United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with Louisiana Agricultural Experiment Station and Louisiana Soil and Water Conservation Committee

Soil Survey of St. Mary Parish, Louisiana

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.

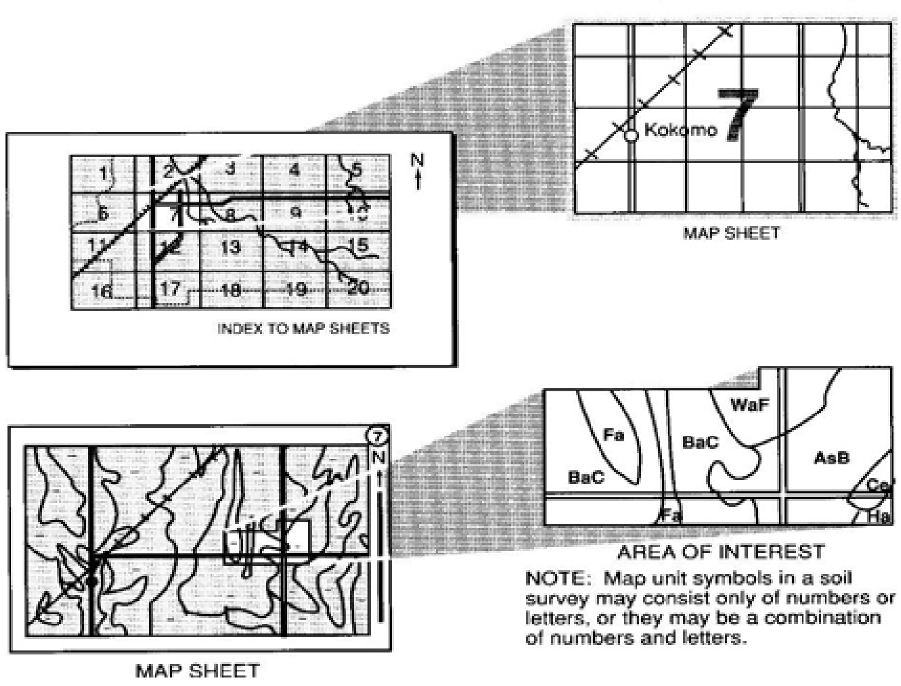
Detailed Soil Maps

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 go to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Go 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 has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 2000. Soil names and descriptions were approved in 2001. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 2000. This survey was made cooperatively by the Natural Resources Conservation Service, Louisiana Agricultural Experiment Station, and the Louisiana State Soil and Water Conservation Committee. The survey is part of the technical assistance furnished to the St. Mary Soil and Water Conservation District.

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.

Cover: Baldcyress (Taxidium distichum) and Water Tupelo (Nyssa aquatica) swamp in an area of Maurepas muck, frequently flooded. These areas are used as habitat for wetland wildlife.

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

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Foreword

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

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

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

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are 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 Louisiana Cooperative Extension Service.

KEVIN D. NORTON
State Conservationist
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Soil Survey of St. Mary Parish, Louisiana

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Fieldwork by Wilton Stephens and Dennis Daugereaux

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United States Department of Agriculture, Natural Resources Conservation Service,
in cooperation with
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One of 22 Acadiana Parishes, St. Mary Parish is located in south-central Louisiana (fig. 1). It has a total area of 442,400 acres of which 398,040 acres is in land and 44,360 acres is large water areas in the form of lakes, bays, and streams. The parish is bordered on the south and southwest by the Gulf of Mexico, on the north and northwest by Iberia Parish, on the northeast by St. Martin Parish, on the southeast by Terrebonne Parish, and on the east by Assumption Parish.

Franklin is the parish seat and is located about 26 miles northwest of Morgan City and 90 miles west of New Orleans. The 2002 population of St. Mary Parish totaled 53,500 and is mostly centered along Bayou Teche. The parish is chiefly rural and extends into the broad, coastal marshes of the Gulf of Mexico. Presently, urban development is expanding and areas of the marshes and swamps are decreasing.

Most of St. Mary Parish lies within the south-central region of the Mississippi River Delta Plain. It is made up of three Major Land Resource Areas (MLRA's). MLRA 131, the Southern Mississippi Valley Alluvium, makes up about 62.3 percent of the area. MLRA 151, the Gulf Coast Marsh, makes up about 36.7 percent of the area. MLRA 134, the Southern Mississippi Valley Silty Uplands makes the remaining 1.0 percent of the parish. The soils of the natural levees formed in sediments deposited by former channels of the Mississippi River and its distributaries on the Teche, Atchafalaya, and Lafourche Delta Complex.

The Southern Mississippi Valley Silty Uplands is in the west-northwest part of the parish at some of the highest elevations and on salt domes. These loamy soils formed in loess and are low in sand content. These loamy, loess soils make up about 1.1 percent of the land area of the parish. They respond well to management. Most of the area is cultivated or used for homesites and other non-farm purposes. Sugarcane is the principal crop.

The Southern Mississippi River Alluvium is in the northern half of the parish. Loamy soils are dominant on the high and intermediate parts of the natural levees, and clayey soils are dominant on the lower parts of the natural levees and in backswamps. The loamy soils, and the clayey soils that rarely flood, make up about 29.9 percent of the total land area of the parish. They are used mainly for cropland, urban, and industrial purposes. A few areas are in pasture and woodland. The loamy and clayey soils on the lowest parts of the landscape are subject to occasional or frequent flooding and make up

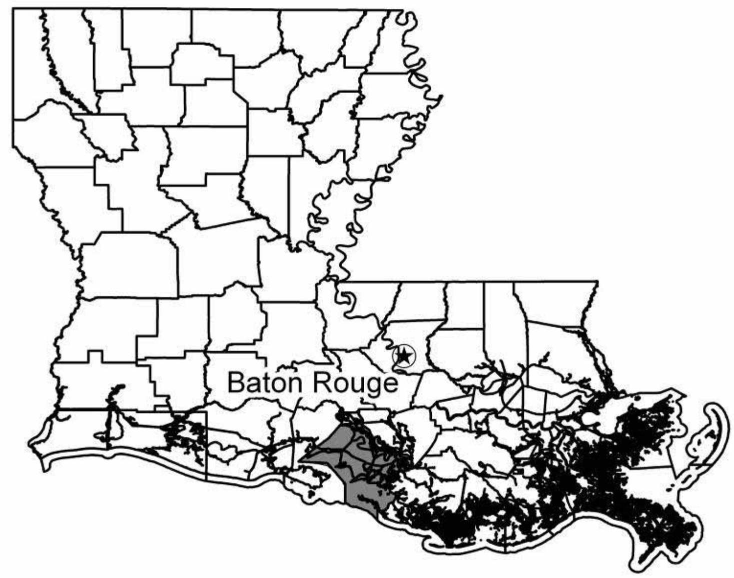

Figure 1.—Location of St. Mary Parish, Louisiana.

about 24.0 percent of the total land area of the parish. They are used mainly for timber production, pasture, recreation, and wildlife. Some narrow, loamy, natural levee ridges in the southwestern parts of the parish extend southwest into the Gulf Coast Marsh. These areas are subject to occasional flooding during tropical storms and are used mainly for camps, homesites, and activities associated with the oil and seafood industry.

The remaining 45.0 percent of the land area of St. Mary Parish consists mainly of ponded, frequently flooded, and very frequently flooded, mucky and clayey, fluid soils in marshes and swamps. They are used mainly as habitat for wetland wildlife and for recreation. Some acreage of former marshes and swamps have been protected, pumped-off, and drained and are used as pasture or for urban use.

Elevations in the parish range from about 16 feet above mean sea level along the natural levee of Bayou Teche in the northern part of the parish, to about 5 feet below sea level in the former marshes and swamps that have been drained. Elevation of the Cote Blanche salt dome ranges to near 100 feet.

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.

This soil survey updates the survey of St. Mary Parish, Louisiana published in March, 1959. (32) This survey provides a more detailed soil survey, and contains more interpretative information.

General Nature of the Survey Area

This section provides general information concerning history, climate, transportation, water resources, industry, and agriculture of the parish.

History

Up to 1803, when the United States purchased the Louisiana Territory from France, the ownership of the area that is now St. Mary Parish shifted back and forth between Spain and France. The area was thinly populated, and settlement did not progress rapidly. Travel into the area that is now St. Mary Parish was restricted by the almost inaccessible Des Allemands and Chacahoula Swamps that separated the area from the New Orleans settlement to the east.

The earliest inhabitants were largely Chitimacha Indians who lived along the shores of the present Grand Lake. In about 1765, French Acadian farmers came into the area. Some of them settled along Bayou Teche. Other settlers came from France and Spain. After the Revolutionary War, settlers came from the eastern seaboard and England and established villages along Bayou Teche and the Atchafalaya River.

Franklin, which is on Bayou Teche in the north-central part of the parish, was founded in 1800. It became the parish seat when St. Mary Parish was organized in 1811, when Attakapas County was split into two separate parishes by the Legislature of the New Orleans Territory. The northern part became St. Martin Parish and the southern portion became St. Mary Parish. Franklin is home to St. Mary's Episcopal Church, founded in 1830, and is Louisiana's fourth oldest congregation. According to the 2000 census, Franklin had a population of 8,354.

Morgan City, formerly called Brashear City, is in the eastern part of the parish. It was founded in 1850 and at that time was the western terminus of the New Orleans-Opelousas and Great Western Railroad. Because of its location on Berwick Bay, Morgan City is an important port of the Intracoastal Waterway and is a principal trading center. It is also the home port of a large part of the shrimp fleet and the oil industry. This town, the largest in the parish, had a population of 12,703 in 2000.

Berwick, which is separated from Morgan City by Berwick Bay, established in 1797, is the oldest settlement in the parish. It is an important port and trading center. Its population was 4,418 in 2000.

Patterson, near Bayou Teche in the eastern part of the parish, is about 7 miles west of Berwick. This settlement began in 1891 as a sawmill community. Later it was the site of a large sawmill used to process cypress trees. After most of the trees were cut, employment declined and the population of the city decreased. Its population in 2000 was 5,130.

The town of Baldwin is in the northwestern part of the parish. Baldwin, like Patterson, was once a thriving sawmill community, but its population declined after the sawmill closed in 1920. Its population in 2000 was 2,497. The Chitimachi Indian government reservation, had a population of 409 in 2000, and a land area of approximately 262 acres, is located near Charenton which is just north of Baldwin.

Climate

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

Thunderstorm days, relative humidity, percent sunshine, and wind information are estimated from First Order station New Orleans, Louisiana.

Table 1 shows data on temperature and precipitation for the survey area as recorded at Morgan City 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 shows data on the length of the growing season.

In winter, the average temperature is 54.0 degrees F and the average daily minimum temperature is 44.6 degrees. The lowest temperature on record, which occurred at Morgan City on December 23, 1989, was 10 degrees. In summer, the average temperature is 68.4 degrees and the average daily maximum temperature is 77.2

degrees. The highest temperature, which occurred at Morgan City on July 6, 1980, was 102 degrees.

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

The average annual total precipitation is 65.47 inches. Of this, about 59.65 inches, or 91 percent, usually falls in February through December. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 10.02 inches at Morgan City on May 9, 1995. Thunderstorms occur on about 69 days each year, and most occur between June and September.

The average seasonal snowfall is 0 inches. The greatest snow depth at any one time during the period of record was 1 inch recorded on December 23, 1989. On average, there are no days that have at least 1 inch of snow on the ground in any given winter. The heaviest 1-day snowfall on record was 1.5 inches recorded on February 13, 1958.

The average relative humidity in mid-afternoon is about 63 percent. Humidity is higher at night, and the average at dawn is about 88 percent. The sun shines 63 percent of the time in summer and 50 percent in winter. The prevailing wind is from the south from March to June, and generally from the northeast during all other months. Average wind speed is highest, around 9 miles per hour, during January to April.

Transportation

Roads in the parish are mostly hard-surfaced federal, state, and parish highways. U.S. Highway 90 (Interstate 49) extends northwest to southeast through the parish and northeast to New Orleans. Louisiana Highway 182 follows the bank of Bayou Teche to Morgan City.

Union Pacific Railroad runs through the parish from Amelia in the southeast to Jeanerette in the northwest. This line is also utilized by Amtrak.

A regional airport located near Patterson has a 5,400-foot runway and a companion 4,400-foot seaway to accommodate seaplanes. The New Orleans International Airport is about 90 miles east of Franklin. Several major airlines provide passenger and freight service at this facility.

The Intracoastal Waterway, Wax Lake Outlet, and the Atchafalaya River are the main navigable waterways in the parish. The Intracoastal Waterway is part of a 19,000-mile water transportation system that serves much of the central United States as well as the Gulf Coastal Area. Many bayous, lakes, and bays are navigable to the Gulf of Mexico. Miles of canals have been built to carry supplies and equipment to sites of oil and gas exploration. Shrimp and fishing fleets, oyster boats, tugs, barges, and pleasure boats are common on the navigable waterways.

Water Resources

Ground Water. Fresh ground water in St. Mary Parish comes from the coastal lowlands aquifer system which consists of a gulfward-thickening, heterogeneous, unconsolidated to poorly consolidated layer of discontinuous beds of sand, silt, and clay that range in age from Oligocene to Holocene. (27) The coastal lowlands aquifer system consists largely of sediments deposited in a deltaic to marginal marine environment. The aquifer system, therefore, contains a highly interbedded mix of sand and clay. Thick sand beds of wide areal extent are uncommon.

The Chicot aquifer is a name commonly applied to the upper part of this coastal lowlands aquifer system, and large quantities of fresh ground water is available from this aquifer in St. Mary Parish. Dissolved-solids concentrations of water in the coastal lowlands aquifer system are directly related to ground-water flow in the system. In updip areas where the aquifers are recharged, ground water has small concentrations of dissolved solids, but the water becomes increasingly saline as it moves toward the coast. Several factors contribute to the coastward increase in dissolved-solids concentration. Dissolved solids increase, in part, as a result of dissolution of aquifer minerals. Water that approaches the coastline becomes even more mineralized as a result of mixing with sea water. Ground-water movement near the coast is sluggish and may not be sufficient to flush saltwater from the aquifer. A band of water that contains dissolved-solids concentrations from 500 to 1,000 milligrams per liter parallels the Atchafalaya River. In coastal areas of Louisiana, the zone contains water with dissolved-solids concentrations of more than 1,000 milligrams per liter. As the water moves down gradient, it becomes a sodium bicarbonate type because calcium ions are exchanged for sodium ions in aquifer minerals, primarily clay minerals.

The Lower Mississippi River Alluvial Aquifer, another part of the coastal lowlands aquifer system, also underlies St. Mary Parish. The alluvium consists of fining upward sequences of gravel, sand, silt, and clay. The sand is fine to medium-grained near the top, grading to coarse sand and gravel in the lower portions. The aquifers are confined by layers of silt and clay of varying thicknesses and extent. Recharge is accomplished by direct infiltration of rainfall over river valleys, lateral and upward movement from adjacent and underlying aquifers, and overbank stream flooding. Water levels fluctuate seasonally with changes in river stage and precipitation. Natural flow is down gradient toward rivers and streams. The water is hard to very hard calcium or magnesium bicarbonate, and salt water is present in some areas. Treatment may be necessary for some applications, but the primary use is for agriculture.

***Surface Water*.** The hydrologic regime of St. Mary Parish involves the movement of freshwater and saltwater masses through the region as a result of the interaction between the Atchafalaya River discharge, regional precipitation, winds, and tides. (24) This current hydrologic regime is influenced by both natural and manmade factors. The basic natural hydrologic system is governed by the pattern of major abandoned distributary channels of the ancient Mississippi River Delta Complex and interdistributary basin channels, which serve to drain swamps and marshes into the estuarine lakes, bays, and sounds.

Under natural conditions, the Mississippi River flowed through the wetlands to the Gulf via the distributary channels. Rainfall and Mississippi River floodwater flowed down the gentle slopes of the natural levees and slowly through the swamps and marshes as sheet flow and interdistributary basin channel flow. The wetland vegetation and the shallow, winding, interdistributary channels slowed the progress of this drainage and stored the fresh water for gradual release into the tidewaters. This situation contributed to a stable environment where water levels and salinity values changed gradually with changing tidal conditions.

During historic times, manmade factors greatly altered the natural hydrologic regime. Construction of levees on the Mississippi River halted the annual overbank flooding, and a channelized drainage network in the leveed area collected precipitation to be discharged into the wetlands at pumping stations and floodgates.

Manmade modifications of the wetlands also occurred within the recent historic period. Canals were developed as a result of logging activity, drainage, navigation improvement, and later, for oil and gas well drilling access and for pipelines. These modifications allowed surplus fresh water to pass more quickly from the point discharge sources into the estuary. Spoil banks along the canals segmented the wetlands and hindered circulation. Greater water depths in the canals provided for greater tidal fluctuation and saltwater intrusion during dry periods.

Under these manmade conditions, the hydrologic circulatory system has shifted to reflect the competition between local runoff in the wetlands coupled with discharge from diked areas and daily tides. The overall effect of these modifications has been the rapid alteration of a stable hydrologic situation into one having a greater fluctuation of water levels and salinity values.

Industry

Major industries in St. Mary Parish include agriculture and sugar mills, carbon black plants, shipbuilders, fabrication firms, seafood processors, oil and gas production, and salt mining.

The parish contains 660 miles of inland navigable waterways, making it very attractive to shipping, fabrication, and fishing industries. The Atchafalaya Basin, in which part of St. Mary Parish lies, is the nation's largest swamp wilderness and the largest active river delta on the continent. It is a prime area for fishing, crawfishing, frogging, sport fishing, and hunting.

The oil and gas industry, mainly the exploration for and production of petroleum and natural gas, is a major industry in St. Mary Parish. There are two ports in the Parish, one on each end of the parish, strategically located to accommodate business, industry, and international trade. The Port of Morgan City is headquarters for the offshore oil and gas industry and has been an avenue of both domestic and international trade since 1957, with convenient, direct access to ocean-going traffic across the globe. The Port is only 29 miles from the Gulf of Mexico. The Atchafalaya River, the Gulf Intracoastal Waterway, and the Bayous Bouef, Black, and Chene Waterways are the connections to traffic throughout the Continental United States and abroad. There are over 200 private dock facilities located in the Morgan City vicinity with heavy lift, barge-mounted cranes, track cranes, and mobile cranes. The Port of West St. Mary is located at Mile Marker 133 on the Gulf Intracoastal Waterway. The Port offers hundreds of acres of excellent industrial and manufacturing sites. The Port offers excellent multi-modal transfer facilities with 6,700 feet of rail spurs, public loading and unloading dock with rail access and 1,350 feet of hard surface bulk headed property. The Port has direct access to U.S. Highway 90, Interstate 49, and Interstate 10.

Agriculture

The soils of St. Mary Parish on natural levees have always been used for farming, even during Indian habitation. Indians grew the first food crops. They planted maize, beans, squash, potatoes, and peas along what is now Bayou Teche and Grand Lake. When the early settlers arrived, they also planted their crops on small farms that fronted on Bayou Teche or on other waterways.

The settlers grew cotton, rice, indigo, corn, and sugarcane on small farms. Most of these farms were Spanish land grants. Each holding included frontage on a navigable bayou and extended back from the stream for a distance of 40 arpents. At first, indigo was the principal cash crop, but cotton began to increase in importance. After the process of granulating sugar was perfected in 1794, sugarcane also became more important. At the time of the Louisiana Purchase in 1803, cotton had become the leading crop in the parish. Planters began to enlarge their holdings by buying cheap back lands, which, if more than 40 arpents from the bayous, cost only $1.25 an acre, resulting in a decline in the number of small farms.

Sugarcane did not become the principal crop in the parish until the War of 1812, when the British blockade kept out sugar from foreign sources. Then cotton farmers turned to growing sugarcane. By 1860, the parish was the principal sugar-producing area in the State. During the Civil War, though, sugar production dropped sharply, and it was not until 1934 that sugarcane again became the principal crop in the parish.

The need for adequate drainage in fields used to grow sugarcane and corn was recognized by the early planters. As early as 1847, the drainage wheel was used in the parish. This wheel was powered by steam and threw water from the main drainage ditches into the back swamps. A typical drainage wheel was 25 feet in diameter and 5 feet wide; the buckets were 5 feet wide and 6 feet deep. Much of the fieldwork on farms consisted of constructing and maintaining the drainage ditches and protective levees.

The trend in agriculture today is toward fewer, larger farm units. According to the 1997 Census of Agriculture, there were 103 farms in the parish. Total land in farms was 83,166 acres; the average size farm was 807 acres. The total value of agriculture products sold in 1997 in St. Mary Parish was $39,430,000, and the average per farm unit was $382,811. A total of 48,217 acres in St. Mary Parish was used as cropland in 1997. Sugarcane is the principal crop grown in the parish. In 1997 there were 45,710 acres planted in sugarcane with a yield of 1,444,290 tons. There were 1,376 acres planted in soybeans producing 62,059 bushels. Crops, including nursery and greenhouse crops were valued at $39,116,000. Livestock, poultry, and their products were valued at $314,000.

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 length and shape of the slopes; the general pattern of drainage; and the kinds of crops and native plants. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Pickup trucks were used to gain access to most parts of the survey area. In the marshes, where accessibility was limited, helicopters and boats provided transportation to the sample sites. In swamps, boats were used to gain access to the sites.

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

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

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of organic material, distribution of plant roots, reaction, fluidity, and other features that enable them to identify soils (fig. 2). 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

Figure 2.—Soil core in saline marsh, showing alternate layers of organic and mineral deposits.

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.

This survey area was mapped at two levels of detail. At the more detailed level, map units are narrowly defined. Map unit boundaries were plotted and verified at closely spaced intervals. At the less detailed level, map units are broadly defined. Boundaries were plotted and verified at wider intervals. In the legend for the detailed soil maps, narrowly defined units are indicated by symbols in which the first letter is a capital and the second is lowercase. For broadly defined units, the first and second letters are capitals.

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.

Map Unit Composition

A map unit delineation on a soil map represents an area dominated by one major kind of soil or an area dominated by two or three kinds of soil. A map unit is identified and named according to the taxonomic classification of the dominant soil or soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural objects. In common with other natural objects, they have a characteristic variability in their properties. 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 soils of other taxonomic classes. Consequently, every map unit is made up of the soil or soils for which it is named and some soils that belong to other taxonomic classes. In the detailed soil map units these latter soils are called inclusions or included soils. In the general soil map units, they are called soils of minor extent.

Most inclusions have properties and behavioral patterns 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 (similar) inclusions. They may or may not be mentioned in the map unit descriptions. Other inclusions, however, have properties and behavior divergent enough to affect use or require different management. These are contrasting (dissimilar) inclusions. They generally occupy small areas and cannot be shown separately on the soil maps because of the scale used in mapping. The inclusion of contrasting soils is mentioned in the map unit descriptions. A few inclusions may not have been observed and consequently are not mentioned in the descriptions, especially where the soil pattern was so complex that it was impractical to make enough observations to identify all of the kinds of soils on the landscape.

The presence of inclusions in a map unit in no way diminishes the usefulness or accuracy of the soil data. The objective of soil mapping is not to delineate pure taxonomic classes of soils but rather to separate the landscape into segments that have similar use and management requirements. The delineation of such landscape segments on the map provides sufficient information for the development of resource plans, but onsite investigation is needed to plan for intensive uses in small 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 one or more major soils or miscellaneous areas and some minor soils or miscellaneous areas. It is named for the major soils or miscellaneous areas. The components of one map unit can occur in another but in a different pattern.

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

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

Soils on Uplands

1. Coteau-Jeanerette-Patoutville

Level to nearly level, somewhat poorly drained soils that are loamy throughout; formed in loess

This map unit consists of soils on broad flats, in depressional areas, and on smooth, low ridges on the terrace uplands. Slopes are 0 to 1 percent.

This map unit makes up about 2 percent of the parish. It is about 39 percent Coteau soils, 36 percent Jeanerette soils, 23 percent Patoutville soils, and 2 percent soils of minor extent.

The Coteau soils are at the highest elevations and are on the most sloping landscapes. These soils are nearly level, somewhat poorly drained, and moderately slowly permeable. The subsoil is yellowish brown silt loam in the upper part, grayish brown silty clay loam in the middle part, and grayish brown silt loam in the lower part.

The Jeanerette soils are on broad flats and in depressional areas. These soils are level to nearly level, are somewhat poorly drained, and moderately slowly permeable. They have a surface layer of very dark grayish brown silt loam. The subsoil is black and very dark gray silt clay loam in the upper part and middle parts and grayish brown silty clay loam in the lower part. The underlying material is light olive gray silt loam.

The Patoutville soils are on smooth, low, slightly convex ridges. These soils are level to very gently sloping, are somewhat poorly drained, and slowly permeable. They have a surface layer of dark grayish brown or very dark grayish brown silt loam. The subsoil is grayish brown silty clay loam in the upper part, brown silty clay loam in the middle part, and light brownish gray and gray in the lower part.

Of minor extent are the very poorly drained Iberia soils in depressions and abandoned stream channels. These soils are clayey throughout.

Most areas of the soils in this map unit are in cropland or urban use. A small acreage is used for pasture or as woodland.

The soils in this map unit are moderately well suited to building site development and intensively used recreation areas. The soils are poorly suited to sanitary facilities. Wetness is the main limitation. A surface drainage system is needed for crops and pasture.

The soils in this map unit are well suited to pasture, cropland, and woodland. A good drainage system and fertilizer are needed for optimum crop and forage production. The soils are well suited to the production of hardwood trees, although wetness and low strength can limit use of equipment.

Soils on Salt Domes

2. Duson-Kleinpeter

Gently sloping to strongly sloping, somewhat poorly drained and moderately well drained soils that have a loamy surface layer and a clayey or loamy subsoil; formed in loess.

This map unit consists of soils at the highest elevations and on the most sloping and dissected landscape in the parish, which are the salt domes on Cote Blanche and Belle Isle Islands. Slopes range from 1 to 12 percent. Elevations range from 5 to 100 feet above sea level. Drainage of surface runoff is through natural depressions and constructed waterways. Most of the area is not subject to flooding. Depressions and low areas are occasionally flooded for short periods.

This map unit makes up about 2 percent of the land area of the parish. It is about 54 percent Duson soils, 40 percent Kleinpeter soils, and 6 percent soils of minor extent.

The Duson soils are at the highest elevations and on some of the most sloping terrain. These soils are moderately sloping to strongly sloping, somewhat poorly drained, and are slowly permeable. They have a surface layer of brown silt. The upper subsoil is yellowish brown silty clay loam, the middle part is yellowish brown silt loam, and the lower part is grayish brown silty clay. They are somewhat poorly drained and slowly permeable.

The Kleinpeter soils are on lower terrace positions that are not as dissected where slopes are mostly 1 to 5 percent. These soils are moderately well drained and are moderately permeable. They have a surface layer of dark grayish brown silt. The upper part of the subsoil is strong brown silty clay loam and silt loam. The lower part is brown and strong brown silty clay loam. They are moderately well drained, moderately permeable soils.

Of minor extent are the somewhat poorly drained Dupuy soils on convex natural levees. It is grayish brown in the upper part and gray below. Texture is silty clay loam throughout. Also included are soils that are sandy throughout the profile and steep, gullied areas of loamy, sandy, and clayey material.

Most areas of this map unit are wooded and used for wildlife habitat and salt mining industry. This map unit is moderately well suited to woodland. Low strength of the Duson and Kleinpeter and the slope of the Duson soils are the main limitations.

Soils on Natural Levees

3. Baldwin-Galvez

Level, poorly drained and somewhat poorly drained soils that have a loamy surface layer and a clayey or loamy subsoil; formed in Mississippi River alluvium

The soils of this map unit are on natural levees of Bayou Teche and its distributaries. Elevations range from sea level to 15 feet above sea level. Slopes are 0 to 1 percent.

This map unit makes up about 15 percent of the land area of the parish. It is about 66 percent Baldwin soils, 17 percent Galvez soils, and 17 percent soils of minor extent.

The Baldwin soils are in intermediate positions on natural levees. These soils are poorly drained, very slowly permeable to impermeable, and are subject to rare flooding. These soils have a surface layer of dark grayish brown silty clay loam. The upper part of the subsoil is gray silty clay or clay, and the lower part is gray clay, silty clay, or silty clay loam. The underlying material is gray silty clay, silty clay loam, or silt loam.

The Galvez soils are in the highest positions on the natural levees, and are not subject to flooding. They are somewhat poorly drained and moderately slowly permeable. These soils have a surface layer of dark grayish brown silt loam or silty clay loam. The subsoil and underlying material are gray silty clay loam and silt loam.

Of minor extent are the somewhat poorly drained Dupuy soils on higher parts of the natural levee. These soils are loamy throughout and make up 6 percent of the map unit. The somewhat poorly drained Loreauville soils are also on higher parts of the natural levee, are loamy throughout, and make up 6 percent of the map unit. The moderately well drained Glenwild soils are on similar positions as the Galvez soil. These soils are loamy throughout and make up 4 percent of the map unit. The very poorly drained Iberia soils are in depressions and abandoned stream channels. These soils are clayey throughout and make up 1 percent of the map unit.

Most areas of the soils in this map unit are in cropland or urban use. A small acreage is used for pasture or as woodland.

The soils in this map unit are moderately well suited to building site development and intensively used recreation areas. The soils are poorly suited to sanitary facilities. Wetness, moderately slow and slow permeability, and the shrinking and swelling of the subsoil are the main limitations. Baldwin soils are also subject to rare flooding after unusually severe storms.

The soils in this map unit are well suited to pasture, cropland, and woodland. A good drainage system and fertilizer are needed for optimum crop and forage production. The soils are well suited to the production of hardwood trees, although wetness can limit use of equipment.

4. Iberia-Schriever

Level, poorly drained soils that have a clayey surface layer and a clayey subsoil; formed in Mississippi River alluvium

The soils of this map unit are at low elevations on natural levees of Bayou Teche and its distributaries. Elevations range from sea level to 10 feet above sea level. Slopes are 0 to 1 percent.

This map unit makes up about 10 percent of the land area of the parish. It is about 44 percent Iberia soils, 34 percent Schriever soils, and 22 percent soils of minor extent.

The Iberia soils are in intermediate positions on natural levees. These soils are poorly drained, very slowly permeable to impermeable, and are subject to rare flooding. These soils have a surface layer of black clay. The upper part of the subsoil is olive gray clay, and the lower part is dark gray silty clay loam. The underlying material is gray silty clay loam.

The Schriever soils are at the lowest elevation and are on broad, level areas of the natural levees. The soils are poorly drained, very slowly permeable to impermeable, and are subject to rare flooding. These soils have a surface layer of dark gray clay. The upper part of the subsoil is dark gray clay, the middle part is gray clay, and the lower part is olive gray to greenish gray clay.

Of minor extent are the somewhat poorly drained Udert and moderately well drained Glenwild soils which have been smoothed and make up 12 percent of the map unit. The Udert soils are clayey throughout and are in lower positions. The Glenwild is loamy throughout and are on higher positions on the natural levees. The poorly drained Baldwin soils are on higher positions on natural levees and make up 4 percent of the map unit. They have loamy surfaces, loamy and clayey subsoils, and loamy substratums. The somewhat poorly drained Galvez soils are on higher positions on natural levees. They are loamy throughout and make up 1 percent of the map unit. The very poorly drained Fausse soils are on low-lying backswamp areas. They are clayey throughout, are flooded or ponded, and make up 1 percent of the mapunit.

Most areas of the soils in this map unit are in cropland or urban use. A small acreage is used for pasture or as woodland.

The soils of this map unit are suitable to most crops and pasture plants grown in the parish. They are also suitable for development for wetland wildlife habitat. Wetness and very slow permeability are the principle limitation for most uses of these soils. Low strength and high shrink-swell potential limit their use for foundations or construction material.

5. Schriever-Carville-Hydraquents

Gently sloping or gently undulating to level somewhat poorly drained and poorly drained soils that are loamy and clayey throughout; formed in Mississippi River alluvium

This map unit is on the natural levees of the Atchafalaya River and its distributaries and in areas of lake fill in the Six-Mile Lake and Grand Lake. It occurs in large tracts in an angular braided pattern inside the Atchafalaya Basin Floodway. The soils formed in loamy and clayey alluvium. They are subject to flooding, scouring, and deposition. Elevation ranges from 3 to 14 feet above sea level. Slopes range from 0 to 2 percent.

This map unit makes up about 10 percent of the land area of the parish. It is about 27 percent Schriever soils, 25 percent Carville soils, 23 percent Hydraquents, and 25 percent soils of minor extent.

The Schriever soils are on broad flats and depressional areas. The soils are level, poorly drained, and very slowly permeable to impermeable. They have a surface layer of very dark grayish brown clay. The upper part of the subsoil is dark gray clay, the middle part is gray clay, and the lower part is gray silty clay. The underlying material is dark grayish brown loam.

The Carville soils are on the highest natural levee positions in the Atchafalaya Basin Floodway. These soils are gently sloping, are somewhat poorly drained, and moderately permeable. They are grayish brown silt loam throughout.

The Hydraquents soil is on concave swales and depressional areas. The soils are level to concave, very poorly drained, and very slowly permeable to impermeable. They have a surface layer of dark grayish brown silt loam. The underlying material is grayish brown silt loam.

Of minor extent are the somewhat poorly drained Dupuy soils, the poorly drained Baldwin soils, and well drained Glenwild on convex natural levees. They are loamy throughout. The Iberia soils are on flats and in depressional areas. These soils are clayey throughout. The very poorly drained Barbary, Fausse, and Harahan soils are in backswamp positions and are also clayey throughout.

All of the acreage is in woodland and is part of the Atchafalaya Basin Floodway. The soils of this map unit are used as wildlife habitat and for recreation. Most of the acreage is owned by the State of Louisiana and by corporations. Floodway flow rights belong to the Federal government.

Flooding, scouring, and deposition are the main limitations for most uses.

Soils in Swamps

6. Maurepas-Barbary

Level, very poorly drained soils that have a mucky surface layer and mucky and clayey underlying material; in swamps

The soils in this map unit are in swamps that are flooded or ponded most of the time. Slopes are 0 to 1 percent.

This map unit makes up about 20 percent of the land area of the parish. It is about 43 percent Maurepas soils, 39 percent Barbary soils, and about 18 percent soils of minor extent.

The Maurepas soils are level, very poorly drained, and are rapidly permeable. They have a dark brown, very fluid muck surface layer, dark brown very fluid muck middle layer, and underlying material of brown muck.

The Barbary soils are level, very poorly drained, and are very slowly permeable to impermeable. They have a very dark grayish brown muck surface layer. The upper subsoil is dark gray silty clay, the middle part is gray clay, and the lower part is dark gray and gray clay.

Of minor extent are the poorly drained Schriever and very poorly drained Fausse soils. They are on slightly higher back swamp positions and have a nonfluid subsoil layer. They are clayey throughout. The very poorly drained Allemands, Harahan, and Kenner soils are on lower positions and have fluid subsoil layers. The permanently saturated Bancker and Lafitte soils are on areas of freshwater marsh. The have mucky surface layers. The underlying material is fluid clay or mucky clay.

Most of the acreage is in native trees and aquatic vegetation. It is used for recreation and as habitat for wetland wildlife.

The soils in this map unit are well suited to recreation uses and as habitat for wetland wildlife. They provide habitat for waterfowl, furbearers, alligators, swamp rabbits, and nongame birds. This map unit is part of an estuary that contributes to the support of marine fishes and crustaceans. Hunting and other outdoor activities are popular in areas of this map unit.

These soils are not suited to crops, pasture, woodland, urban uses, or intensively used recreation areas. Flooding, wetness, subsidence, and low strength are too severe for these uses.

Soils in Former Marshes and Swamps That Have Been Drained

7. Harahan-Allemands

Level, very poorly drained and poorly drained soils that have a clayey or mucky surface layer and a clayey or mucky subsoil; in former swamps

The soils in this map unit are in former swamps that are protected from most floods by levees and are drained by pumps. Flooding is rare, but it can occur during severe storms or when levees or pumps fail. Elevation ranges from sea level to about 3 feet below sea level. Slopes are 0 to 1 percent.

This map unit makes up about 5 percent of the land area of the parish. It is about 66 percent Harahan soils, 23 percent Allemands soils, and 11 percent soils of minor extent.

The Harahan soils are level, poorly drained, and are very slowly permeable to impermeable. They have a dark gray, firm clay surface layer; a gray, nonfluid clay subsoil; and a substratum of gray, very fluid clay in the upper part and greenish gray very fluid clay in the lower part.

The Allemands soils are level, very poorly drained, and are very slowly permeable to impermeable. They have a dark brown muck surface layer. The underlying material is very dark muck in the upper part, gray clay in the middle part, and dark gray clay in the lower part.

Of minor extent are the very poorly drained Barbary and Fausse soils which are in lower swamp positions, and the very poorly drained Larose soils which are in lower fresh water mineral marshes.

The soils in this map unit are mainly in industrial and urban uses. A small amount of acreage is in pasture or idle land that has been reserved for future urban uses.

These soils are poorly suited to most urban and intensive recreation uses. Wetness, low strength, very slow permeability, and shrinking and swelling of the subsoil are the main limitations. Flooding is a hazard during hurricanes or when pumps and levees fail. Adequately controlling the water table is difficult. Foundations for buildings need to be specially designed and set on pilings.

These soils are poorly suited to woodland, cropland, and pastureland. Wetness and poor trafficability are the main limitations.

Soils in Marshes

8. Kenner-Larose-Allemands

Level, very poorly drained soils that have a mucky surface layer and mucky or clayey underlying material; in freshwater marshes

The soils in this map unit are in freshwater marshes (fig. 3) that are flooded or ponded most of the time. Elevation ranges from sea level to about 1 foot above sea level. Slopes are 0 to 1 percent.

This map unit makes up about 25 percent of the land area of the parish. It is about 33 percent Kenner soils, 28 percent Larose soils, 24 percent Allemands soils, and 15 percent soils of minor extent.

The Kenner soils are in broad basins. These soils are level, very poorly drained, and are very slowly permeable. They have a thick surface layer of dark gray muck and underlying material of dark brown muck in the upper part, gray clay in the middle part, and very dark gray muck in the lower part.

The Larose soils are on submerged natural levees along waterways. These soils are level, very poorly drained, and are very slowly permeable to impermeable. They have a surface layer of dark grayish brown muck and underlying material of dark gray, gray, and very dark gray, very fluid clay.

The Allemands soils are in broad basins. These soils are level, very poorly drained, and are very slowly permeable to impermeable. They have a surface layer of dark grayish brown muck and an underlying material of dark brown and very dark grayish brown muck in the upper part, dark gray mucky clay in the middle part, and dark gray clay in the lower part.

Figure 3.—Freshwater marsh on the Kenner-Larose-Allemands general soil map unit.

Of minor extent are the very poorly drained Barbary and Harahan soils in adjacent backswamps, Balize soils in the adjacent areas of fresh water marsh, and the very poorly drained Clovelly and Lafitte soils in brackish marshes.

Most of the soils in this map unit are in native vegetation and used for recreation and as habitat for wetland wildlife. They provide habitat for many species of wetland wildlife. Hunting, fishing, and other outdoor activities are popular in areas of this map unit.

These soils are not suited to crops, pasture, woodland, urban uses, or intensively used recreation areas. Flooding, subsidence, wetness, and low strength are too severe for these uses.

9. Clovelly-Lafitte-Bancker

Level, very poorly drained soils that have a thick or moderately thick, mucky surface layer and clayey underlying material; in brackish marshes

The soils of this map unit are in brackish marshes that are flooded or ponded most of the time. Elevation ranges from sea level to about 1 foot above sea level. Slopes are 0 to 1 percent.

This map unit makes up about 3 percent of the land area of the parish. It is 55 percent Clovelly soils, 27 percent Lafitte soils, 16 percent Bancker soils, and 2 percent soils of minor extent.

The Clovelly soils are level, have a moderately thick surface layer of very dark grayish brown muck and underlying material of dark gray muck in the upper part, gray mucky clay in the middle part, and greenish gray and dark greenish gray clay in the lower part.

The Lafitte soils are level, very poorly drained, and are very slowly permeable. They have a surface layer of brown muck and underlying material of dark gray muck in the upper part, dark grayish brown and brown muck in the middle part, and olive gray fluid clay in the lower part.

The Bancker soils are level, very poorly drained, and are very slowly permeable. They have a surface layer of dark grayish brown muck. The underlying material is stratified very dark gray clay and gray clay.

Of minor extent are the poorly drained Aquents soils on spoil banks, the very poorly drained Barbary soils in adjacent backswamp areas and the very poorly drained Larose soils in adjacent areas of freshwater marshes. Many small ponds and perennial streams are throughout the map unit.

Most of the acreage in this map unit is in native vegetation and is used for recreation and as habitat for wetland wildlife. A small amount of acreage has oil and gas wells.

These soils are well suited to use as habitat for many wildlife species. Hunting, fishing, and other outdoor activities are popular. This map unit is part of an estuary that helps support marine life of the Gulf of Mexico.

These soils are not suited to crops, pasture, woodland, or urban uses; because of hazard of flooding, wetness, salinity, and low strength.

Soils in Spoil Areas

10. Aquents

Gently sloping to level, poorly drained soils that are stratified and have variable textures; on spoil banks

The soils in this map unit are in areas of hydraulic fill dredged from nearby waterways, swamps, and marshes. The largest area of this map unit is the spoil area along the Intercoastal Waterway. The soils in this map unit are rarely or occasionally flooded by high tides during storms. Elevation ranges from sea level to about 5 feet above sea level. Slopes range from 0 to 5 percent.

This map unit makes up about 5 percent of the land area of the parish. It is about 89 percent Aquents and 1 percent soils of minor extent.

The poorly drained Aquents are stratified with layers of clayey, loamy, mucky, and sandy materials. The soils are slightly saline to saline throughout.

Of minor extent are the Allemands, Bancker, Barbary, Clovelly, Fausse, Kenner, Lafitte, Larose, Maurepas, and Schreiver soils in lower positions on the landscape.

The soils in this map unit are used mainly as habitat for wetland wildlife or for extensive recreation. A small amount of acreage is in commercial uses.

These soils are well suited to habitat for wetland wildlife. They provide habitat for many species of wetland wildlife. Hunting and other outdoor activities are popular in areas of this map unit.

These soils are severely limited for most urban and intensive recreation uses. Subsidence, wetness, salinity, low strength, and the shrinking and swelling of the soil material are the main limitations. Flooding is also a hazard during storm events.

Soils in Urban Areas

11. Built-up Land

Level to strongly sloping areas in which more than 85 percent of the surface is covered by asphalt, concrete, buildings, or other impervious surfaces; and large earthen levees; typically on natural levees.

The soils in this map unit are in areas of business centers, parking lots, industrial sites, municipal and agricultural waste disposal sites, and large flood protection levees. Slopes range from 0 to 20 percent.

This map unit makes up about 3 percent of the land area of the parish. It is about 98 percent Urban and built-up and 2 percent soils of minor extent.

Of minor extent are the Baldwin, Galvez, Glenwild, and Iberia soils in lower positions of urban areas which are still in open areas where fill material has not covered the original soil.

The soils in the waste disposal sites are generally not suited to agricultural, forest, or urban uses. The underlying refuse can decay causing the surface to cave in and subside unevenly. Some areas of the flood protection levees are used for livestock grazing and hay production.

Detailed Soil Map Units

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

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

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

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

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

Soils that have profiles that are almost alike make up a *soil series*. 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, 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, Allemands muck, very frequently flooded is a phase of the Allemands series.

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

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. Aquents, dredged is an undifferentiated group in this survey area.

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

Table 4 gives the acreage and proportionate extent of each map unit. 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.

AEA—Allemands muck, very frequently flooded

Map Unit Composition

Major Components

Allemands and similar soils: 79 to 91 percent

Contrasting Inclusions

Aquents soils: 2 percent. On higher positions adjacent to streams and canals and consist of hydraulically deposited, dredged fill material.

Barbary soils: 3 percent. On swamps and are fluid, mineral soils.

Harahan soils: 2 percent. On artificially drained swamps and have a nonfluid, clayey solum.

Kenner soils: 4 percent. On similar positions and have an organic layer more than 51 inches thick.

Larose soils: 4 percent. On areas on the landward side of the Allemands soils and are fluid, mineral soils.

Component Description

Allemands

MLRA: 151—Gulf Coast Marsh
Landform: Landward side of the low coastal freshwater marsh on delta plain
Landform position: Linear areas
Parent material: Herbaceous organic material over fluid clayey alluvium
Slope: 0.0 to 0.2 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Very high (about 15.3 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Very frequent
Ponding hazard: Frequent
Depth to seasonal water saturation: At the surface, apparent
Runoff class: High
Ecological site: Fresh Organic Marsh
Nonirrigated land capability: 8w

Typical Profile

Surface layer:
0 to 9 inches—dark grayish brown muck

Subsurface layer:
9 to 27 inches—dark brown muck
27 to 43 inches—very dark grayish brown muck

Substratum layer:
43 to 52 inches—dark gray mucky clay
52 to 72 inches—dark gray clay

Use and Management

Major land uses: Wetland wildlife habitat and extensive forms of recreation, such as hunting and fishing.

Cropland

- This soil is not suited to cropland because of frequent flooding.

Pastureland

- This soil is not suitable for pasture.

Woodland

- This soil is not suitable for the production of trees.

Building sites

- This soil is not suited to building site development because of the high potential for subsidence, flooding, depth to a seasonal high water table, high organic matter content, and ponding.
- When drained, the layers in this soil subside. Subsidence leads to differential rates of settlement which may cause foundations to break.

Septic tank absorption fields

- This soil is not suited to use as a site for septic tank absorption fields because of ponding, slow water movement, depth to a seasonal high water table, and subsidence.
- Flooding in areas of this soil severely limits the absorption and proper treatment of the effluent from septic systems.
- Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to a high seasonal water table affects the ease of excavation and grading and limits the bearing capacity of this soil.
- Subsidence of the soil layers reduces the bearing capacity of this soil.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

ATA—Aquents, dredged

Map Unit Composition

Major Components
Aquents and similar soils: 80 to 90 percent

Contrasting Inclusions
Roads and structures: 15 percent

Component Description

Aquents

MLRA: 151—Gulf Coast Marsh
Landform: Natural levee on delta plain
Landform position: Linear areas
Parent material: Alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Very poorly
Slowest saturated hydraulic conductivity: Unspecified
Available water capacity: Unspecified
Shrink-swell potential: Unspecified
Flooding hazard: Rare, from June to October
Ponding hazard: None
Depth to seasonal water saturation: Unspecified
Runoff class: Unspecified
Ecological site: Not assigned
Nonirrigated land capability: Not assigned

Typical Profile

All layers:
Profiles are variable in color and texture of soil materials.

Use and Management

Major land uses: Wildlife habitat, woodland, livestock grazing, and residential

Cropland

- These soils are somewhat poorly to poorly suited to cropland depending on the source of the dredge material and its placement on the surrounding landscape. If the source is mineral and the placement is thick enough to lower the water table and prevent flooding, crops can be grown successfully. If the source material is organic or the placement is thin, leaving the area with a high water table or subject to flooding, use for cropland is limited.

Pastureland

- These soils are moderately well to poorly suited to use as pastureland depending on the source of the dredge material and its placement on the surrounding landscape. If the source is mineral and the placement is thick enough to lower the water table and prevent flooding, native and improved grasses can be grown successfully. If the source material is organic or the placement is thin, leaving the area with a high water table or subject to flooding, use for pastureland is limited.

Woodland

- These soils are moderately well to poorly suited to use as woodland depending on the source of the dredge material and its placement on the surrounding landscape. If the source is mineral and the placement is thick enough to lower the water table and prevent frequent or long duration flooding, commercial hardwood trees can be grown successfully. If the source material is organic or the placement is thin, leaving the area with a high water table or subject to frequent or long duration flooding, use for woodland is limited.

Building sites

- These soils are generally not suited to building site development because of the high potential for subsidence, and because the soil remains continuously saturated.
- When drained, the layers in this soil subside. Subsidence leads to differential rates of settlement which may cause foundations to break.
- If the fill is composed of mineral soil material and the thickness of the fill is sufficient to lower the water table, building sites can be successfully developed.

Septic tank absorption fields

- This soil is not suited to use for septic tank absorption fields because of flooding.
- Flooding severely limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Subsidence of the soil layers reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

ATB—Aquents, dredged, 1 to 5 percent slopes, occasionally flooded

Map Unit Composition

Major Components
Aquents and similar soils: 80 to 90 percent

Contrasting Inclusions
Allemands soils: 3 percent. In adjacent marsh and swamps.
Bancker soils: 1 percent. In adjacent marshes.
Barbary soils: 1 percent. In adjacent swamps.
Clovelly soils: 1 percent. In adjacent marshes.
Fausse soils: 1 percent. In adjacent swamps.
Kenner soils: 2 percent. In adjacent marsh and swamps.
Lafitte soils: 2 percent. In adjacent marsh and swamps.
Larose soils: 2 percent. In adjacent marsh and swamps.
Maurepas soils: 1 percent. In adjacent marsh and swamps.
Schriever soils: 1 percent. In adjacent marsh and swamps.

Component Description

Aquents

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Marsh on delta plain, backswamp on delta plain
Landform position: Linear areas
Parent material: Alluvium
Slope: 1 to 5 percent
Depth to restrictive feature: None
Drainage class: Very poorly
Slowest saturated hydraulic conductivity: Unspecified
Available water capacity: Unspecified

Shrink-swell potential: Unspecified
Flooding hazard: Occasional, from June to September
Ponding hazard: None
Depth to seasonal water saturation: Unspecified
Runoff class: Unspecified
Ecological site: Not assigned
Nonirrigated land capability: Not assigned

Use and Management

Major land uses: Wildlife habitat and recreation

Cropland

- This soil is not suited to cropland.

Pastureland

- This soil is not suitable for pasture.

Woodland

- This soil is not suitable for the production of trees.

Building sites

- This soil is not suited to building site development because of the high potential for subsidence, and the soil remains continuously saturated.
- When drained, the layers in this soil subside. Subsidence leads to differential rates of settlement which may cause foundations to break.

Septic tank absorption fields

- This soil is not suited to use as septic tank absorption fields because of flooding.
- Flooding severely limits the absorption and proper treatment of the effluent from septic systems.
- Floodwaters may damage some components of septic systems.

Local roads and streets

- Subsidence of the soil layers reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

BdA—Baldwin silty clay loam, 0 to 1 percent slopes

Map Unit Composition

Major Components
Baldwin and similar soils: 86 to 94 percent

Contrasting Inclusions
Dupuy soils: 2 percent. On higher parts of the natural levee, and have less than 35 percent clay in the subsoil.
Galvez soils: 2 percent. On higher parts of the natural levee, and have less than 35 percent clay in the subsoil.
Glenwild soils: 2 percent. On higher parts of the natural levee, and have less than 35 percent clay in the subsoil.

Iberia soils: 2 percent. In lower backswamp positions, form slickensides, and have a dark colored surface layer more than 12 inches thick.
Loreauville soils: 2 percent. On higher parts of the natural levee, and have less than 35 percent clay in the subsoil.

Component Description

Baldwin

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Teche natural levee on delta plain
Landform position: Convex areas
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: High (about 10.3 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Rare, during December to April
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from the surface to a depth of 24 inches
Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 3w

Typical Profile

Surface layer:
0 to 5 inches—dark grayish brown silty clay loam

Subsoil layer:
5 to 12 inches—grayish brown silty clay loam
12 to 20 inches—gray silty clay
20 to 32 inches—grayish brown silty clay loam
32 to 40 inches—gray silty clay

Substratum layer:
40 to 48 inches—gray silty clay
48 to 80 inches—gray silt loam

Use and Management

Major land uses: Cropland, urban, and residential

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Clods may form if the soil is tilled when wet.
- Controlling traffic can minimize soil compaction.
- The rooting depth of crops may be restricted by the high clay content.
- Maintaining or increasing the content of organic matter in the soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.
- The movement of water into subsurface drains is restricted.
- Subsurface drainage helps to lower the seasonal high water table.

- Including deep-rooted cover crops in the rotation is important for improving soil structure and providing pathways in the clayey subsoil to facilitate the movement of water into subsurface drains.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- A seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.
- The low strength of the soil increases the cost of constructing haul roads and log landings.
- Soil wetness may limit the use of this soil by log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- This soil is not suited to homesite development. Special design of some structures may be needed to prevent the damage caused by flooding.
- This soil is very limited to building site development because of the depth of a high seasonal water table and high shrinking and swelling.
- The high content of clay in the soil below the surface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.
- Under unusual weather conditions, this soil is subject to flooding. The flooding may result in physical damage and costly repairs to buildings.

Septic tank absorption fields

- This soil is poorly suited to septic tank absorption fields because of the slow water movement and seasonal high water table.
- The flooding in areas of this soil on rare occasions will limit the absorption and proper treatment of the effluent from septic systems.
- Floodwaters may damage some components of septic systems.

Local roads and streets

- Shrinking and swelling of this soil may not be suitable for use as base material for local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

BEA—Balize silt loam, very frequently flooded

Map Unit Composition

Major Components
Balize and similar soils: 80 to 90 percent

Contrasting Inclusions
Allemands soils: 3 percent. On similar positions and have organic layers 16 to 51 inches thick.
Bancker soils: 3 percent. On similar positions and are more saline.
Clovelly soils: 3 percent. On similar positions and have organic layers 16 to 51 inches thick.
Kenner soils: 2 percent. On similar positions and have organic layers greater than 51 inches thick.
Lafitte soils: 2 percent. On similar positions and have organic layers greater than 51 inches thick.
Larose soils: 2 percent. On similar positions and are clayey throughout.

Component Description

Balize

MLRA: 151—Gulf Coast Marsh
Landform: Mud flat on delta plain
Landform position: Linear areas
Parent material: Loamy alluvium
Slope: 0.0 to 0.5 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Moderately low (about 0.42 micrometers/seconds)
Available water capacity: High (about 11.7 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Very frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches
Runoff class: High
Ecological site: Fresh Fluid Marsh
Nonirrigated land capability: 8w

Typical Profile

Surface layer:
0 to 11 inches—grayish brown silt loam

Substratum layer:
11 to 24 inches—dark gray silt loam
24 to 48 inches—gray silty clay loam
48 to 72 inches—gray silt loam

Use and Management

Major land uses: Wetland wildlife habitat and extensive forms of recreation, such as hunting and fishing.

Cropland

- These soils are not suited to cropland because of frequent flooding.

Pastureland

- These soils are not suitable for pasture.

Woodland

- These soils are not suitable for the production of trees.

Building sites

- The soil is not suited to building site development because of ponding, flooding, and depth to a high seasonal water table.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of ponding, slow water movement, and depth to a high seasonal water table.
- Flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to a seasonally high water table affects the ease of excavation and grading and limits the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

BNA—Bancker muck, tidal

Map Unit Composition

Major Components
Bancker and similar soils: 79 to 91 percent

Contrasting Inclusions
Aquents soils: 3 percent. On higher positions adjacent to streams and canals and consist of hydraulically deposited, dredged fill material.
Barbary soils: 3 percent. In freshwater swamps.
Clovelly soils: 3 percent. On the lower positions on the landscape and have a thicker organic surface layer.
Lafitte soils: 3 percent. On similar positions and have organic materials throughout the upper 51 inches.
Larose soils: 3 percent. In freshwater marshes.

Component Description

Bancker

MLRA: 151—Gulf Coast Marsh
Landform: Brackish areas along bayous in the marsh on delta plain
Landform position: Linear areas
Parent material: Fluid clayey alluvium
Slope: 0.0 to 0.2 percent

Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: High (about 11.3 inches)
Shrink-swell potential: Low (about 1.5 LEP)
F*looding hazard:* Very frequent, January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches
Runoff class: High
Ecological site: Brackish Fluid Marsh
Nonirrigated land capability: 8w

Typical Profile

Surface layer:
0 to 9 inches—very dark grayish brown muck

Substratum layer:
9 to 27 inches—very dark gray clay
27 to 39 inches—dark gray clay
39 to 54 inches—gray clay
54 to 74 inches—dark gray clay

Use and Management

Major land uses: Wetland wildlife habitat and extensive forms of recreation, such as hunting and fishing.

Cropland

- These soils are not suited to cropland because of frequent flooding.

Pastureland

- These soils are not suitable for pasture.

Woodland

- These soils are not suitable for the production of trees.

Building sites

- The soil is not suited to building site development because of ponding, flooding, depth to a high seasonal water table, and high organic matter content.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of ponding, slow water movement, and depth to a high seasonal water table.
- The flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to a high seasonal water table affects the ease of excavation and grading and limits the bearing capacity of this soil.

- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

BRA—Barbary muck, frequently flooded

Map Unit Composition

Major Components
Barbary and similar soils: 79 to 91 percent

Contrasting Inclusions
Allemands soils: 3 percent. On nearby freshwater marshes, and they have thick organic layers.
Aquents soils: 2 percent. On higher positions adjacent to streams and canals and consist of hydraulically deposited, dredged fill material.
Fausse soils: 2 percent. On slightly higher backswamp positions and have a nonfluid subsoil layer.
Galvez soils: 2 percent. On natural levee positions, are silty throughout the upper 40 inches, and are better drained.
Harahan soils: 2 percent. On artificially drained positions and have a nonfluid, clayey subsoil more than 20 inches thick.
Maurepas soils: 2 percent. On similar positions and have organic materials to depths of more than 51 inches.
Schriever soils: 2 percent. On higher backswamp positions nearer to natural levees, are better drained, and have nonfluid subsoil layers to more than 60 inches deep.

Component Description

Barbary

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Backswamp on delta plain
Landform position: Concave areas
Parent material: Fluid clayey alluvium
Slope: 0.0 to 0.5 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Very high (about 12.3 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches
Runoff class: Negligible
Ecological site: Not assigned
Nonirrigated land capability: 8w

Typical Profile

Surface layer:
0 to 6 inches—very dark grayish brown muck
6 to 12 inches—dark gray clay

Substratum layer:
12 to 42 inches—gray clay
42 to 48 inches—dark gray clay
48 to 84 inches—gray clay

Use and Management

Major land uses: Woodland, wetland wildlife habitat, and extensive forms of recreation, such as hunting and fishing.

Cropland

- These soils are not suited to cropland because of frequent flooding.

Pastureland

- These soils are not suitable for pasture.

Woodland

- Standing water and a seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.
- The low strength, flooding, ponding, and wetness of the soil increases the cost of constructing haul roads and log landings.
- Because of low soil strength, harvesting equipment may be difficult to operate and damage may result. The low strength of the soil may create unsafe conditions for log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment, and the use of equipment for site preparation to drier periods.

Building sites

- This soil is not suited to building site development because of flooding, ponding, depth to a high seasonal water table, and high organic matter content.
- The frequent flooding in areas of this soil greatly increases the risk of damage associated with floodwaters.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of ponding, slow water movement, and depth to a seasonal high water table.
- Flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to a seasonal high water table affects the ease of excavation and grading and limits the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

CoA—Coteau silt, 0 to 1 percent slopes

Map Unit Composition

Major Components
Coteau and similar soils: 85 to 90 percent

Contrasting Inclusions
Jeanerette soils: 6 percent. On slightly lower concave or flat positions, have a darker surface layer more than 10 inches thick, and are gray in the upper part of the subsoil.
Patoutville soils: 7 percent. On slightly lower concave or flat positions, have red iron accumulations, and are gray in the upper part of the subsoil.

Component Description

Coteau

MLRA: 134—Southern Mississippi Valley Loess
Landform: Terrace on upland
Landform position: Convex areas
Parent material: Loess
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately slow (about 1.41 micrometers/seconds)
Available water capacity: Very high (about 13.2 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from 18 to 36 inches, December to April
Runoff class: Medium
Ecological site: Not assigned
Nonirrigated land capability: 2w

Typical Profile

Surface layer:
0 to 5 inches—brown silt

Subsoil layer:
5 to 14 inches—yellowish brown silt loam
14 to 24 inches—brown silt loam
24 to 31 inches—brown silty clay loam
31 to 42 inches—grayish brown silty clay loam
42 to 55 inches—mixed grayish brown and yellowish brown silt loam
55 to 85 inches—grayish brown silt loam

Use and Management

Major land uses: Cropland (fig. 4), urban, and residential

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.

Figure 4.—Soybeans on Coteau silt, 0 to 1 percent slopes.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.

Woodland

- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, and increases the cost of constructing haul roads and log landings.

Building sites

- This soil is poorly suited to building site development because of the seasonal high water table and moderate shrink-swell.
- The high water table restricts the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- Moderate shrinking and swelling of the soil may crack foundations and basement walls. Foundations and other structures may require some special design and construction techniques or maintenance.

Septic tank absorption fields

- The restricted permeability of this soil limits the absorption and proper treatment of the effluent from septic systems.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.

Local roads and streets

- Because of shrinking and swelling, this soil may not be suitable for use as base material for local roads and streets.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.

CvA—Carville and Hydraquents soils, undulating, flooded

Map Unit Composition

Major Components
Carville and similar soils: 45 to 55 percent
Hydraquents and similar soils: 35 to 45 percent

Contrasting Inclusions
Glenwild soils: 10 percent. On similar positions but are better drained and have a reddish solum.

Component Description

Carville

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Mississippi River natural levee on delta plain
Landform position: Convex areas
Parent material: Loamy alluvium
Slope: 0 to 2 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderate (about 4.23 micrometers/second)
Available water capacity: Very high (about 13.2 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Frequent, during December to June
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from 18 to 48 inches, during December to April
Runoff class: Low
Ecological site: Not assigned
Nonirrigated land capability: 5w

Hydraquents

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Swale on delta plain
Landform position: Concave areas
Parent material: Fluid clayey alluvium
Slope: 0.0 to 0.5 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Very high (about 12.3 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Very frequent, January to December
Ponding hazard: Frequent, January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches, during January to December
Runoff class: Negligible
Ecological site: Not assigned
Nonirrigated land capability: 8w

Typical Profile

Carville

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

Subsoil layer:
6 to 22 inches—grayish brown silt loam

Substratum layer:
22 to 80 inches—grayish brown silt loam

Hydraquents
0 to 80 inches—gray to greenish gray fluid clay throughout

Use and Management

Major land uses: Wildlife habitat and recreation

Cropland

- These soils are not suited to cropland because of frequent flooding.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- Standing water can inhibit the growth of some species of seedlings by restricting root respiration.
- Flooding and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.
- The low strength of the soil may create unsafe conditions for log trucks, which can increase the cost of constructing haul roads and log landings.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- The soil is not suited to building site development because of ponding, flooding, depth to a seasonal high water table, and high organic matter content.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.
- The high content of clay in the soil below the surface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of ponding, slow water movement, and depth to a seasonal high water table.
- The flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to a seasonal high water table affects the ease of excavation and grading and limits the bearing capacity of this soil.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

CYA—Clovelly muck, very frequently flooded

Map Unit Composition

Major Components
Clovelly and similar soils: 79 to 91 percent

Contrasting Inclusions
Bancker soils: 8 percent. On similar positions and are fluid and mineral throughout.
Lafitte soils: 7 percent. On similar positions and have organic materials more than 51 inches thick.

Component Description

Clovelly

MLRA: 151—Gulf Coast Marsh (fig. 5)
Landform: Brackish marsh on delta plain
Landform position: Linear areas
Parent material: Herbaceous organic material over very fluid clayey alluvium
Slope: 0.0 to 0.2 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Very high (about 12.6 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Very frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches, during January to December
Runoff class: High
Ecological site: Brackish Organic Marsh
Nonirrigated land capability: 8w

Typical Profile

Surface layer:
0 to 12 inches—very dark grayish brown muck

Subsurface layer:
12 to 28 inches—dark gray muck

Substratum layer:
28 to 34 inches—gray mucky clay
34 to 65 inches—greenish gray clay
65 to 84 inches—dark greenish gray clay

Use and Management

Major land uses: Wetland wildlife habitat and extensive forms of recreation, such as hunting and fishing.

Figure 5.—Saltmeadow or marshhay cordgrass *[Spartina patens* (Ait.) Muhl.] growing in brackish marsh on Clovelly muck, very frequently flooded.

Cropland

- These soils are not suited to cropland because of frequent flooding.

Pastureland

- These soils are generally not suitable for pasture.

Woodland

- These soils are not suitable for the production of trees.

Building sites

- The soil is not suited to building site development because of ponding, flooding, depth to a seasonal high water table, and high organic matter content.
- This soil is not suited to building site development because of the high potential for subsidence. When drained, the layers in this soil subside. Subsidence leads to differential rates of settlement which may cause foundations to break.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of ponding, slow water movement, flooding, depth to a seasonal high water table, and subsidence.
- The flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to a seasonal high water table affects the ease of excavation and grading and limits the bearing capacity of this soil.

- Subsidence of the soil layers reduces the bearing capacity of this soil.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

DP—Dumps

Map Unit Composition

Major Components
Dumps: 80 to 90 percent

Contrasting Inclusions
Water: 15 percent

Component Description

Dumps

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Natural levee on delta plain
Landform position: Convex areas
Parent material: Unspecified
Slope: Unspecified
Depth to restrictive feature: None
Drainage class: Unspecified
Slowest saturated hydraulic conductivity: Unspecified
Available water capacity: Unspecified
Shrink-swell potential: Unspecified
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Unspecified
Runoff class: Unspecified
Ecological site: Not assigned
Nonirrigated land capability: Not assigned

Use and Management

Major land uses: Municipal and agricultural waste disposal. Dumps are not suited to agricultural, forest, or urban uses.

DrA—Dupuy silt loam, 0 to 1 percent slopes

Map Unit Composition

Major Components
Dupuy and similar soils: 80 to 90 percent

Contrasting Inclusions
Baldwin soils: 8 percent. On lower positions on the natural levee, are poorly drained, and are clayey throughout the upper part of the solum.
Iberia soils: 7 percent. On lower positions on the natural levee, are poorly drained, and are clayey throughout the upper part of the solum.

Component Description

Dupuy

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Protected areas; natural levee on delta plain
Landform position: Convex areas

Parent material: Loamy alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately slow (about 1.41 micrometers/seconds)
Available water capacity: High (about 10.8 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 18 to 40 inches, during January to April
Runoff class: Medium
Ecological site: Not assigned
Nonirrigated land capability: 2w

Typical Profile

Surface layer:
0 to 10 inches—dark grayish brown silt loam

Subsoil layer:
10 to 42 inches—grayish brown silty clay loam
42 to 80 inches—gray silty clay loam

Use and Management

Major land uses: Cropland and residential

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Controlling traffic can minimize soil compaction.
- Maintaining or increasing the content of organic matter in the soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.

Building sites

- This soil is poorly suited to building site development because of the seasonal high water table, soil wetness, and moderate shrink-swell.
- Moderate shrinking and swelling of the soil may crack foundations and basement walls. Foundations and other structures may require some special design and construction techniques or maintenance.
- Structures may need special design to avoid damage from wetness.

- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.

Septic tank absorption fields

- The restricted permeability of this soil limits the absorption and proper treatment of the effluent from septic systems.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.

Local roads and streets

- This soil may not be suitable for use as base material for local roads and streetsbecause of shrinking and swelling.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.

DsA—Dupuy silt loam, 0 to 1 percent slopes, occasionally flooded

Map Unit Composition

Major Components
Dupuy and similar soils: 80 to 90 percent

Contrasting Inclusions
Baldwin soils: 8 percent. On lower positions on the natural levee, are poorly drained, and are clayey throughout the upper part of the solum.
Iberia soils: 7 percent. On lower positions on the natural levee, are poorly drained, and are clayey throughout the upper part of the solum.

Component Description

Dupuy

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Teche natural levee on delta plain
Landform position: Convex areas
Parent material: Loamy alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately slow (about 1.41 micrometers/seconds)
Available water capacity: High (about 10.4 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: Occasional, from July to November
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 18 to 42 inches, during January to April
Runoff class: Medium
Ecological site: Not assigned
Nonirrigated land capability: 3w

Typical Profile

Surface layer:
0 to 2 inches—very dark grayish brown slightly decomposed plant material
2 to 6 inches—dark grayish brown silt loam
6 to 10 inches—brown silt loam

Subsoil layer:
10 to 22 inches—light olive brown silty clay loam
22 to 31 inches—grayish brown silty clay loam
31 to 42 inches—grayish brown silt loam
42 to 51 inches—gray silt loam
51 to 80 inches—gray silty clay loam

Use and Management

Major land uses: Cropland, woodland, and the oil industry

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Measures that protect the soil from scouring and minimize the loss of crop residue by floodwaters are needed.
- Small grain crops may be damaged by flooding in summer and fall.
- The soil may be deficient in micronutrients because of the high content of organic matter.

Pastureland

- Forage production can be improved by seeding grass-legume mixtures that are tolerant of flooding.
- Sediment left on forage plants after a flood event may reduce palatability and forage intake by the grazing animal.
- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.

Woodland

- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.
- Flooding restricts the safe use of roads by log truck, and may result in damage to haul roads and increased maintenance costs.

Building sites

- Under normal weather conditions, this soil is subject to occasional flooding. The flooding may result in physical damage and costly repairs to buildings. This soil is not suited to homesite development. Special design of some structures, such as farm outbuildings, may be needed to prevent damage caused by flooding.
- The seasonal high water table and moderate shrinking and swelling of the subsoil make this soil not suitable for homesite development.

Septic tank absorption fields

- This soil is not suited to septic tank absorption fields. The flooding in areas of this soil, the depth to a seasonal high water table, and slow water movement, greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Because of moderate shrinking and swelling, this soil may not be suitable for use as base material for local roads and streets.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

DuD—Duson silt, 5 to 12 percent slopes

Map Unit Composition

Major Components
Duson and similar soils: 90 to 95 percent

Contrasting Inclusions
Kleinpeter soils: 7 percent. On lower terrace positions that are not dissected, are well drained, and do not have a clayey subsoil layer within a depth of 80 inches.

Component Description

Duson

MLRA: 134—Southern Mississippi Valley Loess
Landform: Highly dissected dome on upland
Hillslope position: Convex backslope
Parent material: Loess
Slope: 5 to 12 percent
Depth to restrictive feature: 30 to 60 inches to abrupt textural change
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Slow (about 0.42 micrometers/seconds)
Available water capacity: Very high (about 12.9 inches)
Shrink-swell potential: High (about 7.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Perched, from a depth of 18 to 36 inches, during December to April
Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 4e

Typical Profile

Surface layer:
0 to 4 inches—brown silt

Subsurface layer:
4 to 7 inches—yellowish brown silt loam

Subsoil layer:
7 to 24 inches—yellowish brown silty clay loam
24 to 38 inches—yellowish brown silt loam
38 to 80 inches—grayish brown silty clay

Use and Management

Major land uses: Woodland wildlife habitat and the salt mining industry

Cropland

- Using a system of conservation tillage and planting cover crops reduce the runoff rate and help to minimize soil loss by erosion.
- The rooting depth of crops may be restricted by the high clay content of the lower subsoil layer.

Pastureland

- Avoiding overgrazing can reduce the hazard of erosion.
- Maintaining healthy plants and vegetative cover can reduce the hazard of erosion.
- Erosion control is needed when pastures are renovated.
- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.

Woodland

- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.
- The slope creates unsafe operating conditions and reduces the operating efficiency of log trucks, and restricts the use of some mechanical planting equipment.

Building sites

- This soil is poorly suited to building site development because of moderate shrink-swell, high clay content, slope, wetness, and the seasonal high water table.
- Moderate shrinking and swelling of the soil may crack foundations of dwellings with basements. Foundations and other structures generally require special design and construction techniques or intensive maintenance.
- The slope influences the use of machinery and the amount of excavation required. Special building practices and designs may be required to ensure satisfactory performance.
- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance. Structures may need special design to avoid damage from wetness.
- The high content of clay in the lower subsoil layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- The restricted permeability of this soil limits the absorption and proper treatment of the effluent from septic systems.
- Because of the slope, special design and installation techniques are needed for the effluent distribution lines and seepage of poorly treated effluent is a concern.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.

Local roads and streets

- This soil is somewhat limited for use as base material for local roads and streets because of moderate shrinking and swelling, seasonal high water table, slope, and low strength.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.

FAA—Fausse soils, frequently flooded

Map Unit Composition

Major Components
Fausse and similar soils: 79 to 91 percent

Contrasting Inclusions
Schriever soils: 5 percent. On slightly higher positions and they dry enough to form cracks in the upper part of the solum during normal years.
Maurepas soils: 5 percent. On lower positions and have organic layers more than 51 inches thick.
Barbary soils: 5 percent. On lower positions and are fluid mineral soils.

Component Description

Fausse
MLRA: 131A—Southern Mississippi River Alluvium
Landform: Teche backswamp on delta plain
Landform position: Concave areas
Parent material: Clayey alluvium
Slope: 0.0 to 0.5 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: High (about 11.9 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches, January to December
Runoff class: Negligible
Ecological site: Not assigned
Nonirrigated land capability: 7w

Typical Profile

Surface layer:
0 to 6 inches—dark grayish brown loam

Subsoil layer:
6 to 24 inches—gray clay
24 to 80 inches—greenish gray clay

Use and Management

Major land uses: Wildlife habitat and hardwood timber production

Cropland

- These soils are not suited to cropland because of frequent flooding.

Pastureland

- These soils are generally not suitable for pasture.

Woodland

- Standing water and the seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- Flooding, ponding, soil wetness, and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, damage to haul roads, and increased maintenance costs
- This soil becomes sticky when wet because of the content of clay. The stickiness increases the cost of constructing haul roads and log landings, reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- This soil is not suited to building site development because of frequent flooding, ponding, a seasonal high water table, and high shrinking and swelling of the soil.
- The frequent flooding in areas of this soil greatly increases the risk of damage associated with floodwaters.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of the slow water movement, and depth to seasonal high water table, ponding, and flooding.
- The flooding in areas of this soil, greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- This soil may not be suitable for use as base material for local roads and streets because of shrinking and swelling.
- Ponding and depth to a high water table, affects the ease of excavation and grading and limits the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

GaA—Galvez silt loam, 0 to 1 percent slopes

Map Unit Composition

Major Components
Galvez and similar soils: 80 to 90 percent

Contrasting Inclusions
Baldwin soils: 4 percent. On lower positions on the natural levee, are poorly drained, and are clayey throughout the upper part of the solum.
Iberia soils: 4 percent. On lower positions on the natural levee, are poorly drained, and are clayey throughout the upper part of the solum.
Glenwild soils: 4 percent. On similar positions on the natural levee, but are moderately well drained and have a reddish solum.
Loreauville soils: 3 percent. On lower positions and have a dark surface layer more than 7 inches thick.

Component Description

Galvez

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Teche natural levee on delta plain
Landform position: Convex areas
Parent material: Loamy alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately slow (about 1.41 micrometers/seconds)
Available water capacity: Very high (about 12.6 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 18 to 36 inches, December to April
Runoff class: Medium
Ecological site: Not assigned
Nonirrigated land capability: 2w

Typical Profile

Surface layer:
0 to 8 inches—dark grayish brown silt loam

Subsoil layer:
8 to 17 inches—brown and grayish brown silty clay loam
17 to 83 inches—grayish brown silt loam

Substratum layer:
83 to 91 inches—grayish brown silty clay

Use and Management

Major land uses: Cropland, urban, and residential

Cropland

- All areas are prime farmland.

- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Controlling traffic can minimize soil compaction.
- Maintaining or increasing the content of organic matter in the soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.

Building sites

- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- Moderate shrinking and swelling of the soil may crack foundations and basement walls. Foundations and other structures may require some special design and construction techniques or maintenance.

Septic tank absorption fields

- The restricted permeability of this soil limits the absorption and proper treatment of the effluent from septic systems.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.

Local roads and streets

- This soil may not be suitable for use as base material for local roads and streets because of moderate shrinking and swelling.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.

GxA—Uderts and Glenwild soils, 0 to 3 percent slopes, smoothed

Map Unit Composition

Major Components

Uderts and similar soils: 45 to 55 percent
Glenwild and similar soils: 35 to 45 percent

Contrasting Inclusions

Baldwin soils: 5 percent. On mid-slope positions between the natural levee and backswamps.
Galvez soils: 5 percent. On similar positions and formed in gray sediments.

Component Description

Uderts

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Natural levee on delta plain
Hillslope position: Linear footslope, concave footslope
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Moderate (about 8.4 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Rare, during January to December
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from the surface to a depth of 18 inches, during January to December
Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 3w

Glenwild

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Red River natural levee on delta plain
Landform position: Convex areas
Parent material: Loamy alluvium
Slope: 0 to 3 percent
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately slow (about 1.40 micrometers/seconds)
Available water capacity: Very high (about 12.6 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Perched, from a depth of 18 to 40 inches, during January to March
Runoff class: Low
Ecological site: Not assigned
Nonirrigated land capability: 2e

Typical Profile

Uderts

0 to 80 inches—red silty clay or clay in the solum; red and gray silt loam to silty clay loam in the substratum

Glenwild

Surface layer:
0 to 4 inches—brown silty clay loam

Subsoil layer:
4 to 10 inches—red silty clay loam
10 to 22 inches—red silt loam

22 to 30 inches—red and brown thickly stratified silty clay loam
30 to 35 inches—strong brown silt loam

Substratum layer:
35 to 42 inches—brown silt loam
42 to 45 inches—red silty clay
45 to 52 inches—reddish brown silty clay
52 to 63 inches—red silty clay loam
63 to 67 inches—stratified grayish brown and red silt loam
67 to 80 inches—light brown silt loam

Use and Management

Major land uses: Cropland, pasture, and residential

Cropland

- All areas are prime farmland.
- Clods may form if the soil is tilled when wet.
- Controlling traffic can minimize soil compaction.
- The rooting depth of crops may be restricted by the high clay content.
- Maintaining or increasing the content of organic matter in the soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- A seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- The wetness and low strength of these soils may cause the formation of ruts, which can result in unsafe conditions and damage to equipment and log trucks, and increases the cost of constructing haul roads and log landings.
- Because of low soil strength, harvesting equipment may be difficult to operate and damage may result.
- The stickiness of these soils reduce the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- These soils are not suited to homesite development because of flooding, high shrink-swell, and the seasonal high water table.
- Under unusual weather conditions, these soils are subject to flooding. The flooding may result in physical damage and costly repairs to buildings. Special design of some structures, such as farm outbuildings, may be needed to prevent the damage caused by flooding.
- The high shrinking and swelling and the seasonal high water table in these soils below the surface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of flooding, the seasonal high water table, and slow water movement.
- The flooding in areas of these soils on rare occasions will limit the absorption and proper treatment of the effluent from septic systems.
- Floodwaters may damage some components of septic systems.

Local roads and streets

- These soils may not be suitable for use as base material for local roads and streets because of shrinking and swelling.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of these soils.
- The low strength of these soils are generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

HRA—Harahan clay

Map Unit Composition

Major Components
Harahan and similar soils: 79 to 91 percent

Contrasting Inclusions
Fausse soils: 4 percent. On similar, but undrained, flooded positions and have nonfluid layers to more than 40 inches deep.
Barbary soils: 4 percent. On similar, but undrained, flooded positions and are fluid throughout.
Allemands soils: 4 percent. On slightly lower flooded positions and have organic materials more than 16 inches thick.
Schriever soils: 3 percent. On slightly higher positions, are nonfluid in all layers to a depth of 60 inches or more, and dry enough to form cracks in the upper part of the solum during normal years.

Component Description

Harahan

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Backswamp on delta plain
Landform position: Linear areas
Parent material: Nonfluid over fluid clayey alluvium
Slope: 0.0 to 0.5 percent
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: High (about 10.5 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Rare, during July to November
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 12 to 36 inches, during January to December

Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 3w

Typical Profile

Surface layer:
0 to 11 inches—dark gray clay

Subsoil layer:
11 to 23 inches—gray nonfluid clay

Substratum layer:
23 to 65 inches—gray very fluid clay
76 to 84 inches—greenish gray very fluid clay

Use and Management

Major land uses: Urban land and recreation

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Clods may form if the soil is tilled when wet.
- Controlling traffic can minimize soil compaction.
- The rooting depth of crops is restricted by the very high clay content.
- Maintaining or increasing the content of organic matter in this soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.
- Control of the water table helps reduce subsidence.
- The movement of water into subsurface drains is restricted.
- Subsurface drainage helps to lower the seasonal high water table.
- Including deep-rooted cover crops in the rotation is important for improving soil structure and providing pathways in the clayey subsoil to facilitate the movement of water into subsurface drains.
- This soil may be deficient in micronutrients because of the high content of organic matter.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- The low strength of this soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.
- This soil becomes sticky when wet because of the content of clay. The stickiness increases the cost of constructing haul roads and log landings, reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- This soil is not suited to homesite development because of flooding and the seasonal high water table.
- Under unusual weather conditions, this soil is subject to flooding. The flooding may result in physical damage and costly repairs to buildings.
- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- Special design of some structures, such as farm outbuildings, may be needed to prevent the damage caused by flooding.

Septic tank absorption fields

- This soil is poorly suited to septic tank absorption fields because of flooding, restricted permeability, and the seasonal high water table.
- Flooding in areas of this soil on rare occasions will limit the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.
- The restricted permeability of this soil limits the absorption and proper treatment of the effluent from septic systems.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.

Local roads and streets

- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

HSA—Harahan and Allemands soils, drained

Map Unit Composition

Major Components
Harahan and similar soils: 45 to 55 percent
Allemands and similar soils: 35 to 45 percent

Contrasting Inclusions
Barbary soils: 4 percent. On similar positions and are fluid throughout.
Fausse soils: 3 percent. On similar positions and have nonfluid layers to more than 40 inches deep.
Larose soils: 3 percent. On the landward side of the Allemands soils and are fluid, mineral soils.

Component Description

Harahan

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Backswamp on delta plain

Landform position: Linear areas
Parent material: Nonfluid over fluid clayey alluvium
Slope: 0.0 to 0.5 percent
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: High (about 10.4 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Rare, during July to November
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 12 to 36 inches, during January to December
Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 3w

Allemands

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Protected and artificially drained freshwater marsh on delta plain
Landform position: Linear areas
Parent material: Herbaceous organic material over fluid clayey alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Very high (about 14.9 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Rare, during July to November
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 6 to 48 inches, during January to December
Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 4w

Typical Profile

Harahan

Surface layer:
0 to 6 inches—dark gray silty clay loam

Subsoil layer:
6 to 23 inches—dark gray nonfluid clay

Substratum layer:
23 to 42 inches—dark gray very fluid clay
42 to 60 inches—gray very fluid clay

Allemands

Surface layer:
0 to 9 inches—dark brown muck

Subsurface layer:
9 to 28 inches—very dark gray muck

Substratum layer:
28 to 56 inches—gray clay
56 to 60 inches—dark gray clay

Use and Management

Major land uses: Pasture, wildlife habitat, and recreation

Cropland

- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Clods may form if these soils are tilled when wet.
- Controlling traffic can minimize soil compaction.
- The rooting depth of crops is restricted by the very high clay content.
- Maintaining or increasing the content of organic matter in these soils help to prevent crusting, improves tilth, and increases the rate of water infiltration.
- Control of the water table helps reduce subsidence.
- The movement of water into subsurface drains is restricted.
- Subsurface drainage helps to lower the seasonal high water table.
- Including deep-rooted cover crops in the rotation is important for improving soil structure and providing pathways in the clayey subsoil to facilitate the movement of water into subsurface drains.
- These soils may be deficient in micronutrients because of the high content of organic matter.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- The low strength of these soils may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, log trucks, and harvesting equipment.
- These soils become sticky when wet because of the content of clay. The stickiness increases the cost of constructing haul roads and log landings, reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- These soils are not suited to homesite development because of flooding, high organic matter content, and subsidence.
- These soils are not suited to building site development because of the high potential for subsidence, high organic matter content, and seasonal high water table.
- When drained, the layers in these soils subside. Subsidence of the Allemands soils leads to differential rates of settlement which may cause foundations to break.
- Under unusual weather conditions, these soils are subject to flooding. The flooding may result in physical damage and costly repairs to buildings.

- Special design of some structures may be needed to prevent the damage caused by flooding.

Septic tank absorption fields

- These soils are poorly suited to septic tank absorption fields because of flooding, restricted permeability, seasonal high water table, and subsidence of the Allemands soils.
- Subsidence of the Allemands soils greatly increases the difficulty of designing and installing stable effluent distribution lines.
- The flooding in areas of these soils on rare occasions limit the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.
- The restricted permeability of these soils limit the absorption and proper treatment of the effluent from septic systems.
- The seasonal high water table in areas of these soils greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.

Local roads and streets

- Subsidence of the Allemands soils reduces the bearing capacity of these soils.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of these soils.
- The low strength of these soils are generally unfavorable for supporting heavy loads. Special design of local roads and streets are needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges are needed to prevent the damage caused by flooding.

HYA—Hydraquents, Carville, and Glenwild soils, undulating, flooded

Map Unit Composition

Major Components
Hydraquents and similar soils: 30 to 40 percent
Carville and similar soils: 25 to 35 percent
Glenwild and similar soils: 15 to 25 percent

Contrasting Inclusions
Fausse soils: 15 percent. On similar positions as the hydraquents soils but have a nonfluid subsoil.

Component Description

Hydraquents

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Backswamp on delta plain
Landform position: Concave areas
Parent material: Fluid clayey alluvium
Slope: 0.0 to 0.5 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Very high (about 12.3 inches)

Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Very frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches, during January to December
Runoff class: Negligible
Ecological site: Not assigned
Nonirrigated land capability: 8w

Carville

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Natural levee, delta plain
Landform position: Convex areas
Parent material: Loamy alluvium
Slope: 0 to 2 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderate (about 4.23 micrometers/seconds)
Available water capacity: Very high (about 13.2 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Frequent, during December to June
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 18 to 48 inches, during December to April
Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 5w

Glenwild

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Red River natural levee on delta plain
Landform position: Convex areas
Parent material: Loamy alluvium
Slope: 0 to 3 percent
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderately slow (about 1.40 micrometers/seconds)
Available water capacity: Very high (about 12.6 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: Frequent, during December to May
Ponding hazard: None
Depth to seasonal water saturation: Perched, from a depth of 20 to 40 inches, during January to March
Runoff class: Very low
Ecological site: Not assigned
Nonirrigated land capability: 5w

Typical Profile

Hydraquents

0 to 80 inches—gray to greenish gray fluid clay throughout

Carville

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

Subsoil layer:
6 to 22 inches—grayish brown silt loam

Substratum layer:
22 to 80 inches—grayish brown silt loam

Glenwild

Surface layer:
0 to 6 inches—brown silt loam

Subsoil layer:
6 to 24 inches—brown silty clay loam
24 to 42 inches—dark brown stratified silt loam, very fine sandy loam, and silty clay loam
42 to 55 inches—dark brown silt loam

Substratum layer:
55 to 80 inches—dark brown heavy silty clay loam

Use and Management

Major land uses: Wildlife habitat and recreation

Cropland

- These soils are not suited to cropland because of frequent flooding.

Pastureland

- These soils are not suitable for pasture.

Woodland

- Standing water and the seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- Flooding, wetness, and low strength of these soils may cause the formation of ruts, which can result in unsafe conditions and damage to equipment and log trucks; and increase the cost of constructing haul roads and log landings, which may result in damage to haul roads and increased maintenance costs.
- These soils become sticky when wet because of the content of clay. The stickiness increases the cost of constructing haul roads and log landings, reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- These soils are not suited to building site development because of ponding, flooding, high seasonal water table, high organic matter content, and high shrinking and swelling.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of ponding, flooding, depth to high seasonal water table, and slow water movement.

- The flooding in areas of these soils greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and high shrinking and swelling of these soils affect the ease of excavation and grading and limit the bearing capacity of these soils.
- The low strength of these soils are not favorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

IbA—Iberia clay, 0 to 1 percent slopes

Map Unit Composition

Major Components
Iberia and similar soils: 79 to 91 percent

Contrasting Inclusions
Schriever soils: 5 percent. On similar positions and have a dark colored surface layer less than 12 inches thick.
Loreauville soils: 5 percent. On higher positions and have less than 35 percent clay throughout the subsoil.
Baldwin soils: 5 percent. On higher positions on the footslope of natural levees, average less than 60 percent clay in the subsoil, and have a dark colored surface layer less than 10 inches thick.

Component Description

Iberia

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Backswamp on delta plain
Landform position: Linear areas
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: High (about 10.0 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Rare, during December to April
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from the surface to a depth of 24 inches, during December to April
Runoff class: Low
Ecological site: Not assigned
Nonirrigated land capability: 3w

Typical Profile

Iberia

Surface layer:
0 to 17 inches—black clay

Subsoil layer:
17 to 37 inches—olive gray clay
37 to 60 inches—dark gray silty clay loam

Substratum layer:
60 to 80 inches—gray silty clay loam

Use and Management

Major land uses: Cropland (fig. 6) and urban

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Clods may form if the soil is tilled when wet.
- Controlling traffic can minimize soil compaction.
- The rooting depth of crops may be restricted by the high clay content.
- Maintaining or increasing the content of organic matter in the soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.
- The movement of water into subsurface drains is restricted.
- Subsurface drainage helps to lower the seasonal high water table.
- Including deep-rooted cover crops in the rotation is important for improving soil structure and providing pathways in the clayey subsoil to facilitate the movement of water into subsurface drains.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- A seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- Soil wetness and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, and may limit the use of this soil by log trucks.
- The stickiness of the soil reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- These soils are not suited to homesite development because of flooding, seasonal high water table, high content of clay, and high shrink-swell.

Figure 6.—Immature sugarcane recently "off-barred" in preparation for fertilizer application, on an area of Iberia clay, 0 to 1 percent slopes.

- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- Under unusual weather conditions, this soil is subject to flooding. The flooding may result in physical damage and costly repairs to buildings.
- Special design of some structures, such as farm outbuildings, may be needed to prevent the damage caused by flooding.
- The high content of clay in the soil below the surface layer causes shrinking and swelling and increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- This soil is not suited to septic tank absorption fields because of flooding, the seasonal high water table, and slow water movement,
- Flooding in areas of this soil on rare occasions will limit the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- This soil may not be suitable for use as base material for local roads and streets because of shrinking and swelling,
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.

- Special design of roads and bridges is needed to prevent the damage caused by flooding.

IEA—Iberia clay, frequently flooded

Map Unit Composition

Major Components
Iberia and similar soils: 79 to 91 percent

Contrasting Inclusions
Schriever soils: 5 percent. On similar positions and have a dark colored surface layer less than 10 inches thick.
Fausse soils: 5 percent. On lower positions, have a dark colored surface layer less than 10 inches thick, and remain too wet to form cracks during normal years.
Barbary soils: 5 percent. On lower positions and are fluid clay throughout.

Component Description

Iberia

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Teche backswamp on delta plain
Landform position: Linear areas
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: High (about 10.0 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Frequent, during December to June
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from the surface to a depth of 24 inches, during December to April
Runoff class: Low
Ecological site: Not assigned
Nonirrigated land capability: 5w

Typical Profile

Surface layer:
0 to 8 inches—very dark gray clay

Subsurface layer:
8 to 15 inches—very dark gray clay

Subsoil layer:
15 to 22 inches—dark gray clay
22 to 29 inches—gray clay
29 to 33 inches—dark gray clay
33 to 51 inches—gray silty clay

Substratum layer:
51 to 57 inches—gray silty clay
57 to 80 inches—gray silty clay loam

Use and Management

Major land uses: Wildlife habitat and hardwood production

Cropland

- These soils are not suited to cropland because of frequent flooding.

Pastureland

- Forage production can be improved by seeding grass-legume mixtures that are tolerant of flooding.
- Sediment left on forage plants after a flood event may reduce palatability and forage intake by the grazing animal.
- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- Standing water and a seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- Flooding, wetness, and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, may result in damage to haul roads and increased maintenance costs, and restrict the safe use of roads by log trucks.
- This soil becomes sticky when wet because of the content of clay. The stickiness increases the cost of constructing haul roads and log landings, reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- This soil is not suited to building site development because of the flooding, high content of clay, and seasonal high water table.
- The frequent flooding in areas of this soil greatly increases the risk of damage associated with floodwaters.
- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- The high content of clay which causes a high shrinking and swelling in the soil below the surface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of the flooding, seasonal high water table, and slow water movement.
- The flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- This soil may not be suitable for use as base material for local roads and streets because of shrinking and swelling.

- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

JaA—Jeanerette silt loam, 0 to 1 percent slopes

Map Unit Composition

Major Components
Jeanerette and similar soils: 79 to 91 percent

Contrasting Inclusions
Iberia soils: 5 percent. On similar positions and are clayey throughout the upper part of the solum.
Patoutville soils: 5 percent. On slightly higher or slightly more convex positions and have a dark surface layer less than 7 inches thick.
Coteau soils: 5 percent. On higher, more convex positions, and do not have aquic conditions in the upper part of the subsoil.

Component Description

Jeanerette

MLRA: 134—Southern Mississippi Valley Loess
Landform: Terrace on upland
Landform position: Linear areas
Parent material: Loess
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately slow (about 1.41 micrometers/seconds)
Available water capacity: High (about 10.5 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 12 to 30 inches, during December to April
Runoff class: Low
Ecological site: Not assigned
Nonirrigated land capability: 2w

Typical Profile

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

Subsurface layer:
6 to 22 inches—very dark gray silty clay loam

Subsoil layer:
22 to 25 inches—dark gray silty clay loam

25 to 32 inches—gray silty clay loam
32 to 50 inches—dark gray silty clay loam
50 to 80 inches—grayish brown silt loam

Use and Management

Major land uses: Cropland and pastureland

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Controlling traffic can minimize soil compaction.
- Maintaining or increasing the content of organic matter in the soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.
- Subsurface drainage helps to lower the seasonal high water table.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- Wetness and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, increases the cost of constructing haul roads and log landings, and may limit the use of this soil by log trucks.

Building sites

- This soil is poorly suited to building site development because of wetness, a seasonal high water table, and moderate shrink-swell.
- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- Structures may need special design to avoid damage from wetness.
- Moderate shrinking and swelling of the soil may crack foundations and basement walls. Foundations and other structures may require some special design and construction techniques or maintenance.

Septic tank absorption fields

- The restricted permeability of this soil limits the absorption and proper treatment of the effluent from septic systems.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.

Local roads and streets

- This soil may not be suitable for use as base material for local roads and streets because of shrinking and swelling.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.

- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.

KEA—Kenner muck, very frequently flooded

Map Unit Composition

Major Components
Kenner and similar soils: 79 to 91 percent

Contrasting Inclusions
Allemands soils: 8 percent. On similar positions, and have thin strata of clay in the subsurface layer.
Larose soils: 7 percent. On similar positions, and are fluid, clayey mineral soils.

Component Description

Kenner
MLRA: 151—Gulf Coast Marsh
Landform: Freshwater marsh on delta plain
Landform position: Linear areas
Parent material: Herbaceous organic material stratified with fluid clayey alluvium
Slope: 0.0 to 0.5 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Very high (about 13.6 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Very frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches, during January to December
Runoff class: High
Ecological site: Fresh Organic Marsh
Nonirrigated land capability: 8w

Typical Profile

Surface tier:
0 to 10 inches—dark gray muck

Subsurface tier:
10 to 30 inches—dark brown muck

Substratum tier:
30 to 32 inches—gray clay

Bottom tier:
32 to 80 inches—very dark gray muck

Use and Management

Major land uses: Wetland wildlife habitat and extensive forms of recreation, such as hunting and fishing.

Cropland

- This soil is not suited to cropland because of frequent flooding.

Pastureland

- This soil is generally not suitable for pasture.

Woodland

- This soil is not suitable for the production of trees.

Building sites

- This soil is not suited to building site development because of ponding, flooding, subsidence, depth to a seasonal high water table, and high organic matter content.
- When drained, the layers in this soil subside. Subsidence leads to differential rates of settlement which may cause foundations to break. Because of the high potential for subsidence, this soil is not suited to building site development.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- This soil is not suited to septic tank absorption fields because of ponding, slow water movement, and depth of seasonal high water table.
- Flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to seasonal high water table, affects the ease of excavation and grading and limits the bearing capacity of this soil.
- Subsidence of the soil layers reduces the bearing capacity of this soil.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

KpC—Kleinpeter silt, 1 to 5 percent slopes

Map Unit Composition

Major Components
Kleinpeter and similar soils: 79 to 91 percent

Contrasting Inclusions
Duson soils: 15 percent. On steeper, more dissected positions, and have a clayey subsoil layer within a depth of 40 inches.

Component Description

Kleinpeter

MLRA: 134—Southern Mississippi Valley Loess
Landform: Dome on upland
Landform position: Convex areas
Parent material: Loess
Slope: 1 to 5 percent
Depth to restrictive feature: None
Drainage class: Moderately well drained
Slowest saturated hydraulic conductivity: Moderate (about 4.23 micrometers/seconds)

Available water capacity: Very high (about 12.8 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Rare, during June to November
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 30 to 42 inches, during December to April
Runoff class: Low
Ecological site: Not assigned
Nonirrigated land capability: 2e

Typical Profile

Surface layer:
0 to 4 inches—very dark grayish brown silt

Subsurface layer:
4 to 11 inches—brown silt loam

Subsoil layer:
11 to 50 inches—70 percent strong brown silty clay loam interior and 30 percent pale brown silt exterior
50 to 74 inches—brown silty clay loam
74 to 80 inches—strong brown silty clay loam

Use and Management

Major land uses: Wildlife habitat and the salt mining industry

Cropland

- All areas are prime farmland.
- Grassed waterways can be used in some areas to slow and direct the movement of water and reduce erosion.
- Using a system of conservation tillage and planting cover crops reduce the runoff rate and help to minimize soil loss by erosion.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.

Pastureland

- Erosion control is needed when pastures are renovated.

Woodland

- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.

Building sites

- This soil is not suited to homesite development because of flooding, wetness, and a seasonal high water table.
- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- Under unusual weather conditions, this soil is subject to flooding. The flooding may result in physical damage and costly repairs to buildings. Special design of some structures may be needed to prevent the damage caused by flooding.

Septic tank absorption fields

- This soil is poorly suited to septic tank absorption fields because of flooding, a seasonal high water table, and moderate permeability.
- The flooding in areas of this soil on rare occasions will limit the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.
- The moderate permeability of this soil within the depth of the drainfield somewhat limits the absorption of the effluent from septic systems. An oversize drainfield may be needed.

Local roads and streets

- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

LAA—Lafitte muck, very frequently flooded

Map Unit Composition

Major Components
Lafitte and similar soils: 79 to 91 percent

Contrasting Inclusions
Bancker soils: 8 percent. On similar positions and are fluid and mineral throughout
Clovelly soils: 7 percent. On similar positions and have organic layers 16 to 51 inches thick over fluid mineral material.

Component Description

Lafitte

MLRA: 151—Gulf Coast Marsh
Landform: Brackish marsh on delta plain
Landform position: Linear areas
Parent material: Herbaceous organic material
Slope: 0.0 to 0.2 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: High (about 14.11 micrometers/seconds)
Available water capacity: Very high (about 19.1 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Very frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches, during January to December
Runoff class: High
Ecological site: Brackish Organic Marsh
Nonirrigated land capability: 8w

Typical Profile

Surface tier:
0 to 10 inches—brown muck

Subsurface tier:
10 to 15 inches—dark gray muck

Bottom tier:
15 to 57 inches—dark grayish brown muck
57 to 69 inches—brown muck

Substratum tier:
69 to 80 inches—olive gray fluid clay

Use and Management

Major land uses: Wetland wildlife habitat and extensive forms of recreation, such as hunting and fishing.

Cropland

- This soil is not suited to cropland because of frequent flooding.

Pastureland

- This soil is generally not suitable for pasture.

Woodland

- This soil is not suitable for the production of trees.

Building sites

- This soil is not suited to building site development because of ponding, flooding, subsidence, depth to a seasonal high water table, and high organic matter content.
- When drained, the layers in this soil subside. Subsidence leads to differential rates of settlement, which may cause foundations to break.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- These soils are not suited to septic tank absorption fields because of ponding, slow water movement, depth to a seasonal high water table, and subsidence.
- The flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to a seasonal high water table affects the ease of excavation and grading and limits the bearing capacity of this soil.
- Subsidence of the soil layers reduces the bearing capacity of this soil.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

LEA—Larose muck, very frequently flooded

Map Unit Composition

Major Components
Larose and similar soils: 79 to 91 percent

Contrasting Inclusions
Kenner soils: 4 percent. On similar positions and have organic layers more than 16 inches thick.
Barbary soils: 4 percent. In swamps and have stumps and logs within the profile.
Allemands soils: 4 percent. On similar positions and have organic layers more than 16 inches thick.
Aquents soils: 3 percent. On higher positions adjacent to streams and canals and consist of hydraulically deposited, dredged fill material.

Component Description

Larose

MLRA: 151—Gulf Coast Marsh
Landform: Marsh on delta plain
Landform position: Linear areas
Parent material: Thin herbaceous organic material over fluid clayey alluvium
Slope: 0.0 to 0.2 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: High (about 11.1 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Very frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches, during January to December
Runoff class: High
Ecological site: Fresh Fluid Marsh
Nonirrigated land capability: 8w

Typical Profile

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

Subsurface layer:
8 to 40 inches—dark gray very fluid clay

Substratum layer:
40 to 75 inches—gray very fluid clay
75 to 80 inches—very dark gray very fluid clay

Use and Management

Major land uses: Wetland wildlife habitat (fig. 7) and extensive forms of recreation, such as hunting and fishing.

Cropland

- This soil is not suited to cropland because of frequent flooding.

Pastureland

- This soil is generally not suitable for pasture.

Figure 7.—American white waterlily (*Nymphaea odorata* Ait. ssp. *Odorata)* growing in fresh water marsh on Larose muck, very frequently flooded. The dead trees indicate hydrology has been altered.

Woodland

- This soil is not suitable for the production of trees.

Building sites

- This soil is not suited to building site development because of ponding, flooding, depth to a seasonal high water table, and high organic matter content.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed.

Septic tank absorption fields

- This soil is not suited to septic tank absorption fields because of ponding, slow water movement, and depth to a seasonal high water table.
- Flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and depth to a seasonal high water table, affects the ease of excavation and grading and limits the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets and bridges is needed to prevent the structural damage caused by low soil strength and flooding.

LoA—Loreauville silt loam, 0 to 1 percent slopes

Map Unit Composition

Major Components
Loreauville and similar soils: 79 to 91 percent

Contrasting Inclusions
Baldwin soils: 5 percent. In lower positions on the natural levee, and have more than 35 percent clay throughout the upper part of the solum.
Iberia soils: 5 percent. In lower backswamp positions, and have more than 60 percent clay throughout the upper part of the solum.
Galvez soils: 5 percent. In more convex positions on the natural levee, and do not have a mollic epipedon.

Component Description

Loreauville
MLRA: 131A—Southern Mississippi River Alluvium
Landform: Teche natural levee on delta plain
Hillslope position: Convex toeslope
Parent material: Loamy alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Moderately slow (about 1.41 micrometers/seconds)
Available water capacity: Very high (about 13.0 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from a depth of 12 to 30 inches, during December to April
Runoff class: Medium
Ecological site: Not assigned
Nonirrigated land capability: 2w

Typical Profile

Surface layer:
0 to 5 inches—very dark gray silt loam

Subsurface layer:
5 to 10 inches—very dark grayish brown silty clay loam

Subsoil layer:
10 to 20 inches—grayish brown silty clay loam
20 to 30 inches—light brownish gray silt loam
30 to 42 inches—light brownish gray loam
42 to 57 inches—olive gray loam

Substratum layer:
57 to 65 inches—gray loam
65 to 80 inches—gray very fine sandy loam

Use and Management

Major land uses: Cropland and pastureland

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Controlling traffic can minimize soil compaction.
- Maintaining or increasing the content of organic matter in the soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.
- Subsurface drainage helps to lower the seasonal high water table.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- The wetness and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, increase the cost of constructing haul roads and log landings, and may limit the use of log trucks.

Building sites

- This soil is poorly suited to building site development because of the seasonal high water table and wetness.
- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance. Structures may need special design to avoid damage from wetness.

Septic tank absorption fields

- This soil is poorly suited to septic tank absorption fields because of the seasonal high water table, wetness, and moderate permeability.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.
- The moderate permeability of this soil within the depth of the drainfield somewhat limits the absorption of the effluent from septic systems. An oversize drainfield may be needed.

Local roads and streets

- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.

M-W—Miscellaneous water

Small, constructed water area that is used for industrial, sanitary, or mining applications and contains water most of the year.

MAA—Maurepas muck, frequently flooded

Map Unit Composition

Major Components
Maurepas and similar soils: 79 to 91 percent

Contrasting Inclusions
Larose soils: 3 percent. In freshwater marshes and are clayey, fluid, mineral soils.
Kenner soils: 3 percent. In freshwater marshes and do not contain wood fragments.
Barbary soils: 3 percent. In backswamps and are clayey, fluid, mineral soils.
Allemands soils: 3 percent. In freshwater marshes and have organic layers less than 51 inches thick.
Aquents soils: 3 percent. On higher positions adjacent to streams and canals and consist of hydraulically deposited, dredged fill material.

Component Description

Maurepas

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Freshwater swamp on delta plain
Landform position: Concave areas
Parent material: Highly decomposed woody organic material over fluid clayey alluvium
Slope: 0.0 to 0.2 percent
Depth to restrictive feature: None
Drainage class: Very poorly drained
Slowest saturated hydraulic conductivity: Rapid (about 42.34 micrometers/seconds)
Available water capacity: Very high (about 20.9 inches)
Shrink-swell potential: Low (about 1.5 LEP)
Flooding hazard: Frequent, during January to December
Ponding hazard: Frequent, during January to December
Depth to seasonal water saturation: Apparent, from the surface to greater than 72 inches, during January to December
R*unoff class:* Negligible
Ecological site: Not assigned
Nonirrigated land capability: 8w

Typical Profile

Surface tier:
0 to 8 inches—dark brown muck

Subsurface tier:
8 to 28 inches—dark brown muck

Bottom tier:
28 to 70 inches—brown muck

Use and Management

Major land uses: Wetland wildlife habitat and hardwood production

Cropland

- This soil is not suited to cropland because of frequent flooding.

Pastureland

- This soil is generally not suitable for pasture.

Woodland

- Standing water and a seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- Flooding, ponding, wetness, and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, increases the cost of constructing haul roads and log landings, may result in damage to haul roads and increased maintenance costs, and restrict the safe use of roads by log trucks.
- Harvesting equipment may be difficult to operate and damage may result because of low soil strength.

Building sites

- This soil is not suited to building site development because of flooding, ponding, subsidence, depth to a seasonal high water table, and high organic matter content
- When drained, the layers in this soil subside. Subsidence leads to differential rates of settlement which may cause foundations to break.
- Frequent flooding in areas of this soil greatly increases the risk of damage associated with floodwaters.
- The period when excavations can be made may be restricted and intensive construction site development and building maintenance may be needed. This soil is generally not suited to building site development.

Septic tank absorption fields

- This soil is not suited to septic tank absorption fields because of ponding, depth to a seasonal high water table, lack of filtering capacity, and subsidence.
- Flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- Ponding and a seasonal high water table, affects the ease of excavation and grading and limits the bearing capacity of this soil.
- Subsidence of the soil layers reduces the bearing capacity of this soil.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

PaA—Patoutville silt, 0 to 1 percent slopes

Map Unit Composition

Major Components
Patoutville and similar soils: 79 to 91 percent

Contrasting Inclusions
Coteau soils: 8 percent. On slightly higher, more convex positions, and do not have aquic conditions in the upper part of the subsoil.
Jeanerette soils: 7 percent. On lower, more concave positions, and have a dark surface layer more than 10 inches thick.

Component Description

Patoutville

MLRA: 134—Southern Mississippi Valley Loess
Landform: Terrace on upland
Landform position: Linear areas
Parent material: Loess
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Somewhat poorly drained
Slowest saturated hydraulic conductivity: Slow (about 0.42 micrometers/seconds)
Available water capacity: Very high (about 12.7 inches)
Shrink-swell potential: Moderate (about 4.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Perched, from a depth of 6 to 36 inches, during December to May
Runoff class: Medium
Ecological site: Not assigned
Nonirrigated land capability: 2w

Typical Profile

Surface layer:
0 to 4 inches—dark grayish brown silt

Subsurface layer:
4 to 10 inches—very dark grayish brown silt loam

Subsoil layer:
10 to 22 inches—grayish brown silt loam
22 to 28 inches—brown silty clay loam
28 to 38 inches—light brownish gray silt loam
38 to 65 inches—gray silt loam
65 to 80 inches—light gray silt loam

Use and Management

Major land uses: Cropland and pastureland

Cropland

- All areas are prime farmland.
- This soil is well suited to cropland.
- Subsurface drainage helps to lower the seasonal high water table.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.

Woodland

- The low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment.
- Soil wetness may limit the use of this soil by log trucks.

Building sites

- This soil is poorly suited to building site development because of wetness, a seasonal high water table, and moderate shrink-swell.

- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- Structures may need special design to avoid damage from wetness.
- Moderate shrinking and swelling of the soil may crack foundations and basement walls. Foundations and other structures may require special design and construction techniques or maintenance.

Septic tank absorption fields

- The restricted permeability of this soil limits the absorption and proper treatment of the effluent from septic systems.
- The seasonal high water table in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Costly measures may be needed to lower the water table in the area of the absorption field.

Local roads and streets

- This soil is not suitable for use as base material for local roads and streets because of shrinking and swelling.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is not favorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.

ShA—Schriever clay, 0 to 1 percent slopes

Map Unit Composition

Major Components
Schriever and similar soils: 79 to 91 percent

Contrasting Inclusions
Baldwin soils: 3 percent. On slightly higher and older landscape positions and have an argillic horizon.
Iberia soils: 3 percent. On similar positions, have a dark surface more than 12 inches thick, and formed in older sediments on the Teche system.
Harahan soils: 3 percent. On lower positions and have a fluid substratum within a depth of 40 inches.
Fausse soils: 3 percent. In cypress swamps at lower elevations, remain wet throughout the year, and do not crack to a depth of 20 inches.
Galvez soils: 3 percent. On higher positions nearer to, or on natural levees, and are loamy throughout the upper 40 inches.

Component Description

Schriever
MLRA: 131A—Southern Mississippi River Alluvium
Landform: Backswamp on delta plain
Landform position: Linear areas
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable

Available water capacity: Moderate (about 6.8 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Rare, during December to July
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from the surface to a depth of 24 inches, during December to April
Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 3w

Typical Profile

Surface layer:
0 to 5 inches—dark gray clay

Subsoil layer:
5 to 16 inches—dark gray clay
16 to 53 inches—gray clay
53 to 62 inches—olive gray clay
62 to 80 inches—greenish gray clay

Use and Management

Major land uses: Cropland and urbanland

Cropland

- All areas are prime farmland.
- Careful selection and application of chemicals and fertilizers help to minimize the possibility of groundwater contamination.
- Clods may form if the soil is tilled when wet.
- Controlling traffic can minimize soil compaction.
- The rooting depth of crops is restricted by the very high clay content.
- Maintaining or increasing the content of organic matter in the soil helps to prevent crusting, improves tilth, and increases the rate of water infiltration.
- The movement of water into subsurface drains is restricted.
- Subsurface drainage helps to lower the seasonal high water table.
- Including deep-rooted cover crops in the rotation is important for improving soil structure and providing pathways in the clayey subsoil to facilitate the movement of water into subsurface drains.

Pastureland

- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- A seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.
- Wetness and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, increases the cost of constructing haul roads and log landings, and limit the use of this soil by log trucks.

- This soil becomes sticky when wet because of the content of clay. The stickiness increases the cost of constructing haul roads and log landings, reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- This soil is not suited to homesite development because of flooding, a seasonal high water table, and high shrink-swell.
- Under unusual weather conditions, this soil is subject to flooding. The flooding may result in physical damage and costly repairs to buildings. Special design of some structures may be needed to prevent the damage caused by flooding.
- The high shrinking and swelling, and seasonal high water table in the soil below the surface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- This soil is not suited to septic tank absorption fields because of flooding, the seasonal high water table, and slow water movement.
- The flooding and slow water movement will limit the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- This soil may not be suitable for use as base material for local roads and streets because of the high shrink-swell.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

SIA—Schriever clay, frequently flooded

Map Unit Composition

Major Components
Schriever and similar soils: 79 to 91 percent

Contrasting Inclusions
Fausse soils: 5 percent. On slightly lower positions and remain too wet to form cracks in the upper part of the subsoil during normal years.
Barbary soils: 5 percent. On lower positions that are submerged throughout the year, and they are fluid in all mineral layers.
Harahan soils: 5 percent. On lower protected areas, and have a fluid substratum within a depth of 40 inches.

Component Description

Schriever
MLRA: 131A—Southern Mississippi River Alluvium
Landform: Backswamp on delta plain
Landform position: Linear areas
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Depth to restrictive feature: None
Drainage class: Poorly drained
Slowest saturated hydraulic conductivity: Very slow or impermeable
Available water capacity: Moderate (about 6.9 inches)
Shrink-swell potential: Very high (about 17.0 LEP)
Flooding hazard: Frequent, during December to July
Ponding hazard: None
Depth to seasonal water saturation: Apparent, from the surface to a depth of 24 inches, during December to April
Runoff class: Very high
Ecological site: Not assigned
Nonirrigated land capability: 5w

Typical Profile

Surface layer:
0 to 8 inches—very dark grayish brown clay

Subsoil layer:
8 to 23 inches—dark gray clay
23 to 55 inches—gray clay
55 to 65 inches—gray silty clay

Substratum layer:
65 to 75 inches—dark grayish brown silty clay loam

Use and Management

Major land uses: Wildlife habitat (fig. 8) and hardwood production

Cropland

- This soil is not suited to cropland because of frequent flooding.

Pastureland

- Forage production can be improved by seeding grass-legume mixtures that are tolerant of flooding.
- Sediment left on forage plants after a flood event may reduce palatability and forage intake by the grazing animal.
- Excess water should be removed, or grass or legume species that are adapted to wet soil conditions should be planted.
- Restricting grazing during wet periods can minimize compaction.

Woodland

- Standing water and a seasonal high water table can inhibit the growth of some species of seedlings by reducing root respiration.

Figure 8.—Cypress-Tupelo swamp on an area of Schriever clay, frequently flooded.

- Flooding, wetness, and low strength of the soil may cause the formation of ruts, which can result in unsafe conditions and damage to equipment, may result in damage to haul roads and increased maintenance costs, and restrict the safe use of roads by log trucks.
- This soil becomes sticky when wet because of the content of clay. The stickiness increases the cost of constructing haul roads and log landings, reduces the efficiency of mechanical planting equipment, and restricts the use of equipment for site preparation to drier periods.

Building sites

- This soil is not suited to building site development because of frequent flooding, a seasonal high water table, and the high clay content.
- The seasonal high water table may restrict the period when excavations can be made and may require a higher degree of construction site development and building maintenance.
- Frequent flooding in areas of this soil greatly increases the risk of damage associated with floodwaters.
- The high content of clay in the soil below the surface layer increases the difficulty of digging, filling, and compacting the soil material in shallow excavations.

Septic tank absorption fields

- This soil is not suited to septic tank absorption fields because of the flooding, a seasonal high water table and slow water movement.
- Flooding in areas of this soil greatly limits the absorption and proper treatment of the effluent from septic systems. Floodwaters may damage some components of septic systems.

Local roads and streets

- This soil may not be suitable for use as base material for local roads and streets because of high shrink-swell.
- The seasonal high water table affects the ease of excavation and grading and reduces the bearing capacity of this soil.
- The low strength of this soil is generally unfavorable for supporting heavy loads. Special design of local roads and streets is needed to prevent the structural damage caused by low soil strength.
- Special design of roads and bridges is needed to prevent the damage caused by flooding.

UB—Urban land

Map Unit Composition

Major Components
Urban land: 85 to 100 percent

Contrasting Inclusions
Galvez soils: 2 percent. In areas of lawns that are mostly covered with variable thickness of fill material over the original soil surface.
Baldwin soils: 2 percent. In areas of lawns that are mostly covered with variable thickness of fill material over the original soil surface.
Iberia soils: 1 percent. In areas of lawns that are mostly covered with variable thickness of fill material over the original soil surface.
Glenwild soils: 1 percent. In areas of lawns that are mostly covered with variable thickness of fill material over the original soil surface.
Uderts soils: 1 percent. In areas of lawns that are mostly covered with variable thickness of fill material over the original soil surface.

Component Description

Urban Land

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Natural levee on delta plain
Landform position: Convex areas
Parent material: Unspecified
Slope: Unspecified
Depth to restrictive feature: None
Drainage class: Unspecified
Slowest saturated hydraulic conductivity: Unspecified
Available water capacity: Unspecified
Shrink-swell potential: Unspecified
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Unspecified
Runoff class: Unspecified
Ecological site: Not assigned
Nonirrigated land capability: Not assigned

Use and Management

Major land uses: Urban, industry, and residential

Cropland

- These areas are not suited to use as cropland because of the small size of arable soil areas.

Pastureland

- These areas are not suited to use as pasture because of the small size of arable soil areas.

Woodland

- These areas are not suited to woodland production because of the small size of soil areas.

Building sites

- These areas are well suited to use as building sites because of prior filling, drainage, and stabilization activities.

Septic tank absorption fields

- Suitability for septic tank absorption fields is highly variable within these areas, because of unpredictable differences in fill and the underlying soils.

Local roads and streets

- These areas are well suited to use as a site for local roads because of prior filling, drainage, and stabilization activities.

UD—Udorthents, 1 to 20 percent slopes

Map Unit Composition

Major Components
Udorthents and similar soils: 80 to 90 percent

Contrasting Inclusions
Roads and structures: 15 percent

Component Description

Udorthents

MLRA: 131A—Southern Mississippi River Alluvium
Landform: Backswamp on delta plain, marsh on delta plain
Landform position: Convex built up areas along edges of waterways
Parent material: Unspecified
Slope: 1 to 20 percent
Depth to restrictive feature: None
Drainage class: Unspecified
Slowest saturated hydraulic conductivity: Unspecified
Available water capacity: Unspecified
Shrink-swell potential: Unspecified
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: Greater than 6 feet
Runoff class: Unspecified
Ecological site: Not assigned
Nonirrigated land capability: Not assigned

Use and Management

Major land uses: Flood protection, livestock grazing, and hay production

Cropland

- Crop production is not allowed on these soils because of the high risk of erosion that could compromise the flood protection capabilities.

Pastureland

- Overgrazing can increase the hazard of erosion.
- Maintaining healthy plants and vegetative cover can reduce the hazard of erosion.
- Erosion control is needed when pastures are renovated.
- Plants may suffer moisture stress during the drier summer months because of the limited available water capacity.
- Using a system of seedbed preparation that minimizes soil disturbance when pastures are renovated conserves soil moisture.
- This soil provides poor summer pasture.

Woodland

- Wood production is not allowed on this soil because root penetration and disturbance cause by harvesting would compromise the flood protection capabilities.

Building sites

- Site development is not allowed on this soil because disturbances caused by construction would compromise the flood protection capabilities.
- Under unusual weather conditions, this soil is subject to flooding. The flooding may result in physical damage and costly repairs to buildings.

Septic tank absorption fields

- This soil is not suited to septic tank absorption fields because of flooding and slope.
- Flooding in areas of this soil on rare occasions will limit the absorption and proper treatment of the effluent from septic systems. Rapidly moving floodwaters may damage some components of septic systems.

Local roads and streets

- Special design of roads and bridges is needed to prevent the damage caused by flooding.
- Because of the slope, designing local roads and streets is difficult.

W—Water

A type of (permanent open) water area that includes ponds, lakes, reservoirs, bays or gulfs, and estuaries.

Prime Farmland

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

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil qualities, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. It is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 5 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

About 118,654 acres in the survey area, or nearly 27 percent of the total acreage, meets the soil requirements for prime farmland. Scattered areas of this land are mainly in the northwestern and central parts of the survey area. All areas of this prime farmland are used for crops. The crops grown on this land, mainly bahiagrass, common bermudagrass, cotton lint, rice, soybeans, sugarcane, tall fescue, improved bermudagrass, corn, wheat, sweet potatoes, and grain sorghum account for a significant amount of the county's total agricultural income each year.

A recent trend in land use in some parts of the survey area has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

The map units in the survey area that are considered prime farmland are listed in table 5. This list does not constitute a recommendation for a particular land use. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures. The extent of each listed map unit is shown in table 4. The location is shown on the detailed soil maps. The soil qualities that affect use and management are described under the heading "Detailed Soil Map Units."

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 sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, and trees and shrubs.

Interpretive Ratings

The interpretive tables in this survey rate the soils in the survey area for various uses. Many of the tables identify the limitations that affect specified uses and indicate the severity of those limitations. The ratings in these tables are both verbal and numerical.

Rating Class Terms

Rating classes are expressed in the tables in terms that indicate the extent to which the soils are limited by all of the soil features that affect a specified use or in terms that indicate the suitability of the soils for the use. Thus, the tables may show limitation classes or suitability classes. Terms for the limitation classes are *not limited, somewhat limited,* and *very limited*. The suitability ratings are expressed as *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

Larry Trahan, Conservation Agronomist, Natural Resources Conservation Service helped prepare this section.

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

Planners of management systems for individual fields for farms should consider the detailed information given in the description of each soil under "Detailed Soil Map Units." Specific information can be obtained from the local office of the Natural Resources Conservation Service or the Louisiana Cooperative Extension Service.

About 94,500 acres in St. Mary Parish was used for crops, pasture, or range in 1997. About 92,000 acres was used for crops, mainly sugarcane (fig. 9), and about 2,500 acres was used as pasture or range.

Crops suitability and management needs are based on soil characteristics, such as fertility level, erodibility, organic matter content, availability of water for plants, drainage, and flooding hazard. Each farm has unique soil pattern; therefore, each has unique management problems. Some principles of farm management, however, apply to specific soils and certain crops. This section presents the general principles of management that can be widely applied to the soils of St. Mary Parish.

Figure 9.—Mature sugarcane (*Saccharum officinarum*) ready for harvest on an area of Iberia clay, 0 to 1 percent slopes.

Pasture and Hayland

Perennial grasses or legumes, or mixtures of these, are grown for pasture (fig. 10) and hay. The mixtures generally consist of either a summer or a winter perennial grass and a suitable legume. In addition, many farmers seed small grain crops or ryegrass in the fall for winter and spring forage. Excess grass in summer is harvested as hay for the winter.

Common and improved bermudagrass and Pensacola bahiagrass are the summer perennials most commonly grown. Improved bermudagrass and Pensacola bahiagrass produce good quality forage. Tall fescue, the chief winter perennial grass, grows well only on soils that have a favorable moisture content. All of these grasses respond well to fertilizer, particularly nitrogen.

White clover is the most commonly grown legume, which responds well to lime, particularly where grown on acid soils.

Proper grazing, brush and weed control, fertilizer, lime, and pasture renovation are essential for high quality forage, stand survival, and erosion control.

Fertilization and Liming

The soils of St. Mary Parish range from extremely acid to moderately alkaline in the surface layer. Most soils that are used for crops are moderately low in organic matter content and in available nitrogen. Areas of drained marshes or swamp contain highly oxidized organic materials and have clayey surface layers that range to extremely acid. Most of these marsh or swamp soils were once used for row crops but now are in pasture. Soils used for cultivated crops generally do not need lime. The amount of fertilizer needed depends on the crop to be grown, on past cropping history, the level of yield desired, and the kind of soil. Amounts should be determined on the basis of soil test results. Information and instructions on collecting and testing soil samples can be obtained from the Louisiana Cooperative Extension Service.

Figure 10.—Pastureland on an area of Schriever clay, 0 to 1 percent slopes.

Organic Matter Content

Organic matter is an important source of nitrogen and micronutrients required for plant growth. It also increases the rate of water intake, reduces surface crusting, and improves soil tilth. Most soils of St. Mary Parish that are used for crops are moderately low in organic matter content. The level of organic matter can be maintained by growing crops that produce an extensive root system and an abundance of foliage, by leaving plant residue on the surface, by growing perennial grasses and legumes in rotation with other crops, and by adding barnyard manure. In St. Mary Parish, residue from sugarcane helps to maintain the organic matter content of the soils.

Soil Tillage

Soil should be tilled only enough to prepare a seedbed and to control weeds. Excessive tillage destroys soil structure. The clayey soils in the parish become cloddy if cultivated when they are too wet. A compacted layer, generally known as a trafficpan or plowpan, sometimes develops just below the plow layer in loamy soils. This problem can be avoided by plowing when the soil is dry or by varying the depth of plowing. If the compacted layer does develop, it can be broken up by subsoiling or chiseling. A plowplan is undesirable because it limits rooting depth and the amount of moisture available to the crops. Tillage implements that stir the surface and leave crop residue in place protect the soil from beating rains, thereby helping to control erosion, reduce runoff, increase infiltration, reduce surface crusting, and ensure good seed germination.

Drainage

Most of the soils in St. Mary Parish need surface drainage to make them more suitable for crops. Soils are drained by a gravity drainage system consisting of a series of mains, laterals, and smaller drains that branch out from them. The success of the systems depends on the availability of adequate outlets. Drainage is also improved by land grading, water leveling, or precisely leveling the fields to a uniform grade. Land grading improves surface drainage, eliminates cross ditches, and creates larger and more uniformly shaped fields that are more suited to the use of modern, multirow farm machinery. However, deep cutting of soils that have unfavorable subsoil characteristics should be avoided.

The Mississippi and Atchafalaya Rivers levee system protects most cropland and pastureland from flooding. Nevertheless, some soils at the lower elevations are subject to flooding from runoff from higher areas. Flooding on many of these areas can be controlled only by constructing a ring levee system and using pumps to remove excess water.

Water for Plant Growth

The available water capacity of the soils in the parish range from moderate to high, but in some years, sufficient water is not available at the critical time for optimum growth unless irrigation water is provided. Large amounts of rainfall occur in winter and spring. Sufficient rain generally occurs in summer and autumn of most years. However, on most soils, plants lack water during dry periods in summer and autumn.

Cropping Systems

A good cropping system includes a legume for nitrogen, a cultivated crop to aid in weed control, a deep-rooted crop to utilize substratum fertility and maintain substratum permeability, and a close-growing crop to help maintain organic matter content. The crop sequence should cover the soil as much of the year as possible.

In St. Mary Parish, three crops of sugarcane are generally obtained from each planting. After the third crop, the field is planted to soybeans, a cover crop, or more commonly is fallowed for a year. The organic matter content of the soil can be maintained at a desirable level under this system by properly utilizing the sugarcane residue. Additional information on cropping systems can be obtained from the Natural Resources Conservation Service, the Louisiana Cooperative Extension Service, or the Louisiana Agricultural Experiment Station.

Control of Erosion

Soil erosion generally is not a serious problem on most of the soils in St. Mary Parish, mainly because most of the topography is level to nearly level. Nevertheless, sheet and rill erosion can be moderately severe in fallow, plowed fields, in newly constructed drainage ditches, and on ridges and mounds in undulating areas. Some gullies tend to form at outfalls into drainage areas. New drainage ditches should be seeded immediately after construction.

Erosion is a hazard on some of the sloping soils left without plant cover for extended periods. If the surface layer is lost through erosion, most of the available plant nutrients and most of the organic matter are also lost. Soil erosion results in sedimentation of drainage systems and streams. Streams can be polluted by sediments, nutrients, and pesticides.

Cropping systems that maintain a plant cover on the soil for extended periods reduce soil erosion. Use of legume or grass cover crops reduces erosion, increases the content of organic matter and nitrogen in the soils, and improves tilth. Constructing pipe drop structures in drainageways to drop water to different levels can help prevent gullying.

Additional information on erosion control, cropping systems, and drainage practices can be obtained from the local office of the Natural Resources Conservation Service and the Louisiana Cooperative Extension Service, or from the Louisiana Agricultural Experiment Station.

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 6. 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 parishes 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 (fig. 11) that ensures the smallest possible loss.

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

Crops other than those shown in table 6 are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Louisiana Cooperative Extension

Figure 11.—Mature sugarcane being harvested with sugarcane combine.

Service can provide information about the management and productivity of the soils for those crops.

Land Capability Classification

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

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

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. (33) The classes are defined as follows:

Class 1 soils have slight limitations that restrict their use.

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

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

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

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *w* or *e* to the class numeral, for example, 2w. The letter e shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; and the letter *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).

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclass indicated by *w* 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 map units in this survey area is given in the section “Detailed Soil Map Units” and in Table 6.

Rangeland

Craig A. Pate, Rangeland Management Specialist, Natural Resources Conservation Service, prepared this section.

In areas that have similar climate and topography, differences in the kind and amount of vegetation produced on rangeland are closely related to the kind of soil. Effective management is based on the relationship of the soils, vegetation, and water.

All of the marshland in St. Mary Parish can be defined as rangeland; however, the percentage of marsh rangeland that can be grazed by livestock is very low. The biggest barrier to grazing by livestock is that the majority of these soils are not firm enough to support the weight of livestock. The hazards that affect grazing marsh rangeland require unique management. These hazards include insects, disease, unusually deep inundation from heavy rainfall or storm tides, a scarcity of shelter, and unstable soil conditions in areas where livestock can become bogged down.

Insects, especially mosquitoes, can be a serious hazard during summer months, particularly in areas of brackish marshes. Cattle can lose weight and even die during severe infestations. This hazard can be reduced by seasonal grazing in the winter and at other times when infestations are low.

High water levels during periods of heavy rainfall or storm tides force cattle to concentrate on higher ground, such as spoil banks and ridges. Cattle lose weight under these conditions and are more susceptible to communicable diseases.

Prolonged periods of high water can cause normally firm soils to become unstable to the extent that they will not support livestock grazing. If fences are not located, maintained, and used correctly, livestock can stray into areas of unstable soils.

Measures that can help to overcome the hazards that affect grazing marsh rangeland and allow optimum use of this resource are described in the following paragraphs.

Fencing.—Installing fences helps to distribute livestock grazing and prevent livestock from straying into areas that are boggy. Four strand barbed wire fences are generally used in the marsh. Posts need to be treated with preservatives and protected from fire. Fire can damage the galvanized coating on fence wires and increase their susceptibility to rust. Fences should be located so that they separate different ecological sites where practical.

Livestock watering facilities.—Water for livestock is needed on many ecological sites because the water in bayous, ponds, and pits can become too salty in summer for cattle to drink. Fresh water from wells is the most dependable source of water for livestock. Proper locations and spacing of watering facilities helps to distribute grazing.

Prescribed burning.—Prescribed burning is used widely in marsh rangeland. Livestock producers and trappers burn off the dense cover of mature marsh vegetation so that new, succulent growth for cattle and wildlife is stimulated and the availability of forage is increased. The natural vegetation can be severely damaged if burned during periods of drought, when the fire can reach the crowns and roots of the plants. Marshes should be burned every other year and at a time when the surface is covered by water.

Supplemental feeding.—Supplemental feeding or access to improved pastures is needed on most of the marsh rangeland to provide an adequate supply of forage throughout the year. Maidencane, a major forage plant in the fresh marshes, produces only a small amount of green forage during cold weather. The vegetation remaining from the previous growing season weathers rapidly and quickly becomes unsatisfactory as forage. Unless the weather warms and allows new growth of vegetation, supplemental feed must be provided to cattle. Providing the supplemental feed in a timely manner helps to prevent weight loss in cattle. Calcium and phosphorus minerals should generally be available on a free choice basis throughout the year.

During severe weather, protein supplements and roughage should be provided to cattle. Some protein supplements should also be available to cattle grazing on mature vegetation. The supplements generally are not needed in accessible areas that have been controlled burned.

Insect control.—When insects, especially mosquitoes, become intolerable during the summer, cattle should be removed from the brackish marshes. The marsh rangeland should be grazed during the period mid-October to mid-April. Most summer grazing should occur on the fresh marsh rangeland or on improved pastures at the higher elevations.

Brush management.—Aerial spraying of herbicides can be done to control willow, Chinese tallow tree, rattlebox, hemp sesbania, and other undesirable vegetation. Herbicides must be handled carefully and properly applied according to directions on the label. Prescribed burning can also be used to manage some brush species. When properly applied, herbicides and prescribed burning can be safely and effectively used to control undesirable vegetation with no threat to people, livestock, wildlife, fish, desirable plants, or water quality.

Water control.—Salt water from the Gulf of Mexico periodically intrudes into the marshes in the parish through rivers, bayous, and drainage or transportation canals. The vegetation in brackish marshes can be severely damaged by water that has high concentrations of salt. During periods of drought, when the amount of fresh water moving to the gulf is reduced, salt water can move landward in the waterways. Heavy south winds can push the salt water inland for considerable distances, allowing it to spread over the rangeland in marshes adjacent to the waterways. Where salt concentrations become high, vegetation is damaged and the habitat for various forms of aquatic wildlife may be destroyed. Soils and vegetation in brackish marshes are generally damaged less by short-term inundation of sea water than the soils and vegetation in fresh marshes. Long-term intrusions of sea water, however, can destroy the vegetation in brackish marshes. Clayey soils, which are dry before they are flooded, absorb large amounts of salt. Accumulations of salt kill the plants that are less tolerant to salt and cause fine textured mineral and organic soils to become unstable. As a result, these accumulations of salt can reduce the productivity of the range and cause the soils to become unstable and hazardous to livestock. Gates, weirs, and levee systems are needed in some areas to protect the marsh rangeland from intrusions of salt water.

Ecological Sites

The marsh rangeland in St. Mary Parish is assigned to one of four ecological sites—Fresh Organic Marsh, Fresh Fluid Marsh, Brackish Organic Marsh, and Brackish Fluid Marsh. An *ecological site* is a distinctive kind of marsh rangeland that produces a characteristic climax plant community that differs from climax plant communities on other ecological sites in kind, amount, or proportion of plant species. The relationship between soils and vegetation was ascertained during this survey; thus, ecological sites generally can be determined directly form the soil map. Soil properties that affect moisture supply and plant nutrients have the greatest influence on the productivity of these sites. Soil reaction, salt content, flooding, ponding, and a seasonal high water table are also important. The natural plant communities for these ecological sites found in St. Mary Parish are specified in the following paragraphs.

Fresh Organic Marsh.—The natural plant community is dominated by maidencane interspersed with colonies of bulltongue, pickerelweed, and cattails. A variety of other freshwater wetland plants such as bur-marigold and spikerush are common throughout the community but do not dominate the site. The Allemands and Kenner soils are included in this ecological site.

Fresh Fluid Marsh.—The natural plant community is dominated by maidencane interspersed with colonies of bulltongue (fig.12), pickerelweed, and cattails. A variety of other freshwater wetland plants such as bur-marigold and spikerush are common throughout the community but do not dominate the site. The Larose and Balize soils are included in this ecological site.

Brackish Organic Marsh.—The natural plant community is dominated by marshhay cordgrass with lesser amounts of olney bulrush, giant cutgrass, and leafy three-square scattered throughout. The Lafitte and Clovelly soils are included in this ecological site.

Brackish Fluid Marsh.—*The* natural plant community is dominated by marshhay cordgrass with lesser amounts of olney bulrush, giant cutgrass, and leafy three square scattered throughout. The Bancker soils are included in this ecological site.

Range management requires a knowledge of plants and soils. It requires an evaluation of the current plant community to determine rangeland health and trend. The kinds, proportions, and amounts of plants in the existing plant community are compared to the plant community that is needed to meet the objectives of the landowner and conserve soil, water, air, plant, and animal resources.

The goal of range management is to maintain or improve the structure and functions of the vegetation, soil, water, air, and the ecological processes on rangelands in order to help the owner or manager of those lands achieve their desired enterprise objectives. Proper management results in optimum vegetation production, suppression of undesirable plants, enhancement of water quality, and control of erosion. Management techniques can be tailored to meet grazing requirements, provide wildlife habitat, and protect soil and water resources.

Figure 12.—Freshwater marsh, bulltongue arrowhead (*Sagittaria lancifolia* L.) in foreground and common water hyacinth (*Eichhornia crassipes* Mart.) Solms) in center of photograph.

Forestland Management and Productivity

Donald Lawrence, State Forester, USDA Natural Resources Conservation Service, prepared this section.

Soils directly influence the growth, management, harvesting and multiple uses of forests. This section identifies, defines, and discusses the major soil characteristics which foresters, woodland owners and users, agriculture workers and others will find useful in forest establishment, management, utilization, and harvesting. It also provides information on the relation between trees and the soils in which they grow and soil interpretations that can be used in planning. Depth, fertility, texture and available water capacity influence the growth. Elevation, aspect and climate determine the kinds of trees that can grow on a site.

St. Mary Parish contains approximately 124,400 acres of commercial forestland. Commercial forestland is defined as land producing or is capable of producing crops of industrial wood and will not be withdrawn from timber use.

The ownership of forestland in the parish is as follows: 39 percent corporate, 39 percent individual, 17 percent farmer and 5 percent state.

Corporate is defined as lands privately owned by private corporations other than forest industries and incorporated farms. *Individual* is defined as lands privately owned by individuals rather than forest industries, farmers, or miscellaneous private corporations. *Farmer* is defined as land operated as a unit of 10 acres or more and from which the sale of agricultural products totals $1,000 or more annually. *State* is defined as land owned by states, counties, and local public agencies or municipalities, or lands leased to these governments for 50 years or more. Commercial forests may be divided into different forest types. These types may be based on tree species, site quality, or age. In this section forest types are stands of trees of similar character, composed of the same species, and growing under the same ecological and biological conditions. These forest types are named for the trees that dominate.

The oak-gum-cypress type in St. Mary Parish comprises about 103,700 acres or 83 percent of the forested area. Common associates include cottonwood, willow, ash, elm, sugarberry, and maple.

The elm-ash-cottonwood type comprises about 20,700 acres or 17 percent. Common associates include sycamore, willow, and maple.

The volume of growing stock in St. Mary Parish is southern hardwood (fig. 13). Most of the forest acreage is in sawtimber—56 percent, followed by pole timber—22 percent, and seedlings and saplings—22 percent.

Figure 13.—Mixed oak forest on Schriever clay, 0 to 1 percent slopes.

Productivity of forestland can be measured by the amount of cubic feet of wood produced per acre per year. Many of the productive sites are in land uses other than forestland. Forestland in St. Mary Parish is fairly productive with 11 percent producing 120 to 165 cubic feet per year, 11 percent producing 85 to 120 cubic feet per year, 72 percent producing 50 to 85 cubic feet per year, and less than 6 percent producing less than 50 cubic feet per year.

Other values associated with forest land include wildlife habitat, recreation, natural beauty, and soil and water conservation. A large portion of the acreage in St. Mary Parish is subject to flooding, with numerous acres in the Atchafalaya Basin Floodway. Some good stands of commercial trees are produced in the woodlands in this parish. The potential value of the wood products is substantial, but under present conditions, much of the area is far below its potential. Some of the forested areas are used for commercial crawfishing.

Trees can be planted to screen distracting views of dumps and other unsightly areas, muffle traffic sound, reduce wind velocity and lend beauty to the landscape. Trees help filter out dust and other impurities from the atmosphere, convert carbon dioxide to oxygen, release moisture, and provide shade. They also produce fruits and nuts for use by people and wildlife.

The tables in this section can help forest owners or managers plan the use of soils for wood crops. They show the potential productivity of the soils for wood crops and rate the soils according to the limitations that affect various aspects of forest management.

Forest Productivity

In table 7, the *potential productivity* of merchantable or common trees on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," (29) which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

Forest Management

In tables 8 through 12, interpretive ratings are given for various aspects of forest management. The ratings are both verbal and numerical.

Some rating class terms indicate the degree to which the soils are suited to a specified forest management practice. *Well suited* indicates that the soil has features that are favorable for the specified practice and has no limitations. Good performance can be expected, and little or no maintenance is needed. *Moderately suited* indicates that the soil has features that are moderately favorable for the specified practice. One or more soil properties are less than desirable, and fair performance can be expected. Some maintenance is needed. *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 0.01 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 fire damage and seedling mortality are expressed as low, moderate, and high. Where these terms are used, the numerical ratings indicate gradations between the point at which the potential for fire damage or seedling mortality is highest (1.00) and the point at which the potential is lowest (0.00).

The paragraphs that follow indicate the soil properties considered in rating the soils for forest management practices. More detailed information regarding site index is available in the "National Forestry Manual," (28) which is available in local offices of the Natural Resources Conservation Service or on the Internet.

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

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

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

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

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

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

Ratings in the columns *suitability for hand planting and suitability for mechanical planting* are based on slope, depth to a restrictive layer, content of sand, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, moderately suited, poorly suited, or not suited to these methods of planting. It is assumed that necessary site preparation is completed before seedlings are planted.

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

Ratings in the column *suitability for mechanical site preparation (surface)* are based on slope, depth to a restrictive layer, plasticity index, rock fragments on or below the surface, depth to a water table, and ponding. The soils are described as well suited, poorly suited, or not suited 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 not suited to this management activity. The part of the soil from the surface to a depth of about 3 feet is considered in the ratings.

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

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

Windbreaks and Environmental Plantings

Windbreaks protect livestock, buildings, yards, fruit trees, gardens, and cropland from wind and snow; and provide food and cover for wildlife. Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil.

Environmental plantings help to beautify and screen houses and other buildings and to abate noise. The plants, mostly evergreen shrubs and trees, are closely spaced. To ensure plant survival, a healthy planting stock of suitable species should be planted properly on a well prepared site and maintained in good condition.

Table 13 shows the height that locally grown trees and shrubs are expected to reach in 20 years on soils in the survey area. The estimates in the table are based on measurements and observation of established plantings that have been given adequate care. They can be used as a guide in planning windbreaks and screens. Additional information on planning windbreaks and screens and planting and caring for trees and shrubs can be obtained from the local office of the Natural Resources Conservation Service, Louisiana Cooperative Extension, or from a commercial nursery.

Wildlife Habitat

Wildlife and fisheries habitat is very unique and diverse within the boundaries of St. Mary Parish. Because of its proximity to the Gulf of Mexico, the parish is home to an extremely diversified group of ecosystems. This blending zone between land and sea supports a wide variety of habitats utilized by numerous species of fish and wildlife. Important habitat types include the coastal marsh; woodland, including cypress-tupelo swamp and hardwood bottomland; and openland, such as cropland and pastureland.

The coastal marshes of St. Mary Parish comprise about 165,000 acres or 37 percent of the total area of the parish. This vast wetland-complex is within the heart of south-central Louisiana’s fishing, hunting, and trapping industries.

A large proportion of the waterfowl that utilize the Mississippi Flyway either winter in the marsh or stopover for food and rest during their migration to and from the tropics. Abundant wild alligators are harvested each year, contributing directly to the parish's economy. High populations of furbearers, such as nutria, muskrat, and raccoon occur in the marshes of St. Mary Parish. Furbearer harvests also provide a substantial seasonal boost to the local economy.

Freshwater and saltwater fisheries are vital to the economy of St. Mary Parish. The coastal marsh provides habitat for both commercially and non-commercially important species of fish. The freshwater ponds and lakes located throughout the parish support high numbers of catfish, largemouth bass, bluegill, and crappie. The brackish marshes found in the parish serve as important nursery grounds for marine organisms. Species commonly found in these salt layer areas include shrimp, menhaden, redfish, speckled trout, blue crab, and oysters.

Many other kinds of wildlife and fish utilize the coastal marsh. Songbirds, hawks, owls, shorebirds, and wading birds use the marsh either seasonally or year-round. The endangered bald eagle (fig. 14) nests in baldcypress trees growing in swampy areas of the parish. A host of reptilian and amphibian species meet their habitat needs within the confines of the coastal marsh.

Figure 14.—Bald eagle soaring above an area of Allemands muck, very frequently flooded, bordered by Barbary muck, frequently flooded (in center of photograph) and Fausse clay, frequently flooded (in background). (photograph by U.S. Fish and Wildlife Service)

Two different types of coastal marsh are found in St. Mary Parish, fresh and brackish. The marsh types are characterized according to the level of salinity and species of vegetation growing in the area. Since water salinity declines along a gradient moving inland from the Gulf of Mexico, the marsh types generally occur in bands parallel to the Gulf shoreline. Although some overlap does occur, wildlife and fisheries usage differs markedly among the marsh types. Furthermore, the productivity or habitat quality of each marsh type is related to the kind of soil present. The location and extent of the soils in each marsh type is shown on the General Soil Map.

Marsh plants differ in their tolerance to salt and the composition of a marsh plant community indicates the type of marsh and approximate level of salinity.

The brackish marsh type is found in an area between the coastline and the freshwater marsh, covering about 10.3 square miles. Brackish marsh comprises approximately 5.6 percent of the marshland in the parish. The predominant soils are Bancker, Clovelly, and Lafitte. The levels of salinity in the soils of the brackish marsh range from about 4 to 8 millimhos per centimeter. The native plants growing in these soils are dwarf spikerush, marshhay cordgrass, Olney bulrush, coastal waterhyssop and widgeongrass, a highly preferred waterfowl food which is the dominant submerged aquatic plant of the brackish marsh.

Soils of the brackish marsh support habitat for large numbers of geese, wading and shore birds, muskrats, mink, otters, and raccoons. The muskrat prefers the brackish marsh over the other marsh types. One of the highest populations of mottled ducks occurs in the brackish marsh of St. Mary Parish. The native plants in the brackish marsh provide a source of food most favored by geese. Moderate numbers of ducks, nutria, American alligators (fig. 15), and swamp rabbits utilize the brackish marshes. The brackish marsh is important nursery grounds for many species of fish and crustaceans.

Freshwater marsh makes up 94.4 percent of the coastal marshland in St. Mary Parish, covering roughly 171.5 square miles. The main soils in the freshwater marsh include Allemands, Balize, Kenner, and Larose. Water salinity averages 1.5 millimhos per centimeter but may range between 1.5 to 3.4 millimhos per centimeter. Plant diversity is highest in the fresh marsh because of the abundance of freshwater.

Figure 15.—Young alligator sunning in freshwater marsh.

A freshwater “hydraulic head” is maintained because of the constant input of freshwater from rivers and bayous. That is, the volume of freshwater entering the system is enough to dilute the incoming tides of saltwater to a nominal salt content. Average salinities are reduced to levels not harmful to freshwater plants. Dominant plants are maidencane, bulltongue, alligatorweed, cattail, giant cutgrass, pickerelweed, swamp knotweed, and common rush. Many different kinds of submerged and floating-leafed plants aquatics, such as water hyacinth, form extensive floating mats that hinder boat traffic and recreational activities.

Large numbers of waterfowl, nutria, mink, otters, raccoons, swamp rabbits, white-tailed deer, and American alligators utilize the freshwater marsh. Waterfowl favor freshwater marsh over the other marsh types. Dabbling ducks, such as mallard and teal, spend the winter months primarily in the fresh marsh. Few muskrat are found in the freshwater marsh, but nutria numbers often reach detrimental levels. Managed harvests of these animals, especially the nutria, are carried out each winter to prevent “eat-outs.” Eat-outs are areas of marsh on which nutria have almost completely denuded the vegetation. Without controlled harvests these vermin will eat themselves out of house and home by destroying the marsh plant communities that hold the fragile marsh soils intact. Freshwater fisheries include such species as catfish, largemouth bass, bluegill, and black crappie. Species of birds commonly found in the freshwater marsh include egrets, herons, and ibises.

Forestland covers approximately 124,400 acres or about 28.1 percent of the land area in the parish. The two major types of forestland occurring in the parish are cypress-tupelo swamp and bottomland hardwoods. Wooded areas provide habitat for woodland wildlife such as white-tailed deer, rabbits, mink, otters, raccoons, squirrels, wood ducks, migratory birds, and wading birds. American alligator, crawfish, and fish are usually plentiful in wooded areas that are frequently flooded.

Although cypress-tupelo swamps are frequently flooded, they usually support trees. Baldcypress and tupelo-gum are well-adapted to wet conditions and these species are the dominant trees. Except for buttonbush and Drummond red maple, understory species are sparse mainly because of the flooded conditions. The main soils in the swamp include those of the Barbary, Fausse, Maurepas, and Hydraquents.

The remaining portion of forestland consists primarily of bottomland hardwood. Bottomland hardwood forests usually occur along the flanks of bayous where elevations are slightly higher than those found in swamps. Bottomland hardwood forests are rarely or occasionally flooded and these areas typically support green ash, sugarberry, water tupelo, water oak, and sweetgum. The main soils found in bottomland hardwood forests are the Convent, Glenwild, Iberia, and Schriever series.

Openland-habitat is found mainly along the higher ridges in the parish. It contains about 95,500 acres and comprises about 21.6 percent of the total area of the parish. Elevation is generally 5 to 15 feet. A large percentage of the area is used to produce agricultural crops, mainly sugarcane. The main soils are those of the Baldwin, Coteau, Galvez, Dupuy, Jeanerette, Loreauville, and Patoutville series. Some areas provide habitat for wildlife but most areas are of limited value because of the lack of food and cover. Bobwhite quail, cottontail rabbits, and doves are the most common game species.

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 14 and table 15, 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.

Ratings for *grain and seed crops for food and cover* can be used in the selection of sites that have the soil properties and plant species necessary to sustain wildlife habitat. The ratings do not reflect the limitation for commercial agronomic production. The soil properties and features that affect the growth of grain and seed crops are soil texture, content of organic matter, the amount of rock fragments on or near the soil surface, available water capacity, depth to bedrock or a cemented pan, soil moisture and temperature regimes, depth to a high water table, ponding, flooding, permeability of the soil surface, slope, presence of excess salts in the soil, and susceptibility of the soil surface to water erosion and wind erosion. No commercial grain and seed crops are grown in St. Mary Parish.

Ratings for *domestic grasses and legumes for food and cover* can be used in the selection of sites that have the soil properties and plant species necessary to sustain wildlife habitat. The ratings do not reflect the limitations for commercial agronomic production. The soil properties and features that affect the growth of grasses and legumes are soil texture, content of organic matter, the amount of rock fragments on or near the soil surface, available water capacity, depth to bedrock or a cemented pan, soil moisture and temperature regimes, depth to a high water table, ponding, flooding, permeability of the soil surface, slope, presence of excess salts in the soil, and susceptibility of the soil surface to water erosion and wind erosion. Examples of grasses are annual ryegrass (*Lolium multiflorum*), Bahiagrass (*Paspalum notatum*), Bermudagrass (*Cynodon dactylon*), dallisgrass (*Paspalum dilatatum*); examples of legumes are crimson clover (*Trifolium incarnatum*), white clover (*Trifolium repens),and* hairy vetch (*Vicia villosa*).

Ratings for *upland wild herbaceous plants* indicate the limitation of the soils as a growing medium for a diverse upland herbaceous plant community. This community is adapted to soils that are drier than the common soils in moist riparian and wetland zones but that are not as dry as the soils in upland desert areas. The soil properties and features that affect the ability of these species to thrive include soil texture, available water capacity, the presence of excess salts in the soil, soil moisture and temperature regimes, depth to a high water table, and rock fragments on the soil surface. Examples of upland wild herbaceous plants are Virginia wildrye (*Elymus virginicus*), switchgrass (*Panicum virgatum*), Illinois bundleflower (*Desmanthus illinoensis*), hoary ticktrefoil (*Desmodium canescens*), Carolina canarygrass (*Phalaris caroliniana*), browntop millet (*Panicum fasiculatum*), wooly croton (*Croton capitatus*) switchcane (*Arundinaria gigantea*), horseweed (*Conyza canadensis*) and common goldenrod (*Solidago canadensis*).

Ratings for *upland shrubs and vines* indicate the limitation of the soils as a growing medium for a diverse upland shrub and vine community. This community is adapted to soils that are drier than those common in the moist riparian and wetland zones but that are not as dry as those in upland desert areas. The soil properties and features that affect the ability of these species to thrive include soil texture, content of organic matter, available water capacity, depth to bedrock or a cemented pan, the presence of excess salts in the soil, soil moisture and temperature regimes, depth to a high water table, and rock fragments on the soil surface. Examples of upland shrubs and vines are persimmon (*Diospyros virginiana*), Elderberry (*Sambucus canadensis*), Blue beech (*Carpinus caroliniana*), yaupon *(Ilex vomitoria*), Hercules' club (*Aralia spinosa*), winged sumac (*Rhus copallinium*), tie vine (*Jacquemontia tamnifolia*), Japanese honeysuckle (*Lonicera japonica*), trumpet creeper (*Campis radicans*), cross-vine (*Bignonia capreolata*) common greenbriar (*Smilax rotundifolia*), poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), and muscadine (*Vitis rotundifolia*).

Ratings for *upland deciduous trees* indicate the limitation of the soils as a growing medium for a diverse upland deciduous tree community that meets specific local habitat requirements for targeted and nontargeted wildlife species. Typically, deciduous trees require better soil conditions than geographically related conifers. The soil properties and features that affect the ability of upland deciduous trees to thrive include available water capacity, depth to a high water table, depth to bedrock or a cemented pan, and soil moisture and temperature regimes. Examples of upland deciduous trees are live oak (*Quercus virginiana*), water oak (*Quercus nigra*), pecan (*Carya illinoiensis*) sweet gum (*Liquidambar styraciflua*), small snowbell (*Styrax americanus*, honey locust (*Gleditsia triacanthos*), Chinaberry (*Melia azedarach*), Camphor tree (*Cinnamomum camphora*), Southern hackberry (*Celtis laevigata*), black locust (*Robinia pseudoacacia*), and American elm (*Ulmus americana*).

Ratings for *upland mixed deciduous-coniferous trees* indicate the limitation of the soils as a growing medium for a diverse upland deciduous-coniferous tree community that meets specific local habitat requirements for targeted and non-targeted wildlife species. A mixed deciduous-coniferous forest can subsist under a wide variety of soil conditions. Typically, better soil conditions are required to maintain the deciduous species, but many of these species adapt to harsher conditions. The soil properties and features that affect the ability of the deciduous and coniferous trees to thrive include available water capacity, depth to a high water table and its seasonal duration, depth to bedrock or a cemented pan, and soil moisture and temperature regimes.

Ratings for *riparian herbaceous plants* indicate the limitation of the soils as a growing medium for herbaceous plants that are adapted to soil conditions that are wetter than those common in the drier upland areas. The soils suitable for this habitat generally are on flood plains, in depressions, on bottomland, in drainageways adjacent to streams, or in any other area where the soil is either saturated for some period during the year or is subject to periodic overflow from ponding or flooding. The soil properties and features that affect the ability of riparian herbaceous plants to persist include soil texture, content of organic matter, depth to a high water table, the frequency and duration of ponding and flooding, the presence of excess salts in the soil, rock fragments, and the soil temperature regime. Examples of riparian herbaceous plants are Virginia wildrye (*Elymus virginicus)*, Eastern gamagrass (*Tripsacum dactyloides*), switchgrass (*Panicum virgatum*), switchcane (*Arundinaria gigantea*), and Illinois bundleflower (*Desmanthus illinoensis*).

Ratings for *riparian shrubs, vines, and trees* indicate the limitation of the soils as a growing medium for shrubs, vines, and trees that are adapted to soil conditions that are wetter than those common in the drier upland areas. The soils suitable for this habitat generally are on flood plains, in depressions, on bottomland, in drainageways adjacent to streams, in areas of springs and seeps, or in any other area where the soil is either saturated for some period during the year or is subject to periodic overflow from ponding or flooding. The soil properties and features that affect the ability of riparian shrubs, vines, and trees to persist include available water capacity, depth to a high water table, the frequency and duration of ponding and flooding, the presence of excess salts in the soil, and the soil temperature regime. Examples of riparian shrubs, vines, and trees are

Eastern cottonwood (*Populus deltoides*), American sycamore (*Platanus occidentalis*) black willow (*Salix nigra*), box elder (*Acer negundo*), red maple (*Acer rubrum* var. *drummondii)*, Chinese privet (*Ligustrum sinense*) green ash *(Fraxinus pennsylvanica*) , Southern hackberry (*Celtis laevigata*), American elm (*Ulmus americana*), bald cypress *(Taxodium distichum*), red mulberry (*Morus rubra*), Southern bayberry (*Myrica cerifera*), rattan *(Berchemia scandens*), poison ivy (*Toxicodendron radicans*), trumpet creeper (*Campis radicans*), common greenbriar (*Smilax rotundifolia*), and muscadine (*Vitis rotundifolia*).

Ratings for *freshwater wetland plants* indicate the limitation of the soils as a growing medium for plants that are adapted to wet soil conditions. The soils suitable for this habitat generally are in marshes, in depressions, on bottomland, in backwater areas on flood plains, in drainageways adjacent to streams, in areas of springs and seeps, or in any other area where the soil is not directly affected by moving floodwater but may be ponded during some part of the year. The soil properties and features that affect the ability of freshwater wetland plants to persist include soil texture, content of organic matter, depth to a high water table, the frequency and duration of ponding, the presence of excess salts in the soil, and soil reaction (pH). Examples of freshwater wetland plants are dotted smartweed (*Polygonum punctatum*), marsh purslane (*Ludwigia palustris*), American lotus *(Nelumbo lutea*) barnyard grass (*Echinochloa crusgalli*), common cattail (*Typha latifolia*), annual wildrice (*Zizania aquatica*), maidencane (*Panicum hemitomon*) , lizard tail (*Saururus cernuus*), rattle box, hemp sesbania *(Sesbania exaltata*), Tupelogum (*Nyssa aquatica*), bald cypress *(Taxodium distichum*), water locust (*Gleditisia aquatica*), buttonbush (*Cephalanthus occidentalis*), fragrant flatsedge (*Cyperus odoratus*), various rushes (*Juncus* spp.), and sedges (*Carex* spp).

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobwhite quail, meadowlark, field sparrow, cottontail, and red fox.

Habitat for woodland wildlife consists of areas of deciduous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, woodcock, thrushes, woodpeckers, squirrels, fox, raccoon, deer, and blackbear.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, muskrat, nutria, otter, mink, and beaver.

Habitat for rangeland wildlife consists of areas of shrubs and wild herbaceous plants. Wildlife attracted to rangeland include deer, rabbit, quail, and dove.

Marshland Management

General management needed to control the losses of marshlands and to improve marshlands for use as habitat for wetland wildlife are suggested in this section.

Planners of management systems for individual areas should consider the detailed information given in the description of each soil under “Detailed Soil Map Units.” Specific information can be obtained from the staff at the local office of the Natural Resources Conservation Service, the Louisiana Cooperative Extension Service, or the Louisiana Agricultural Experiment Station.

Marshland loss.—The loss of Louisiana's coastal marshlands has reached a crisis level. St. Mary Parish is within an area that is experiencing the highest rates of marshland losses in Louisiana. Both natural and manmade events are responsible for these losses.

Geologic subsidence of the Gulf Coastal marshes is the main natural cause of marshland loss. (14) As the continental shelf and adjoining marshlands slowly subside, some of the marshlands at the lowest elevations become submerged below sea level. Little can be done about the losses caused by these natural events; however, the marshland deterioration caused by man's actions can be controlled with better management and restraint. Man's activities, such as drainage and the construction of channels for navigation, accelerate the rates of erosion, subsidence, and saltwater intrusion.

Coastal marsh erosion changes areas of marshland to open water areas. In most cases, this is a permanent land loss because the open water areas are too deep to revegetate.

The production of fish and wildlife resources in the marshes of the parish is directly related to the marsh plant community. When the plants are killed by increases in salinity or for other reasons, the other dependent resources are degraded. Each plant species and community requires a definite range of salinity and water levels for growth. The marsh plants are the basic source of energy for dependent animal populations, such as muskrat, and conditions enhancing plant growth serve to benefit the fish and wildlife resources. The fish and wildlife population density and diversity are dependent on the plants; therefore, the need for maintaining the marshland resource base is very important ecologically and economically.

The organic soils of the marshland are very sensitive to increases in salinity. Saltwater intrusions into brackish and freshwater marshes have increased in recent years. The increased salinity causes the loss of surface vegetation. When the plants die, they start decomposing and eventually are carried out of the marshes by tidal action. In a very short time, the surface soil is lost and the areas revert to open water. This loss is generally permanent along with the associated loss of sustained annual soil productivity.

Management.—Many opportunities exist for improving the marshes of St. Mary Parish for fish, wildlife, and other resources. (14) The marshland is a delicately balanced ecosystem that requires an interdisciplinary approach to planning and implementing management practices that will improve the habitat for waterfowl, furbearers, and fisheries. Following are some suggested management practices:

Weirs are low level dams placed in marshwater courses to provide better water management capability. Fixed-crest weirs are normally placed so the weir crest is about 6 inches below average marsh level. These water-control structures stabilize water levels in the marsh, reduce the turbidity levels of the water, improve plant community condition, and improve trapper and hunter access during the winter months by holding water in the bayous and canals. Weirs with fixed crests are most useful in brackish marshes.

Prescribed or controlled burning is a very useful and economical technique to improve marsh vegetative conditions. Periodic controlled burning helps maintain a good variety of marsh plants, which in turn has a positive impact on furbearers, such as muskrat, and other wildlife species.

Prescribed burning results are best in brackish marshes. Controlled burning done in the fall of the year is the best for wildlife; however, winter burning also has some positive results.

Leveed impoundments can be installed if soils are suitable for construction. Almost every form of marsh wildlife uses the impoundments for feeding, roosting, or cover areas. Landowner objectives, marsh type, and other factors determine the management techniques to use on an impoundment.

Shoreline erosion control is one of the primary concerns for the parish and the entire coastal area. Numerous studies and field trials have been conducted to determine suitable techniques for shoreline erosion. Structural and vegetative approaches or combinations of these are currently being used. Individual site conditions vary and include soils, salinity, amount of boat traffic, and size of the water body.

Smooth cordgrass is one of the most promising plants to use in the tidal zone of brackish areas. It is generally available locally. Smooth cordgrass is easily established in the tidal zone where a large part of the erosion is occurring. It withstands a wide salinity range, expands rapidly in the tidal zone, normally provides shoreline protection in one growing season, and forms dense stands which dissipate wave energy.

Many other plants are available for alleviating shoreline erosion. Specific site information is needed to plan the proper combination of structural and vegetative measures.

Recreation

St. Mary Parish provides excellent opportunity for hunting. However, most openland, wooded areas, marsh, and swamp that are suitable for hunting are either privately owned or in commercial hunting clubs.

The parish provides excellent opportunities for saltwater and freshwater fishing (fig. 16). Charter yachts and other boats are readily available for deep-sea excursions. The many canals, bayous, and lakes provide opportunities for sport fishing. There are many recreational areas that provide boat launches and campsites.

In addition to hunting and fishing, other recreational activities, such as crabbing, shrimping, oystering, camping, picnicking, swimming and water-skiing, and bird-watching are available in the parish and nearby coastal waters.

The soils of the survey area are rated in table 16 and table 17 according to limitations that affect their suitability for recreation. The ratings are based on restrictive soil features, such as wetness 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 are also important. Soils 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.

Figure 16.—Crawfish (*Procambarus clarkii*) caught in a wire trap in freshwater swamp.

The soils of the survey area are rated in tables 16 and 17 according to limitations that affect their suitability for recreation. 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 table 16 and table 17 can be supplemented by other information in this survey, for example, interpretations for building site development, construction materials, sanitary facilities, and water management.

Camp areas require site preparation, such as shaping and leveling the tent and parking areas, stabilizing roads and intensively used areas, and installing sanitary facilities and utility lines. Camp areas are subject to heavy foot traffic and some vehicular traffic. The ratings are based on the soil properties that affect the ease of developing camp areas and the performance of the areas after development. Slope 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, and permeability. The soil properties that affect the growth of plants are depth to 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 is the main concern 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, and permeability. The soil properties that affect the growth of plants are depth to a cemented pan, permeability, and toxic substances in the soil.

Playgrounds require soils that are nearly level 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 is the main concern 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, and permeability. The soil properties that affect the growth of plants are depth to a cemented pan, permeability, and toxic substances in the soil.

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling. The ratings are based on the soil properties that affect trafficability and erodibility. These properties are 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 slope, depth to a water table, ponding, flooding, and texture of the surface layer.

Golf course 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 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, 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.

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. (6,15,25,28) Criteria for each of the characteristics must be met for areas to be identified as 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. (7) These soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation (fig. 17).

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. (8) The criteria are used to identify a phase of a soil series that normally is also a hydric soil. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (23) and "Keys to Soil Taxonomy" (21) and in the "Soil Survey Manual". (20)

If soils are wet enough for a long enough period to be considered hydric, they generally 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." (11)

Figure 17.—Freshwater marsh, water hyacinth [*Eichhornia crassipes* (Mart.) Solms] in foreground and cutgrass (*Leersia* Sw.) in background on Allemands muck, very frequently flooded; with mixed hardwood/cypress swamp on Barbary muck, frequently flooded in far background.

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 required to determine the hydric soils on a specific site. (11,15)

AEA—Allemands muck, very frequently flooded
ATA—Aquents, dredged
ATB—Aquents, dredged, 1 to 5 percent slopes, occasionally flooded
BEA—Balize silt loam, very frequently flooded
BNA—Bancker muck, tidal
BRA—Barbary muck, frequently flooded
BdA—Baldwin silty clay loam, 0 to 1 percent slopes
CYA—Clovelly muck, very frequently flooded
CvA—Carville and Hydraquents soils, undulating, flooded
DP—Dumps
FAA—Fausse soils, frequently flooded
HRA—Harahan clay
HSA—Harahan and Allemands soils, drained
HYA—Hydraquents, Carville, and Glenwild soils, undulating, flooded
IEA—Iberia clay, frequently flooded
IbA—Iberia clay, 0 to 1 percent slopes
KEA—Kenner muck, very frequently flooded
LAA—Lafitte muck, very frequently flooded
LEA—Larose muck, very frequently flooded
MAA—Maurepas muck, frequently flooded
SIA—Schriever clay, frequently flooded
ShA—Schriever clay, 0 to 1 percent slopes

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 nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the data in the tables described under the heading "Soil Properties."

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil between the surface and a depth of 5 to 7 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

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

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

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

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of 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

Table 18 and table19 show the degree and kind of soil limitations that affect shallow excavations, dwellings without basements, small commercial buildings, local roads and streets, and lawns and landscaping. The limitations are considered *slight* if soil properties and site features are generally favorable for the indicated use and limitations are minor and easily overcome; *moderate* if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or minimize the limitations; and *severe* if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are required. Special feasibility studies may be required where the soil limitations are severe.

Dwellings and small commercial buildings are structures built on shallow foundations on undisturbed soil. The load limit is the same as that for single-family dwellings no higher than three stories. Ratings are made for small commercial buildings without basements and for dwellings without basements. The ratings are based on soil properties, site features, and observed performance of the soils. A high water table, flooding, shrinking and swelling, and organic layers can cause the movement of footings. A high water table and flooding affect the ease of excavation and construction. Landscaping and grading that require cuts and fills of more than 5 or 6 feet are not considered.

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 stabilized soil material; and a flexible or rigid surface. Cuts and fills are generally limited to less than 6 feet. The ratings are based on soil properties, site features, and observed performance of the soils. Depth to a high water table and flooding affect the ease of excavating and grading. Soil strength (as inferred from the engineering classification of the soil), shrink-swell potential, and depth to a high water table affect the traffic-supporting capacity.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, and other purposes. The ratings are based on soil properties, site features, and observed performance of the soils. The ease of digging, filling, and compacting is affected by soil texture, fluidity, organic layers, and buried stumps and logs. The time of the year that excavations can be made is affected by the depth to a seasonal high water table and the susceptibility of the soil to flooding. The resistance of the excavation walls or banks to sloughing or caving is affected by soil texture and depth to the water table.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. The ratings are based on soil properties, site features, and observed performance of the soils. Soil reaction, a high water table, the available water capacity in the upper 40 inches, and the content of salts, sodium, and sulfidic materials affect plant growth. Flooding, wetness, and the amount of sand, clay, or organic matter in the surface layer affect trafficability after vegetation is established.

Sanitary Facilities

Table 20 and table 21 shows the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to 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 down slope areas.

Some soils are underlain by loose sand and gravel 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 a cemented pan, flooding, 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 and cemented pans can cause construction problems. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to a cemented pan, depth to a water table, ponding, slope, flooding, texture, 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 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, slope, depth to a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of 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 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 22 and table 23 provide information about the soils as potential sources of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 22, only the likelihood of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom tier of the soil contains sand or gravel, the soil is considered a likely source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

The soils are rated *good, fair*, or *poor* as potential sources of sand and gravel. A rating of good or fair means that the source material is likely to be in or below the soil. The bottom tier and the thickest layer of the soils are assigned numerical ratings. These ratings indicate the likelihood that the layer is a source of sand or gravel. The number 0.00 indicates that the layer is a poor source. The number 1.00 indicates that the layer is a good source. A number between 0.00 and 1.00 indicates the degree to which the layer is a likely source.

The soils are rated *good, fair*, or *poor* as potential sources of topsoil, reclamation material, and roadfill in table 23. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

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

Water Management

Table 24 provides information on the soil properties and site features that affect water management. The degree and kind of soil limitations are given for pond reservoir areas; embankments, dikes, and levees; and aquifer-fed excavated ponds. 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).

Pond reservoir areas hold water behind a dam or embankment. Soils best suited to this use have low seepage potential in the upper 60 inches. The seepage potential is determined by the permeability of the soil and the depth to fractured bedrock or other permeable material. Excessive slope can affect the storage capacity of the reservoir area.

Embankments, dikes, and levees are raised structures of soil material, generally less than 20 feet high, constructed to impound water or to protect land against overflow. Embankments that have zoned construction (core and shell) are not considered. In this table, the soils are rated as a source of material for embankment fill. The ratings apply to the soil material below the surface layer to a depth of about 5 feet. It is assumed that soil layers will be uniformly mixed and compacted during construction.

The ratings do not indicate the ability of the natural soil to support an embankment. Soil properties to a depth even greater than the height of the embankment can affect performance and safety of the embankment. Generally, deeper onsite investigation is needed to determine these properties.

Soil material in embankments must be resistant to seepage, piping, and erosion and have favorable compaction characteristics. Unfavorable features include less than 5 feet of suitable material and a high content of stones or boulders, organic matter, or salts or sodium. A high water table affects the amount of usable material. It also affects trafficability.

Aquifer-fed excavated ponds are pits or dugouts that extend to a ground-water aquifer or to a depth below a permanent water table. Excluded are ponds that are fed only by surface runoff and embankment ponds that impound water 3 feet or more above the original surface. Excavated ponds are affected by depth to a permanent water table, permeability of the aquifer, and quality of the water as inferred from the salinity of the soil. Depth to bedrock and the content of large stones affect the ease of excavation.

Soil Properties

Data relating to soil properties are collected during the course of the soil survey.

Soil properties are ascertained by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine particle-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties are shown in tables. They include physical and chemical properties, and clay mineralogy.

Engineering Index Properties

Table 25 provides the engineering classifications and the range of index properties for the layers of each soil in the survey area.

Depth to the upper and lower boundaries of each layer is indicated.

Texture is given in the standard terms used by the 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 across. "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 (2) and the system adopted by the American Association of State Highway and Transportation Officials (1).

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 across 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 across 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 across and 3 to 10 inches across 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 across based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of 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 26 shows estimates of some physical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Particle size is the effective diameter of a soil particle as measured by sedimentation, sieving, or micrometric methods. Particle sizes are expressed as classes with specific effective diameter class limits. The broad classes are sand, silt, and clay, ranging from the larger to the smaller.

Sand as a soil separate consists of mineral soil particles that are 0.05 millimeter to 2 millimeters wide. In table 26, the estimated sand content of each soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters wide.

Clay as a soil separate consists of mineral soil particles that are less than 0.002 millimeter wide. In table 26, 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 wide.

The content of sand 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 affects tillage and earthmoving operations.

Moist bulk density is the weight of soil (ovendry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3- or 1/10-bar (33kPa or 10kPa) moisture tension. Weight is determined after the soil is dried at 105 degrees C. In the table, the estimated moist bulk density of each soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters wide. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. Depending on soil texture, a bulk density of more than 1.4 can restrict water storage and root penetration. Moist bulk density is influenced by texture, kind of clay, content of organic matter, and soil structure.

*Permeability (*K-sat*)* refers to the ability of a soil to transmit water or air. The term "permeability," as used in soil surveys, indicates saturated hydraulic conductivity *(*K-sat*)*. The estimates in the table indicate the rate of water movement, in inches per hour, when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Linear extensibility refers to the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. It is an expression of the volume change between the water content of the clod at 1/3- or 1/10-bar tension (33kPa or 10kPa tension) and oven dryness. The volume change is reported in the table as percent change for the whole soil. Volume change is influenced by the amount and type of clay minerals in the soil.

Linear extensibility is used to determine the shrink-swell potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. If the linear extensibility is more than 3, shrinking and swelling can cause damage to buildings, roads, and other structures and to plant roots. Special design commonly is needed.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 26, the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters wide.

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 26 as the K factor (Kw and Kf) and the T factor. Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of several factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and permeability. Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Erosion factor Kw indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average annual rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible. The groups are as follows:

1. Coarse sands, sands, fine sands, and very fine sands.

2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, ash material, and sapric soil material.

3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams.

4L. Calcareous loams, silt loams, clay loams, and silty clay loams.

4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay.

5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material.
6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay.
7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material.
8. Soils that are not subject to wind erosion because of rock fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

Chemical Soil Properties

Table 27 shows estimates of some chemical characteristics and features that affect soil behavior. These estimates are given for the layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated.

Cation-exchange capacity is the total amount of extractable bases that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. The ability to retain cations reduces the hazard of ground-water pollution.

Effective cation-exchange capacity refers to the sum of extractable bases plus aluminum expressed in terms of milliequivalents per 100 grams of soil. It is determined for soils that have pH of less than 5.5.

Soil reaction is a measure of acidity or alkalinity. The pH of each soil horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the fraction of the soil less than 2 millimeters in size. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Gypsum is expressed as a percent, by weight, of hydrated calcium sulfates in the fraction of the soil less than 20 millimeters in size. Gypsum is partially soluble in water. Soils that have a high content of gypsum may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter (mmhos/cm) or decisiemens per meter (dS/m) 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 28 provides estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. Table 28 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 28 indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

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

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

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered is local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 29 gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Subsidence is the settlement of organic soils or of saturated mineral soils of very low density. Subsidence generally results from either desiccation and shrinkage or oxidation of organic material, or both, following drainage (fig. 18). 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.

Figure 18.—Foundation failure is common for structures built on organic soils with high subsidence potential.

Soil Fertility Levels

This section contains information on both the environmental factors and the physical and chemical properties of the soils that affect their potential for crop production. It also lists the analytical methods that were used to determine the chemical properties of the sampled soils.

Factors Affecting Crop Production

Crop composition and yield are a function of many environmental, plant, and soil factors. These factors are interdependent. The magnitude of the factors and the interactions among them control crop response. The relative importance of each factor changes from soil to soil, crop to crop, and environment to environment. The soil factors are only part of the overall system, and are as follows.

Environmental factors.—Light (intensity and duration), temperature (air and soil), precipitation (distribution and amount), and atmospheric carbon dioxide concentration are the main environmental factors.

Plant factors.—These factors are species- and hybrid-specific. They include the rates of nutrient and water uptake and the rates of growth and related plant functions.

Soil factors.—These factors include physical, chemical and mineralogical properties of the soils.

Physical properties.—These factors are texture, structure, surface area, bulk density, aeration, water retention and flow.

Chemical properties (soil fertility factors).—The effect that the chemical properties of soils have on crop growth can be better understood by discussing the quantity of a chemical element and the rate of replenishment of the elements to the soils.

Quantity factor.—This describes the concentration of a nutrient ion absorbed or held in exchangeable form on the solid phase of the soil. This form of nutrient ion is available for plant uptake.

Replenishment factor.—Rate of replenishment of the available supply of nutrients in the solid and solution phases by weathering reactions, fertilizer additions, and transport by mass flow and diffusion.

The goal of soil testing is to provide information for a soil and crop management program that establishes and maintains optimum levels and balance of the essential elements in soil for crop and animal nutrition, and that protects the environment against the buildup of potentially toxic levels of essential and nonessential elements. Current soil tests attempt to measure the available supply of one or more nutrients in the plow layer. Where crop production is clearly limited by available supply of one or more nutrients, existing soil tests generally can diagnose the problem and reliable recommendations to correct the problem can be made. Soil management systems generally are based on physical and chemical alteration of the plow layer. Characteristics of this layer can vary from one location to another, depending upon management practices and soil use.

Subsurface horizons are less subject to change or change very slowly as a result of alteration of the plow layer. These horizons reflect the inherent ability of the soil to supply nutrients to plant roots and to provide a favorable environment for root growth. If soil fertility recommendations based on current soil tests are followed, major fertility problems in the plow layer normally are corrected. Crop production is then limited by crop and environmental factors, physical properties of the plow layer, and physical and chemical properties of the subsoil.

Characteristics of Soil Fertility

In general, four major types of nutrient distribution in soils of Louisiana can be identified.

The first type includes soils that have relatively high levels of available nutrients throughout the profile. This type reflects the relatively high fertility status of the parent material from which soils developed at a relatively young age or a less intense degree of weathering of the soil profile.

The second type includes soils that have relatively low levels of available nutrients in the surface layer, but generally have increasing levels with depth through the soil profile. These soils have relatively fertile parent material, but are more mature soils that have been subjected either to weathering over a longer period of time or to more intense weathering. If the levels of available nutrients in the surface layer are low, crops may exhibit deficiency symptoms early in the growing season. Deficiency symptoms often disappear if crop roots are able to penetrate to the more fertile subsoil as the growing season progresses.

The third type includes soils that have adequate or relatively high levels of available nutrients in the surface layer but have relatively low levels in the subsoil. Such soils developed from low fertility parent material, or they are mature soils that have been subjected to more intense weathering over a longer period of time. The higher nutrient levels in the surface layer generally are a result of fertilization in agricultural soils or bio-cycling in undisturbed soils.

The fourth type includes soils that have relatively low levels of available nutrients throughout the soil profile. These soils developed from low fertility parent material, or they are mature soils that have been subjected to intense weathering over a long period of time. Neither fertilization nor bio-cycling has contributed to nutrient levels in the surface layer of these soils.

All of the soils in St. Mary Parish are in the first group.

Soil reaction, organic matter content, sodium content, and cation-exchange capacity (CEC) can provide evidence of the general nutrient status of soils. Nutrient status is the result of the interactions of parent material; weathering (climate); time; and, to a lesser extent, organisms and topography.

More than 90 percent of nitrogen in the surface layer is in the organic form. Most of the nitrogen in the subsoil is fixed ammonium nitrogen. This form of nitrogen is unavailable for plant uptake.

Nitrogen generally is the most limiting nutrient element in crop production, because of high plant demand. For most soils, nitrogen fertilizer recommendations are based upon the nitrogen requirement of the crop, rather than on the nitrogen soil test levels, because no reliable nitrogen soil tests have been developed for Louisiana soils.

Information on the nitrogen fertility status of a soil can be obtained by measuring several soil nitrogen parameters. These include the amount of readily available ammonium and nitrate nitrogen in the soil, the amount of organic nitrogen, the rate of mineralization of organic nitrogen to available forms of inorganic nitrogen, and the rate of conversion of fixed ammonium nitrogen to available forms of nitrogen. Unfortunately, since the amounts and rates of transformation of the various forms of nitrogen in the soils of St. Mary Parish have not been determined, no assessment of the nitrogen fertility status for these soils can be given; however, fertilizer nitrogen recommendations obtained from the Louisiana Cooperative Extension Service may be used to determine application rates.

Phosphorus exists in soils as inorganic phosphorus in soil solution; as discrete minerals, such as hydroxyapatite, or as occluded or coprecipitated phosphorus in other minerals, such as carbonates, metal oxides, and layer silicates and in organic compounds. Soil solution concentrations of phosphorus generally are low. Since plant roots obtain almost all phosphorus from the soil solution, phosphorous uptake depends on the ability of the soil solid phase phosphorus to maintain phosphorus concentration in soil solution. Soil test procedures generally attempt to measure soil solution phosphorus, plus the readily available solid phase phosphorus that buffers the solution phase concentration.

The Bray 2 extractant tends to extract more phosphorus than the commonly used Bray 1, Mehlich 1, and Olsen extractants. The soils on the natural levees of St. Mary Parish, such as Baldwin, Galvez, and Loreauville, generally have medium to high levels of phosphorus.

Potassium exists in four major forms in soils. These are soil solution potassium, exchangeable potassium associated with negatively charged sites on clay mineral surfaces, nonexchangeable potassium within clay mineral interlayers, and structural potassium within the crystal lattice of minerals. Exchangeable potassium in soils can be replaced by other cations and is generally readily available for plant uptake. To become available to plants, nonexchangeable potassium and structural potassium must be converted to exchangeable potassium through weathering reactions.

Crops respond to fertilizer potassium if exchangeable potassium levels are very low to low. Low levels can be built up gradually by adding fertilizer potassium to soils that contain a sufficient amount of clay to hold the potassium. Exchangeable potassium levels can be maintained by adding enough fertilizer potassium to account for crop removal, fixation of exchangeable potassium to nonexchangeable potassium, and leaching losses. Soils that have a sandier texture, such as Felicity, do not have a sufficient amount of clay to hold the potassium; therefore, they do not have a sufficiently high cation-exchange capacity to maintain adequate quantities of available potassium for sustained crop production. More frequent additions are needed to balance losses of potassium by leaching in these soils. The content of exchangeable potassium in soils is an estimate of the supply of potassium available to plants. The content of available potassium in the soils of St. Mary Parish generally is moderate to high according to soil test interpretation guidelines.

Magnesium exists in soil solution as exchangeable magnesium associated with negatively charged sites on clay mineral surfaces and as structural magnesium in mineral crystal lattices. Solution and exchangeable magnesium generally are readily available for plant uptake, whereas structural magnesium must be converted to exchangeable magnesium during mineral weathering reactions.

According to soil test interpretation guidelines, the exchangeable magnesium within the soils of St. Mary Parish is low, medium, or high, depending upon soil texture. Low exchangeable magnesium levels are found throughout most of the soil profile in soils such as Felicity soils. The Cancienne soils have variable levels of magnesium throughout the profile because of variable textures. Higher levels of exchangeable magnesium are generally associated with higher clay content in the horizons of some soils, such as Gramercy and Schriever soils.

The levels of exchangeable magnesium in most of the soils in St. Mary Parish are more than adequate for crop production, especially where the plant roots can exploit the high levels of magnesium found in the subsoil. Because magnesium deficiencies in plants are normally rare, fertilizer sources of magnesium are generally not needed for crop production.

Calcium exists in soil solution, as exchangeable calcium associated with negatively charged sites on clay mineral surfaces, and as structural calcium in mineral crystal lattices. Exchangeable calcium generally is available for plant intake while structural calcium is not.

Calcium deficiencies in plants are extremely rare. Calcium normally is added to soils from liming materials used to correct problems associated with soil acidity. Calcium generally is the most abundant exchangeable cation in the soils of St. Mary Parish. In most soils of the parish, the content of exchangeable calcium is higher than, or about the same as the content of exchangeable magnesium. As depth increases, the content of exchangeable calcium increases in some soils, and remains about the same in other soils. A content of exchangeable calcium that is higher in the subsoil than in the surface layer generally is associated with a high content of clay in the subsoil or with free carbonates.

The *organic matter* content of a soil greatly influences other soil properties. High organic matter content in mineral soils is desirable, while low organic matter content can lead to many problems. Increasing the organic matter content can greatly improve the soil structure, drainage, and other physical properties. It can also increase the moisture-holding capacity, cation-exchange capacity, and nitrogen content.

Increasing the organic matter content is very difficult, because organic matter is continually subject to microbial degradation. This is especially true in Louisiana where higher soil temperatures and water content increase microbial activity. The rate of organic matter degradation in native plant communities is balanced by the rate of input of fresh material. Disruption of this natural process can lead to a decline in the organic matter content of the soil. Unsound management practices lead to a further decrease in organic matter content.

If no degradation of organic matter occurs, 10 tons of organic matter addition will raise the organic matter content in the upper 6 inches of soil by just 1 percent. Since breakdown of organic matter does occur in the soil, the addition of large amounts of organic matter to the soil are needed over a period of several decades to produce a small increase in the organic matter content. Conservation tillage and use of cover crops slowly increase the organic matter content over time, or at least prevent further declines.

The content of organic matter in the soils of St. Mary Parish generally is moderately low for the soils on the natural levees that are in crop production. It decreases sharply with depth because fresh inputs of organic matter are confined to the surface layer. These moderately low levels reflect the high rate of organic matter degradation, erosion, and the use of cultural practices that make maintenance of organic matter at higher levels difficult. The soils in swamps and marshes have a high organic matter content in the surface layers or throughout the profile.

Sodium exists in soil solution as exchangeable sodium associated with negatively charged sites on clay mineral surfaces, and as structural sodium in mineral crystal lattices. Because sodium is readily soluble and generally is not strongly retained by soils, well drained soils subjected to moderate or high rainfall normally do not have significant amounts of sodium. Soils in low rainfall environments, soils that have restricted drainage in the subsoil, and soils of the coastal marsh may have significant amounts of sodium. High levels of exchangeable sodium in soils are associated with undesirable physical properties such as poor structure, slow permeability, and restricted drainage.

Most of the soils in St. Mary Parish have more exchangeable sodium than exchangeable potassium. Where the content of exchangeable sodium is more than about 6 percent of the CEC within the rooting depth of crops, production can be limited. Some soils in the parish that are used for agricultural purposes have a moderately high content of exchangeable sodium below the surface layer. This restricts the permeability of these soils by deflocculating the soil structural aggregates.

The *pH* of the soil solution in contact with the soil affects other soil properties. The lower the pH, the more acidic the soil. Soil pH controls the availability of essential and nonessential elements by controlling mineral solubility, ion exchange, and absorption-desorption reactions at the surfaces of the soil minerals and organic matter. The pH also affects microbial activity.

Aluminum exists in soils as exchangeable polymeric hydrolysis species, aluminum oxides, and aluminosilicate minerals. Exchangeable aluminum in soils is determined by extraction with neutral salts, such as potassium chloride or barium chloride. The exchangeable aluminum in soils is directly related to pH. If the pH is less than 5.5, the soils have significant amounts of exchangeable aluminum that has a charge of plus 3. This species of aluminum is toxic to plants. The toxic effects of aluminum on plant growth can be alleviated by adding lime to the soil to convert exchangeable aluminum to nonexchangeable polymeric hydrolysis species. High levels of organic matter can alleviate aluminum toxicity

Sources of exchangeable *hydrogen* in soils include hydrolysis of exchangeable and nonexchangeable aluminum and pH-dependent exchange sites on metal oxides, certain layer silicates, and organic matter. Exchangeable hydrogen, as determined by extraction with such neutral salts as potassium chloride, normally is not a major component of soil acidity. Exchangeable hydrogen is not readily replaced by other cations unless accompanied by a neutralization reaction. Most of the neutral salt exchangeable hydrogen in soils apparently comes from aluminum hydrolysis.

Except those soils in former marshes and swamps that have been drained, such as Rita soils, most of the soils in St. Mary Parish have medium to high pH, contain significantly low quantities of exchangeable aluminum, and have low levels of total acidity in most of the soil horizons. In drained soils, the upper part of the soil typically becomes increasingly acid as the organic matter decomposes.

Cation-exchange capacity is a measure of the total negative charge, both permanent and pH-dependent, resulting from an array of minerals, usually clay size and can be related to the amount of nutrient and non-nutrient cations a soil can hold in an exchangeable form. Permanent charge cation-exchange sites occur because a net negative charge develops on a mineral surface from substitution of ions within the crystal lattice. A negative charge developed from ionization of surface hydroxyl groups on minerals and organic matter produces pH-dependent cation-exchange sites.

Methods for determining cation-exchange capacity are available and can be classified as one of two types. These include methods that use unbuffered salts to measure the cation-exchange capacity at the pH of the soil, and methods that use buffered salts to measure the cation-exchange capacity at a specified pH. These methods produce different results since buffered salt methods include only a part of the pH-dependent cation-exchange capacity up to the pH of the buffer, pH 7 and 8.2. Errors in the saturation, washing, and replacement steps also can cause different results.

Acidity from hydrolysis of neutral salt exchangeable aluminum plus neutral salt exchangeable hydrogen from pH-dependent exchange sites makes up the exchangeable acidity in soils. Exchangeable acidity is determined by the pH of the soil. Titratable acidity is the amount of acidity neutralized to a selected pH, generally, pH 7 or 8.2, and constitutes the total potential acidity of a soil. All sources of soil acidity, including hydrolysis of monomeric and polymeric aluminum species and hydrogen from pH-dependent exchange sites on metal oxides, layer silicates, and organic matter, contribute to the total potential acidity. Total potential acidity in soils is determined by titration with base or incubation with lime; extraction with a buffered extractant followed by titration of the buffered extractant (pH 8.2, barium chloride-triethanolamine method); or equilibration with buffers followed by estimation of acidity from changes in buffer pH.

The *effective cation-exchange capacity* is the sum of exchangeable bases, which includes calcium, magnesium, potassium, and sodium. Effective cation-exchange capacity is determined by extraction with 1 molar ammonium acetate at pH 7, plus the sum of neutral salt-exchangeable aluminum and hydrogen (exchangeable acidity). The sum cation-exchange capacity is the sum of exchangeable bases, plus the total acidity determined by extraction with pH 8.2, barium chloride-triethanolamine. The effective-cation exchange capacity generally is less than the sum cation-exchange capacity, and includes only that part of the pH-dependent cation-exchange capacity that is determined by exchange of hydrogen with a neutral salt. The sum cation-exchange capacity includes all of the pH-dependent cation-exchange capacity up to pH 8.2. If a soil contains no pH-dependent exchange sites, or if the pH of the soil is about 8.2, the effective and sum cation-exchange capacity will be about the same. The larger the cation-exchange capacity, the larger the capacity to store nutrient cations.

Chemical Analyses of Selected Soils

Information on the available nutrient supply in the subsoil allows evaluation of the natural fertility levels of the soil. Soil profiles were sampled during the soil survey and analyzed for soil reaction; organic matter content; extractable phosphorus; exchangeable cations of calcium, magnesium, potassium, sodium, aluminum, and hydrogen; total acidity; and cation-exchange capacity. The results are summarized in Table 30. The methods used in obtaining the data are indicated in the list that follows. The codes in parentheses refer to published methods.

Organic matter—acid-dichromate oxidation (6Ala).
pH—1:1 soil/water solution (8Cla).
Extractable phosphorus—Bray 2 extractant (0.03 molar ammonium fluoride—0.1 molar hydrochloric acid).
Exchangeable cations—pH 7, 1 molar ammonium acetate-calcium (6N2), magnesium (602), potassium (6Q2), sodium (6P2).
Exchangeable aluminum and hydrogen—1 molar potassium chloride (6G2).
Total acidity—pH 8.2, barium chloride-triethanolamine (6Hla).
Sum cation-exchange capacity—sum of bases plus total acidity (5A3a).
Cation-exchange capacity—sum of bases plus exchangeable aluminum and hydrogen (5A3b).
Base saturation—sum of cations/sum cation-exchange capacity (5C3).
Exchangeable sodium percentage—exchangeable sodium/sum cation-exchange capacity.
Aluminum saturation—exchangeable aluminum/effective cation-exchange capacity.

Physical Analyses of Selected Soils

The results of physical analysis of several typical pedons in the survey area are given in table 31. The data are for soils sampled at carefully selected sites. Unless otherwise indicated, the pedons are typical of the series. They are described in the section "Soil Series and Their Morphology." Soil samples were analyzed by USDA-NRCS, National Soil Survey Laboratory at Lincoln, Nebraska.

Depth to the upper and lower boundaries of each layer is indicated.

Most determinations, except those for grain-size analysis and bulk density, were made on soil material smaller than 2 millimeters across. Measurements reported as percent or quantity of unit weight were calculated on an ovendry basis. The methods used in obtaining the data are indicated in the list that follows. The codes in parentheses refer to published methods. (31)

Sand—(0.05- to 2.0-millimeter fraction) weight percentages of material less than 2 millimeters (3A1).

Silt—(0.002- to 0.05-millimeter fraction) pipette extraction, weight percentages of all material less than 2 millimeters (3A1).

Clay—(fraction less than 0.002 millimeters) pipette extraction, weight percentages of material less than 2 millimeters (3A1).

Water retained—pressure extraction, percentage of ovendry weight of less than 2-millimeter material; 1/3 bar (4B1), and 15 bars (4B2).

Water-retention difference—between 1/3 bar and 15 bars for whole soil (4C1).

Bulk density—of less than 2-millimeter material, saran-coated clods field moist (4A1a), 1/3 bar (4A1d), ovendry (4A1h).

Coefficient of linear extensibility—change in clod dimension based on whole soil (4D).

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories. (21,23) 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 32 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 Alfisol.

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 Aqualf (*Aqu*, meaning water, plus *alf*, from Alfisol).

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 Endoaqualfs (*Endo*, meaning a ground water table, plus *aqualf,* the suborder of the Alfisols that has an aquic 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. An example is Aeric Endoaqualfs.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineralogy class, cation-exchange activity class, soil temperature regime, soil depth, and reaction class. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is fine-silty, mixed, superactive, hyperthermic Aeric Endoaqualfs.

SERIES. The series consists of soils within a family that have horizons similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile.

Soil Series and Their Morphology

In this section, each soil series recognized in the survey area is described. Characteristics of the soil and the material in which it formed are identified for each series. A pedon, a small three-dimensional area of soil that is typical of the series in the survey area is described. The detailed description of each soil horizon follows standards in the "Soil Survey Manual." (20) Many of the technical terms used in the descriptions are defined in "Soil Taxonomy" (23) and in "Keys to Soil Taxonomy." (21) 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.

Allemands Series

MLRA: Gulf Coast Marsh
Geomorphic setting: On landward side of the low coastal freshwater marsh on delta plain
Position on landform: Linear areas
Parent material: Herbaceous organic material over fluid clayey alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0 to 1 percent

Associated Soils

- Barbary soils are in swamps and are fluid mineral soils.
- Clovelly soils are in similar positions and are more saline.
- Harahan soils are in drained swamps and are mineral soils.
- Kenner soils have organic materials thicker than 51 inches.
- Larose soils are fluid mineral soils.
- Maurepas soils are in freshwater swamps and are organic.

Taxonomic Classification

Clayey, smectitic, euic, hyperthermic Terric Haplosaprists

Typical Pedon

Allemands muck in an area of Allemands muck, very frequently flooded, in marshland; located 10.6 miles west of Morgan City on U.S. Highway 90 to Wax Lake Canal, 9.7 miles south of U.S. Highway 90 bridge to entrance of Hog Bayou, 1.15 miles west in Hog Bayou, and 316 yards southwest of the center of the channel; Sec. 16, T. 18 S., R. 10 E., Belle Isle, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 34 minutes, 2.00 seconds N.
Longitude: 91 degrees, 27 minutes, 1.00 seconds W.

Oa1—0 to 9 inches; dark grayish brown (10YR 4/2) muck; about 30 percent fiber, about 20 percent rubbed; massive; many live roots; dominantly herbaceous fiber; about 25 percent mineral matter; slightly alkaline; clear smooth boundary.

Oa2—9 to 27 inches; dark brown (7.5YR 3/2) muck; about 20 percent fiber, about 5 percent rubbed; about 30 percent mineral matter; massive; flows easily between fingers when squeezed leaving small residue in hand; common live roots; dominantly herbaceous fiber; slightly alkaline; clear smooth boundary.

Oa3—27 to 43 inches; very dark grayish brown (10YR 3/2) muck; about 10 percent fiber, about 1 percent rubbed; about 45 percent mineral matter; massive; flows easily between fingers when squeezed leaving hand empty; few live roots; dominantly herbaceous fiber; slightly alkaline; clear smooth boundary.

Ag—43 to 52 inches; dark gray (5Y 4/1) mucky clay; massive; flows easily between fingers when squeezed leaving small residue in hand; moderately alkaline; clear smooth boundary.

Cg—52 to 72 inches; dark gray (N 4/) clay; massive; flows easily between fingers when squeezed leaving hand empty; moderately alkaline.

Range in Characteristics

Solum thickness: 16 to 51 inches
Clay content in the control section: 60 to 95 percent
Redoximorphic features: Gleyed matrix in the mineral layers

Other distinctive soil features: The n-value is more than 0.7 in substratum.
Concentrated minerals: None
Reaction: The organic material ranges from strongly acid to slightly alkaline in the upper part and from slightly acid to moderately alkaline in the lower part; the underlying clayey materials are slightly acid to moderately alkaline. In drained areas the reaction ranges from extremely acid to slightly alkaline in the Oa horizon, and from extremely acid to moderately alkaline in the Ag and Cg horizon.

Oe or Oa horizon (surface layer):
Color—Hue of 7.5YR, 10YR or neutral, value of 2 to 4, and chroma of 1 to 3
Redoximorphic features—None
Texture—Muck
Other features—Less than 1 inch thick clay overwash in some areas
Thickness—16 to 51 inches

Ag horizon: (where present)
Color—Hue of 10YR, 2.5Y, or 5Y, value of 2 to 5, and chroma of 1
Redoximorphic features—Gleyed matrix
Texture—Clay or mucky clay
Thickness—0 to 20 inches

Cg horizon:
Color—Hue of 10YR to 5Y, 5G, or 5GY, value of 3 to 6, and chroma of 1 or 2 or it is neutral with value of 3 to 6
Redoximorphic features—Gleyed matrix
Texture—Clay or mucky clay

Baldwin Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: On natural levee on Teche Delta Plain
Position on landform: Convex areas
Parent material: Clayey alluvium
Drainage class: Poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Deep
Shrink-swell potential: Very high
Slope: 0 to 1 percent

Associated Soils

- Galvez soils have less than 35 percent clay in the subsoil.
- Glenwild soils have less than 35 percent clay in the subsoil.
- Iberia soils have more than 60 percent clay in the subsoil.

Taxonomic Classification

Fine, smectitic, hyperthermic Chromic Vertic Epiaqualfs

Typical Pedon

Baldwin silty clay loam in an area of Baldwin silty clay loam, 0 to 1 percent slopes, in row crop; located 21.7 miles west of Morgan City on U.S. Highway 90, 12.75 miles northwest on Louisiana Highway 87, 616 yards north of Louisiana Highway 87 on farm road, and about 40 feet east of farm road into sugarcane field; Spanish Land Grant Sec. 47, T. 14 S., R. 9 E., Franklin, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 50 minutes, 16.00 seconds N.
Longitude: 91 degrees, 31 minutes, 0.50 seconds W.

Ap—0 to 5 inches; dark grayish brown (10YR 4/2) silty clay loam; moderate fine subangular blocky structure; firm; moderately acid; abrupt smooth boundary.

Btg1—5 to 12 inches; grayish brown (10YR 5/2) silty clay loam, common medium distinct dark yellowish brown (10YR 4/4) masses of iron accumulation throughout, moderate fine subangular blocky structure; firm; thick continuous very dark gray clay films on exterior of peds; strongly acid; clear wavy boundary.

Btg2—12 to 20 inches; gray (10YR 5/1) silty clay; common medium distinct strong brown (7.5YR 4/6) masses of iron accumulation throughout; moderate medium subangular blocky structure; firm; few medium black nodules of iron and manganese; few fine and common continuous dark gray clay films on exterior of peds; strongly acid; gradual wavy boundary.

Btg3—20 to 32 inches; grayish brown (10YR 5/2) silty clay loam; common medium distinct dark yellowish brown (10YR 4/4) masses of iron accumulation throughout; moderate medium prismatic structure; firm; few medium black nodules of iron and manganese; thin patchy gray clay films on exterior or peds; few distinct dark gray (5Y 4/1) iron depletions in root channels; moderately acid; clear smooth boundary.

BCg—32 to 40 inches; gray (10YR 5/1) silty clay; common medium prominent dark yellowish brown (10YR 4/4) masses of iron throughout; moderate medium prismatic structure; firm; few fine black nodules of iron and manganese; thin patchy gray clay films on exterior of peds; few distinct dark gray (5Y 4/1) iron depletions in root channels and pores; moderately acid.

Cg1—40 to 48 inches; gray (5Y 5/1) silty clay; common medium prominent dark yellowish brown (10YR 4/4) masses of iron throughout; moderate medium prismatic structure; firm; few fine black nodules of iron and manganese concretions throughout; moderately acid.

Cg2—48 to 80 inches; gray (5Y 5/1) silt loam; common medium prominent dark yellowish brown (10YR 4/4) masses of iron throughout; massive; firm; moderately acid.

Range in Characteristics

Solum thickness: 40 to more than 80 inches

Clay content in the control section: 40 to 55 percent

Redoximorphic features: Depleted matrix with iron accumulations in shades of brown throughout the subsoil.

Other distinctive soil features: Dark ped coatings in the upper part of the subsoil.

Concentrated minerals: Concretions of calcium carbonate in the subsoil in some pedons.

Reaction: Very strongly acid to slightly acid in the A horizon, strongly acid or slightly acid in the upper part of the Btg horizon, moderately acid to moderately alkaline in the lower part of the Bt and BC horizons, and moderately acid to moderately alkaline in the C horizon.

Ap horizon:

Color—Hue of 10YR, value of 3 or 4, and chroma of 2 or less
Redoximorphic features—None
Texture—Silty clay loam
Other features—None
Thickness—6 to 10 inches

Btg horizon:

Color—Hue of 10YR to 5Y, value of 4 to 6, chroma of 2 or less
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of brown or olive
Texture—Clay, silty clay, or silty clay loam

Other features—Most peds are coated or partly coated with dark gray or very dark gray material. Concretions of calcium carbonate are 1 to 5 percent, and 0.07 to 0.78 inch (2 to 20 mm) wide in some pedons
Thickness—14 to 30 inches

BCg horizon:
Color—Hue of 10YR to 5Y, value of 4 to 6, chroma of 2 or less
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of brown or olive.
Texture—Clay, silty clay, or silty clay loam
Other features—Concretions of calcium carbonate are 1 to 5 percent, and 0.07 to 0.78 inch (2 to 20 mm) wide are in some pedons
Thickness—6 to 40 inches

Cg horizon:
Color—Hue of 10YR to 5Y, value of 4 to 6, chroma of 2 or less
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of brown or olive
Texture—Silty clay, silty clay loam, or silt loam
Other features—None

Balize Series

MLRA: Gulf Coast Marsh
Geomorphic setting: On mud flat on Atchafalaya River active delta plain
Position on landform: Linear areas
Parent material: Loamy alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Slow
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0.0 to 0.5 percent

Associated Soils

- Allemands soils have organic layers 16 to 51 inches thick.
- Bancker soils have a very-fine particle-size control section.
- Clovelly soils have organic layers 16 to 51 inches thick.
- Kenner soils have organic layers more than 51 inches thick.
- Lafitte soils have organic layers more than 51 inches thick.
- Larose soils have a very-fine particle-size control section.

Taxonomic Classification

Fine-silty, mixed, superactive, nonacid, hyperthermic Typic Hydraquents

Typical Pedon

Balize silt loam in an area of Balize silt loam, very frequently flooded, in marshland; located 10.6 miles west of Morgan City on U.S. Highway 90 to Wax Lake Canal, then 11.6 miles south of U.S. Highway 90 bridge to Wax Lake entrance, about 0.5 mile west of Wax Lake entrance, and 0.7 mile northwest to Grass Island; T. 17 S., R. 10 E., Belle Isle, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 32 minutes, 35.50 seconds N.
Longitude: 91 degrees, 26 minutes, 30.20 seconds W.

A—0 to 11 inches; grayish brown (10YR 5/2) silt loam; massive; very fluid; flows easily between fingers when squeezed leaving hand empty; few medium and fine roots; moderately alkaline; clear smooth boundary.
Cg1—11 to 24 inches; dark gray (10YR 4/1) silt loam; massive; very fluid, flows easily through fingers when squeezed leaving hand empty; moderately alkaline; clear smooth boundary.
Cg2—24 to 48 inches; gray (5Y 5/1) silty clay loam; massive; very fluid, flows easily through fingers when squeezed leaving hand empty; few thin strata of silt loam; moderately alkaline; clear smooth boundary.
Cg3—48 to 65 inches; gray (N 5/) silt loam; common thin (1-inch) strata of gray (5Y 5/1) silty clay loam; massive; slightly fluid, flows easily through fingers when squeezed leaving small residue in hand; moderately alkaline.
Cg4—65 to 72 inches; gray (N 5/) silt loam; common thin (1-inch) strata of gray (5Y 5/1) silty clay loam and very fine sandy loam; massive; slightly fluid, flows with difficulty through fingers when squeezed leaving large residue in hand; moderately alkaline.

Range in Characteristics

Solum thickness: 3 to 12 inches
Clay content in the control section: 18 to 35
Redoximorphic features: Depleted matrix or gleyed throughout
Other distinctive soil features: The n-value is more than 0.7 in all horizons.
Concentrated minerals: None
Reaction: The reaction ranges from neutral to moderately alkaline in the A horizon and neutral to moderately alkaline in the C horizon.

A horizon:
Color—Hue of 10YR, 2.5Y, and 5Y, value of 2 to 5, and chroma of 2 or less
Redoximorphic features—None
Texture—Silt loam
Other features—None
Thickness—3 to 12 inches

Cg horizon:
Color—Hue of 10YR to 5Y, 5G, 5GY, 5BG, or neutral, value of 4 to 6, and chroma of 2 or less
Redoximorphic features—Depleted matrix and gleyed
Texture—Silt loam, silty clay loam, mucky silt loam, very fine sandy loam, with or without pockets or lenses of muck or peat
Other features—None
Thickness—More than 40 inches

Bancker Series

MLRA: Gulf Coast Marsh
Geomorphic setting: On brackish areas along bayous in the marsh on delta plain
Position on landform: Linear areas
Parent material: Fluid clayey alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0.0 to 0.2 percent

Associated Soils

- Clovelly soils are in similar positions and are organic.
- Lafitte soils are in similar positions and are organic.

Taxonomic Classification

Very-fine, smectitic, nonacid, hyperthermic Sodic Hydraquents

Typical Pedon

Bancker muck in an area of Bancker muck, tidal, in marshland; located 26 miles west of Morgan City on U.S. Highway 90, 15.1 miles southwest of U.S. Highway 90 on Louisiana Highway 83, 4.8 miles southwest on Louisiana Highway 319, and 228 yards due south of Louisiana Highway 319; Sec. 15, T. 15 S., R. 6 E., Hammock Lake, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 44 minutes, 1.00 seconds N.
Longitude: 91 degrees, 49 minutes, 57.00 seconds W.

0a—0 to 9 inches; very dark grayish brown (10YR 3/2) muck; about 30 percent fiber, about 20 percent rubbed; massive; many live roots; dominantly herbaceous fiber; about 25 percent mineral matter; slightly alkaline; clear smooth boundary.
Ag—9 to 27 inches; very dark gray (10YR 3/1) clay; massive; few roots and fibers; flows easily between fingers when squeezed leaving hand empty; moderately alkaline; abrupt wavy boundary.
Cg1—27 to 39 inches; dark gray (5Y 4/1) clay; 60 percent mineral; massive; flows easily between fingers when squeezed leaving hand empty; moderately alkaline; clear wavy boundary.
Cg2—39 to 54 inches; gray (5Y 5/1) clay; massive; few fine roots and fibers; flows easily between fingers when squeezed leaving hand empty; moderately alkaline; clear wavy boundary.
Cg3—54 to 74 inches; dark gray (N 4/) clay; massive; flows easily between fingers when squeezed leaving hand empty; moderately alkaline.

Range in Characteristics

Organic thickness: 4 to 15 inches
Clay content in the control section: 60 to 85 percent
Redoximorphic features: Depleted or gleyed matrix throughout the substratum
Other distinctive soil features: The n-value is more than 0.7 in all horizons.
Concentrated minerals: Exchangeable sodium is 13 percent or more within 40 inches
Reaction: Strongly acid to slightly alkaline in the Oa layers and moderately acid to moderately alkaline in the Ag and Cg horizons.

Oa horizon:
Color—Hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 or 2
Redoximorphic features—None
Texture—Muck
Other features—None
Thickness—4 to 15

Ag horizon:
Color—Hue of 10YR to 5Y, or neutral, value of 2 to 4, and chroma of 2 or less
Redoximorphic features—Depleted matrix
Texture—Clay or mucky clay
Other features—None
Thickness—4 to 12

Cg horizon:
Color—Hue of 10YR to 5Y, 5GY, or 5BG, value of 4 to 6, and chroma of 1, or neutral
Redoximorphic features—Depleted or gleyed matrix with masses of iron accumulation in shades of olive or brown.
Texture—Clay, silty clay, or mucky clay
Other features—None
Thickness—24 to 42 inches

Barbary Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: In backswamp on Teche Delta Plain
Position on landform: Concave areas
Parent material: Fluid clayey alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0.0 to 0.5 percent

Associated Soils

- Carville soils are on higher positions, silty and not fluid.
- Fausse soils are nonfluid in some layer within 20 inches.
- Glenwild soils are on higher positions, silty and not fluid.
- Harahan soils are in drained swamps.
- Maurepas soils are in freshwater swamps and are organic.
- Schriever soils are nonfluid to a depth of 60 inches or more.

Taxonomic Classification

Very-fine, smectitic, nonacid, hyperthermic Typic Hydraquents

Typical Pedon

Barbary muck in an area of Barbary muck, frequently flooded, in swamp; located 10.6 miles west of Morgan City on U.S. Highway 90 to Wax Lake Canal, 3.2 miles north of U.S. Highway 90 bridge to Sixmile Lake entrance, 1.4 miles northwest along the south shore of Sixmile Lake, and 242 yards southwest of lakeshore; Sec. 9, T. 15 S., R. 11 E., Centerville, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 45 minutes, 9.30 seconds N.
Longitude: 91 degrees, 22 minutes, 35.40 seconds W.

Oa—0 to 6 inches; very dark grayish brown (10YR 3/2) muck; massive; nonsticky, very fluid, about 50 percent organic matter; slightly acid; clear smooth boundary.
Ag—6 to 12 inches; dark gray (10YR 4/1) clay; massive; nonsticky, (very fluid, flows easily between fingers when squeezed leaving small residue in hand); about 20 percent organic matter; slightly acid; clear smooth boundary.
Cg1—12 to 36 inches; gray (2.5Y 5/1) clay; few massive; nonsticky, (very fluid, flows easily through fingers when squeezed leaving small residue in hand); about 5 percent organic matter; few small to large fragments of wood; neutral.
Cg2—36 to 42 inches; gray (5Y 5/1) clay; massive; nonsticky, (very fluid, flows easily through fingers when squeezed leaving hand empty); about 5 percent organic matter; neutral.
Cg3—42 to 48 inches; dark gray (5Y 4/1) clay; massive; nonsticky, (very fluid, flows easily through fingers when squeezed leaving hand empty); about 5 percent organic matter; few small to large fragments of wood; neutral.

Cg4—48 to 84 inches; gray (5Y 5/1) clay; massive; nonsticky, (very fluid, flows easily through fingers when squeezed leaving hand empty); about 5 percent organic matter; few small to large fragments of wood; neutral.

Range in Characteristics

Solum thickness: None
Clay content in the control section: 60 to 95 percent
Redoximorphic features: Depleted or gleyed matrix with masses of iron accumulation in shades of olive or brown throughout.
Other distinctive soil features: The n-value is more than 0.7 in all horizons to a depth of 40 inches or more. Buried logs are in the Cg1 and Cg2 horizons.
Concentrated minerals: None
Reaction: Strongly acid to slightly alkaline in the Oa horizon, moderately acid to slightly alkaline in the Ag horizon, and neutral to moderately alkaline in the Cg horizon.

Oa horizon:
Color—Hue of 5YR to 10YR, value of 2 to 4, and chroma of 1 to 3
Redoximorphic features—None
Texture—Muck
Other features—None
Thickness—3 to 15 inches

Ag horizon: (where present)
Color—Hue of 10YR to 5Y, value of 3 to 5, and chroma of 1 or 2
Redoximorphic features—Depleted or gleyed matrix
Texture—Moderately fluid or very fluid clay, mucky silty clay, or silty clay
Other features—None
Thickness—0 to 10 inches

Cg horizon:
Color—Hue of 10YR to 5BG, value of 4 or 5, and chroma of 1, or it is neutral with value of 4 or 5
Redoximorphic features—Depleted or gleyed matrix with masses of iron accumulation in shades of olive or brown
Texture—Fluid or very fluid clay or mucky clay
Other features—Thin layers of peat or muck and layers of wood, logs, and stumps are present in some pedons

Carville Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: On natural levee on Mississippi River Delta Plain (fig. 19)
Position on landform: Convex areas
Parent material: Loamy alluvium
Drainage class: Somewhat poorly drained
Saturated hydraulic conductivity class: Moderate
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0 to 2 percent

Associated Soils

- Barbary soils are in swamps and are clayey throughout.
- Fausse soils are in swamps and are clayey throughout.

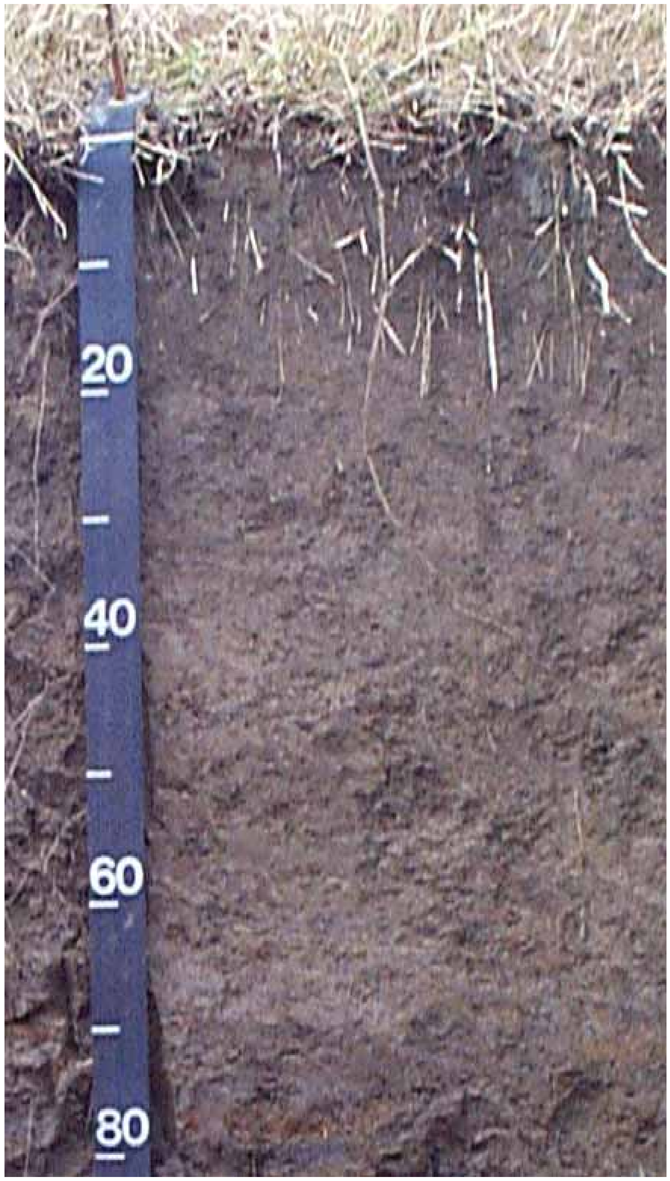

Figure 19.—Profile of Carville silt loam in an area of Carville and Hydraquents soils, undulating, flooded. [Scale in centimeters]

Taxonomic Classification

Coarse-silty, mixed, superactive, calcareous, hyperthermic Fluventic Endoaquepts

Typical Pedon

Carville silt loam in an area of Carville and Hydraquents soils, undulating, flooded, in hardwoods; located 10.6 miles west of Morgan City on U.S. Highway 90 to Wax Lake Canal, 3.2 miles north of U.S. Highway 90 bridge to Sixmile Lake entrance, 3 miles northwest across Sixmile Lake, and 200 feet north of the north shore of Sixmile Lake; Sec. 6, T. 15 S., R. 11 E., Centerville, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 46 minutes, 36.20 seconds N.
Longitude: 91 degrees, 23 minutes, 14.70 seconds W.

A—0 to 6 inches; dark grayish brown (10YR 4/2) silt loam; weak medium subangular blocky structure that parts to weak fine granular structure; very friable; common fine and medium roots; slightly alkaline; clear smooth boundary.

Bg—6 to 22 inches; grayish brown (10YR 5/2) silt loam; weak medium subangular blocky structure; slightly friable; few fine roots; few fine pores; few fine soft manganese concretions; common medium faint brown (10YR 5/3) masses of iron accumulation throughout; common medium distinct yellowish brown (10YR 5/4) masses of iron accumulation throughout; slightly alkaline; clear smooth boundary.

Cg1—22 to 27 inches; grayish brown (10YR 5/2) silt loam; weak medium subangular blocky structure; friable; few fine roots; few fine pores; few fine soft manganese concretions; common medium distinct yellowish brown (10YR 5/4) masses of iron accumulation throughout; slightly alkaline; clear smooth boundary.

Cg2—27 to 36 inches; grayish brown (10YR 5/2) silt loam; weak medium subangular blocky structure; friable; few fine roots; few very fine manganese stains on faces of peds; few fine faint brown (10YR 5/3) masses of iron accumulation throughout; common medium distinct yellowish brown (10YR 5/4) masses of iron accumulation throughout; slightly alkaline; clear smooth boundary.

Cg3—36 to 44 inches; grayish brown (10YR 5/2) silt loam; weak medium subangular blocky structure; friable; common medium faint brown (10YR 5/3) masses of iron accumulation throughout; slightly alkaline; gradual smooth boundary.

Cg4—44 to 80 inches; grayish brown (10YR 5/2) silt loam; weak medium subangular blocky structure; friable; few fine soft manganese concretions; common medium distinct yellowish brown (10YR 5/6) masses of iron accumulation throughout; slightly alkaline; gradual smooth boundary.

Range in Characteristics

Solum thickness: 10 to 50 inches

Clay content in the control section: 6 to 18 percent

Redoximorphic features: Depleted matrix with iron accumulations within a depth of 20 inches.

Concentrated minerals: The soil materials have very slight and slightly effervescence in dilute HCL between a depth of 10 and 20 inches.

Reaction: Moderately acid to moderately alkaline throughout

A horizon:

Color—Hue of 10YR, value of 4 or 5, and chroma of 2 or 3, or hue of 7.5YR, value of 4, and chroma of 2

Redoximorphic features—Iron accumulations in shades of brown and iron depletions in shades of gray are present in some pedons

Texture—Silt loam, very fine sandy loam, or fine sandy loam

Other features—None

Thickness—4 to 8 inches

Bg horizon:

Color—Hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 1 or 2. Some pedons have thin strata with hue of 10YR, value of 3 to 6, and chroma of 3 or 4; or hue of 7.5YR, value of 4, and chroma of 2 to 4

Redoximorphic features—Depleted matrix with iron accumulations in shades of brown

Texture—Silt loam, loam, or very fine sandy loam; some pedons have thin strata of finer or coarser material

Other features—Some pedons have thin strata with hue of 10YR, value of 3 to 6, and chroma of 3 or 4; hue of 7.5YR, value of 4, and chroma of 2 to 4; or hue of 5YR, value of 4, and chroma of 2 that comprise up to 40 percent of the 10- to 40-inch control section

Thickness—6 to 20 inches

Abg horizon: (where present)
Color—Hue of 10YR, value of 4 or 5, and chroma of 2
Redoximorphic features—Depleted matrix with iron accumulations in shades of brown
Texture—Fine sandy loam, loamy very fine sand, very fine sandy loam, loam, silt loam, silty clay loam, clay loam, silty clay, or clay
Other features—None
Thickness—0 to 8 inches

C or Cg horizon:
Color—Hue of 10YR to 5GY, value of 4 to 6, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with iron accumulations in shades of brown
Texture—Silt loam, loam, or very fine sandy loam; some pedons have thin strata of finer or coarser material.
Other features—Some pedons have thin strata with hue of 10YR, value of 3 to 6, and chroma of 3 or 4; hue of 7.5YR, value of 4, and chroma of 2 to 4; or hue of 5YR, value of 4, and chroma of 2 that comprise up to 40 percent of the 10- to 40-inch control section. Many pedons have wood fragments in the Cg horizon.

Clovelly Series

MLRA: Gulf Coast Marsh
Geomorphic setting: In brackish marsh on delta plain
Position on landform: Linear areas
Parent material: Herbaceous organic material over very fluid clayey alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0.0 to 0.2 percent

Associated Soils

- Bancker soils are fluid, mineral, and in similar positions.
- Lafitte soils have more than 51 inches of organic material.

Taxonomic Classification

Clayey, smectitic, euic, hyperthermic Terric Haplosaprists

Typical Pedon

Clovelly muck in an area of Clovelly muck, very frequently flooded, in marshland; located 26 miles west of Morgan City on U.S. Highway 90, 15.1 miles southwest of U.S. Highway 90 on Louisiana Highway 83, 7.35 miles southwest on Louisiana Highway 319, 345 yards southeast along a drainage canal, and 55 yards due east into marsh; Sec. 20, T. 15 S., R. 6 E., Hammock Lake, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 43 minutes, 0.00 seconds N.
Longitude: 91 degrees, 52 minutes, 0.00 seconds W.

Oa1—0 to 12 inches; very dark grayish brown (10YR 3/2) muck; about 30 percent fiber, 10 percent rubbed; massive; flows easily between fingers when squeezed leaving hand empty; about 50 percent mineral; slightly alkaline; clear smooth boundary.

Oa2—12 to 28 inches; dark gray (7.5YR 4/1) muck; about 10 percent fiber, 2 percent rubbed; about 60 percent mineral; massive; flows easily between fingers when squeezed leaving small residue in hand; few medium and fine roots; slightly alkaline; clear smooth boundary.

Cg1—28 to 34 inches; gray (5Y 5/1) mucky clay; massive; flows easily between fingers when squeezed leaving hand empty; moderately alkaline clear smooth boundary.
Cg2—34 to 65 inches; greenish gray (5BG 5/1) clay; massive; flows easily between fingers when squeezed leaving hand empty; moderately alkaline.
Cg3—65 to 84 inches; dark greenish gray (5BG 4/1) clay; massive; flows easily between fingers when squeezed leaving hand empty; moderately alkaline.

Range in Characteristics

Solum thickness: 16 to 51 inches
Clay content in the control section: 50 to 90 percent
Redoximorphic features: Depleted matrix in substratum
Other distinctive soil features: The n-value is more than 0.7 in all horizons.
Concentrated minerals: None
Reaction: Neutral to moderately alkaline throughout.

Oa horizon (surface layer):
Color—Hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 2 or less
Redoximorphic features—None
Texture—Muck
Other features—None
Thickness—16 to 51 inches

Ag horizon: (where present)
Color—Hue of 10YR to 5YR, value of 2 to 4, and chroma of 2 or less
Redoximorphic features—Depleted matrix
Texture—Mucky clay, clay, or silty clay
Other features—None
Thickness—0 to 5 inches

Cg horizon:
Color—Hue of 10YR to 5Y, 5BG, 5GY, or 5G, value of 4 to 6, and chroma 1 or less
Redoximorphic features—Depleted or gleyed matrix
Texture—Mucky clay, clay, or silty clay
Other features—None

Coteau Series

MLRA: Southern Mississippi Valley Loess
Geomorphic setting: On terrace on upland
Position on landform: Convex areas
Parent material: Loess
Drainage class: Somewhat poorly drained
Saturated hydraulic conductivity class: Moderately slow
Soil depth class: Very deep
Shrink-swell potential: Moderate
Slope: 0 to 1 percent

Associated Soils

- Jeanerette soils have mollic epipedons.
- Patoutville soils have red iron accumulations in the subsoil.

Taxonomic Classification

Fine-silty, mixed, active, hyperthermic Glossaquic Hapludalfs

Typical Pedon

Coteau silt in an area of Coteau silt, 0 to 1 percent slopes, in row crops; located 32.5 miles west of Morgan City on U.S. Highway 90, 85 yards southwest of U.S. Highway 90 to frontage road, 0.8 mile northwest on frontage road, 118 yards southwest on field road, and 105 yards due west of field road; Spanish Land Grant Sec. 67 T. 13 S., R. 8 E., Jeanerette, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 52 minutes, 55.50 seconds N.
Longitude: 91 degrees, 40 minutes, 11.90 seconds W.

Ap—0 to 5 inches; brown (10YR 4/3) silt; few fine faint light brownish gray mottles; weak fine granular structure; friable; many fine roots; few fine soft black masses of organic matter accumulation; moderately acid; abrupt wavy boundary.

Bt1—5 to 14 inches; yellowish brown (10YR 5/4) silt loam; weak medium prismatic structure that parts into moderate medium subangular blocky structure; firm; common fine roots throughout; common fine pores; faint dark yellowish brown (10YR 4/3) ped coatings; faint clay films on faces of peds; common medium distinct strong brown (7.5YR 4/6) masses of iron accumulation throughout; light brownish gray (10YR 6/2) iron depletions around roots and in pores; neutral slightly acid; clear irregular boundary.

Bt2—14 to 24 inches; brown (10YR 5/3) silt loam, moderate coarse and medium prismatic structure that parts to moderate medium subangular blocky; firm; few fine roots throughout; faint clay films on faces of peds and in pores; common medium faint dark yellowish brown (10YR 4/3) ped coatings; few fine and medium brown and black weakly cemented iron and manganese nodules; few fine faint grayish brown (10YR 5/2) iron depletions throughout; slightly acid; clear irregular boundary.

Bt3—24 to 31 inches; brown (10YR 5/3) silty clay loam; moderate medium and coarse prismatic structure that parts to moderate medium subangular blocky; firm; few fine roots, mainly concentrated between peds; common fine and medium pores; distinct clay films on faces of peds and in pores; faint clay films in grayish material between prisms; faint black stains on faces of peds; common medium distinct strong brown (7.5YR 5/6) masses of iron accumulation throughout; common fine and medium grayish brown (10YR 5/2) iron depletions; slightly acid; clear irregular boundary.

Bt4—31 to 42 inches; grayish brown (10YR 5/2) silty clay loam; weak coarse prismatic structure that parts to weak coarse subangular blocky; friable; few fine roots throughout; many fine and medium pores and voids; faint gray (10YR 5/1) clay films lining pores and voids; few very dark gray (10YR 3/1) soft masses of manganese accumulation; common medium distinct yellowish brown (10YR 5/6) masses of iron accumulation throughout; slightly acid; gradual wavy boundary.

Bt/E—42 to 55 inches; mixed grayish brown (10YR 5/2), and yellowish brown (10YR 5/4) silt loam; weak coarse subangular blocky structure; firm; common fine and medium pores and voids; common medium distinct brownish yellow (10YR 6/6) and gray (10YR 6/1) silt coats around pores and voids; faint clay films lining pores and voids; slightly acid; clear smooth boundary.

BCg1—55 to 65 inches; grayish brown (2.5Y 5/2) silt loam; few gray (10YR 6/1) silt coats around pores and voids; weak coarse subangular blocky structure; firm; few very dark gray (10YR 3/1) soft masses of manganese accumulation; common medium distinct dark yellowish brown (10YR 4/4) masses of iron accumulation throughout; neutral; clear smooth boundary.

BCg2—65 to 85 inches; grayish brown (2.5Y 5/2) silt loam; weak fine subangular blocky structure; friable; common fine and medium pores; few very dark gray (10YR 3/1) and dark brown (10YR 4/3) soft manganese bodies; common fine distinct pale brown (10YR 6/3) and gray (10YR 5/1) iron depletions around pores and voids; many medium yellowish brown (10YR 5/6) masses of iron accumulation; neutral.

Range in Characteristics

Solum thickness: 48 to 100 inches
Clay content in the control section: 18 to 35 percent
Redoximorphic features: Iron depletions in shades of gray within the upper 10 inches of the subsoil.
Other distinctive soil features: Sand content in the solum ranges up to 10 percent.
Concentrated minerals: None
Reaction: Strongly acid to slightly acid in the A horizon, strongly acid to slightly acid in the Bt and Bt/E horizons, and strongly acid to neutral in the BC horizons.

Ap horizon:
Color—Hue of 10YR, value of 3 to 5, and chroma of 1 to 3
Redoximorphic features—None
Texture—Silt
Other features—None
Thickness—3 to 12 inches

Bt horizon:
Color—Hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 3 or 4
Redoximorphic features—Iron accumulations in shades of brown; few to common iron depletions and clay depletions in shades of gray
Texture—Silt loam or silty clay loam
Other features—None
Thickness—17 to 56 inches

Bt/E horizon:
Color—Hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 3 or 4 in the Bt parts; and hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2 or 3 in the E parts
Redoximorphic features—Iron accumulations in shades of brown; few to common iron depletions and clay depletions in shades of gray
Texture—Silt loam or silty clay loam in the Bt parts, and silt or silt loam in the E parts
Other features—The E part of the Bt/E horizon is vertically oriented and occurs as interfingers of albic material 0.07 to 0.78 inch (2 to 20 mm) wide between prisms, and silt coatings on faces of prisms.
Thickness—5 to 15 inches

BC horizon:
Color—Hue of 10YR to 2.5Y, value of 3 to 5, and chroma of 2 to 4
Redoximorphic features—Iron accumulations in shades of brown, and iron depletions in shades of gray
Texture—Silt loam
Other features—None

Dupuy Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: On unprotected areas on natural levee on Teche Delta Plain
Position on landform: Convex areas
Parent material: Loamy alluvium
Drainage class: Somewhat poorly drained
Saturated hydraulic conductivity class: Moderately slow

Soil depth class: Very deep
Shrink-swell potential: Moderate
Slope: 0 to 1 percent

Associated Soils

- Baldwin soils are more clayey in the upper part of the solum.
- Galvez soils are more acid in the upper part of the solum.
- Iberia soils are more clayey in the upper part of the solum.

Taxonomic Classification

Fine-silty, mixed, active, hyperthermic Aeric Endoaqualfs

Typical Pedon

Dupuy slightly decomposed plant material in an area of Dupuy silt loam, 0 to 1 percent slopes, occasionally flooded, in hardwoods; located 15.5 miles west of Morgan City on U.S. Highway 90, 13.8 miles southwest of U.S. Highway 90 on State Road 317, 160 yards northeast of State Road 317 on Oil Field Road, and 50 feet north of road on pipeline right-of-way; Sec. 3, T. 17 S., R. 9 E., Point Chevreuil, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 36 minutes, 0.49 seconds N.
Longitude: 91 degrees, 31 minutes, 10.88 seconds W.

Oe—0 to 2 inches; very dark grayish brown (10YR 3/2) slightly decomposed plant material; abrupt smooth boundary.

A—2 to 6 inches; dark grayish brown (10YR 4/2) silt loam; moderate fine and medium granular structure; very friable; many fine and medium roots throughout; 10 percent coarse prominent irregular yellowish brown (10YR 5/6) masses of oxidized iron on faces of peds; 2 percent fine prominent cylindrical strong brown (7.5YR 5/6) masses of oxidized iron lining pores; very strongly acid; clear smooth boundary.

AB—6 to 10 inches; brown (10YR 4/3) silt loam; moderate fine subangular blocky structure; very friable; many fine and medium roots throughout; 20 percent linings on crawfish burrows; 10 percent coarse prominent irregular yellowish brown (10YR 5/6) masses of oxidized iron on faces of peds; 1 percent fine prominent cylindrical strong brown (7.5YR 5/6) masses of oxidized iron lining pores; very strongly acid; clear smooth boundary.

Bt—10 to 22 inches; light olive brown (2.5Y 5/3) silty clay loam; moderate fine and medium subangular blocky structure; friable; many fine and medium roots between peds; 20 percent linings on crawfish burrows; 8 percent faint dark grayish brown (10YR 4/2) clay films on faces of peds and in pores; 21 percent coarse prominent irregular yellowish brown (10YR 5/6) masses of oxidized iron on faces of peds; 15 percent fine faint dendritic iron depletions on surfaces along root channels; 2 percent fine prominent cylindrical strong brown (7.5YR 5/6) masses of oxidized iron lining pores; extremely acid; gradual smooth boundary.

Btg1—22 to 31 inches; grayish brown (10YR 5/2) silty clay loam; weak fine subangular blocky structure; friable, moderately sticky, very plastic; many fine and medium roots between peds; common very fine and fine dendritic tubular pores; 2 percent bi-lateral area krotovinas; 3 percent faint dark grayish brown (10YR 4/2) clay films on faces of peds and in pores; 15 percent medium and coarse distinct irregular yellowish brown (10YR 5/4) masses of oxidized iron on faces of peds; 1 percent fine prominent cylindrical strong brown (7.5YR 5/6) masses of oxidized iron lining pores; 1 percent fine prominent cylindrical very dark grayish brown (10YR 3/2) manganese coatings lining pores; extremely acid; gradual smooth boundary.

Btg2—31 to 42 inches; grayish brown (10YR 5/2) silt loam; weak fine subangular blocky structure; friable, moderately sticky, very plastic; many fine and medium roots between peds; common very fine and fine dendritic tubular pores; 3 percent bi-lateral area krotovinas; 3 percent faint dark grayish brown (10YR 4/2) clay films on faces of peds and in pores; 15 percent medium and coarse distinct irregular dark yellowish brown (10YR 4/6) masses of oxidized iron on faces of peds; 5 percent medium distinct dendritic gray (5Y 5/1) iron depletions on surfaces along root channels; 2 percent fine prominent cylindrical very dark grayish brown (10YR 3/2) manganese coatings lining pores; 2 percent fine prominent cylindrical strong brown (7.5YR 5/6) masses of oxidized iron lining pores; very strongly acid; gradual wavy boundary.

BCg1—42 to 51 inches; gray (10YR 5/1) silt loam; weak fine subangular blocky structure; friable, moderately sticky, very plastic; common very fine and fine roots throughout; common very fine and fine dendritic tubular pores; 3 percent bi-lateral area krotovinas; 1 percent faint clay films on surfaces along pores; 15 percent medium and coarse prominent irregular dark yellowish brown (10YR 4/6) masses of oxidized iron throughout; 10 percent medium distinct dendritic gray (5Y 5/1) iron depletions on surfaces along root channels; 3 percent fine prominent irregular strong brown (7.5YR 5/6) masses of oxidized iron throughout; 2 percent fine prominent cylindrical very dark grayish brown (10YR 3/2) manganese coatings lining pores; strongly acid; gradual smooth boundary.

BCg2—51 to 63 inches; gray (5Y 5/1) silty clay loam; weak fine subangular blocky structure; friable, moderately sticky, very plastic; common very fine and fine roots throughout; common very fine and fine dendritic tubular pores; 3 percent bi-lateral area krotovinas; 1 percent faint gray (10YR 5/1) clay films on surfaces along pores; 15 percent medium and coarse prominent irregular strong brown (7.5YR 5/6) and strong brown (7.5YR 4/6) masses of oxidized iron throughout; 2 percent fine prominent cylindrical very dark grayish brown (10YR 3/2) manganese coatings lining pores; slightly acid; diffuse smooth boundary.

BCg3—63 to 80 inches; gray (5Y 5/1) silty clay loam; weak fine subangular blocky structure; friable, moderately sticky, very plastic; common very fine and fine roots throughout; common very fine and fine dendritic tubular pores; 3 percent bi-lateral area krotovinas; 1 percent faint dark grayish brown (10YR 4/2) clay films on surfaces along pores; 15 percent medium and coarse prominent irregular strong brown (7.5YR 5/6) and strong brown (7.5YR 4/6) masses of oxidized iron throughout; slightly acid.

Range in Characteristics

Solum thickness: 40 to more than 80 inches
Clay content in the control section: 18 to 34 percent
Redoximorphic features: Iron depletions in shades of gray on faces of peds or throughout the upper 5 inches of the subsoil.
Other distinctive soil features: None
Concentrated minerals: None
Reaction: Extremely acid to moderately acid in A and Bt horizons except where the surface soils have been limed, very strongly acid to slightly acid in the BCg horizon.

Oe horizon: (where present)
Color—Hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 2 to 4
Redoximorphic features—None
Texture—Slightly decomposed plant material
Other features—None
Thickness—0 to 2 inches

A or Ap horizon:

Color—Hue of 10YR, value of 4 to 5, and chroma of 2 or 3; in some pedons where the A horizon is less than 6 inches thick, it has hue of 10YR, value of 3, and chroma of 2.
Redoximorphic features—None
Texture—Silt loam
Other features—None
Thickness—4 to 8 inches

BA or AB horizon: (where present)

Color—Hue of 10YR, value of 4 or 5, and chroma of 2 or 3
Redoximorphic features—Iron accumulations and depletions are in shades of gray or brown
Texture—Silt loam, very fine sandy loam, or loam
Other features—None
Thickness—0 to 6 inches

Bt horizon:

Color—10YR or 2.5Y, value of 4 or 5, and chroma of 3 to 6 in more than 50 percent of the matrix
Redoximorphic features—Iron accumulations and depletions in shades of gray and brown range from few to many
Texture—Clay loam, silty clay loam, loam, or silt loam
Other features—None
Thickness—3 to 15 inches

Btg horizon:

Color—Hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 2. In the lower parts, it may also have hue of 10YR, value of 6, and chroma of 1 or 2; or value of 4 or 5, and chroma of 1.
Redoximorphic features—Depleted matrix with iron accumulations and depletions in shades of brown
Texture—Clay loam, silty clay loam, loam, or silt loam
Other features—The upper 20 inches has from 18 to 34 percent clay, and more than 15 percent sand that is mainly in the very-fine size fraction.
Thickness—Combined thickness of the Bt and Btg horizons range from 20 to 40 inches

BCg horizon:

Color—Hue of 10YR, value of 4 to 6, and chroma of 1 or 2, or hue of 2.5Y to 5Y, value of 4 or 5, and chroma of 2
Redoximorphic features—Depleted matrix with iron accumulations in shades of brown and yellow
Texture—Loam, silty clay loam, or silt loam
Other features—None
Thickness—Combined thickness of the BCg horizon ranges from 10 to more than 40 inches

2Cg horizon: (where present)

Color—Hue of 10YR, value of 5 or 6, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with iron accumulations in shades of brown or yellow
Texture—Texture is loam, very fine sandy loam, silt loam, or silty clay loam. In some pedons, texture is silty clay or clay below a depth of 60 inches.
Other features—None

Duson Series

MLRA: Southern Mississippi Valley Loess
Geomorphic setting: On salt dome on highly dissected upland
Position on hillslope: Convex backslopes
Parent material: Loess
Drainage class: Somewhat poorly drained
Saturated hydraulic conductivity class: Slow
Soil depth class: Moderately deep to an abrupt textural change layer
Shrink-swell potential: High
Slope: 5 to 12 percent

Associated Soils

- Kleinpeter soils lack a clayey discontinuity within 80 inches.

Taxonomic Classification

Fine-silty, mixed, superactive, hyperthermic Aquic Paleudalfs

Typical Pedon

Duson silt in an area of Duson silt, 5 to 12 percent slopes, in hardwoods; located 26 miles west of Morgan City on U.S. Highway 90, 11.3 miles southwest of U.S. Highway 90 on Louisiana Highway 83, 2.3 miles south of Louisiana Highway 83 on Cote Blanche Crossing, and 450 yards due west of road; Spanish Land Grant Sec. 25, T. 15 S., R. 7 E., Kemper, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 45 minutes, 29.40 seconds N.
Longitude: 91 degrees, 43 minutes, 0.20 seconds W.

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

E—4 to 7 inches; yellowish brown (10YR 5/4) silt loam; weak fine subangular blocky structure; friable; many very fine and fine roots; moderately acid; clear wavy boundary.

Bt1—7 to 24 inches; yellowish brown (10YR 5/6) silty clay loam; moderate medium subangular blocky structure; firm; many very fine and fine roots; common distinct clay films on faces of peds; few fine dark colored, moderately cemented iron and manganese concretions throughout; many fine and medium distinct yellowish red (5YR 5/6) masses of iron accumulation throughout; few fine prominent grayish brown (10YR 5/2) iron depletions throughout; very strongly acid; clear wavy boundary.

Bt2—24 to 38 inches; yellowish brown (10YR 5/4) silt loam; weak medium subangular blocky structure; friable; many very fine and fine roots; common distinct clay films on faces of peds; common medium and coarse dark colored, moderately cemented iron and manganese concretions throughout; many medium distinct strong brown (7.5YR 5/6) masses of iron accumulation throughout; common fine distinct grayish brown (10YR 5/2) iron depletions throughout; very strongly acid; gradual wavy boundary.

Btg—38 to 80 inches; grayish brown (10YR 5/2) silty clay; moderate medium subangular blocky structure; firm; common distinct clay films on faces of peds; many medium and coarse prominent strong brown (7.5YR 5/6) masses of iron accumulation throughout; very strongly acid.

Range in Characteristics

Solum thickness: 60 to more than 80 inches
Clay content in the control section: 18 to 35 percent
Redoximorphic features: Few to common iron depletions in shades of gray within 30 inches
Other distinctive soil features: Discontinuity at a depth of 30 to 60 inches
Concentrated minerals: Few to common soft to slightly hard iron and manganese nodules in the upper part of the subsoil.
Reaction: Very strongly acid to slightly acid in the A and E horizons, very strongly acid to neutral in the Bt and Btg horizons, and moderately acid to neutral in the horizons below the discontinuity.

A horizon:
Color—Hue of 10YR, value of 3 to 5, and chroma of 1 to 3
Redoximorphic features—None
Texture—Silt
Other features—None
Thickness—3 to 10 inches

E horizon:
Color—Hue of 10YR, value of 4 to 6, and chroma of 2 to 4
Redoximorphic features—Iron accumulations in shades of brown range from few to common
Texture—Silt or silt loam
Other features—None
Thickness—3 to 12 inches

Bt horizon:
Color—Hue of 7.5YR or 10YR, value of 4 to 6, and chroma of 3 to 6
Redoximorphic features—Few to common iron depletions in shades of gray within a depth of 30 inches
Texture—Silt loam or silty clay loam
Other features—Few to common soft to slightly hard iron and manganese nodules
Thickness—10 to 30 inches

Btg horizon:
Color—Hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with masses of iron accumulation in shades of brown or red
Texture—Silt loam or silty clay loam
Other features—Few to common soft to slightly hard iron and manganese nodules
Thickness—10 to 30 inches

2Btg, 2BCg, or 2Cg horizon: (where present)
Color—Hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with masses of iron accumulation in shades of brown or red
Texture—Silty clay loam, silty clay, or clay
Other features—None

2C horizon: (where present)
Color—Variegated in shades of gray, brown, or red
Redoximorphic features—Iron accumulations in shades of brown and iron depletions in shades of gray range from few to many
Texture—Clay loam, silty clay loam, silty clay, or clay
Other features—None

Fausse Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: In backswamp on Teche Delta Plain
Position on landform: Concave areas
Parent material: Clayey alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Very high
Slope: 0.0 to 0.5 percent

Associated Soils

- Barbary soils are fluid in upper 40 inches of solum.
- Harahan soils are in drained swamps and fluid below 20 inches.
- Schriever soils dry out and form cracks in upper part.

Taxonomic Classification

Very-fine, smectitic, nonacid, hyperthermic Vertic Endoaquepts

Typical Pedon

Fausse loam in an area of Fausse soils, frequently flooded, in swamp; located 3.42 miles north of the U.S. Highway 90 bridge in Morgan City on the Lower Atchafalaya River, and 132 yards due east of the edge of the waterway; Sec. 27, T. 15 S., R. 12 E., Morgan City, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 44 minutes, 16.00 seconds N.
Longitude: 91 degrees, 13 minutes, 32.00 seconds W.

A—0 to 6 inches; dark grayish brown (10YR 4/2) loam; weak coarse prismatic structure; very sticky; common fine and medium roots; many fine distinct dark yellowish brown (10YR 4/4) masses of iron accumulation; neutral; gradual wavy boundary.

Bg1—6 to 24 inches; dark gray (10YR 4/1) clay; weak medium angular blocky structure parting to weak fine angular blocky; very sticky, common fine roots; many fine and medium distinct dark yellowish brown (10YR 4/4) masses of iron accumulation; neutral; gradual irregular boundary.

Bg2—24 to 80 inches; greenish gray (5GY 5/1) clay; weak medium subangular blocky structure parting to weak fine angular blocky; very sticky; few fine roots; shiny pressure faces on peds; many medium prominent dark brown (7.5YR 3/2) masses of iron and manganese accumulation; neutral; gradual irregular boundary.

Range in Characteristics

Solum thickness: 40 to more than 80 inches
Clay content in the control section: 60 to 95 percent
Redoximorphic features: Depleted matrix with none to many iron accumulations in shades of brown throughout.
Other distinctive soil features: The n-value is variable within 36 inches of the soil surface but is 0.7 or less in some subhorizons between 8 and 20 inches. The n-value of subhorizons below 36 inches is less than 0.7.
Concentrated minerals: None
Reaction: Slightly acid and neutral in the A horizon, neutral to moderately alkaline in the Bg horizon, and neutral to moderately alkaline in the BCg and Cg horizons.

A horizon:

Color—Hue of 10YR to 5Y, value of 3 or 4, and chroma of 2 or less; or it is neutral with value of 4
Redoximorphic features—None
Texture—Loam, clay loam, silty clay loam, silty clay, or clay
Other features—Some areas have an overwash layer that is loamy fine sand, loamy very fine sand, or silt loam, or have a layer of muck at the surface
Thickness—1 to 12 inches

Bg horizon:

Color—Hue of 10YR to 5GY, value of 4 or 5, and chroma of 1; or it is neutral with value of 4 or 5
Redoximorphic features—Depleted or gleyed matrix with none to common iron accumulations in shades of brown
Texture—Clay
Other features—N-value is less than 0.7
Thickness—8 to more than 80 inches

BCg or 2Cg horizon: (where present)

Color—Hue of 5Y, 5GY or 5GB, value of 4 or 5, and chroma of 1; or it is neutral with value of 4 or 5
Redoximorphic features—Depleted or gleyed matrix with none to common iron accumulations in shades of brown
Texture—Clay, silty clay, or silty clay loam
Other features—N-value ranges from 0.5 to 1.0.

Galvez Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: On natural levee on Teche Delta Plain (fig. 20)
Position on landform: Convex areas
Parent material: Loamy alluvium
Drainage class: Somewhat poorly drained
Saturated hydraulic conductivity class: Moderately slow
Soil depth class: Very deep
Shrink-swell potential: Moderate
Slope: 0 to 1 percent

Associated Soils

- Baldwin soils on lower positions with a clayey upper solum.
- Glenwild soils formed in older, reddish sediments.
- Iberia soils on lower positions with a clayey upper solum.
- Loreauville soils have a darker surface layer.

Taxonomic Classification

Fine-silty, mixed, superactive, hyperthermic Aeric Endoaqualfs

Typical Pedon

Galvez silt loam in an area of Galvez silt loam, 0 to 1 percent slopes, in row crops; located about 17 miles southeast of New Iberia on U.S. Highway 90 to the intersection with State Route 318, 1.37 miles southwest on State Route 318 to a road 300 feet south of Bayou Cypremort, 2,000 feet southwest on road to a curve, and 25 feet southwest into field; SE 1/4, NW 1/4, NE 1/4 Sec. 13, T. 14 S., R. 8 E., Kemper, Louisiana; USGS 7.5-Minute Quadrangles.

Figure 20.—Profile of Galvez silt loam, 0 to 1 percent slopes. [Scale in centimeters]

Latitude: 29 degrees, 50 minutes, 43.15 seconds N.
Longitude: 91 degrees, 39 minutes, 15.00 seconds W.

Ap—0 to 8 inches; dark grayish brown (10YR 4/2) silt loam; weak fine subangular blocky structure; friable; many fine roots throughout; common fine pores; 3 percent faint pale brown (10YR 6/3) silt coats on faces of peds; 10 percent fine faint brown (10YR 4/3) masses of oxidized iron between peds; strongly acid; diffuse smooth boundary.

Bt—8 to 17 inches; 35 percent brown (10YR 5/3) and 30 percent grayish brown (10YR 5/2) silty clay loam; moderate medium subangular blocky structure; firm; common fine roots between peds; common fine and medium pores; 55 percent distinct dark grayish brown (10YR 4/2) clay films on faces of peds; 25 percent fine distinct yellowish brown (10YR 5/6) masses of oxidized iron between peds; moderately acid; diffuse wavy boundary.

Btg1—17 to 26 inches; grayish brown (10YR 5/2) silt loam; weak fine subangular blocky structure; friable; common fine roots throughout; common fine and medium pores; 30 percent distinct dark grayish brown (10YR 4/2) clay films on faces of peds and in pores; 25 percent fine distinct yellowish brown (10YR 5/4) masses of oxidized iron between peds; slightly acid; clear smooth boundary.

Btg2—26 to 35 inches; grayish brown (10YR 5/2) silt loam; weak fine subangular blocky structure; very friable; common fine roots throughout; common fine pores; 1 percent distinct dark grayish brown (10YR 4/2) clay films in root channels and pores; 30 percent fine distinct yellowish brown (10YR 5/4) masses of oxidized iron between peds; 1 percent fine distinct yellowish brown (10YR 5/6) masses of oxidized iron; 1 percent faint gray (10YR 5/1) iron depletions; neutral; diffuse wavy boundary.

Btg3—35 to 45 inches; grayish brown (2.5Y 5/2) silt loam; weak fine subangular blocky structure; very friable; common fine roots throughout; common fine pores; 1 percent distinct dark grayish brown (2.5Y 4/2) clay films in root channels and pores; 30 percent fine prominent yellowish brown (10YR 5/4) masses of oxidized iron between peds; 1 percent fine faint gray (2.5Y 5/1) iron depletions between peds; neutral; gradual wavy boundary.

Bg—45 to 52 inches; grayish brown (2.5Y 5/2) silt loam; weak fine subangular blocky structure; very friable; common fine roots throughout; common fine pores; 30 percent fine prominent yellowish brown (10YR 5/4) masses of oxidized iron throughout; 1 percent fine prominent yellowish brown (10YR 5/6) masses of oxidized iron throughout; neutral; clear wavy boundary.

BCg1—52 to 63 inches; grayish brown (2.5Y 5/2) silt loam; weak fine subangular blocky structure; friable; common fine roots; common fine pores; 30 percent fine prominent yellowish brown (10YR 5/6) masses of oxidized iron throughout; 3 percent fine distinct brown (10YR 4/3) masses of oxidized iron throughout; 1 percent fine prominent very dark brown (10YR 2/2) iron and manganese masses between peds; neutral; gradual wavy boundary.

BCg2—63 to 68 inches; grayish brown (2.5Y 5/2) silt loam; weak fine subangular blocky structure; friable; common fine roots; common fine pores; 5 percent faint dark gray (2.5Y 4/1) organic stains in root channels and pores; 30 percent fine prominent yellowish brown (10YR 5/6) masses of oxidized iron throughout; 3 percent fine distinct brown (10YR 4/3) masses of oxidized iron throughout; 1 percent fine prominent very dark brown (10YR 2/2) iron and manganese masses between peds; neutral; gradual wavy boundary.

BCg3—68 to 83 inches; grayish brown (2.5Y 5/2) silt loam; weak fine subangular blocky structure; friable; common fine pores; 5 percent faint dark gray (2.5Y 4/1) organic stains in root channels and pores; 30 percent fine distinct light olive brown (2.5Y 5/4) masses of oxidized iron throughout; 1 percent fine prominent very dark brown (10YR 2/2) iron and manganese masses between peds; neutral; diffuse wavy boundary.

2Cg—83 to 91 inches; grayish brown (2.5Y 5/2) silty clay; weak fine subangular blocky structure; firm, very sticky, very plastic; many fine tubular pores; 55 percent faint dark gray (2.5Y 4/1) organic stains in root channels and pores; 30 percent medium prominent extremely weakly cemented very dark brown (10YR 2/2) iron and manganese masses between peds; 30 percent fine prominent dark yellowish brown (10YR 4/4) masses of oxidized iron between peds; 1 percent iron and manganese concretions between peds; neutral.

Range in Characteristics

Solum thickness: 40 to more than 80 inches
Clay content in the control section: 20 to 35 percent
Redoximorphic features: More than 50 percent iron depletions in shades of gray on faces of peds or throughout the upper 5 inches of the subsoil.
Other distinctive soil features: None
Concentrated minerals: None

Reaction: Strongly acid to slightly acid in A, Bt, and upper parts of the Btg horizons, and neutral to moderately alkaline in the lower part of the Btg, Bg, BCg, Cg, and 2Cg horizons.

Ap horizon:
Color—Hue of 10YR, value of 4 or 5, and chroma of 1 to 3
Redoximorphic features—None
Texture—Silt loam
Other features—None
Thickness—4 to 9 inches

Bt horizon:
Color—Hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 3 or 4 on interiors of peds, and chroma 1 or 2 on faces of most peds
Redoximorphic features—Iron accumulations in shades of brown and iron depletions in shades of gray
Texture—Silty clay loam or silt loam
Other features—None
Thickness—3 to 15 inches

Btg horizon:
Color—Hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with iron accumulations in shades of brown
Texture—Silty clay loam or silt loam
Other features—None
Thickness—12 to 45 inches

Bg or BCg horizon:
Color—Hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with iron accumulations in shades of brown
Texture—Silty clay loam or silt loam
Other features—None

Cg or 2Cg horizon:
Color—Hue of 10YR or 2.5Y, value of 4 or 5, and chroma of 1 or 2, or it is variegated in shades of gray and brown
Redoximorphic features—Depleted matrix with iron accumulations in shades of brown
Texture—Silt loam, silty clay loam, or silty clay
Other features—None

Glenwild Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: On natural levee on delta plain (fig. 21)
Position on hillslope: Convex summits, shoulders
Parent material: Loamy alluvium
Drainage class: Moderately well drained
Saturated hydraulic conductivity class: Moderately slow
Soil depth class: Very deep
Shrink-swell potential: Moderate
Slope: 0 to 3 percent

Associated Soils

- Baldwin soils are grayer and are clayey throughout.
- Galvez soils formed in younger, more grayish sediments.
- Iberia soils are grayer and are clayey throughout.

Taxonomic Classification

Fine-silty, mixed, superactive, hyperthermic Oxyaquic Hapludalfs

Typical Pedon

Glenwild silty clay loam in an area of Uderts and Glenwild soils, 0 to 3 percent slopes, smoothed, in row crops; located 34.5 miles west of Morgan City on U.S. Highway 90, 1.7 miles north on State Road 671, 200 yards west on State Road 182 to the center of town in Jeanerette, Louisiana, 500 yards north on Rightway Road across bridge to State Road 87, 7.5 miles east on State Road 87, 100 yards north on field road, and 40 yards east to edge of cane rows; Spanish Land Grant Sec. 31, T. 13 S., R. 9 E., Charenton, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 52 minutes, 43.01 seconds N.
Longitude: 91 degrees, 33 minutes, 4.02 seconds W.

Ap—0 to 4 inches; brown (7.5YR 4/3) silty clay loam; weak medium subangular blocky structure; friable; common very fine and fine roots and few medium roots; few very fine and fine pores; 3 percent patchy faint dark brown (7.5YR 3/3) clay films on faces of peds; moderately acid; clear smooth boundary.

Bt1—4 to 10 inches; red (2.5YR 4/6) silty clay loam; moderate medium subangular blocky structure; firm; few fine and medium roots; few very fine tubular pores; 25 percent continuous distinct dark red (2.5YR 3/6) clay films on faces of peds and in pores; 8 percent continuous distinct very dark gray (10YR 3/1) organic stains in root channels and pores; 15 percent fine prominent very dark grayish brown (10YR 3/2) iron and manganese masses throughout; neutral; clear smooth boundary.

Bt2—10 to 17 inches; red (2.5YR 4/6) silt loam; weak medium subangular blocky structure; friable; few very fine and fine roots; common very fine and fine tubular pores; 25 percent continuous distinct dark red (2.5YR 3/6) clay films on faces of peds and in pores; 5 percent continuous distinct very dark gray (10YR 3/1) organic stains in root channels and pores; 3 percent discontinuous faint very pale brown (10YR 7/4) silt coats on faces of peds; 8 percent fine prominent very dark grayish brown (10YR 3/2) iron and manganese masses throughout; slightly alkaline; gradual smooth boundary.

Bt3—17 to 22 inches; red (2.5YR 5/8) silt loam; weak medium subangular blocky structure; friable; few very fine and fine roots; many very fine and fine tubular and few medium tubular pores; 25 percent continuous distinct reddish brown (2.5YR 4/4) clay films on faces of peds and in pores; 2 percent continuous distinct dark brown (10YR 3/3) organic stains in root channels and pores; 2 percent fine and medium distinct reddish yellow (7.5YR 6/6) masses of oxidized iron between peds; moderately alkaline; clear smooth boundary.

2Btk—22 to 30 inches; red (2.5YR 4/6) and brown (7.5YR 4/2) stratified silty clay loam to silty clay to silt loam; moderate medium subangular blocky structure; very firm; few very fine and fine roots; few very fine and fine tubular pores; 20 percent continuous distinct clay films on faces of peds and in pores; 15 percent continuous distinct very pale brown (10YR 7/4) silt coats on faces of peds; 1 percent fine iron and manganese masses throughout; 1 percent fine and medium strongly cemented carbonate concretions throughout; individual strata are 2 to 4 inches thick; moderately alkaline; clear wavy boundary.

2BCk—30 to 35 inches; strong brown (7.5YR 4/6) silt loam; weak medium angular blocky structure; friable; few very fine and fine roots; common very fine and fine tubular pores; 4 percent continuous distinct brown (7.5YR 4/3) clay films on faces of peds; 4 percent continuous distinct clay films on surfaces along pores; 4 percent continuous faint pink (7.5YR 7/4) silt coats on faces of peds; 10 percent fine and medium distinct brown (7.5YR 4/4) masses of oxidized iron throughout; 1

percent fine prominent very dark grayish brown (10YR 3/2) iron and manganese masses throughout; 1 percent fine and medium prominent light yellowish brown (2.5Y 6/3) iron depletions throughout; 1 percent fine and medium weakly cemented carbonate concretions throughout; moderately alkaline; clear smooth boundary.

2C—35 to 42 inches; brown (7.5YR 5/4) silt loam; massive; very friable; few very fine and fine roots; few very fine and fine tubular pores; 3 percent continuous distinct brown (7.5YR 4/3) clay films on surfaces along root channels; 1 percent patchy faint pink (7.5YR 7/4) silt coats on faces of peds; 8 percent fine and medium prominent strong brown (7.5YR 5/8) masses of oxidized iron throughout; 1 percent fine distinct very dark grayish brown (10YR 3/2) iron and manganese masses throughout; 1 percent fine and medium extremely weakly cemented carbonate concretions throughout; moderately alkaline; clear smooth boundary.

3C—42 to 45 inches; red (2.5YR 4/6) silty clay; moderate medium platy structure; firm; few very fine and fine roots; few very fine tubular pores; 6 percent distinct light reddish brown (5YR 6/4) silt coats on bottom faces of peds; 15 percent fine prominent weak red (2.5YR 5/2) iron depletions throughout; 15 percent fine prominent very dark grayish brown (10YR 3/2) iron and manganese masses between peds; 1 percent fine and medium carbonate concretions throughout; moderately alkaline; clear smooth boundary.

3Ck—45 to 52 inches; reddish brown (5YR 5/3) silty clay; weak fine platy structure; firm; few very fine and fine roots; few very fine tubular pores; 3 percent patchy distinct brown (7.5YR 4/3) clay films on faces of peds and in pores; 5 percent fine and medium prominent grayish brown (2.5Y 5/2) iron depletions throughout; 5 percent fine and medium prominent masses of oxidized iron throughout; 1 percent fine distinct very dark grayish brown (10YR 3/2) iron and manganese masses between peds; 8 percent fine strongly cemented carbonate concretions throughout; few coarse prominent red (2.5YR 4/8) strata; moderately alkaline; clear smooth boundary.

3C'—52 to 63 inches; red (2.5YR 4/6) silty clay loam; weak fine platy structure; firm; few very fine and fine roots; few very fine and fine tubular pores; 5 percent continuous distinct light reddish brown (5YR 6/4) silt coats on bottoms of plates; 3 percent fine and medium prominent grayish brown (2.5Y 5/2) iron depletions between peds; 1 percent fine moderately cemented very dark grayish brown (10YR 3/2) iron and manganese concretions between peds; moderately alkaline; clear smooth boundary.

3Ck'1—63 to 67 inches; red (2.5YR 4/6) and grayish brown (2.5Y 5/2) silt loam; 20 percent coarse prominent red (2.5YR 4/8) mottles; weak fine platy structure; friable; few very fine and fine roots; few very fine and fine tubular pores; 19 percent fine and medium prominent strong brown (7.5YR 5/8) masses of oxidized iron throughout; 1 percent fine distinct very dark grayish brown (10YR 3/2) iron and manganese masses throughout; 2 percent fine and medium strongly cemented carbonate concretions throughout; moderately alkaline; clear smooth boundary.

3Ck'2—67 to 80 inches; light brown (7.5YR 6/3) silt loam; massive; very friable; few fine roots; few very fine and fine tubular pores; 3 percent prominent red (2.5YR 4/6) clay films on surfaces along pores; 21 percent fine and medium prominent yellowish brown (10YR 5/8) and strong brown (7.5YR 5/8) and strong brown (7.5YR 4/6) masses of oxidized iron throughout; 8 percent fine and medium faint grayish brown (10YR 5/2) and grayish brown (2.5Y 5/2) iron depletions throughout; 1 percent fine prominent very dark grayish brown (10YR 3/2) iron and manganese masses between peds; 1 percent fine weakly cemented carbonate concretions throughout; grading to weak fine platy in the lower part; moderately alkaline; gradual smooth boundary.

Figure 21.—Profile of Glenwild silty clay loam in an area of Uderts and Glenwild soils, 0 to 3 percent slopes. [Scale in centimeters].

Range in Characteristics

Solum thickness: 30 to 60 inches
Clay content in the control section: 18 to 35 percent
Redoximorphic features: None to common iron depletions in shades of brown or gray below 24 inches deep.
Other distinctive soil features: A clayey layer more than 4 inches thick is between depths of 40 and 60 inches. Clayey strata 1 to 4 inches thick are in most pedons between depths of 20 to 40 inches.
Concentrated minerals: None to common iron and manganese concretions and concretions of calcium carbonate throughout the subsoil.
Reaction: Moderately acid to neutral in the A horizon, moderately acid to moderately alkaline in the Bt horizon, and neutral to strongly alkaline in the 2Btk, 2BC, and C horizons.

A or Ap horizon:
Color—Hue or 7.5YR or 10YR, value of 4 or 5, and chroma of 2 to 4

Redoximorphic features—None
Texture—Silty clay loam or silt loam
Other features—None
Thickness—3 to 12 inches

Bt horizon:
Color—Hue of 2.5YR to 7.5YR, value of 4 or 5, and chroma of 4 to 8; or it has hue of 2.5YR or 5YR, value of 3, and chroma of 3 or 4
Redoximorphic features—None to common masses of iron and manganese accumulations in shades of brown or yellow below 24 inches deep
Texture—Silt loam, clay loam, loam, or silty clay loam
Other features—None
Thickness—12 to 36 inches

2Btk horizon: (where present)
Color—Hue or 2.5YR to 7.5YR, value of 4 or 5, and chroma of 2 to 8
Redoximorphic features—None to common masses of iron and manganese accumulations in shades of brown or yellow below 24 inches deep
Texture—Silty clay loam or silty clay
Other features—Few to common concretions of calcium carbonate
Thickness—0 to 4 inches

2BCk horizon: (where present)
Color—Hue of 5YR to 10YR, value of 4 or 5, and chroma of 4 to 6
Redoximorphic features—None to common iron depletions in shades of brown or gray. Masses of iron and manganese accumulations in shades of brown or yellow.
Texture—Stratified silty clay loam, silty clay, and silt loam
Other features—Few to common concretions of calcium carbonate
Thickness—0 to 5 inches

C or Ck horizon:
Color—Hue of 2.5YR to 2.5Y, value of 4 to 6, and chroma of 2 to 6 in individual strata
Redoximorphic features—Iron depletions in shades of gray, or depleted matrix in some strata. Iron and manganese accumulations in shades of brown or yellow.
Texture—Stratified layers and lenses of very fine sandy loam, silt loam, silty clay loam, clay, and silty clay
Other features—None to common concretions of calcium carbonate

Harahan Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: In artificially drained backswamp on delta plain
Position on landform: Linear areas
Parent material: Nonfluid over fluid clayey alluvium
Drainage class: Poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Very high
Slope: 0.0 to 0.5 percent

Associated Soils

- Allemands soils have a histic epipedon 16 to 51 inches.
- Barbary soils are in undrained swamps and are fluid.
- Fausse soils are thicker and are nonfluid in the lower part.
- Schriever soils are nonfluid in all layers to 60 inches.

Taxonomic Classification

Very-fine, smectitic, nonacid, hyperthermic Vertic Endoaquepts

Typical Pedon

Harahan clay in an area of Harahan clay, in intermixed conifers and hardwoods; located 2 miles west of Morgan City on U.S. Highway 90 to drainage canal, 225 yards northwest along drainage canal, and 27 yards east of canal; Spanish Land Grant Sec. 3, T. 16 S., R. 12 E., Morgan City, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 41 minutes, 25.34 seconds N.
Longitude: 91 degrees, 14 minutes, 22.13 seconds W.

A—0 to 11 inches; dark gray (10YR 4/1) clay; moderate medium subangular blocky structure; firm; very sticky; very plastic; deformable; common fine roots throughout; few fine distinct dark yellowish brown (10YR 4/4) masses of iron accumulations on faces of peds; strongly acid; clear smooth boundary.
Bg—11 to 23 inches; dark gray (10YR 4/1) clay; moderate medium subangular blocky structure; firm; very sticky; very plastic; deformable; few fine roots throughout; few slickensides; many fine prominent strong brown (7.5YR 4/6) masses of iron accumulation on faces of peds; moderately acid; clear wavy boundary.
Cg1—23 to 65 inches; dark gray (5Y 4/1) clay; massive; very fluid; flows easily between fingers when squeezed leaving a small residue in hand; few wood fragments; common fine roots; slightly alkaline; clear wavy boundary.
Cg2—65 to 76 inches; dark gray (5Y 4/1) clay; massive; very fluid; flows easily between fingers when squeezed leaving a small residue in hand; common wood fragments; moderately alkaline; clear wavy boundary.
Cg3—76 to 84 inches; greenish gray (5BG 5/1) clay; massive; very fluid; flows easily between fingers when squeezed leaving a small residue in hand; moderately alkaline.

Range in Characteristics

Solum thickness: 20 to 40 inches
Clay content in the control section: 50 to 95 percent
Redoximorphic features: Depleted or gleyed matrix with few to common iron accumulations in shades of brown throughout the subsoil.
Other distinctive soil features: Few to common wood fragments in the substratum.
Concentrated minerals: None
Reaction: Strongly acid to neutral in the A horizon, strongly acid to neutral in the Bg horizon, and neutral to moderately alkaline in the Cg horizon.

A horizon:
Color—Hue of 10YR, value of 2 to 4, and chroma of 2 or less
Redoximorphic features—Few iron accumulations in shades of brown
Texture—Clay or silty clay loam
Other features—None
Thickness—3 to 12 inches

Bg horizon:
Color—Hue of 10YR to 5GY or 5BG, value of 3 to 5, and chroma of 2 or less
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of brown
Texture—Clay with or without thin layers or lenses of silty clay
Other features—None
Thickness—8 to 36 inches

Ab horizon: (where present)
Color—Hue of 10YR, value of 2 to 4, and chroma of 2 or less
Redoximorphic features—Few to common iron accumulations in shades of brown
Texture—Clay, silty clay, or mucky clay
Other features—None
Thickness—0 to 13 inches

Cg horizon:
Color—Hue of 10YR to 5G, value of 2 to 6, and chroma of 2 or less
Redoximorphic features—Depleted or gleyed matrix with iron accumulations in shades of brown
Texture—Clay, silty clay, or mucky clay
Other features—Few to common wood fragments; n-value is more than 0.7.

Iberia Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: In backswamp on Teche Delta Plain (fig. 22)
Position on landform: Linear areas
Parent material: Clayey alluvium
Drainage class: Poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Very high
Slope: 0 to 1 percent

Associated Soils

- Baldwin soils have less than 60 percent clay in the subsoil.
- Barbary soils are in swamps and are fluid throughout.
- Fausse soils have lighter color surfaces which do not crack.
- Galvez soils have less than 35 percent clay in the subsoil.
- Loreauville has subsoils with less than 35 percent clay.
- Schriever soils have a lighter-colored surface layer.

Taxonomic Classification

Very-fine, smectitic, hyperthermic Typic Epiaquerts

Typical Pedon

Iberia clay in an area of Iberia clay, 0 to 1 percent slopes, in row crops; located about 0.6 miles south of Landry, 0.7 miles south of U.S. Highway 90, and 1,000 feet west of Parish Road; Sec. 33, T. 13 S., R. 8 E., Kemper, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 51 minutes, 55.39 seconds N.
Longitude: 91 degrees, 39 minutes, 41.88 seconds W.

Ap—0 to 17 inches; black (10YR 2/1) clay; moderate fine angular blocky structure; friable; very sticky; plastic; many fine roots; moderately acid; abrupt smooth boundary.

Bssg—17 to 37 inches; olive gray (5Y 4/2) clay; firm; very sticky; very plastic; few fine roots; common shiny pressure faces on peds; common slickensides 4 to 5 inches long; few fine prominent yellowish brown (10YR 5/6) masses of iron accumulation throughout; neutral; gradual wavy boundary.

Figure 22.—Profile of Iberia clay, 0 to 1 percent slopes. [Scale in centimeters]

Bg—37 to 60 inches; dark gray (5Y 4/1) silty clay loam; weak medium angular blocky structure; firm; very sticky; very plastic; few slickensides; few vertical channels up to 1 inch wide filled with black (10YR 2/1) silty clay; common medium prominent brown (7.5YR 4/4) masses of iron accumulation throughout; neutral; clear smooth boundary.

Cg—60 to 80 inches; gray (5Y 5/1) silty clay loam; massive; sticky; plastic; common medium distinct yellowish brown (10YR 5/8) masses of iron accumulation throughout; massive; friable; neutral.

Solum thickness: 40 to more than 80 inches
Clay content in the control section: 60 to 80 percent
Redoximorphic features: Reduced matrix with few to common iron accumulations in shades of brown throughout the subsoil.
Other distinctive soil features: Surface layer with value of 2 or 3 that is 12 to 24 inches thick; intersecting slickensides in the upper part of the subsoil.
Concentrated minerals: Few to common concretions of calcium carbonate at more than 20 inches deep
Reaction: Moderately acid to slightly alkaline in the Ap or A1 horizon, neutral to moderately alkaline in the A2, Bssg, and Bg horizons; and neutral to moderately alkaline in the Cg horizon.

Range in Characteristics

A or Ap horizon:
Color—Hue of 10YR, value of 2 or 3, and chroma of 2 or less
Redoximorphic features—Few iron accumulations in shades of brown
Texture—Clay
Other features—None to few concretions of calcium carbonate
Thickness—12 to 24 inches

Bssg horizon:
Color—Hue of 10YR to 5Y, value of 4 or 5, and chroma of 1 or 2; or hue of 2.5Y or 10YR and chroma of 1
Redoximorphic features—Depleted matrix with few to many iron accumulations in shades of brown.
Texture—Clay in the upper part, and clay or silty clay below a depth of 40 inches.
Other features—Few to common nodules of calcium carbonate in some pedons; intersecting slickensides
Thickness—10 to more than 60 inches

Bg or 2Btg horizon: (where present)
Color—Hue of 10YR to 5Y, value of 4 or 5, and chroma of 1 or 2; or it is neutral with value of 4 or 5
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of brown.
Texture—Clay, silty clay, or silty clay loam
Other features—Few to common nodules of calcium carbonate in some pedons
Thickness—0 to 40 inches

Cg or 2Cg horizon:
Color—Hue of 2.5Y to 5Y, value of 4 or 5, and chroma of 1 or 2; or it is neutral with value of 4 or 5
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of brown
Texture—Clay, silty clay, and silty clay loam
Other features—None

Jeanerette Series

MLRA: Southern Mississippi Valley Loess
Geomorphic setting: On terrace on upland (fig. 23)
Position on landform: Linear areas
Parent material: Loess
Drainage class: Somewhat poorly drained
Saturated hydraulic conductivity class: Moderately slow

Soil depth class: Very deep
Shrink-swell potential: Moderate
Slope: 0 to 1 percent

Associated Soils

- Coteau soils do not have a dark-colored surface layer.
- Iberia soils are clayey in the upper part of the solum.
- Patoutville soils do not have a dark-colored surface layer.

Taxonomic Classification

Fine-silty, mixed, superactive, hyperthermic Typic Argiaquolls

Typical Pedon

Jeanerette silt loam in an area of Jeanerette silt loam, 0 to 1 percent slopes, in row crops; located 32.5 miles west of Morgan City on U.S. Highway 90, 80 yards northeast of U.S. Highway 90 to frontage road, 0.6 mile northeast on frontage road to Pepper Road, 266 yards north on Pepper Road, and 66 yards due west into field; Spanish Land Grant Sec. 28, T. 13 S., R. 8 E., Jeanerette, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 53 minutes, 5.00 seconds N.
Longitude: 91 degrees, 39 minutes, 53.00 seconds W.

Ap—0 to 6 inches; very dark grayish brown (10YR 3/2) silt loam; grayish brown (10YR 5/2), dry; weak fine granular structure; friable; many very fine and fine roots; neutral; clear smooth boundary.

A—6 to 22 inches; very dark gray (10YR 3/1) silty clay loam; grayish brown (10YR 5/2), dry; weak medium subangular blocky structure; friable; many very fine and fine roots; many very fine and fine tubular pores with moderate vertical continuity; slightly alkaline; clear smooth boundary.

Btg—22 to 25 inches; dark gray (10YR 4/1) silty clay loam; moderate medium subangular blocky structure; firm; many very fine and fine roots between peds; common fine and very fine tubular pores with moderate vertical continuity; many distinct clay films on faces of peds; few fine rounded iron and manganese concretions; few medium and coarse nodules of calcium carbonate; few fine masses of iron accumulation on faces of peds; slightly alkaline; clear smooth boundary.

Btkg1—25 to 32 inches; gray (10YR 5/1) silty clay loam; coarse medium subangular blocky structure; firm; many very fine and fine roots between peds; common fine and very fine tubular pores with low vertical continuity; many prominent clay films on faces of peds; few fine rounded iron and manganese concretions; common fine and medium nodules of calcium carbonate; few fine masses of iron accumulation on faces of peds; moderately alkaline; clear smooth boundary.

Btkg2—32 to 50 inches; dark gray (10YR 4/1) silty clay loam; coarse medium subangular blocky structure; firm; many very fine and fine roots between peds; common fine and very fine tubular pores with low vertical continuity; many distinct clay films on faces of peds; moderately alkaline; clear smooth boundary.

BCg—50 to 80 inches; grayish brown (10YR 5/2) silt loam; weak medium subangular blocky structure; friable; moderately alkaline.

Range in Characteristics

Solum thickness: 60 to more than 80 inches
Clay content in the control section: 18 to 35 percent
Redoximorphic features: Depleted matrix with iron accumulations in shades of brown throughout the subsoil.

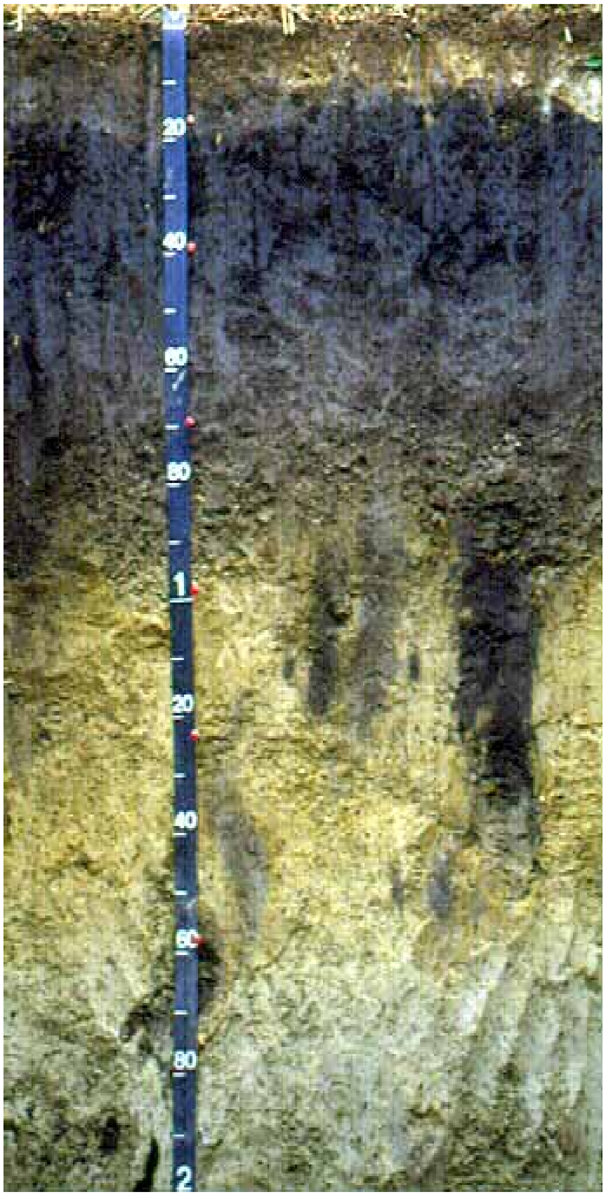

Figure 23.—Profile of Jeanerette silt loam, 0 to 1 percent slopes. [Scale in centimeters]

Other distinctive soil features: Dark surface layer 10 to 24 inches thick.
Concentrated minerals: Up to 10 percent nodules of calcium carbonate below a depth of 20 inches.
Reaction: Moderately acid to slightly alkaline in the A horizon, and neutral to moderately alkaline in the subsoil and underlying layers.
Ap and A horizons:
Color—Hue of 10YR, value of 2 or 3, and chroma of 1 or 2; or hue of 2.5Y, value of 3, and chroma of 2
Redoximorphic features—None to few iron accumulations in shades of brown

Texture—Silt loam
Other features—None
Thickness—4 to 24 inches

Btg horizon:
Color—Hue of 10YR, value of 2 or 3, and chroma of 1 or 2; or value of 4, and chroma of 1
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of olive or brown
Texture—Silt loam or silty clay loam
Other features—None
Thickness—3 to 20 inches

Btkg horizon:
Color—Hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of olive or brown
Texture—Silt loam or silty clay loam
Other features—3 to 10 percent nodules of calcium carbonate
Thickness—5 to 30 inches

B'tg horizon: (where present)
Color—Hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of olive or brown
Texture—Silt loam or silty clay loam
Other features—None
Thickness—0 to 24 inches

BCg or Cg horizon
Color—Hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or 2
Redoximorphic features—Depleted matrix with few to common iron accumulations in shades of olive or brown
Texture—Silt loam, loam, very fine sandy loam, or silty clay loam
Other features—None

Kenner Series

MLRA: Gulf Coast Marsh
Geomorphic setting: In freshwater marsh on delta plain
Position on landform: Linear areas
Parent material: Herbaceous organic material stratified with fluid clayey alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0.0 to 0.5 percent

Associated Soils

- Allemands soils do not have mineral layers in the upper part.
- Barbary soils are in fluid, mineral swamps.
- Lafitte soils are in brackish marshes and are more saline.
  Larose soils are fluid and mineral throughout.
- Maurepas soils have histic epipedons over 51 inches thick.

Taxonomic Classification

Euic, hyperthermic Fluvaquentic Haplosaprists

Typical Pedon

Kenner muck in an area of Kenner muck, very frequently flooded, in marshland; located 3,000 feet east of Bayou Long, and 7,300 feet north of Bayou Carlin; T. 16 S., R. 8 E., Ellerslie, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 40 minutes, 0.00 seconds N.
Longitude: 91 degrees, 36 minutes, 0.00 seconds W.

Oe—0 to 10 inches; dark gray (10YR 4/1) muck; about 75 percent fiber, 35 percent rubbed; massive; dominantly live roots; about 40 percent mineral; only water runs between fingers when squeezed; slightly acid; clear wavy boundary.
Oa—10 to 30 inches; dark brown (7.5YR 3/2) muck; 12 percent fiber, 3 percent rubbed; massive; dominantly herbaceous fiber; about 65 percent mineral; neutral; clear wavy boundary.
Cg—30 to 32 inches; gray (10YR 5/1) clay; massive; flows easily between fingers when squeezed leaving hand empty; few fine live roots; neutral; abrupt smooth boundary.
O'a—32 to 80 inches; very dark gray (10YR 3/1) muck; 12 percent fiber, 3 percent rubbed; massive; dominantly herbaceous fiber; about 65 percent mineral; few coarse yellowish brown plant fragments; flows easily between fingers when squeezed leaving hand empty; moderately alkaline.

Range in Characteristics

Solum thickness: 16 to 51 inches
Clay content in the control section: 45 to 85 percent
Redoximorphic features: Depleted or gleyed in substratum
Other distinctive soil features: One or more mineral layers at a depth of 10 to 51 inches.
Concentrated minerals: None
Reaction: Reaction is moderately acid to moderately alkaline throughout.

Oe horizon (surface tier):
Color—Hue of 7.5YR or 10YR, and value of 2 to 4, and chroma of 1 or 2
Redoximorphic features—None
Texture—Muck
Other features—None
Thickness—6 to 12 inches

Oa horizon (subsurface tier):
Color—Hue of 7.5YR or 10YR, and value of 2 or 3, and chroma of 1 to 3
Redoximorphic features—None
Texture—Muck
Other features—None
Thickness—12 to 36 inches

Cg horizon:
Color—Hue of 10YR or 5GY, value of 4 or 5, and chroma of 1 or less. Upon exposure to air, the color will change to hue of 10YR, value of 2 to 4, and chroma of 1.
Redoximorphic features—Depleted matrix
Texture—Clay, silty clay, and mucky clay
Other features—None
Thickness—1 to 10 inches

O'a horizon (bottom tier):
Color—Hue of 7.5YR or 10YR, value of 2 or 3, and chroma of 1 to 3
Redoximorphic features—None
Texture—Muck
Other features—None
Thickness—10 to 50 inches

Kleinpeter Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: On salt dome on upland (fig. 24)
Position on landform: Convex areas
Parent material: Loess
Drainage class: Moderately well drained
Saturated hydraulic conductivity class: Moderate
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 1 to 5 percent

Associated Soils

- Duson soils have a clayey discontinuity within 80 inches.

Taxonomic Classification

Fine-silty, mixed, active, hyperthermic Oxyaquic Glossudalfs

Typical Pedon

Kleinpeter silt in an area of Kleinpeter silt, 1 to 5 percent slopes, in hardwoods; located 26 miles west of Morgan City on U.S. Highway 90, 11.3 miles southwest of U.S. Highway 90 on Louisiana Highway 83, 1.6 miles south of Louisiana Highway 83 on Cote Blanche Crossing to ferry, 2.67 miles south on Cote Blanche Road, 811 yards southeast on a trail, and 50 yards due east of road; Sec. 22, T. 15 S., R. 7 E., Marone Point, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 44 minutes, 27.00 seconds N.
Longitude: 91 degrees, 42 minutes, 27.51 seconds W.

Ap—0 to 4 inches; very dark grayish brown (10YR 3/2) silt; weak fine and medium granular structure; very friable; many fine roots throughout; strongly acid; clear smooth boundary.

E—4 to 11 inches; brown (10YR 5/3) silt loam; weak fine and medium granular structure; friable; many fine and medium roots throughout; common fine low continuity vesicular pores; 3 percent intrusions of material from the A horizon; 3 percent faint clay films on surfaces along pores; 1 percent fine wormcasts lining pores; very strongly acid; clear smooth boundary.

Bt/E1—11 to 25 inches; 70 percent strong brown (7.5YR 5/6) silty clay loam, interior; 30 percent pale brown (10YR 6/3) silt, exterior; weak medium subangular blocky structure; friable; few fine roots throughout; common fine and medium high continuity dendritic tubular pores; 10 percent brittle peds; 5 percent faint brown (10YR 5/3) clay films on surfaces along pores and 5 percent faint brown (7.5YR 4/4) clay films on faces of peds; 3 percent fine and medium prominent irregular very dark grayish brown (10YR 3/2) and dark brown (10YR 3/3) iron and manganese masses on faces of peds; 2 percent fine prominent dendritic light brownish gray (10YR 6/2) iron depletions lining pores; very strongly acid; diffuse wavy boundary.

Bt/E2—25 to 32 inches; 70 percent strong brown (7.5YR 5/6) silty clay loam, interior and 30 percent pale brown (10YR 6/3) silt, exterior; weak medium subangular blocky structure; friable; few fine roots throughout; common fine and medium high continuity dendritic tubular pores; 15 percent faint brown (7.5YR 4/4) clay films on faces of peds; 5 percent faint brown (10YR 5/3) clay films on surfaces along pores; 3 percent fine and medium prominent irregular very dark grayish brown (10YR 3/2) and dark brown (10YR 3/3) iron and manganese masses on faces of peds; 2 percent fine prominent dendritic light brownish gray (10YR 6/2) iron depletions lining pores; very strongly acid; gradual wavy boundary.

Bt/E3—32 to 40 inches; 70 percent strong brown (7.5YR 5/6) silty clay loam, interior and 30 percent pale brown (10YR 6/3) silt, exterior; weak medium subangular blocky structure; friable; few fine roots throughout; common fine and medium high continuity dendritic tubular pores; 10 percent faint brown (7.5YR 4/4) clay films on faces of peds; 5 percent faint brown (10YR 5/3) clay films on surfaces along pores; 3 percent fine and medium prominent irregular very dark grayish brown (10YR 3/2) and dark brown (10YR 3/3) iron and manganese masses on faces of peds; 2 percent fine prominent dendritic light brownish gray (10YR 6/2) iron depletions lining pores; strongly acid; gradual wavy boundary.

Bt/E4—40 to 50 inches; 70 percent strong brown (7.5YR 5/6) silty clay loam, interior; 30 percent pale brown (10YR 6/3) silt, exterior; weak medium subangular blocky structure; friable; few fine roots throughout; common fine and medium high continuity dendritic tubular pores; 5 percent faint brown (10YR 5/3) clay films on surfaces along pores; 2 percent faint brown (7.5YR 4/4) clay films on faces of peds; 3 percent fine and medium prominent irregular very dark grayish brown (10YR 3/2) and dark brown (10YR 3/3) iron and manganese masses on faces of peds; very strongly acid; diffuse wavy boundary.

Bt/E5—50 to 61 inches; brown (7.5YR 4/4) silty clay loam; weak medium subangular blocky structure; friable; few fine roots throughout; common fine and medium high continuity dendritic tubular pores; 8 percent distinct pale brown (10YR 6/3) silt coats on vertical faces of peds; 5 percent faint brown (10YR 5/3) clay films on surfaces along pores; 2 percent faint dark brown (7.5YR 3/4) clay films on faces of peds; 10 percent fine distinct irregular strong brown (7.5YR 5/6) masses of oxidized iron on faces of peds; 1 percent fine prominent dendritic very dark grayish brown (10YR 3/2) iron and manganese masses lining pores; very strongly acid; gradual wavy boundary.

Bt/E6—61 to 74 inches; brown (7.5YR 4/4) silty clay loam; weak medium prismatic parting to weak medium subangular blocky structure; friable; few fine roots throughout; common fine and medium high continuity dendritic tubular pores; 8 percent faint dark brown (7.5YR 3/4) clay films on faces of peds; 8 percent distinct pale brown (10YR 6/3) silt coats on vertical faces of peds; 5 percent faint brown (10YR 5/3) clay films on surfaces along pores; 1 percent fine prominent dendritic very dark grayish brown (10YR 3/2) iron and manganese masses lining pores; very strongly acid; diffuse wavy boundary.

Bt/E7—74 to 80 inches; strong brown (7.5YR 5/6) silty clay loam; weak medium prismatic parting to weak medium subangular blocky structure; friable; few fine roots throughout; common fine high continuity dendritic tubular pores; 8 percent distinct pale brown (10YR 6/3) silt coats on vertical faces of peds; 2 percent faint brown (10YR 5/3) clay films on surfaces along pores; 1 percent fine prominent dendritic very dark grayish brown (10YR 3/2) iron and manganese masses lining pores; very strongly acid.

Range in Characteristics

Solum thickness: More than 80 inches
Clay content in the control section: 18 to 35 percent

Figure 24.—Profile of Kleinpeter silt, 1 to 5 percent slopes. [Scale in centimeters.]

Redoximorphic features: Iron accumulations in shades of brown and iron depletion in shades of gray at 22 to 65 inches deep.
Other distinctive soil features: Thickness of the loess over Pleistocene age terrace deposits (2Bt horizon) ranges from 4 to 10 feet.
Concentrated minerals: 1 to 5 percent nodules of calcium carbonate at a depth of more than 20 inches in some pedons.
Reaction: Strongly acid to slightly acid in the A horizon, and very strongly acid to moderately acid in the E, Bt, and Bt/E horizons.

A or Ap horizon:
Color—Hue of 10YR, value of 4 or 5, and chroma of 1 to 4; or value of 3, and chroma of 2 or 3
Redoximorphic features—None
Texture—Silt
Other features—None
Thickness—2 to 8 inches

E or Bw horizon: (where present)
Color—Hue of 10YR, value of 4 or 5, and chroma of 3 or 4
Redoximorphic features—None
Texture—Silt loam
Other features—None
Thickness—0 to 7 inches

Bt horizon: (where present)
Color—Hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 4 to 6
Redoximorphic features—Iron and manganese accumulations on the faces of peds range from few to many.
Texture—Silt loam or silty clay loam
Other features—None
Thickness—0 to 25 inches

Bt/E horizon:
Color—Hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 4 to 6 in the Bt parts; and hue of 10YR, value of 5 or 6, and chroma of 2 or 3 in the E parts.
Redoximorphic features—None to common iron or clay depletions in shades of gray; and iron accumulations in shades of brown.
Texture—Silt loam or silty clay loam in the Bt parts, and silt or silt loam in the E parts.
Other features—Intrusions of E material that extend upward from the bottom make up more than 15 percent of the volume in one or more subhorizons; up to 5 percent nodules of calcium carbonate are in some pedons.
Thickness—33 to more than 80 inches

2Bt/E or 2Bt horizon: (where present)
Color—Hue of 7.5YR or 10YR, value of 3 to 5, and chroma of 4 to 6 in the Bt parts; hue of 10YR, value of 5 or 6, chroma of 2 or 3 in the E parts.
Redoximorphic features—Few to common iron or clay depletions in shades of gray; and iron accumulations in shades of brown.
Texture—Silt loam, silty clay loam, or clay loam.
Other features—Up to 25 percent intrusions of E material that extend upward from the bottom.

Lafitte Series

MLRA: Gulf Coast Marsh
Geomorphic setting: In brackish marsh on delta plain
Position on landform: Linear areas
Parent material: Herbaceous organic material
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Moderately rapid
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0.0 to 0.2 percent

Associated Soils

- Bancker soils are mineral soils.
- Clovelly soils have less than 51 inches of organic material.

Taxonomic Classification

Euic, hyperthermic Typic Haplosaprists

Typical Pedon

Lafitte muck in an area of Lafitte muck, very frequently flooded, in marshland; located 26 miles west of Morgan City on U.S. Highway 90, 15.1 miles southwest of U.S. Highway 90 on Louisiana Highway 83, 1,530 yards southwest on Louisiana Highway 319 to Intracoastal Waterway Bridge, and 1.61 miles due west into marsh; T. 14 S., R. 6 E., Weeks, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 46 minutes, 5.50 seconds N.
Longitude: 91 degrees, 48 minutes, 4.30 seconds W.

Oa1—0 to 10 inches; brown (10YR 4/3) muck; about 40 percent fiber, 20 percent rubbed; very fluid (flows easily between fingers when squeezed leaving hand empty); about 20 percent mineral; moderately alkaline; clear smooth boundary.
Oa2—10 to 15 inches; dark gray (10YR 4/1) muck; about 20 percent fiber, less than 10 percent rubbed; very fluid (flows easily between fingers when squeezed leaving hand empty); about 25 percent mineral; moderately alkaline; clear smooth boundary.
Oa3—15 to 36 inches; dark grayish brown (10YR 4/2) muck; about 20 percent fiber, less than 5 percent rubbed; very fluid (flows easily between fingers when squeezed leaving hand empty); about 20 percent mineral; moderately alkaline; clear smooth boundary.
Oa4—36 to 57 inches; dark grayish brown (10YR 4/2) muck; about 20 percent fiber, less than 10 percent rubbed; very fluid (flows easily between fingers when squeezed leaving hand empty); about 25 percent mineral; moderately alkaline; clear smooth boundary.
Oa5—57 to 69 inches; brown (10YR 4/3) muck; about 20 percent fiber, less than 10 percent rubbed; very fluid (flows easily between fingers when squeezed leaving hand empty); about 20 percent mineral; moderately alkaline; clear smooth boundary.
Cg—69 to 80 inches; olive gray (5Y 4/2) clay; massive; very fluid (flows easily between fingers when squeezed leaving hand empty); moderately alkaline.

Range in Characteristics

Organic thickness: 16 to 51 inches
Clay content in the control section: 0 percent
Redoximorphic features: None
Other distinctive soil features: The n-value is more than 0.7 in all layers.
Concentrated minerals: The conductivity of the saturation extract varies seasonally and with the salt content of preceding flood waters, but averages 4 to 8 dS/m in at least part of the upper or middle layers during most of the year.
Reaction: The surface tier ranges from slightly acid to moderately alkaline; the subsurface and bottom tiers are slightly acid to moderately alkaline.

Oa horizon (surface tier):
Color—Hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 to 3
Redoximorphic features—None
Texture—Muck
Other features—None
Thickness—More than to 51 inches

Cg horizon: (where present)
Color—Hue of 5Y, 5GY, or neutral, value of 3 to 5, and chroma of 2 or less
Redoximorphic features—Gleyed matrix
Texture—Clay or silty clay
Other features—None

Larose Series

MLRA: Gulf Coast Marsh
Geomorphic setting: In freshwater marsh on delta plain
Position on landform: Linear areas
Parent material: Thin herbaceous organic material over fluid clayey alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0.0 to 0.2 percent

Associated Soils

- Allemands soils are fluid organic soils.
- Barbary soils are mineral soils which are in swamps.
- Kenner soils are fluid organic soils.

Taxonomic Classification

Very-fine, smectitic, nonacid, hyperthermic Typic Hydraquents

Typical Pedon

Larose muck in an area of Larose muck, very frequently flooded, in marshland; located about 0.2 mile west of Greens Bayou, and 0.3 mile south of Cross Bayou; Sec. 6, T. 17 S., R. 12 E., Lake Salve, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 35 minutes, 58.30 seconds N.
Longitude: 91 degrees, 17 minutes, 0.50 seconds W.

Oa—0 to 8 inches; dark grayish brown (10YR 4/2) muck; massive; flows easily between fingers when squeezed leaving only roots and fibers in hand; about 65 percent mineral; about 15 percent fibers; less than 1 percent rubbed; many fine roots; neutral; clear smooth boundary.
Ag—8 to 40 inches; dark gray (10YR 4/1) clay; massive; flows easily between fingers when squeezed leaving hand empty; many fine roots; slightly alkaline; clear smooth boundary.
Cg1—40 to 75 inches; gray (5Y 5/1) clay; massive; flows easily between fingers when squeezed leaving hand empty; many fine roots; slightly alkaline; clear smooth boundary.
Cg2—75 to 80 inches; very dark gray (5Y 3/1) clay; massive; flows easily between fingers when squeezed leaving hand empty; many fine roots; slightly alkaline; clear smooth boundary.

Range in Characteristics

Organic thickness: 2 to 15 inches
Clay content in the control section: 60 to 80 percent
Redoximorphic features: Depleted or gleyed matrix
Other distinctive soil features: The n-value is more than 0.7 in all horizons above 60 inches
Concentrated minerals: None
Reaction: Moderately acid to slightly alkaline in the O and A horizons, and slightly acid to moderately alkaline in the C horizon.

Oa horizon:
Color—Hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 1 or 2
Redoximorphic features—None
Texture—Muck

Other features—None
Thickness—2 to 15 inches

Ag horizon:
Color—Hue of 10YR to 5Y, value of 2 to 4, and chroma of 2 or less
Redoximorphic features—Gleyed matrix
Texture—Clay, silty clay, or mucky clay
Other features—None
Thickness—4 to 12 inches

Cg horizon:
Color—Hue of 10YR to 5BG, or neutral, value of 3 to 5, and chroma of 2 or less
Redoximorphic features—Depleted or gleyed matrix
Texture—Clay, silty clay, or mucky clay
Other features—None

Loreauville Series

MLRA: Southern Mississippi Valley Alluvium
Geomorphic setting: On natural levee on Teche Delta Plain
Position on hillslope: Convex toeslopes
Parent material: Loamy alluvium
Drainage class: Somewhat poorly drained
Saturated hydraulic conductivity class: Moderately slow
Soil depth class: Very deep
Shrink-swell potential: Moderate
Slope: 0 to 1 percent

Associated Soils

- Baldwin soils are clayey throughout the upper solum.
- Galvez soils have a lighter-colored surface layer.
- Iberia soils have a clayey upper solum.

Taxonomic Classification

Fine-silty, mixed, superactive, hyperthermic Mollic Endoaqualfs

Typical Pedon

Loreauville silt loam in an area of Loreauville silt loam, 0 to 1 percent slopes, in row crops; in Jeanerette, Louisiana, 541 yards northeast on Lewis Street from intersection with Main Street, 0.7 miles southeast on Louisiana Highway 87, 1.25 miles northeast of Louisiana Highway 87 on a farm road, and 200 yards due west of field road; Spanish Land Grant Sec. 52, T. 13 S., R. 8 E., Jeanerette, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 55 minutes, 20.33 seconds N.
Longitude: 91 degrees, 38 minutes, 34.82 seconds W.

Ap1—0 to 5 inches; very dark gray (10YR 3/1) silt loam; weak medium granular structure; very friable, common fine roots; slightly acid; clear smooth boundary.

Ap2—5 to 10 inches; very dark grayish brown (10YR 3/2) silty clay loam; weak medium subangular blocky structure; friable, common fine roots; few medium distinct yellowish brown (10YR 5/4) silt coatings between peds; few fine soft masses of calcium carbonate accumulation; few fine prominent yellowish brown (10YR 5/6) masses of iron accumulation around roots and pores; slightly alkaline; gradual wavy boundary.

Btk—10 to 20 inches; grayish brown (2.5Y 5/2) silty clay loam; weak coarse prismatic structure parting to weak medium subangular blocky structure; firm; few fine roots; common faint dark gray (10YR 4/1) silt coats between peds; distinct clay films on faces of peds; common weakly cemented nodules of calcium carbonate; common medium prominent light olive brown (2.5Y 5/6) masses of iron accumulation on faces of peds; few fine faint light olive brown (2.5Y 5/3) masses of iron accumulation throughout; moderately alkaline; clear smooth boundary.

Btkg—20 to 30 inches; light brownish gray (2.5Y 6/2) silt loam; weak coarse prismatic structure parting to weak medium subangular blocky structure; firm; few fine roots; common weakly cemented nodules of calcium carbonate; common faint dark gray (10YR 4/1) clay films on faces of peds; moderately alkaline; gradual wavy boundary.

Btg—30 to 42 inches; light brownish gray (2.5Y 6/2) loam; weak coarse prismatic structure parting to weak medium subangular blocky structure; friable; few weakly cemented nodules of calcium carbonate; common medium prominent light olive brown (2.5Y 5/6) masses of iron accumulation on faces of peds; common fine distinct dark gray (10YR 4/1) iron depletions throughout; moderately alkaline; gradual wavy boundary.

BCg—42 to 57 inches; olive gray (5Y 5/2) loam; weak fine subangular blocky structure; friable; few weakly cemented nodules of calcium carbonate; common fine prominent olive (5Y 5/6) masses of iron accumulation throughout; moderately alkaline; gradual wavy boundary.

Cg1—57 to 65 inches; gray (5Y 5/1) loam; massive; friable; one thin lense of more clayey material 0.19 to 0.39 inch (5 to 10 mm) wide is within the horizon; common fine prominent olive (5Y 5/6) masses of iron accumulation throughout; moderately alkaline.

Cg2—65 to 80 inches; gray (5Y 5/1) very fine sandy loam; massive; friable; moderately alkaline.

Range in Characteristics

Solum thickness: 35 to more than 80 inches

Clay content in the control section: 18 to 32 percent

Redoximorphic features: Depleted matrix with iron accumulations in shades of brown and olive throughout the subsoil and substratum.

Other distinctive soil features: The soil material color has value of 3 or less, when mixed to a depth of 7 inches.

Concentrated minerals: Up to 5 percent nodules of calcium carbonate in the subsoil.

Reaction: Slightly acid to slightly alkaline in the A horizon, neutral to moderately alkaline in the Btk and Btkg horizons, neutral to moderately alkaline in the Btg horizon, and slightly alkaline or moderately alkaline in the BCg and Cg horizons.

Ap horizon:

Color—Hue of 10YR, value of 2 or 3, chroma of 1 or 2

Redoximorphic features—None to few masses of iron accumulations in shades of brown around roots

Texture—Silt loam

Other features—Concretions of calcium carbonate in some pedons

Thickness—6 to 10 inches thick

Btk or Bt horizon:

Color—Hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 2

Redoximorphic features—Iron accumulations are in shades of brown; iron depletions are in shades of gray.

Texture—Silt loam, loam, or silty clay loam

Other features—Peds are coated or partly coated with very dark grayish brown to black silt coatings or clay films. Nodules of calcium carbonate 0.19 to 0.39 inch (5 to 10 mm) wide range from 0 to 10 percent
Thickness—10 to 20 inches

Btkg or Btg horizon:
Color—Hue of 2.5Y to 5Y, value of 5 or 6, and chroma of 1 or 2
Redoximorphic features—Iron accumulations are in shades of brown; iron depletions are in shades of gray.
Texture—Silt loam, loam, silty clay loam, or clay loam.
Other features—Nodules of calcium carbonate 0.19 to 0.39 inch (5 to 10 mm) wide range from 0 to 10 percent.
Thickness—10 to 40 inches

BCg and Cg horizons:
Color—Hue of 10YR to 5Y, value of 5 or 6, and chroma of 1 or 2
Redoximorphic features—Iron accumulations are in shades of brown or olive, and iron depletions are in shades of gray.
Texture—Very fine sandy loam, loam, or silt loam
Other features—None

Maurepas Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: In freshwater swamp on delta plain
Position on landform: Concave areas
Parent material: Highly decomposed woody organic material over fluid clayey alluvium
Drainage class: Very poorly drained
Saturated hydraulic conductivity class: Rapid
Soil depth class: Very deep
Shrink-swell potential: Low
Slope: 0.0 to 0.2 percent

Associated Soils

- Allemands soils have less than 51 inches of organic material.
- Barbary soils are in swamps and are mineral.
- Kenner soils have thin mineral strata within 51 inches.
- Larose soils have an organic layer less than 16 inches thick.

Taxonomic Classification

Euic, hyperthermic Typic Haplosaprists

Typical Pedon

Maurepas muck in an area of Maurepas muck, frequently flooded, in swamp; about 1.5 miles west of Franklin Canal, and 2.5 miles southwest of Franklin, Louisiana; T. 15 S., R. 9 E., Franklin, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 46 minutes, 6.88 seconds N.
Longitude: 91 degrees, 33 minutes, 18.32 seconds W.

Oa1—0 to 8 inches; dark brown (7.5YR 3/2) muck, same color pressed or rubbed; very dark gray (10YR 3/1) after exposure to air; massive; very fluid; about 15 percent fiber, about 3 percent rubbed; about 55 percent herbaceous fiber, the remainder woody; 30 percent mineral matter; moderately alkaline; clear smooth boundary.

Oa2—8 to 28 inches; dark brown (7.5YR 3/2) muck, same color pressed or rubbed; very dark gray (10YR 3/1) after exposure to air; massive; very fluid; about 30 percent fiber; about 2 percent rubbed; 60 percent woody fiber, the remainder herbaceous; 25 percent mineral matter; common wood fragments; moderately alkaline; clear smooth boundary

Oa3—28 to 70 inches; dark brown (7.5YR 3/4) muck, same color pressed or rubbed; very dark grayish brown (10YR 3/2), after exposure to air; massive; very fluid; about 30 percent fiber, less than 1 percent rubbed; 60 percent woody fiber, the remainder herbaceous; 15 percent mineral matter; common logs and wood fragments; moderately alkaline; clear smooth boundary.

Range in Characteristics

Organic thickness: 51 to more than 80 inches
Clay content in the control section: None
Redoximorphic features: None
Other distinctive soil features: Buried cypress logs or stumps at a depth of 15 to 80 inches.
Concentrated minerals: None
Reaction: Reaction ranges from moderately acid to moderately alkaline throughout.

Oa1 horizon (surface tier):
Color—Hue of 5YR to 10YR, value of 2 or 3, and chroma of 2 or less
Redoximorphic features—None
Texture—Muck
Other features—Rubbed fiber content ranges from about 2 to 40 percent
Thickness—6 to 12 inches

Oa2 horizon (subsurface tier):
Color—Hue of 5YR to 10YR, value of 2 or 3, and chroma of 2 or less
Redoximorphic features—None
Texture—Muck
Other features—Rubbed fiber content is less than 10 percent
Thickness—6 to 30 inches

Oa3 horizon (bottom tier):
Color—Hue of 5YR to 10YR, value of 2 or 3, and chroma of 4 or less
Redoximorphic features—None
Texture—Muck
Other features—Rubbed fiber content is less than 10 percent, but some pedons have thin layers that contain more fibers. Logs, dominantly cypress, and wood fragments in varying states of decomposition, are common throughout the organic material.

Patoutville Series

MLRA: Southern Mississippi Valley Loess
Geomorphic setting: On terrace on upland
Position on landform: Linear areas
Parent material: Loess
Drainage class: Somewhat poorly drained
Saturated hydraulic conductivity class: Slow
Soil depth class: Very deep
Shrink-swell potential: Moderate
Slope: 0 to 1 percent

Associated Soils

- Coteau soils are browner in the upper part of the subsoil.
- Iberia soils have a dark-colored surface layer.
- Jeanerette soils have a dark-colored surface layer.

Taxonomic Classification

Fine-silty, mixed, superactive, hyperthermic Aeric Epiaqualfs

Typical Pedon

Patoutville silt in an area of Patoutville silt, 0 to 1 percent slopes, in row crops (fig. 25); 32.5 miles west of Morgan City on U.S. Highway 90, 80 yards northeast of U.S. Highway 90 to frontage road, 0.6 mile northeast on frontage road to Pepper Road, 0.46 mile northwest on Pepper Road, 0.55 mile northeast on Albania Road, and 115 yards due east into field; Spanish Land Grant Sec. 40, T. 13 S., R. 8 E., Jeanerette, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 53 minutes, 37.68 seconds N.
Longitude: 91 degrees, 39 minutes, 35.24 seconds W.

Ap1—0 to 4 inches; dark grayish brown (10YR 4/2) silt; weak fine granular structure; very friable; many fine and medium roots; few fine distinct dark yellowish brown (10YR 4/4) iron oxidation stains along root channels; very strongly acid; abrupt smooth boundary.

Ap2—4 to 10 inches; very dark grayish brown (10YR 3/2) silt loam; moderate medium granular structure; friable; many fine and medium roots; many fine and medium distinct dark yellowish brown (10YR 4/4) masses of iron accumulation throughout; common fine distinct light brownish gray (10YR 6/2) iron depletions throughout; very strongly acid; clear smooth boundary.

Btg1—10 to 15 inches; grayish brown (10YR 5/2) silt loam; moderate medium subangular blocky structure; firm; common fine roots; few faint clay films on faces of peds; few fine iron and manganese concretions; few fine prominent yellowish red (5YR 5/8) masses of iron accumulation on faces of peds; many fine prominent strong brown (7.5YR 5/8) masses of iron accumulation throughout; common fine faint grayish brown (10YR 5/2) and gray (2.5Y 6/1) iron depletions throughout; strongly acid; gradual smooth boundary.

Btg2—15 to 22 inches; grayish brown (2.5Y 5/2) silt loam; moderate medium subangular blocky structure; firm; common fine roots; few faint clay films on faces of peds; few fine iron and manganese concretions; few fine prominent yellowish red (5YR 5/8) masses of iron accumulation on faces of peds; many fine prominent strong brown (7.5YR 5/8) masses of iron accumulation throughout; common fine faint grayish brown (10YR 5/2) and gray (2.5Y 6/1) iron depletions throughout; strongly acid; gradual smooth boundary.

Bt—22 to 28 inches; brown (10YR 5/3) silty clay loam; moderate coarse prismatic structure parting to moderate medium subangular blocky; firm; few fine and medium roots; many distinct dark gray (10YR 4/1) clay films on faces of peds; many fine and medium moderately cemented iron and manganese concretions throughout; many medium distinct brownish yellow (10YR 6/6) masses of iron accumulation throughout; common fine prominent reddish brown (2.5YR 4/4) masses of iron accumulation throughout; few medium prominent yellowish red (5YR 5/6) masses of iron accumulation throughout; slightly acid; clear wavy boundary.

B'tg1—28 to 38 inches; light brownish gray (2.5Y 6/2) silt loam; weak coarse prismatic structure parting to moderate medium subangular blocky; firm; few fine roots; faint clay films on faces of peds; few fine iron and manganese concretions; many medium prominent yellowish brown (10YR 5/6 and 10YR 5/8) and strong brown

(7.5YR 5/6 and 7.5YR 5/8) masses of iron accumulation throughout; common fine faint gray (2.5Y 6/1) iron depletions throughout; neutral; gradual smooth boundary.

B'tg2—38 to 55 inches; gray (5Y 5/1) silt loam; weak coarse prismatic structure parting to moderate medium subangular blocky; firm; few fine roots; faint clay films on faces of peds; few fine iron and manganese concretions; many medium prominent yellowish brown (10YR 5/6 and 10YR 5/8) and strong brown (7.5YR 5/6 and 7.5YR 5/8) masses of iron accumulation throughout; common fine faint gray (2.5Y 6/1) iron depletions throughout; slightly acid; gradual smooth boundary.

B'tg3—55 to 65 inches; gray (5Y 6/1) silt loam; weak coarse prismatic structure parting to moderate medium subangular blocky; firm; few fine roots; faint clay films on faces of peds; few fine iron and manganese concretions; many medium prominent yellowish brown (10YR 5/6 and 10YR 5/8) and strong brown (7.5YR 5/6 and 7.5YR 5/8) masses of iron accumulation throughout; common fine faint gray (2.5Y 6/1) iron depletions throughout; slightly acid; gradual smooth.

Bg—65 to 80 inches; light gray (2.5Y 6/1) silt loam; weak fine subangular blocky structure; friable; few fine roots; many medium prominent yellowish brown (10YR 5/6) and brownish yellow (10YR 6/6) soft masses of iron accumulation; common fine very dark grayish brown (10YR 3/2) and dark brown (10YR 3/3) soft masses of iron and manganese accumulation; slightly alkaline.

Range in Characteristics

Solum thickness: 50 to more than 80 inches

Clay content in the control section: 18 to 35 percent

Redoximorphic features: Depleted matrix with iron accumulations in shades of red and brown in the upper part of the subsoil.

Other distinctive soil features: Red masses of iron accumulation are diagnostic for the series and are present in the upper part of the subsoil.

Concentrated minerals: None

Reaction: Extremely acid to slightly alkaline in the A and E horizons, strongly acid to neutral in the Btg and Bt horizons, and slightly acid to moderately alkaline in the underlying horizons.

Ap horizon:

Color—Hue of 10YR, value of 3 or 4, and chroma of 1 to 3; or value of 5 and chroma of 2 or 3. Where value is 3, the A or Ap horizon is less then 6 inches thick.

Redoximorphic features—None to few masses of iron accumulation in shades of brown around roots

Texture—Silt

Other features—None

Thickness—3 to 12 inches

Eg horizon: (where present)

Color—Hue of 10YR, value of 4 to 6, and chroma of 1 or 2; or hue of 2.5Y, value of 4 or 5, and chroma of 2

Redoximorphic features—None to few masses of iron accumulation in shades of brown around roots

Texture—Silt loam

Other features—None

Thickness—0 to 8 inches

Btg and B'tg horizons:

Color—Hue of 10YR, value of 4 to 6, and chroma of 1 or 2; or hue of 2.5Y or 5Y, value of 5 or 6, and chroma of 1 or 2

Redoximorphic features—Depleted matrix with few to common masses of iron accumulation in shades of red and brown

Texture—Silt loam or silty clay loam

Other features—Peds are coated with clay films in shades of brown or gray
Thickness—5 to 18 inches

Bt and B't horizons:
Color—Hue of 10YR or 2.5Y, value of 5 or 6, and chroma of 3 to 6
Redoximorphic features—Few to common masses of iron accumulation in shades of red; iron accumulations in shades of brown, and iron depletions in shades of gray also are present in most pedons
Texture—Silt loam or silty clay loam
Other features—Peds are coated with clay films in shades of brown or gray
Thickness—5 to 18 inches

2Bt horizon: (where present)
Color—Hue of 10YR to 5Y, value of 5 or 6, and chroma of 1 to 6; or it is variegated with these colors

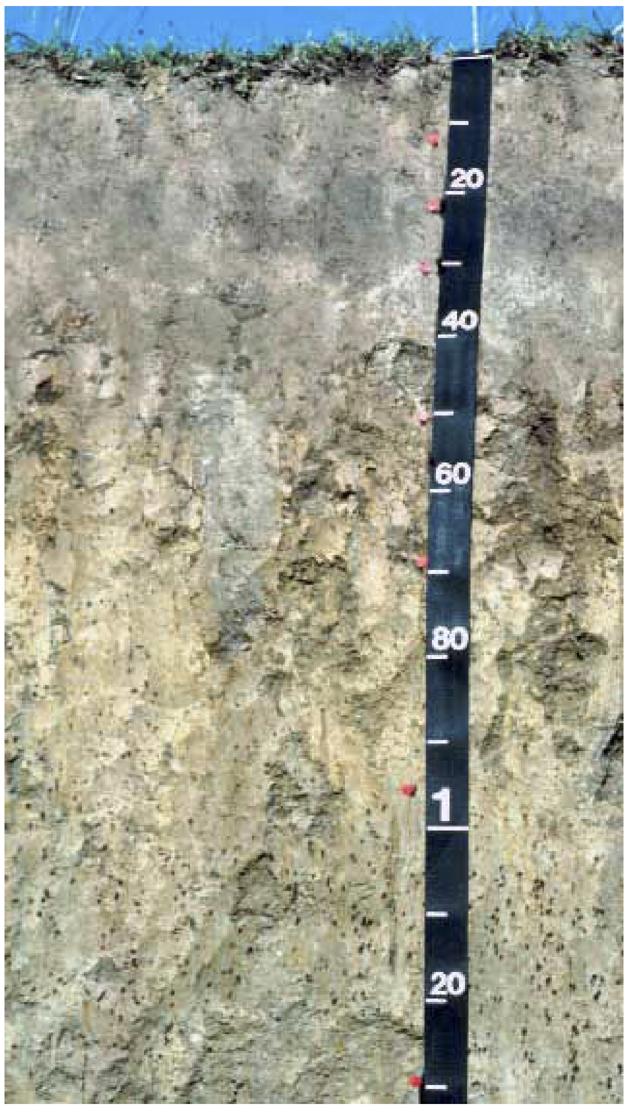

Figure 25.—Profile of Patoutville silt, 0 to 1 percent slopes. [Scale in centimeters]

Redoximorphic features—Iron accumulations in shades of brown, and iron depletions in shades of gray are present in most pedons.
Texture—Silt loam, silty clay loam, or silty clay
Other features—None

Bg, BC, or C horizon: (where present)
Color—Hue of 10YR to 5Y, value of 5 or 6, and chroma of 1 to 6; or they are variegated with these colors
Redoximorphic features—Iron accumulations in shades of brown, and iron depletions in shades of gray are present in most pedons
Texture—Silt loam, silty clay loam, or silty clay
Other features—None

Schriever Series

MLRA: Southern Mississippi River Alluvium
Geomorphic setting: In backswamp on delta plain
Position on landform: Linear areas
Parent material: Clayey alluvium
Drainage class: Poorly drained
Saturated hydraulic conductivity class: Very slow or impermeable
Soil depth class: Very deep
Shrink-swell potential: Very high
Slope: 0 to 1 percent

Associated Soils

- Baldwin soils have an argillic horizon.
- Barbary soils are in swamps and are fluid clays.
- Fausse soils are wetter and do not form surface cracks.
- Harahan soils are in drained swamps.
- Iberia soils have a dark surface more than 12 inches thick.

Taxonomic Classification

Very-fine, smectitic, hyperthermic Chromic Epiaquerts

Typical Pedon

Schriever clay in an area of Schriever clay, frequently flooded, in intermixed conifers and hardwoods; in Jeanerette, Louisiana, 541 yards northeast on Lewis Street from intersection with Main Street, 2.1 miles southeast on Louisiana Highway 87, 1.1 miles northeast of Louisiana Highway 87 on a farm road to the levee, 466 yards northeast towards lake along canal, and 109 yards due west of the canal; Spanish Land Grant Sec. 75 T. 13 S., R. 8 E., Jeanerette, Louisiana; USGS 7.5-Minute Quadrangles.
Latitude: 29 degrees, 55 minutes, 10.78 seconds N.
Longitude: 91 degrees, 37 minutes, 35.67 seconds W.

A—0 to 8 inches; very dark grayish brown (10YR 3/2) clay; moderate fine angular blocky structure; very firm; very sticky; very plastic; many fine and medium roots throughout; few very fine tubular pores; moderately acid; clear smooth boundary (2 to 10 inches thick).
Bg—8 to 23 inches; dark gray (2.5Y 4/1) clay; strong medium angular blocky structure; very firm; very sticky; very plastic; few fine roots between peds; common medium distinct dark yellowish brown (10YR 3/4) masses of iron accumulation on faces of peds; slightly acid; gradual smooth boundary.
Bssg1—23 to 38 inches; gray (5Y 5/1) clay; strong coarse prismatic structure parting to moderate medium angular blocky structure and wedge-shaped aggregates;

very firm; very sticky; very plastic; few fine roots between peds; common shiny, slightly grooved pressure faces on peds; neutral; gradual wavy boundary.

Bssg2—38 to 55 inches; gray (5Y 5/1) clay; strong coarse prismatic structure parting to moderate medium angular blocky structure and wedge-shaped aggregates; very firm; very sticky; very plastic; few fine roots between peds; common shiny, slightly grooved pressure faces on peds; neutral; gradual wavy boundary.

BCg—55 to 65 inches; gray (5Y 5/1) silty clay; moderate medium angular blocky structure; firm; very sticky; very plastic; few fine roots between peds; neutral; gradual wavy boundary.

2Cg—65 to 80 inches; dark grayish brown (2.5Y 4/2) silty clay loam; massive; friable; sticky; slightly plastic; few fine roots between peds; neutral.

Range in Characteristics

Solum thickness: 40 to more than 80 inches

Clay content in the control section: 60 to 90 percent

Redoximorphic features: Depleted matrix with iron accumulations in shades of brown throughout.

Other distinctive soil features: Slickensides or wedge-shaped aggregates in a layer at least 10 inches thick within a depth of 40 inches.

Concentrated minerals: None to common, soft to slightly hard nodules of calcium carbonate at depth of more than 20 inches.

Reaction: Strongly acid to moderately alkaline in the A, Bg, and Bssg horizons, and neutral to moderately alkaline in the Bkssg, BCg, and Cg horizons.

A or Ap horizon:

Color—Hue of 10YR or 2.5Y, value of 2 to 4, and chroma of 1 or 2
Redoximorphic features—Few iron accumulations in shades of brown
Texture—Clay
Other features—None
Thickness—3 to 12 inches

Bg horizon:

Color—Hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 1 or less; or value of 6 and chroma of 2; or hue of 5Y, value of 4 to 6, and chroma of 2 or less
Redoximorphic features—Common to many iron accumulations in shades of brown
Texture—Clay
Other features—None
Thickness—6 to 30 inches

Bssg horizon:

Color—Hue of 10YR or 2.5Y, value of 4 to 6, chroma of 1 or less; or value of 6 and chroma of 2; or hue of 5Y, value of 4 to 6, and chroma of 2 or less
Redoximorphic features—Common to many iron accumulations in shades of brown
Texture—Clay
Other features—Slickensides and wedge-shaped aggregates. Some pedons have thin lenses or strata of silty clay loam or silt loam, or clay with hue of 5YR or 2YR in the Bssg horizon.
Thickness—10 to 70 inches

Bkssg horizon: (where present)

Color—Hue of 10YR to 2.5Y, value of 4 to 6, chroma of 1 or less; or value of 6 and chroma of 2; or hue of 5Y, value of 4 to 6, and chroma of 2 or less
Redoximorphic features—Common to many iron accumulations in shades of brown
Texture—Clay
Other features—Slickensides and wedge-shaped aggregates; few to common nodules or soft masses of calcium carbonate accumulation

BCg, Cg, or 2Cg horizon: (where present)

Color—Hue of 10YR to 5GY, value of 4 to 6, and chroma of 2 or less

Redoximorphic features—Common to many iron accumulations in shades of brown

Texture—Clay or silty clay; in some pedons it is loam, silt loam, or silty clay loam below a depth of 40 inches

Other features—The Cg or 2Cg horizon is slightly fluid or moderately fluid below a depth of 60 inches in some pedons.

Formation of the Soil

This section describes the factors of soil formation and the process of soil formation and relates them to the formation of the soils in St. Mary Parish. It also describes the physiography and surface geology of the survey area.

Factors of Soil Formation

Soil is a natural, three-dimensional body that forms on the earth's surface. It has properties resulting from the integrated effect of climate and living matter acting on parent material, as conditioned by relief over time. Considered individually, the five factors of soil formation are parent material, climate, plants and animal life, relief, and time.

Interaction of the five main factors influences the processes of soil formation and results in differences among the soils. The climate during formation of the soil material from the parent material; the physical and chemical composition of the original parent material; the kinds of plants and other organisms living in and on the soil; the relief of the land and its effect on runoff and erosion; and the length of time the soil has had to form all have an effect on what types of properties will be expressed in soils at any given site.

The effect of any one factor can differ from place to place, but the interaction of all the factors will determine the kind of soil that forms. Many of the differences in soils cannot be attributed to differences in only one factor. For example, just the content of organic matter in the soils of St. Mary Parish is influenced by several of the factors, including relief, parent material, and living organisms. In the following paragraphs the factors of soil formation are described individually as they relate to soils in the survey area.

Parent Material

Parent material is the initial material from which soil forms. It affects the chemical and mineralogical composition of the soils. It also influences the degree of leaching, the reaction, texture, permeability, drainage, and the kind and color of the surface and subsoil layers. Relative percentages of sand, silt, and clay in the parent materials affect the rate that water moves into and through the soil, and also affect the soil's ability to hold organic humus, air, and soil nutrients in the rooting zone. Generally, soils that form in loamy and sandy parent material have a lower capacity to hold soil nutrients than those that form in clay. The soils in St. Mary Parish formed in either alluvial sediments or loess, and many have accumulations of organic material in the upper part. Some are organic throughout, and some soils nearest to the coast formed in marine sediments.

The alluvium is from distributary streams of former deltas of the Mississippi River. (24) Bordering the stream channels are low ridges called natural levees. These levees are highest next to the channels and slope gradually into backswamps further from the channels. The levees are shaped by waters that overspread the streambanks. When the water slows, it first drops sand, then silt, and finally clay particles. Thus, the soils on the highest parts of natural levees generally formed in more loamy parent materials. These soils are generally lighter in color, more permeable, and better drained than the soils on the lower part of the natural levees and in the backswamps. Galvez and Dupuy soils generally are near the crest of natural levees. The soils on the lower part of the natural levees and in the backswamps beyond the natural levees generally formed in more clayey parent materials that were deposited by slowly moving water or stagnant backwater. The Baldwin, Schriever, Harahan, Iberia, Fausse, and Barbary soils formed in these types of parent materials. The Larose and Bancker soils also formed in clayey alluvium, but they contain some marine sediments in the lower parts.

The soils of the terrace uplands formed in loess. They are very low in sand content, have medium fertility, and are loamy throughout. The Coteau, Duson, Jeanerette, and Kleinpeter soils formed in this moderately thick mantle of loess. The Jeanerette soils have a thick organic surface layer.

Organic material accumulates in areas that are continuously saturated or flooded. Water prevents the complete oxidation and decomposition of the plant residue. Water, vegetation, and time, coupled with a rise in sea level and land subsidence, created conditions where thick layers of organic material accumulated in the marshes of St. Mary Parish. (14) Until recent time, the buildup of organic material kept pace with land subsidence and sea level rise. The Kenner and Lafitte soils formed in thick accumulations of organic material from herbaceous hydrophytic plant remains. The Allemands and Clovelly soils formed in moderately thick accumulations of organic material from herbaceous hydrophytic plant remains over clayey alluvium.

Climate

St. Mary Parish has a humid subtropical climate characteristic of areas near the Gulf of Mexico. The warm, moist climate promotes rapid soil formation. Only slight variations in rainfall and temperature are throughout the parish. The minor climatic differences within the parish are not considered enough to create significant soil differences. The seasonal variations in the temperature of the air affect the temperature of the soil within the rooting zone. Soils in St. Mary Parish generally have a mean annual temperature in the rooting zone that is more than 72 degrees F because of a relatively high average winter air temperature. More specific information about the climate of St. Mary Parish is given in the section "General Nature of the Survey Area."

Plant and Animal Life

Plant and animal life include plants, bacteria, fungi, and animals, and are important in the formation of soils. Among the chemical and physical changes they cause are gains in content of plant nutrients and changes in structure and porosity. Plant roots force openings into the soil and help to increase porosity. As plant roots grow, they break up and rearrange the soil particles. Soil nutrients move from within the soil to plant tissues above the surface layer, and when they die, plant tissues are deposited on the surface of the soil. That organic matter slowly releases the nutrients back into the upper part of the soil. Bacteria and other micro-organisms decompose organic matter into humus compounds that help improve the physical condition of the soil. The native plants, and their associated complex communities of bacteria and fungi generally have a significant influence on soil formation in St. Mary Parish. Animals, such as crawfish and earthworms also influence soil formation by mixing the soil. Man's activities, such as cultivating crops, channel construction, burning, draining, diking, flooding, paving, and land smoothing, affect the soil. Some soils in St. Mary Parish, such as Harahan and Allemands, have been changed drastically through artificial drainage that de-watered and made firm the formerly semifluid clay layers in those soils. When animals die, they too decompose and enrich the soil with organic matter and nutrients.

Man's activities, such as cultivating, fertilizing, channel constructing, harvesting, burning, draining, diking, flooding, and land smoothing, affect the soil. Some soils in St. Mary Parish, such as drained areas of Barbary soils that are now mapped as Harahan soils, have been changed significantly.

The soils of the natural levees along streams formed under bottomland hardwood forest vegetation. Soils of the marsh formed under grass and sedge vegetation, and soils of the swamps formed under woody and herbaceous vegetation. (4,34) The organic layers present in soils in the hardwood swamps and freshwater marshes formed in organic material from freshwater woody and herbaceous hydrophytic plants. The

Maurepas and Kenner soils are examples. Freshwater marshes make up about 34 percent of St. Mary Parish. The Kenner-Allemands-Larose general soil map unit is in freshwater marshes. Areas of the coastal marsh that now are brackish actually formed under freshwater vegetation. Subsidence of the land and encroachment of seawater, the vegetation has changed to more saline tolerant grass and sedge types of vegetation. (14) Vegetation in these areas now typically consists of marshhay cordgrass, coastal waterhyssop, dwarf spikerush, olney bulrush, and saltmarsh bulrush. Examples of soils in the brackish marsh are the Bancker, Clovelly, and Lafitte soils. Brackish marshes make up about 2 percent of St. Mary Parish. The Clovelly-Lafitte-Bancker general soil map unit is in brackish marsh.

Relief

Relief and other physiographic features influence soil formation processes mainly by affecting internal soil drainage, runoff, erosion and deposition, salinity levels, and exposure to the sun and wind.

In St. Mary Parish sediment accumulated at a much faster rate than the erosion took place. This accumulation of sediment has occurred at a faster rate than many of the processes of soil formation. This is evident in the distinct stratification in lower horizons of some soils. Levee construction and other water-control measures may have reversed this trend for such soils as the Dupuy soils. Soil slope and rate of runoff on the alluvial soils are low enough that erosion is not a major problem. However, the slope and rate of runoff on the terrace uplands are high enough to be an erosion hazard.

The land surface of most of the parish is generally level or nearly level. The slope is dominantly less than 1 percent, except on the terrace uplands where slopes range up to 12 percent. Relief and the landscape position have influenced formation of the different soils. Characteristically, the slopes are generally short and irregular on the terrace uplands. Slopes on the natural levees are long and extend from the highest elevation on natural levees along bayous or distributary channels down to an elevation that is several feet lower in the swamps and marshes.

Differences in the Galvez, Schriever, and Allemands soils illustrate the influence of relief on the soils in the parish. Galvez soils are on the highest elevation, contain the least amount of clay, and have the best natural drainage. Schriever soils are on the lower parts of the natural levees, have a high content of clay, and are poorly drained. Allemands soils are in the lower positions, are very poorly drained, and are ponded most of the time unless they are artificially drained. Allemands soils have a moderately thick organic surface layer over clayey underlying material. Areas of Allemands soils that are protected by levees and drained now are at elevations below sea level because of subsidence.

The soils on lower positions on the landscape receive runoff from those on higher positions, and the soils remain saturated nearer to the surface for longer periods. In many areas, suitable outlets do not exist to allow the water to move out of these areas readily. Differences in the content of organic matter in the soils are related to the length of time the soils remain saturated, and consequently to relief. The content of organic matter generally increases as the length of time the soil remains saturated increases, and at some point, a layer of partially decomposed organic matter will begin to accumulate on the surface. Soils on higher positions on the landscape, such as the Galvez and Dupuy soils, have better surface runoff, internal drainage, and aeration. This allows more rapid and complete oxidation of organic matter to take place.

The overall surface elevation in St. Mary Parish relative to sea level is slowly changing. This is because the soils are on a low-lying, slowly subsiding landmass. Geologic investigations indicate that the overall area is very slowly decreasing in elevation. (5,14) Subsidence of the land mass is attributed in part to the continued accumulation in the Gulf of Mexico of sediments from the Mississippi River and lesser sources. The added weight of this sediment results in a continuous downwarping of the adjoining landmass. This process causes a general lowering of the landmass and a slight increase in the regional gulfward slope. In addition, post-depositional sediment compaction can result in some subsidence, and local deposition of sediment can contribute to similar but more localized changes.

Some possible effects of this natural geologic subsidence are apparent. For example, some soils that were subject only to intermittent flooding are now flooded more frequently and are covered with deeper water for longer periods. Some of the soils on natural levees along distributary channels have subsided to an elevation below sea level and are now covered with water most of the time. As the soils subside, sea water moves landward with each increment of subsidence. Consequently, some soils that were formerly in freshwater marshes are now in brackish marshes. In time, scouring and additional deposition from floodwaters and rising tides may alter former relief and landscape positions in some of the most affected areas. In many areas, natural and accelerated subsidence have lowered the elevation to such an extent that only lakes and ponds exist where land was once visible.

Subsidence and the resulting intrusions of salt water are accelerated by some of man's actions. Artificial drainage can cause organic soils to subside several feet in a short time. Also, ditches and channels dug for drainage or navigation purposes create courses for sea water to intrude inland for great distances. The increase in soil and water salinity has had a marked effect on marsh and swamp vegetation in some areas.

Time

Time influences the kinds of horizons and their degree of development. Long periods are generally required for prominent horizons to form.

In general, the soils of St. Mary Parish formed in various kinds of parent material, ranging in age from the most recent deposits along distributary channels and in swamps and marshes to the late Pleistocene sediments that form the core of the terrace uplands. Soils such as Schriever on the low to intermediate positions of the natural levees of streams have been influenced by soil-forming processes only long enough to have developed only faintly differentiated horizons. Development is evident mainly by development of structural aggregates and some illuviation of clay into the subsoil layer. Stratification that was present when the sediments were deposited is no longer evident and organic carbon has become more evenly distributed throughout the subsoil and substratum layers.

The soils on the older natural levees and on the terrace uplands have been influenced by time the longest and consequently have well developed B horizons with well developed structural aggregates and distinct illuviation of clay.

The youngest soils in the parish have little or no profile development. For example, the Bancker and Larose soils in coastal marshes formed in recent sediments, and the underlying material still shows evidence of stratification, and no structural aggregates have developed.

Processes of Soil Formation

The processes of soil formation influence the kind and degree of development of soil horizons. Important soil-forming processes are those that result in additions of organic, mineral, and gaseous materials to the soil; losses of these same materials from the soil; translocation of materials from one point to another within the soil; and physical and chemical transformation of mineral and organic material within the soil. (17)

Many processes occur simultaneously. Examples in the survey area include accumulation of organic matter, the development of soil structure, and the leaching of bases from some soil horizons. The contribution of a particular process can change with time. Drainage and water-control systems, for example, can change the length of time some soils are flooded or saturated with water. Some important processes that have contributed to the formation of the soils in St. Mary Parish are discussed in the following paragraphs.

Organic matter has accumulated, has partly decomposed, and has been incorporated into all the soils. The organic accumulations range from the humus in mineral horizons of the Galvez and Schriever soils to the organic horizons of the Kenner and Maurepas soils in the marshes and swamps. Because most of the organic matter is produced in and above the surface layer, the surface layer is higher in content of organic matter than the deeper horizons. Living organisms decompose, incorporate, and mix organic residue into the soil. Some of the more stable products contribute to darker colors, increased water-holding and cation-exchange capacities, and granulation of the soil.

Processes that result in development of soil structure have occurred in most of the mineral soils. Plant roots and other organisms contribute to the rearrangement of soil material into secondary aggregates. The decomposition products of organic residue and the secretions of organisms serve as cementing agents that help stabilize structural aggregates. Alternate wetting and drying as well as shrinking and swelling contribute to the development of structural aggregates and are particularly effective in soils that have appreciable amounts of clay. Consequently, soil structure is typically most pronounced in the surface horizon, which contains the most organic matter, and in clayey horizons that alternately undergo wetting and drying.

Most of the soils mapped in the parish have horizons in which reduction of iron and manganese compounds is an important process. Reducing conditions prevail for long periods in poorly aerated horizons. Consequently, the relatively soluble reduced forms of iron and manganese predominate over the less soluble oxidized forms. The reduced compounds of these elements produce the gray colors in the Bg and Cg horizons that are characteristic of many of the soils. In the more soluble reduced form, appreciable amounts of iron and manganese can be removed from the soils or translocated by water from one position to another within the soil. Reduced forms of iron and manganese not removed can be reoxidized upon development of oxidizing conditions in the soil. The presence of gray, yellow, or red masses indicates alternating oxidizing and reducing conditions in many of the soils.

Water moving through the soil has leached many soluble components from the upper horizon of some of the mineral soils in the parish. The components include any free carbonates that may have been present initially. The carbonates and other more readily soluble salts have been mostly leached from the soil or moved to lower horizons in the better drained, loamy soils, such as Dupuy soils. In general, the permanently wet soils of the marshes and swamps have rarely been leached.

Physiography and Surface Geology

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The surface of St. Mary Parish consists of deltaic and alluvial landforms created by the Mississippi and Red Rivers. Sediments deposited by the Mississippi River and, lesser extent Red River, during either the Late Pleistocene or Holocene epochs underlie the surface of this parish. Peoria Loess blankets the Late Pleistocene alluvial plains. On the basis of physiography and alluvial and deltaic landform, St. Mary Parish can be differentiated into four different regions as follows: (a) swamps and lakes of the Atchafalaya Basin, (b) the course and natural levees of Bayou Teche, (c) small fragments of Pleistocene alluvial plain, and (d) the partially submerged deltaic plain of the Teche Delta Lobe.

***Atchafalaya Basin*.—**The backswamps and lakes of the Atchafalaya Basin occupy the northern and northeastern edge of St. Mary Parish north of the relict natural levees of Bayou Teche. This part of St. Mary Parish typically consists of very poorly drained forest, swamp, lakes, and bayous. The wetlands are generally flat, being typically less than 5 feet above sea level in elevation within the Atchafalaya Basin. The highest parts of the Atchafalaya Basin within St. Mary Parish are the natural levees of the Atchafalaya Basin Main Channel, which in elevation are over 10 feet above sea level, and the spoil piles on them, which are in places over 25 feet above sea level. The natural levees of the numerous crevasse distributaries and splays, which channel floodwater from the Atchafalaya Basin Main Channel, are typically over 5 feet above sea level in elevation.

Ironically, the natural levees of the Atchafalaya Basin Main Channel and its crevasse distributaries and splays, which are now the highest part of the Atchafalaya Basin, occupy what was prior to 1940's open water of Grand Lake. In a period of 30 years, what had been among the deepest parts of Grand Lake has been filled by the Atchafalaya River to create the highest part of the Atchafalaya Basin. In fact, most of the Atchafalaya Basin within St. Mary Parish was once part of Grand Lake. (9,10)

The sediments underlying the Atchafalaya Basin consist of about 120 to 140 feet of complex interlayered beds of sediments deposited in backswamps and lakes. The backswamp deposits consist of massive, largely de-watered, highly compacted, blue-gray to brown silty clays and clay loams. Typically, the backswamp sediments are highly churned by the burrowing of animals and the action of plant roots. The lake deposits typically consist of black to brown, massive to laminated sandy to silty clay and clay loams. Often these sediments become more sandy or silty either close to the surface or on natural levees. Somewhere buried within these fine-grained sediments are the coarse-grained sediments of natural levee and point bar deposits associated with at least one buried course of the Mississippi River. The backswamp and lake deposits lie upon thick sands and sandy loams deposited by braided rivers. These rivers, which were fed by glacial meltwater, occupied the Mississippi River Valley 10,000 to 25,000 years ago when sea level was over 300 feet lower than today and large ice sheets covered large parts of North America. (12,16,26)

***Bayou Teche*.—**Bayou Teche, which cuts across St. Mary Parish, occupies a relict river course of the Mississippi and Red Rivers. The relict Mississippi River natural levees, between which Bayou Teche lies, are typically the highest land within St. Mary Parish except for Belle Isle and Cote Blanche Island. These natural levees are highest in the northwestern part of the Parish at the Iberia-St. Mary Parish line where they are about 3.5 miles wide and about 16 to 18 feet above sea level. Further south these natural levees decrease in width to about 2 to 2.5 miles at Franklin, Louisiana and 1 to 1.5 miles in the Patterson and Bayou Vista area. Similarly, the elevation of the natural levees decreases to just over 10 feet above sea level at Franklin and just over 5 feet above sea level at Bayou Vista. Smaller natural levee ridges extend at right angles from Bayou Teche. They represent relict crevasse distributaries of the Teche-Mississippi course. These ridges range in elevation from 1 to 12 feet above sea level. A set of arcuate ridges locally augments the high ground created by these relict Mississippi River natural levees between the northwest edge of Baldwin to about 2 miles northwest of Baldwin. These arcuate ridges are the surface of a relict point bar created by the local meandering of the Mississippi River when it occupied what is now Bayou Teche. (16,18)

Between 4,500 to 10,000 years ago, the Mississippi River occupied river courses lying along the western valley wall of the Mississippi Alluvial Valley. Older Mississippi River courses lie buried beneath the backswamp and lake sediments of the Atchafalaya Basin and their position within St. Mary Parish is uncertain. The relict Mississippi River course, now occupied by Bayou Teche and called the Teche-Mississippi course, is the youngest of these courses, having been created around 6,000 years ago. The Mississippi River abandoned it about 4,500 years ago as a result of an abrupt diversion of the Mississippi River within the Memphis region. It was between 4,500 to 6,000 years ago that deposition of silt and clay during annual flooding from the Mississippi River created the large natural levees, which now lie on either side of Bayou Teche. (16,35)

After the Mississippi River abandoned the Teche-Mississippi course, the Red River occupied it. During this time, the Red River deposited reddish colored sediments, which characterize it, between the now relict Mississippi River natural levees. The Red River filled the larger Mississippi River channel with its sediments and constructed a lower and narrower set of natural levees in places between it and the relict natural levees of the Mississippi River. Sometime between 1,800 to 2,000 years ago, the Red River abandoned the Teche-Mississippi River course, leaving it occupied by Bayou Teche. (16,35)

Pleistocene Alluvial Plain.—Three small fragments of Pleistocene alluvial plains occur within St. Mary Parish. They consist of one small remnant within the western part of the parish and the surface of Belle Isles and Cote Blanche Island. West to northwest of Sorrel a low ridge of Pleistocene alluvial plain extends less than 1.5 miles into St. Mary Parish from Iberia Parish. It lies largely between U.S. Highway 90 and the Southern Pacific tracks. It ranges in elevation from about 10 to just over 15 feet above sea level and is less than a mile in width. This fragment of Pleistocene alluvial plain is the southeastern edge of the loess-covered western valley wall of the Mississippi Alluvial Valley where it disappears beneath the sediments of the Teche Delta Lobe, as illustrated by Snead and McCulloh (fig. 26). (19)

The other two fragments of Pleistocene alluvial plain comprise Belle Isle and Cote Blanche Island. They consist of Pleistocene sediments uplifted by salt domes underlying them. Cote Blanche Island is a roughly circular, hilly island within the coastal marsh just under 2 miles wide and 1,600 acres in area. The highest part of Cote Blanche Island is 97 feet above sea level. Belle Isle consists of a smaller roughly triangular island, about a mile long, which rises above the surrounding coastal marsh. The main hill on its southwest end has an elevation of about 78 feet above sea level and is about 240 acres in area. The surface of each island consists of loess-covered Pleistocene alluvial sediments. The forested soils on salt domes have the highest elevations and the steepest slopes (5 to 20 percent) and are the most severely eroded of any of the soils in the parish. In topography, they present a striking contrast to the surrounding low areas of marshlands. (3,13)

The Pleistocene alluvial plain consists of Peoria Loess overlying Late Pleistocene alluvial sediments. The Late Pleistocene sediments consist of coarse- to fine-grained fluvial sediments. The coarse-grained sediments, which typically consist of light gray sand and sandy loams, likely were deposited by rivers as point bars in meander belts. The fine-grained sediments, which typically consist of light gray clay, sandy clay, and clay loam, likely accumulated within flood basins between these meander belts. Within Belle Isle and Cote Blanche Island, the Pleistocene alluvium has been badly fractured and sheared by uplift by underlying salt domes. (3)

Overlying the Pleistocene alluvium is a blanket of silt loam called the Peoria Loess. This layer of silt loam, typically 2 to 6 feet thick, consists of sediment blown by prevailing winds out of the Mississippi River Alluvial Valley from glacial braided river systems channeling meltwater from the ice sheets covering Canada and the northern and midwestern parts of the United States. The Peoria Loess accumulated between 11,000 to 25,000 years ago. Within Belle Isle and Cote Blanche Island, it has been deeply eroded and redeposited as colluvial deposits and in gully fills on sideslopes. Also, within these islands, the uplift of these islands by salt tectonics has also fractured and sheared the Peoria Loess. (3)

Teche Delta Lobe.—South of the relict natural levees of Bayou Teche, St. Mary Parish consists of the partially submerged deltaic plain of the Teche Delta Lobe except for Belle Isle and Cote Blanche Island. The coastal marshes that occupy the surface of this delta lobe extend 8 to 12 miles inland from the gulf. They cover a broad plain of low relief that has an imperceptible slope toward the gulf. In general, elevations range from level in the southern part of the marshes to 1 or 2 feet in the northern and interior parts. The low natural levees along the tidal channels and large streams within the marshes rise to elevations of 1 foot or less above the marshes. These coastal marshes are frequently flooded by tides and overflow from the many lakes, bayous, and canals. Water is on or near the surface of the soil much of the year. Tidal waters regularly flood some part of the coastal marshes to a depth of as much as 18 inches. Occasional storm tides cover some areas with as much as 6 feet of water.

Bayou Cypremont and Bayou Sale, distributaries of the Teche Delta Lobe, divide the flat coastal marshes into three segments. Bayou Cypremont zigzags for about 18 miles from the Home Place Plantation to Cypremont Point on Vermilion Bay. The natural levees of Bayou Cypremont decrease in width and size as it approaches Vermilion Bay. For example, the elevation of its natural levees drops from about 16 feet at its northeast end to just over 10 feet above sea level at Kemper; just over 5 feet in elevation at Cypremont; and sea level where it disappears beneath Vermilion Bay. Bayou Sale meanders southwestward from the relict natural levees of Bayou Tech for a distance of about 17 miles. Like Bayou Cypremont, the width and elevation of its natural levees decrease away from Bayou Teche. It drops in elevation from about 9 feet above sea level at the post office of Bayou Sale to between 2 to just over 5 feet above sea level where it ends at Bayou Sale Bay.

The Teche Delta Lobe is the oldest delta lobe of the Mississippi Delta that remains above sea level. It was created by the Mississippi River when it occupied the present course of Bayou Teche around 4,500 to 6,000 years ago. During this time, the Mississippi River deposited fine-grained deltaic sediment as a thin seaward thickening prism of deltaic sediments over older Holocene deltaic sediments and loess-covered Pleistocene alluvial deposits to create the Teche Delta Lobe. These deltaic sediments consist of gray to black interbedded soft, organic-rich clays, mucks, and peat that grade downward into soft gray clays containing silt lenses and brackish water to marine shells. (5)

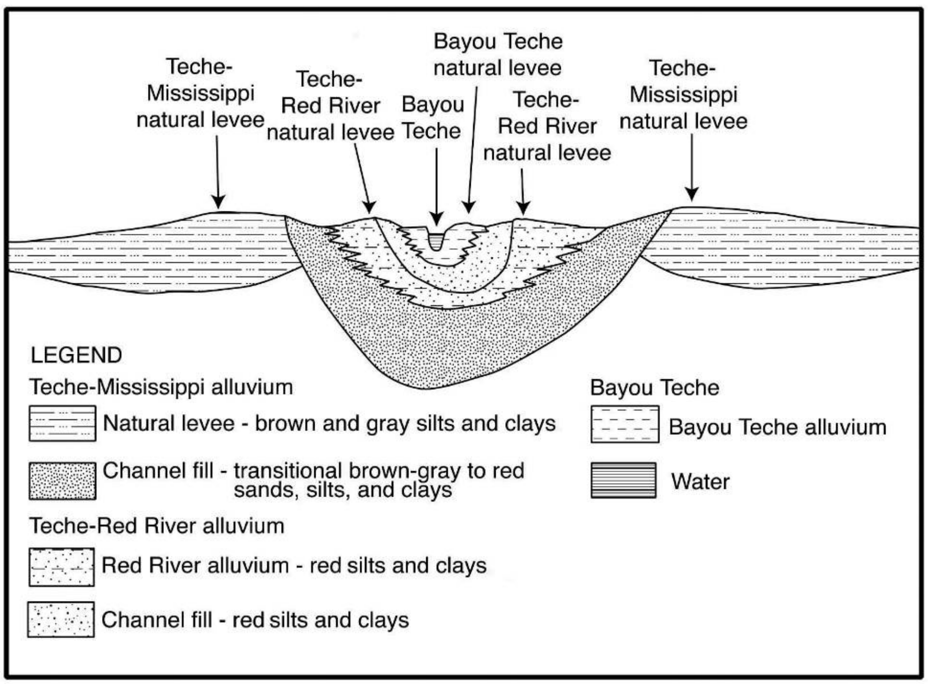

Figure 26.—Schematic cross-section of Teche-Mississippi and Teche-Red River deposits as St. Martinsville, Louisiana. Modified and redrawn from figure courtesy of Coastal Studies Institute, Louisiana State University, Baton Rouge, Louisiana.

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Glossary

Many of the terms relating to landforms, geology, and geomorphology are defined in more detail in the "National Soil Survey Handbook" (30), available in local offices of the Natural Resources Conservation Service or on the Internet.

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alluvium. Unconsolidated material, such as gravel, sand, silt, clay, and various mixtures of these, deposited on land by running water.

Alpha, alpha-dipyridyl. A compound that when dissolved in ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction implies reducing conditions and the likely presence of redoximorphic features.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Aspect. The direction toward which a slope faces. Also called slope aspect.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity). The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3
Low	3 to 6
Moderate	6 to 9
High	9 to 12
Very high	more than 12

Backswamp. A flood-plain landform. Extensive, marshy or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

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 plane. A planar or nearly planar bedding surface that visibly separates each successive layer of stratified sediment or rock (of the same or different lithology) from the preceding or following layer; a plane of deposition. It commonly marks a change in the circumstances of deposition and may show a parting, a color difference, a change in particle size, or various combinations of these. The term is commonly applied to any bedding surface, even one that is conspicuously bent or deformed by folding.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

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. An informal term loosely applied to various portions of a flood plain.

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

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

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 and under similar climatic conditions but that 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.

Cement rock. Clayey limestone used in the manufacture of cement.

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 wide. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. See Redoximorphic features.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A dense, compact, slowly permeable subsoil layer that contains much more clay than the overlying materials, from which it is separated by a sharply defined boundary. A claypan is commonly hard when dry and plastic and sticky when wet.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded or partly rounded fragment of rock 3 to 10 inches (7.6 to 25 centimeters) wide.

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

Colluvium. Unconsolidated, unsorted earth material being transported or deposited on side slopes and at the base of slopes by mass movement (e.g., direct gravitational action) and by local, unconcentrated runoff.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

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

Concretions. 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 compounds making up concretions. See Redoximorphic features.

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

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

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

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but for many it is that part of the soil profile between depths of 10 inches (25 centimeters) and 40 to 80 inches (102 to 203 centimeters).

Corrosion (geomorphology). A process of erosion whereby rocks and soil are removed or worn away by natural chemical processes, especially by the solvent action of running water, but also by other reactions, such as hydrolysis, hydration, carbonation, and oxidation.

Corrosion (soil survey interpretations). Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

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 fan shaped and nearly flat; deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer (in tables)**.** A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches (152 centimeters) deep over bedrock; deep soils, 40 to 60 inches (102 to 152 centimeters); moderately deep, 20 to 40 inches (51 to 102 centimeters);

shallow, 10 to 20 inches (25 to 51 centimeters); and very shallow, less than 10 inches (25 centimeters).

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

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—*excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained*, and *very poorly drained*. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. A general term for a course or channel along which water moves in draining an area. A term restricted to relatively small, linear depressions that at some time move concentrated water and either do not have a defined channel or have only a small defined channel.

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.

Earthy fill. See Mine spoil.

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

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

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

Eolian deposit. Sand-, silt-, or clay-sized clastic material transported and deposited primarily by wind, commonly in the form of a dune or a sheet of sand or loess.

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 (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 (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 surface. A land surface shaped by the action of erosion, especially by running water.

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.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the ovendry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity, normal moisture capacity,* or *capillary capacity*.

Fine textured soil. Sandy clay, silty clay, or clay.

First bottom. An obsolete, informal term loosely applied to the lowest flood-plain steps that are subject to regular flooding.

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

Flood-plain landforms. A variety of constructional and erosional features produced by stream channel migration and flooding. Examples include backswamps, flood-plain splays, meanders, meander belts, meander scrolls, oxbow lakes, and natural levees.

Flood-plain splay. A fan-shaped deposit or other outspread deposit formed where an overloaded stream breaks through a levee (natural or artificial) and deposits its material (commonly coarse grained) on the flood plain.

Flood-plain step. An essentially flat, terrace-like alluvial surface within a valley that is frequently covered by floodwater from the present stream; any approximately horizontal surface still actively modified by fluvial scour and deposition. May occur individually or as a series of steps.

Fluvial. Of or pertaining to rivers or streams; produced by stream or river action.

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

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

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

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) wide. An individual piece is a pebble.

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.

Hard to reclaim (in tables)**.** Reclamation is difficult after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

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.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. An explanation of the subdivisions is given in the "Soil Survey Manual." The major horizons of mineral soil are as follows:

O horizon.—An organic layer of fresh and decaying plant residue.

L horizon.—A layer of organic and mineral limnic materials, including coprogenous earth (sedimentary peat), diatomaceous earth, and marl.

A horizon.—The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.—The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.—The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.—The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

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

Interfluve. A landform composed of the relatively undissected upland or ridge between two adjacent valleys containing streams flowing in the same general direction. An elevated area between two drainageways that sheds water to those drainageways.

Interfluve (geomorphology). A geomorphic component of hills consisting of the uppermost, comparatively level or gently sloping area of a hill; shoulders of backwearing hillslopes can narrow the upland or can merge, resulting in a strongly convex shape.

Intermittent stream. A stream, or reach of a stream, that does not flow year-round but that is commonly dry for 3 or more months out of 12 and whose channel is generally below the local water table. It flows only during wet periods or when it receives ground-water discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Iron depletions. See Redoximorphic features.

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

Basin.—Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Controlled flooding.—Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Knoll. A small, low, rounded hill rising above adjacent landforms.

K-sat. Saturated hydraulic conductivity. (See Permeability.)

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lake plain. A nearly level surface marking the floor of an extinct lake filled by well sorted, generally fine textured, stratified deposits, commonly containing varves.

Lake terrace. A narrow shelf, partly cut and partly built, produced along a lakeshore in front of a scarp line of low cliffs and later exposed when the water level falls.

Large stones (in tables)**.** Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

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

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

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 strength. The soil is not strong enough to support loads.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

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. See Redoximorphic features.

Meander belt. The zone within which migration of a meandering channel occurs; the flood-plain area included between two imaginary lines drawn tangential to the outer bends of active channel loops.

Meander scar. A crescent-shaped, concave or linear mark on the face of a bluff or valley wall, produced by the lateral erosion of a meandering stream that impinged upon and undercut the bluff.

Meander scroll. One of a series of long, parallel, close-fitting, crescent-shaped ridges and troughs formed along the inner bank of a stream meander as the channel migrated laterally down-valley and toward the outer bank.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Mine spoil. An accumulation of displaced earthy material, rock, or other waste material removed during mining or excavation. Also called earthy fill.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. A kind of map unit that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance—*few, common*, and *many; size—fine, medium*, and *coarse*; and *contrast—faint, distinct,* and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch)*; medium,* from 5 to 15 millimeters (about 0.2 to 0.6 inch)*;* and *coarse,* more than 15 millimeters (about 0.6 inch).

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.

n-value. The *n* value characterizes the relation between the percentage of water in a soil under field conditions and its percentages of inorganic clay and humus. The *n* value is helpful in predicting whether a soil can be grazed by livestock or can support other loads and in predicting what degree of subsidence would occur after drainage.

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. See Redoximorphic features.

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

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

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

Outwash plain. A landform of mainly sandy or coarse textured material of glaciofluvial origin. An outwash plain is commonly smooth; where pitted, it generally is low in relief.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan, fragipan, claypan, plowpan*, and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pedon. The smallest volume that can be called "a soil." A pedon is three-dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The movement of water through the soil.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Impermeable	less than 0.0015 inch
Very slow	0.0015 to 0.06 inch
Slow	0.06 to 0.2 inch
Moderately slow	0.2 to 0.6 inch
Moderate	0.6 inch to 2.0 inches
Moderately rapid	2.0 to 6.0 inches
Rapid	6.0 to 20 inches
Very rapid	more than 20 inches

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

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

Piping (in tables)**.** Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Pitting (in tables)**.** Pits caused by melting around ice. They form on the soil after plant cover is removed.

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

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

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Pore linings. See Redoximorphic features.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed as pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline	7.4 to 7.8
Moderately alkaline	7.9 to 8.4
Strongly alkaline	8.5 to 9.0
Very strongly alkaline	9.1 and higher

Red beds. Sedimentary strata that are mainly red and are made up largely of sandstone and shale.

Redoximorphic concentrations. See Redoximorphic features.

Redoximorphic depletions. See Redoximorphic features.

Redoximorphic features. Redoximorphic features are associated with wetness and result from alternating periods of reduction and oxidation of iron and manganese compounds in the soil. Reduction occurs during saturation with water, and oxidation occurs when the soil is not saturated. Characteristic color patterns are created by these processes. The reduced iron and manganese ions may be removed from a soil if vertical or lateral fluxes of water occur, in which case there is no iron or manganese precipitation in that soil. Wherever the iron and manganese are oxidized and precipitated, they form either soft masses or hard concretions or nodules. Movement of iron and manganese as a result of redoximorphic processes in a soil may result in redoximorphic features that are defined as follows:

1. Redoximorphic concentrations.—These are zones of apparent accumulation of iron and manganese oxides, including:
   a. Nodules and concretions, which are cemented bodies that can be removed from the soil intact. Concretions are distinguished from nodules on the basis of internal organization. A concretion typically has concentric layers that are visible to the naked eye. Nodules do not have visible organized internal structure; and
   b. Masses, which are noncemented concentrations of substances within the soil matrix; and
   c. Pore linings, i.e., zones of accumulation along pores that may be either coatings on pore surfaces or impregnations from the matrix adjacent to the pores.

2. Redoximorphic depletions.—These are zones of low chroma (chromas less than those in the matrix) where either iron and manganese oxides alone or both iron and manganese oxides and clay have been stripped out, including:
   a. Iron depletions, i.e., zones that contain low amounts of iron and manganese oxides but have a clay content similar to that of the adjacent matrix; and
   b. Clay depletions, i.e., zones that contain low amounts of iron, manganese, and clay (often referred to as silt coatings or skeletans).
3. Reduced matrix.—This is a soil matrix that has low chroma *in situ* but undergoes a change in hue or chroma within 30 minutes after the soil material has been exposed to air.

Reduced matrix. See Redoximorphic features.

Relief. The relative difference in elevation between the upland summits and the lowlands or valleys of a given region.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as bedrock disintegrated in place.

Rill. A very small, steep-sided channel resulting from erosion and cut in unconsolidated materials by concentrated but intermittent flow of water. A rill generally is not an obstacle to wheeled vehicles and is shallow enough to be smoothed over by ordinary tillage.

Riser. The vertical or steep side slope (e.g., escarpment) of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural, steplike landforms, such as successive stream terraces.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Root zone. The part of the soil that can be penetrated by plant roots.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called ground-water runoff or seepage flow from ground water.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters wide. 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.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saturated hydraulic conductivity (K-sat). See Permeability.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

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.

Shrink-swell (in tables)**.** The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Side slope (geomorphology). A geomorphic component of hills consisting of a laterally planar area of a hillside. The overland waterflow is predominantly parallel. Side slopes are dominantly colluvium and slope-wash sediments.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silt. As a soil separate, individual mineral particles that range wide 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.

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

Slickensides (pedogenic). Grooved, striated, and glossy (shiny) slip faces on structural peds, such as wedges; produced by shrink-swell processes, most commonly in soils that have a high content of expansive clays.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 3 percent is a drop of 3 feet in 100 feet of horizontal distance.

Slow refill (in tables)**.** The slow filling of ponds, resulting from restricted permeability in the soil.

Sodic (alkali) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^{+} to $Ca^{++} + Mg^{++}$. The degrees of sodicity and their respective ratios are:

Slight	less than 13:1
Moderate	13-30:1
Strong	more than 30:1

Sodium adsorption ratio (SAR). A measure of the amount of sodium (Na) relative to calcium (Ca) and magnesium (Mg) in the water extract from saturated soil paste. It is the ratio of the Na concentration divided by the square root of one-half of the Ca + Mg concentration.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief and by the passage of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Strath terrace. A type of stream terrace; formed as an erosional surface cut on bedrock and thinly mantled with stream deposits (alluvium).

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel, originally formed near the level of the stream;

represents the remnants of an abandoned flood plain, stream bed, or valley floor produced during a former state of fluvial erosion or deposition.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to wind erosion and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are—*platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless soils are either single grained* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

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. See Underlying material.

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."

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terrace (conservation). An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field generally is built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geomorphology). A steplike surface, bordering a valley floor or shoreline, that represents the former position of a flood plain, lake, or seashore. The term is usually applied both to the relatively flat summit surface (tread) that was cut or built by stream or wave action and to the steeper descending slope (scarp or riser) that has graded to a lower base level of erosion.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand, loamy sand, sandy loam, loam, silt loam, silt, sandy clay loam, clay loam, silty clay loam, sandy clay, silty clay,* and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables)**.** Otherwise suitable soil material that is too thin for the specified use.

Tier. The control section of Histosols is divided somewhat arbitrarily into three tiers—surface, subsurface, and bottom tier.

Surface Tier. The surface tier of a Histosol or Histel extends from the soil surface to a depth of 60 cm if either (1) the materials within that depth are fibric and three-fourths or more of the fiber volume is derived from Sphagnum or other mosses or

(2) the materials have a bulk density of less than 0.1. Otherwise, the surface tier extends from the soil surface to a depth of 30 cm. Some organic soils have a mineral surface layer less than 40 cm thick as a result of flooding, volcanic eruptions, additions of mineral materials to increase soil strength or reduce the hazard of frost, or other causes. If such a mineral layer is less than 30 cm thick, it constitutes the upper part of the surface tier; if it is 30 to 40 cm thick, it constitutes the whole surface tier and part of the subsurface tier.

Subsurface Tier. The subsurface tier is normally 60 cm thick. If the control section ends at a shallower depth (at a densic, lithic, or paralithic contact or a water layer or in permafrost), however, the subsurface tier extends from the lower boundary of the surface tier to the lower boundary of the control section. It includes any unconsolidated mineral layers that may be present within those depths.

Bottom Tier. The bottom tier is 40 cm thick unless the control section has its lower boundary at a shallower depth (at a densic, lithic, or paralithic contact or a water layer or in permafrost).Thus, if the organic materials are thick, there are two possible thicknesses of the control section, depending on the presence or absence and the thickness of a surface mantle of fibric moss or other organic material that has a low bulk density (less than 0.1). If the fibric moss extends to a depth of 60 cm and is the dominant material within this depth (three-fourths or more of the volume), the control section is 160 cm thick. If the fibric moss is thin or absent, the control section extends to a depth of 130 cm.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

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

Tread. The flat to gently sloping, topmost, laterally extensive slope of terraces, flood-plain steps, or other stepped landforms; commonly a recurring part of a series of natural steplike landforms, such as successive stream terraces.

Tuff. A generic term for any consolidated or cemented deposit that is 50 percent or more volcanic ash.

Upland. An informal, general term for the higher ground of a region, in contrast with a low-lying adjacent area, such as a valley or plain, or for land at a higher elevation than the flood plain or low stream terrace; land above the footslope zone of the hillslope continuum.

Underlying material. The part of the soil below the solum.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an ovendry basis, at which a plant (specifically a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

Tables

Table 1.--Temperature and Precipitation

(Recorded in the period 1971-2000 at Morgan City, LA)

Month	Temperature: Average daily maximum	Temperature: Average daily minimum	Temperature: Average	Temperature: 2 years in 10 will have-- Maximum temperature higher than--	Temperature: 2 years in 10 will have-- Minimum temperature lower than--	Temperature: Average number of growing degree days*	Precipitation: Average	Precipitation: 2 years in 10 will have-- Less than--	Precipitation: 2 years in 10 will have-- More than--	Precipitation: Average number days with 0.10 inch or more
	°F	°F	°F	°F	°F	Units	In	In	In	
January-----	61.5	43.0	52.3	78	23	156	5.81	2.53	8.61	7
February----	64.6	45.4	55.0	80	27	187	4.39	1.68	6.65	5
March-------	70.7	52.4	61.6	82	32	368	4.70	2.41	6.69	5
April-------	76.7	58.6	67.7	87	43	532	4.22	1.06	6.74	4
May---------	83.0	66.6	74.8	91	54	768	5.37	1.74	8.35	5
June--------	87.9	72.2	80.0	95	63	897	5.91	2.76	8.63	7
July--------	89.8	74.0	81.9	97	68	970	7.60	4.56	10.32	10
August------	89.9	73.6	81.8	97	67	960	7.40	4.14	10.28	10
September---	86.7	70.3	78.5	95	54	853	6.54	3.23	9.41	8
October-----	79.9	60.7	70.3	90	44	621	3.65	1.31	5.60	4
November----	71.3	51.8	61.6	86	34	360	5.07	1.91	7.71	5
December----	64.4	45.3	54.8	80	24	212	4.80	2.68	6.68	5
Yearly:										
Average---	77.2	59.5	68.4	---	---	---	---	---	---	---
Extreme---	102	10	---	98	19	---	---	---	---	---
Total-----	---	---	---	---	---	6,885	65.47	53.41	76.15	75

* 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).

Table 2.--Freeze Dates in Spring and Fall

(Recorded in the period 1971-2000 at Morgan City, LA)

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--	February 9	February 21	March 1
2 years in 10 later than--	January 20	February 8	February 19
5 years in 10 later than--	----------	December 29	January 25
First freezing temperature in fall			
1 year in 10 earlier than--	December 29	December 9	November 28
2 years in 10 earlier than--	January 9	December 20	December 5
5 years in 10 earlier than--	----------	January 15	December 19

Table 3.--Growing Season

(Recorded for the period 1971-2000 at Morgan City, LA)

Probability	Daily Minimum Temperature During Growing Season: Number of days higher than 24° F	Number of days higher than 28° F	Number of days higher than 32° F
	Days	Days	Days
9 years in 10	363	307	283
8 years in 10	> 365	330	299
5 years in 10	> 365	> 365	345
2 years in 10	> 365	> 365	> 365
1 year in 10	> 365	> 365	> 365

Table 4.--Acreage and Proportionate Extent of the Soils

Map symbol	Soil name	Acres	Percent
AEA	Allemands muck, very frequently flooded	24,575	5.6
ATA	Aquents, dredged	1,831	0.4
ATB	Aquents, dredged, 1 to 5 percent slopes, occasionally flooded	19,687	4.5
BdA	Baldwin silty clay loam, 0 to 1 percent slopes	42,035	9.5
BEA	Balize silt loam, very frequently flooded	14,957	3.4
BNA	Bancker muck, tidal	664	0.2
BRA	Barbary muck, frequently flooded	37,845	8.6
CoA	Coteau silt, 0 to 1 percent slopes	1,030	0.2
CvA	Carville and Hydraquents soils, undulating, flooded	12,096	2.7
CYA	Clovelly muck, very frequently flooded	4,156	0.9
DP	Dumps	856	0.2
DrA	Dupuy silt loam, 0 to 1 percent slopes	3,044	0.7
DsA	Dupuy silt loam, 0 to 1 percent slopes, occasionally flooded	1,156	0.3
DuD	Duson silt, 5 to 12 percent slopes	930	0.2
FAA	Fausse soils, frequently flooded	5,483	1.2
GaA	Galvez silt loam, 0 to 1 percent slopes	10,832	2.4
GxA	Uderts and Glenwild soils, 0 to 3 percent slopes, smoothed	6,415	1.5
HRA	Harahan clay	7,540	1.7
HSA	Harahan and Allemands soils, drained	8,379	1.9
HYA	Hydraquents, Carville, and Glenwild soils, undulating, flooded	13,773	3.1
IbA	Iberia clay, 0 to 1 percent slopes	24,851	5.6
IEA	Iberia clay, frequently flooded	1,146	0.3
JaA	Jeanerette silt loam, 0 to 1 percent slopes	936	0.2
KEA	Kenner muck, very frequently flooded	40,933	9.3
KpC	Kleinpeter silt, 1 to 5 percent slopes	675	0.2
LAA	Lafitte muck, very frequently flooded	1,809	0.4
LEA	Larose muck, very frequently flooded	29,297	6.6
LoA	Loreauville silt loam, 0 to 1 percent slopes	2,254	0.5
M-W	Miscellaneous water	54	*
MAA	Maurepas muck, frequently flooded	43,742	9.9
PaA	Patoutville silt, 0 to 1 percent slopes	549	0.1
ShA	Schriever clay, 0 to 1 percent slopes	17,337	3.9
SIA	Schriever clay, frequently flooded	13,234	3.0
UB	Urban land	1,303	0.3
UD	Udorthents, 1 to 20 percent slopes	2,689	0.6
W	Water	44,307	10.0
	Total	442,400	100.0

* Less than 0.1 percent.

Table 5.--Prime Farmland

(Only the soils considered prime farmland are listed. Urban or built-up areas of the soils listed are not considered prime farmland.

Map Symbol	Map unit name
BdA	Baldwin silty clay loam, 0 to 1 percent slopes
CoA	Coteau silt, 0 to 1 percent slopes
DrA	Dupuy silt loam, 0 to 1 percent slopes
DsA	Dupuy silt loam, 0 to 1 percent slopes, occasionally flooded
GaA	Galvez silt loam, 0 to 1 percent slopes
GxA	Uderts and Glenwild soils, 0 to 3 percent slopes, smoothed
HRA	Harahan clay
IbA	Iberia clay, 0 to 1 percent slopes
JaA	Jeanerette silt loam, 0 to 1 percent slopes
KpC	Kleinpeter silt, 1 to 5 percent slopes
LoA	Loreauville silt loam, 0 to 1 percent slopes
PaA	Patoutville silt, 0 to 1 percent slopes
ShA	Schriever clay, 0 to 1 percent slopes

Table 6.--Nonirrigated Yields by Map Unit Component

(Yields are those that can be expected under a high level of management. They are for nonirrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.)

Map symbol and Soil name	Land capability	Bahiagrass	Common bermudagrass	Corn	Grain sorghum	Sugarcane
		AUM	AUM	Bu	Bu	Tons
AEA:						
Allemands	8w	---	---	---	---	---
ATA:						
Aquents	---	---	---	---	---	---
ATB:						
Aquents	---	---	---	---	---	---
BdA:						
Baldwin	3w	8.00	7.00	---	---	30.00
BEA:						
Balize	8w	---	---	---	---	---
BNA:						
Bancker	8w	---	---	---	---	---
BRA:						
Barbary	8w	---	---	---	---	---
CoA:						
Coteau	2w	6.50	5.50	---	---	30.00
CvA:						
Carville	5w	---	6.50	---	---	---
Hydraquents	8w	---	---	---	---	---
CYA:						
Clovelly	8w	---	---	---	---	---
DP:						
Dumps	---	---	---	---	---	---
DrA:						
Dupuy	2w	---	---	85.00	---	---
DsA:						
Dupuy	3w	---	---	---	---	---
DuD:						
Duson	4e	6.00	5.00	---	---	---
FAA:						
Fausse	7w	---	---	---	---	---
GaA:						
Galvez	2w	10.00	6.50	90.00	---	31.00
GxA:						
Uderts	3w	---	6.00	---	70.00	26.00
Glenwild	2e	9.50	7.00	80.00	---	31.00

Table 6.--Nonirrigated Yields by Map Unit Component--Continued

Map symbol and Soil name	Land capability	Bahiagrass	Common bermudagrass	Corn	Grain sorghum	Sugarcane
		AUM	AUM	Bu	Bu	Tons
HRA:						
Harahan	3w	---	10.00	---	---	---
HSA:						
Harahan	3w	---	10.00	---	---	---
Allemands	4w	---	9.00	---	---	---
HYA:						
Hydraquents	8w	---	---	---	---	---
Carville	5w	---	6.50	---	---	---
Glenwild	5w	8.50	6.00	---	---	---
IbA:						
Iberia	3w	---	6.50	---	---	26.00
IEA:						
Iberia	5w	---	5.50	---	---	---
JaA:						
Jeanerette	2w	6.50	6.10	---	---	30.00
KEA:						
Kenner	8w	---	---	---	---	---
KpC:						
Kleinpeter	2e	---	7.50	95.00	---	---
LAA:						
Lafitte	8w	---	---	---	---	---
LEA:						
Larose	8w	---	---	---	---	---
LoA:						
Loreauville	2w	---	8.00	95.00	---	30.00
M-W:						
Water, small	---	---	---	---	---	---
MAA:						
Maurepas	8w	---	---	---	---	---
PaA:						
Patoutville	2w	7.00	5.50	---	---	30.00
ShA:						
Schriever	3w	---	8.00	---	---	30.00
SIA:						
Schriever	5w	---	6.50	---	---	---
UB:						
Urban land	---	---	---	---	---	---

Table 6.--Nonirrigated Yields by Map Unit Component--Continued

Map symbol and Soil name	Land capability	Bahiagrass	Common bermudagrass	Corn	Grain sorghum	Sugarcane
		AUM	AUM	Bu	Bu	Tons
UD:						
Udorthents	---	---	---	---	---	---
W:						
Water, large	---	---	---	---	---	---

Table 7.--Forestland Productivity

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
AEA:				
Allemands	---	---	---	---
ATA:				
Aquents	---	---	---	---
ATB:				
Aquents	---	---	---	---
BdA:				
Baldwin	green ash	---	0	American sycamore, eastern cottonwood, sweetgum
	Nuttall oak	90	86	
	pecan	---	0	
	sweetgum	---	0	
	water oak	80	57	
	willow oak	90	100	
BEA:				
Balize	---	---	---	---
BNA:				
Bancker	---	---	---	---
BRA:				
Barbary	baldcypress	80	57	baldcypress
	black willow	---	0	
	water tupelo	60	86	
CoA:				
Coteau	cherrybark oak	100	157	loblolly pine, slash pine
	loblolly pine	90	114	
	slash pine	---	0	
	water oak	90	86	
CvA:				
Carville	eastern cottonwood	---	0	American sycamore, eastern cottonwood
	Nuttall oak	105	143	
	overcup oak	---	0	
	sugarberry	---	0	
	water hickory	---	0	
Hydraquents	baldcypress	80	57	baldcypress
	black willow	60	86	
	water tupelo	---	0	
CYA:				
Clovelly	---	---	---	---
DP:				
Dumps	---	---	---	---
DrA:				
Dupuy	cherrybark oak	105	172	cherrybark oak, eastern cottonwood, sweetgum, tuliptree, water oak
	eastern cottonwood	100	129	
	sweetgum	100	143	
	water oak	95	86	

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
DsA:				
Dupuy	cherrybark oak	105	172	cherrybark oak, eastern cottonwood, sweetgum, tuliptree, water oak
	eastern cottonwood	100	129	
	sweetgum	100	143	
	water oak	95	86	
DuD:				
Duson	cherrybark oak	90	157	loblolly pine, Shumard's oak, slash pine, water oak
	loblolly pine	90	114	
	slash pine	---	0	
	water oak	90	86	
FAA:				
Fausse	baldcypress	96	86	baldcypress
	black willow	---	0	
	overcup oak	---	0	
	red maple	---	0	
	water hickory	---	0	
	water tupelo	---	0	
GaA:				
Galvez	American sycamore	90	57	eastern cottonwood, sweetgum
	eastern cottonwood	110	172	
	green ash	80	86	
	Nuttall oak	---	---	
	pecan	---	0	
	sweetgum	90	100	
GxA:				
Uderts	American sycamore	---	0	green ash, Nuttall oak, sweetgum, water oak
	green ash	90	57	
	honeylocust	---	0	
	Nuttall oak	---	0	
	sugarberry	---	0	
	sweetgum	75	72	
	water oak	90	86	
	willow oak	---	0	
Glenwild	American sycamore	80	57	American sycamore, eastern cottonwood
	cherrybark oak	100	129	
	eastern cottonwood	83	86	
	green ash	---	0	
	pecan	---	0	
	sweetgum	---	0	
	water oak	95	129	
HRA:				
Harahan	---	---	---	---
HSA:				
Harahan	---	---	---	---
Allemands	---	---	---	---

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
DsA:				
Dupuy	cherrybark oak	105	172	cherrybark oak, eastern cottonwood, sweetgum, tuliptree, water oak
	eastern cottonwood	100	129	
	sweetgum	100	143	
	water oak	95	86	
IbA:				
Iberia	eastern cottonwood	95	114	eastern cottonwood, sweetgum
	green ash	80	57	
	sweetgum	90	100	
IEA:				
Iberia	eastern cottonwood	90	100	eastern cottonwood, sweetgum
	green ash	70	43	
	sweetgum	80	86	
JaA:				
Jeanerette	American sycamore	---	0	green ash, Nuttall oak, water oak
	cherrybark oak	90	114	
	eastern cottonwood	120	186	
	green ash	80	57	
	pecan	---	0	
	water oak	---	0	
KEA:				
Kenner	---	---	---	---
KpC:				
Kleinpeter	cherrybark oak	105	172	cherrybark oak, loblolly pine
	loblolly pine	100	143	
	sweetgum	90	100	
LAA:				
Lafitte	---	---	---	---
LEA:				
Larose	---	---	---	---
LoA:				
Loreauville	American sycamore	---	0	eastern cottonwood
	cherrybark oak	120	0	
	eastern cottonwood	80	57	
	green ash	---	0	
	pecan	---	0	
	water oak	90	57	
M-W:				
Water, small	---	---	---	---
MAA:				
Maurepas	---	---	---	---

Table 7.--Forestland Productivity--Continued

Map symbol and soil name	Potential productivity: Common trees	Site index	Volume of wood fiber	Trees to manage
			cu ft/ac	
PaA:				
Patoutville	loblolly pine	95	143	loblolly pine, slash pine
	slash pine	95	172	
	sweetgum	86	100	
	cherrybark oak	93	129	
	water oak	---	0	
	willow oak	---	---	
ShA:				
Schriever	green ash	98	0	green ash, Nuttall oak
	Nuttall oak	---	100	
	overcup oak	---	---	
	sugarberry	---	0	
	sweetgum	---	0	
	water hickory	---	---	
SIA:				
Schriever	baldcypress	---	---	baldcypress
	black willow	---	---	
	green ash	90	0	
	overcup oak	96	---	
	sugarberry	---	0	
	sweetgum	---	0	
	water hickory	---	---	
UB:				
Urban land	---	---	---	---
UD:				
Udorthents	---	---	---	---
W:				
Water, large	---	---	---	---

Table 8.--Haul Roads, Log Landings, and Soil Rutting on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and Soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AEA:							
Allemands-----------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Wetness	1.00	Flooding	1.00	Wetness	0.50
		Stickiness/Slope	0.50	Low strength	1.00		
				Wetness	1.00		
ATA:							
Aquents-------------	85	Not rated		Not rated		Not rated	
		Not rated		Not rated		Not rated	
ATB:							
Aquents-------------	85	Not rated		Not rated		Not rated	
		Not rated		Not rated		Not rated	
		Flooding	0.50	Flooding	0.50		
BdA:							
Baldwin-------------	90	Moderate		Moderately suited		Severe	
		Low strength	0.50	Wetness	0.50	Low strength	1.00
				Low strength	0.50		
BEA:							
Balize--------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Wetness	1.00	Flooding	1.00	Wetness	0.50
		Low strength	0.50	Wetness	1.00		
				Low strength	0.50		
BNA:							
Bancker-------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Low strength	1.00	Flooding	1.00	Wetness	0.50
		Wetness	1.00	Low strength	1.00		
		Stickiness/Slope	0.50	Stickiness; high plasticity index	0.50		
BRA:							
Barbary-------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Low strength	1.00	Flooding	1.00	Wetness	0.50
		Wetness	1.00	Low strength	1.00		
				Stickiness; high plasticity index	0.50		
CoA:							
Coteau--------------	87	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
CvA:							
Carville------------	50	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		

Table 8.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings: Rating class and limiting features	Value	Suitability for log landings: Rating class and limiting features	Value	Soil rutting hazard: Rating class and limiting features	Value
Hydraquents	40	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Low strength	1.00	Flooding	1.00	Wetness	0.50
		Wetness	1.00	Low strength	1.00		
		Stickiness/Slope	0.50	Wetness	1.00		
				Stickiness; high plasticity index	0.50		
CYA:							
Clovelly	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Wetness	1.00	Flooding	1.00	Wetness	0.50
		Stickiness/Slope	0.50	Low strength	1.00		
				Wetness	1.00		
DP:							
Dumps	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
DsA:							
Dupuy	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
DuD:							
Duson	93	Slight		Moderately suited		Severe	
				Low strength	0.50	Low strength	1.00
				Slope	0.50		
FAA:							
Fausse	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Wetness	1.00	Flooding	1.00	Wetness	0.50
		Low strength	0.50	Wetness	1.00		
				Low strength	0.50		
GaA:							
Galvez	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
GxA:							
Uderts	50	Moderate		Poorly suited		Severe	
		Low strength	0.50	Wetness	1.00	Low strength	1.00
		Stickiness/Slope	0.50	Low strength	0.50		
				Stickiness; high plasticity index	0.50		
Glenwild	40	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00

Table 8.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
HRA:							
Harahan	85	Severe		Poorly suited		Severe	
		Low strength	1.00	Low strength	1.00	Low strength	1.00
		Stickiness/Slope	0.50	Stickiness; high plasticity index	0.50		
HSA:							
Harahan	50	Severe		Poorly suited		Severe	
		Low strength	1.00	Low strength	1.00	Low strength	1.00
		Stickiness/Slope	0.50	Stickiness; high plasticity index	0.50		
Allemands	40	Severe		Poorly suited		Severe	
		Low strength	1.00	Low strength	1.00	Low strength	1.00
HYA:							
Hydraquents	35	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Low strength	1.00	Flooding	1.00	Wetness	0.50
		Wetness	1.00	Low strength	1.00		
				Wetness	1.00		
Carville	30	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
Glenwild	20	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Low strength	0.50		
IbA:							
Iberia	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Wetness	0.50	Low strength	1.00
		Stickiness/Slope	0.50	Low strength	0.50		
				Stickiness; high plasticity index	0.50		
IEA:							
Iberia	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Wetness	0.50		
		Stickiness/Slope	0.50	Low strength	0.50		
				Stickiness; high plasticity index	0.50		
JaA:							
Jeanerette	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
				Wetness	0.50		
KEA:							
Kenner	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Wetness	1.00	Flooding	1.00	Wetness	0.50
		Stickiness/Slope	0.50	Low strength	1.00		
				Wetness	1.00		

Table 8.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
KpC:							
Kleinpeter----------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
LAA:							
Lafitte-------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Low strength	1.00	Flooding	1.00	Wetness	0.50
		Wetness	1.00	Low strength	1.00		
				Wetness	1.00		
LEA:							
Larose--------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Low strength	1.00	Flooding	1.00	Wetness	0.50
		Wetness	1.00	Low strength	1.00		
				Stickiness; high plasticity index	0.50		
LoA:							
Loreauville---------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Low strength	0.50	Low strength	1.00
				Wetness	0.50		
M-W:							
Water, small--------	100	Not rated		Not rated		Not rated	
MAA:							
Maurepas------------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Ponding	1.00	Low strength	1.00
		Low strength	1.00	Flooding	1.00	Wetness	0.50
		Wetness	1.00	Low strength	1.00		
				Wetness	1.00		
PaA:							
Patoutville---------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Wetness	0.50	Low strength	1.00
				Low strength	0.50		
ShA:							
Schriever-----------	85	Moderate		Moderately suited		Severe	
		Low strength	0.50	Wetness	0.50	Low strength	1.00
		Stickiness/Slope	0.50	Stickiness; high plasticity index	0.50		
				Low strength	0.50		
SIA:							
Schriever-----------	85	Severe		Poorly suited		Severe	
		Flooding	1.00	Flooding	1.00	Low strength	1.00
		Low strength	0.50	Wetness	0.50		
		Stickiness/Slope	0.50	Low strength	0.50		
				Stickiness; high plasticity index	0.50		

Table 8.--Haul Roads, Log Landings, and Soil Rutting on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Limitations affecting construction of haul roads and log landings		Suitability for log landings		Soil rutting hazard	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
UB:							
Urban land----------	93	Not rated		Not rated		Not rated	
UD:							
Udorthents----------	85	Not rated		Not rated		Not rated	
		Not rated		Not rated		Not rated	
				Slope	0.50		
W:							
Water, large--------	100	Not rated		Not rated		Not rated	

Table 9.--Hazard of Erosion and Suitability for Roads on Forestland

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and Soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		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
AEA:							
Allemands	85	Very Severe		Very Severe		Poorly suited	
		Organic matter content high	1.00	Organic matter content high	1.00	Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Wetness	1.00
ATA:							
Aquents	85	Not rated		Not rated		Not rated	
ATB:							
Aquents	85	Not rated		Not rated		Not rated	
				Slope/erodibility	0.50	Flooding	0.50
BdA:							
Baldwin	90	Slight		Slight		Moderately suited	
						Wetness	0.50
						Low strength	0.50
BEA:							
Balize	85	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
BNA:							
Bancker	85	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Stickiness; high plasticity index	0.50
BRA:							
Barbary	85	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Stickiness; high plasticity index	0.50
CoA:							
Coteau	87	Slight		Slight		Moderately suited	
						Low strength	0.50

Table 9.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Hazard of off-road or off-trail erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
CvA:							
Carville------------	50	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
Hydraquents---------	40	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Wetness	1.00
						Stickiness; high plasticity index	0.50
CYA:							
Clovelly------------	85	Very Severe		Very Severe		Poorly suited	
		Organic matter content high	1.00	Organic matter content high	1.00	Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Wetness	1.00
DP:							
Dumps---------------	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy---------------	85	Slight		Slight		Moderately suited	
						Low strength	0.50
DsA:							
Dupuy---------------	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
DuD:							
Duson---------------	93	Slight		Severe		Moderately suited	
				Slope/erodibility	0.95	Low strength	0.50
						Slope	0.50
FAA:							
Fausse--------------	85	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Wetness	1.00
						Low strength	0.50
GaA:							
Galvez--------------	85	Slight		Slight		Moderately suited	
						Low strength	0.50
GxA:							
Uderts--------------	50	Slight		Slight		Poorly suited	
						Wetness	1.00
						Low strength	0.50
						Stickiness; high plasticity index	0.50

Table 9.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Hazard of off-road or off-trail erosion: Rating class and limiting features	Value	Hazard of erosion on roads and trails: Rating class and limiting features	Value	Suitability for roads (natural surface): Rating class and limiting features	Value
Glenwild------------	40	Slight		Slight		Moderately suited	
						Low strength	0.50
HRA:							
Harahan-------------	85	Slight		Slight		Poorly suited	
						Low strength	1.00
						Stickiness; high plasticity index	0.50
HSA:							
Harahan-------------	50	Slight		Slight		Poorly suited	
						Low strength	1.00
						Stickiness; high plasticity index	0.50
Allemands-----------	40	Very Severe		Very Severe		Poorly suited	
		Organic matter content high	1.00	Organic matter content high	1.00	Low strength	1.00
HYA:							
Hydraquents---------	35	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Wetness	1.00
Carville------------	30	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
Glenwild------------	20	Slight		Slight		Poorly suited	
						Flooding	1.00
						Low strength	0.50
IbA:							
Iberia--------------	85	Slight		Slight		Moderately suited	
						Wetness	0.50
						Low strength	0.50
						Stickiness; high plasticity index	0.50
IEA:							
Iberia--------------	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	0.50
						Low strength	0.50
						Stickiness; high plasticity index	0.50
JaA:							
Jeanerette----------	85	Slight		Slight		Moderately suited	
						Low strength	0.50
						Wetness	0.50

Table 9.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
KEA:							
Kenner	85	Very Severe		Very Severe		Poorly suited	
		Organic matter content high	1.00	Organic matter content high	1.00	Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Wetness	1.00
KpC:							
Kleinpeter	85	Slight		Moderate		Moderately suited	
				Slope/erodibility	0.50	Low strength	0.50
LAA:							
Lafitte	85	Very Severe		Very Severe		Poorly suited	
		Organic matter content high	1.00	Organic matter content high	1.00	Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Wetness	1.00
LEA:							
Larose	85	Slight		Slight		Poorly suited	
						Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Stickiness; high plasticity index	0.50
LoA:							
Loreauville	85	Slight		Slight		Moderately suited	
						Low strength	0.50
						Wetness	0.50
M-W:							
Water, small	100	Not rated		Not rated		Not rated	
MAA:							
Maurepas	85	Very Severe		Very Severe		Poorly suited	
		Organic matter content high	1.00	Organic matter content high	1.00	Ponding	1.00
						Flooding	1.00
						Low strength	1.00
						Wetness	1.00
PaA:							
Patoutville	85	Slight		Slight		Moderately suited	
						Wetness	0.50
						Low strength	0.50
ShA:							
Schriever	85	Slight		Slight		Moderately suited	
						Wetness	0.50
						Stickiness; high plasticity index	0.50
						Low strength	0.50

Table 9.--Hazard of Erosion and Suitability for Roads on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Hazard of off-road or off-trail erosion		Hazard of erosion on roads and trails		Suitability for roads (natural surface)	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SIA:							
Schriever	85	Slight		Slight		Poorly suited	
						Flooding	1.00
						Wetness	0.50
						Low strength	0.50
						Stickiness; high plasticity index	0.50
UB:							
Urban land	93	Not rated		Not rated		Not rated	
UD:							
Udorthents	85	Not rated		Not rated		Not rated	
		Not rated		Not rated		Not rated	
		Slope/erodibility	0.50	Slope/erodibility	0.95	Slope	0.50
				Slope/erodibility	0.50		
W:							
Water, large	100	Not rated		Not rated		Not rated	

Table 10.--Forestland Planting and Harvesting

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and Soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
AEA:							
Allemands	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Wetness	0.75	Low strength	1.00
						Wetness	1.00
ATA:							
Aquents	85	Not rated		Not rated		Not rated	
ATB:							
Aquents	85	Not rated		Not rated		Not rated	
BdA:							
Baldwin	90	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
BEA:							
Balize	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Wetness	0.75	Wetness	1.00
						Low strength	0.50
BNA:							
Bancker	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Wetness	0.75	Low strength	1.00
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Wetness	1.00
						Stickiness; high plasticity index	0.50
BRA:							
Barbary	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Stickiness; high plasticity index	0.75	Low strength	1.00
		Stickiness; high plasticity index	0.75	Wetness	0.75	Wetness	1.00
						Stickiness; high plasticity index	0.50
CoA:							
Coteau	87	Well suited		Well suited		Moderately suited	
						Low strength	0.50
CvA:							
Carville	50	Well suited		Well suited		Moderately suited	
						Low strength	0.50
Hydraquents	40	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Stickiness; high plasticity index	0.75	Low strength	1.00
		Stickiness; high plasticity index	0.75	Wetness	0.75	Wetness	1.00
						Stickiness; high plasticity index	0.50

Table 10.--Forestland Planting and Harvesting--Continued

Map symbol and Soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
CYA:							
Clovelly	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Wetness	0.75	Low strength	1.00
						Wetness	1.00
DP:							
Dumps	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
DsA:							
Dupuy	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
DuD:							
Duson	93	Well suited		Moderately suited		Moderately suited	
				Slope	0.50	Low strength	0.50
FAA:							
Fausse	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Wetness	0.75	Wetness	1.00
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
GaA:							
Galvez	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
GxA:							
Uderts	50	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
						Stickiness; high plasticity index	0.50
Glenwild	40	Moderately suited		Moderately suited		Moderately suited	
		Stickiness; high plasticity index	0.50	Stickiness; high plasticity index	0.50	Low strength	0.50
HRA:							
Harahan	85	Poorly suited		Poorly suited		Poorly suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	1.00
						Stickiness; high plasticity index	0.50
HSA:							
Harahan	50	Poorly suited		Poorly suited		Poorly suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	1.00
						Stickiness; high plasticity index	0.50
Allemands	40	Well suited		Well suited		Poorly suited	
						Low strength	1.00

Table 10.--Forestland Planting and Harvesting--Continued

Map symbol and Soil name	Pct. of map unit	Suitability for hand planting: Rating class and limiting features	Value	Suitability for mechanical planting: Rating class and limiting features	Value	Suitability for use of harvesting equipment: Rating class and limiting features	Value
HYA:							
Hydraquents	35	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Stickiness; high plasticity index	0.75	Low strength	1.00
		Stickiness; high plasticity index	0.75	Wetness	0.75	Wetness	1.00
Carville	30	Well suited		Well suited		Moderately suited	
						Low strength	0.50
Glenwild	20	Well suited		Well suited		Moderately suited	
						Low strength	0.50
IbA:							
Iberia	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
						Stickiness; high plasticity index	0.50
IEA:							
Iberia	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
						Stickiness; high plasticity index	0.50
JaA:							
Jeanerette	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
KEA:							
Kenner	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Wetness	0.75	Low strength	1.00
						Wetness	1.00
KpC:							
Kleinpeter	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
LAA:							
Lafitte	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Wetness	0.75	Low strength	1.00
						Wetness	1.00
LEA:							
Larose	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Stickiness; high plasticity index	0.75	Low strength	1.00
		Stickiness; high plasticity index	0.75	Wetness	0.75	Wetness	1.00
						Stickiness; high plasticity index	0.50
LoA:							
Loreauville	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50

Table 10.--Forestland Planting and Harvesting--Continued

Map symbol and Soil name	Pct. of map unit	Suitability for hand planting		Suitability for mechanical planting		Suitability for use of harvesting equipment	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
M-W:							
Water, small	100	Not rated		Not rated		Not rated	
MAA:							
Maurepas	85	Poorly suited		Poorly suited		Poorly suited	
		Wetness	0.75	Wetness	0.75	Low strength	1.00
						Wetness	1.00
PaA:							
Patoutville	85	Well suited		Well suited		Moderately suited	
						Low strength	0.50
ShA:							
Schriever	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
						Stickiness; high plasticity index	0.50
SIA:							
Schriever	85	Poorly suited		Poorly suited		Moderately suited	
		Stickiness; high plasticity index	0.75	Stickiness; high plasticity index	0.75	Low strength	0.50
						Stickiness; high plasticity index	0.50
UB:							
Urban land	93	Not rated		Not rated		Not rated	
UD:							
Udorthents	85	Not rated		Not rated		Not rated	
W:							
Water, large	100	Not rated		Not rated		Not rated	

Table 11.--Forestland Site Preparation

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and Soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (Deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
AEA:					
Allemands	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
ATA:					
Aquents	85	Not rated		Not rated	
ATB:					
Aquents	85	Not rated		Not rated	
BdA:					
Baldwin	90	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
BEA:					
Balize	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
BNA:					
Bancker	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
		Stickiness; high plasticity index	0.50		
BRA:					
Barbary	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
		Stickiness; high plasticity index	0.50		
CoA:					
Coteau	87	Well suited		Well suited	
CvA:					
Carville	50	Well suited		Well suited	
Hydraquents	40	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
		Stickiness; high plasticity index	0.50		
CYA:					
Clovelly	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
DP:					
Dumps	85	Not rated		Not rated	
DrA:					
Dupuy	85	Well suited		Well suited	

Table 11.--Forestland Site Preparation--Continued

Map symbol and Soil name	Pct. of map unit	Suitability for mechanical site preparation (surface)		Suitability for mechanical site preparation (Deep)	
		Rating class and limiting features	Value	Rating class and limiting features	Value
DsA:					
Dupuy	85	Well suited		Well suited	
DuD:					
Duson	93	Well suited		Well suited	
FAA:					
Fausse	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
		Stickiness; high plasticity index	0.50		
GaA:					
Galvez	85	Well suited		Well suited	
GxA:					
Uderts	50	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
Glenwild	40	Well suited		Well suited	
HRA:					
Harahan	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
HSA:					
Harahan	50	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
Allemands	40	Well suited		Well suited	
HYA:					
Hydraquents	35	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
		Stickiness; high plasticity index	0.50		
Carville	30	Well suited		Well suited	
Glenwild	20	Well suited		Well suited	
IbA:					
Iberia	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
IEA:					
Iberia	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
JaA:					
Jeanerette	85	Well suited		Well suited	

Table 11.--Forestland Site Preparation--Continued

Map symbol and Soil name	Pct. of map unit	Suitability for mechanical site preparation (surface): Rating class and limiting features	Value	Suitability for mechanical site preparation (Deep): Rating class and limiting features	Value
KEA:					
Kenner	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
KpC:					
Kleinpeter	85	Well suited		Well suited	
LEA:					
Larose	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
		Stickiness; high plasticity index	0.50		
LoA:					
Loreauville	85	Well suited		Well suited	
M-W:					
Water, small	100	Not rated		Not rated	
MAA:					
Maurepas	85	Unsuited		Unsuited	
		Wetness	0.75	Wetness	1.00
PaA:					
Patoutville	85	Well suited		Well suited	
ShA:					
Schriever	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
SIA:					
Schriever	85	Poorly suited		Well suited	
		Stickiness; high plasticity index	0.50		
UB:					
Urban land	93	Not rated		Not rated	
UD:					
Udorthents	85	Not rated		Not rated	
		Not rated		Not rated	
W:					
Water, large	100	Not rated		Not rated	

Table 12.--Damage by Fire and Seedling Mortality on Forestland

(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	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
AEA:					
Allemands-----------	85	Low		High	
				Wetness	1.00
ATA:					
Aquents-------------	85	Not rated		Not rated	
ATB:					
Aquents-------------	85	Not rated		Not rated	
BdA:					
Baldwin-------------	90	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
BEA:					
Balize--------------	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
				Soil reaction	0.50
BNA:					
Bancker-------------	85	Low		High	
				Wetness	1.00
				Salinity	0.50
BRA:					
Barbary-------------	85	Low		High	
				Wetness	1.00
CoA:					
Coteau--------------	87	Low		Low	
		Texture/rock fragments	0.10		
CvA:					
Carville------------	50	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
Hydraquents---------	40	Low		High	
				Wetness	1.00
CYA:					
Clovelly------------	85	Low		High	
				Wetness	1.00
DP:					
Dumps---------------	85	Not rated		Not rated	

Table 12.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
DrA:					
Dupuy	85	Moderate		Low	
		Texture/rock fragments	0.50		
DsA:					
Dupuy	85	Low		Moderate	
				Soil reaction	0.50
DuD:					
Duson	93	Moderate		Low	
		Texture/surface depth/rock fragments	0.50		
FAA:					
Fausse	85	Low		High	
		Texture/rock fragments	0.10	Wetness	1.00
GaA:					
Galvez	85	Low		Low	
		Texture/rock fragments	0.10		
GxA:					
Uderts	50	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
Glenwild	40	High		Low	
		Texture/surface depth/rock fragments	1.00		
HRA:					
Harahan	85	Moderate		Low	
		Texture/rock fragments	0.50		
HSA:					
Harahan	50	Moderate		Low	
		Texture/rock fragments	0.50		
Allemands	40	Low		Low	
HYA:					
Hydraquents	35	Low		High	
				Wetness	1.00
Carville	30	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00

Table 12.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Potential for damage to soil by fire: Rating class and limiting features	Value	Potential for seedling mortality: Rating class and limiting features	Value
Glenwild	20	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
IbA:					
Iberia	85	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
IEA:					
Iberia	85	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
JaA:					
Jeanerette	85	Low		Low	
		Texture/rock fragments	0.10		
KEA:					
Kenner	85	Low		High	
				Wetness	1.00
KpC:					
Kleinpeter	85	Moderate		Low	
		Texture/rock fragments	0.50		
LAA:					
Lafitte	85	Low		High	
				Wetness	1.00
				Salinity	0.50
				Soil reaction	0.50
LEA:					
Larose	85	Low		High	
				Wetness	1.00
LoA:					
Loreauville	85	Low		Low	
		Texture/rock fragments	0.10		
M-W:					
Water, small	100	Not rated		Not rated	
MAA:					
Maurepas	85	Low		High	
				Wetness	1.00
				Soil reaction	0.50
PaA:					
Patoutville	85	Low		Low	
		Texture/rock fragments	0.10		

Table 12.--Damage by Fire and Seedling Mortality on Forestland--Continued

Map symbol and Soil name	Pct. of map unit	Potential for damage to soil by fire		Potential for seedling mortality	
		Rating class and limiting features	Value	Rating class and limiting features	Value
ShA:					
Schriever-----------	85	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
SIA:					
Schriever-----------	85	Moderate		High	
		Texture/rock fragments	0.50	Wetness	1.00
UB:					
Urban land----------	93	Not rated		Not rated	
UD:					
Udorthents----------	85	Not rated		Not rated	
W:					
Water, large--------	100	Not rated		Not rated	

Table 13.--Windbreaks and Environmental Plantings

(Absence of an entry indicates that trees generally do not grow to the given height.)

Map symbol and Soil name	Trees having predicted 20-year average height, in feet, of-- <8	8-15	16-25	26-35	>35
AEA: Allemands	---	---	---	---	buttonbush
ATA: Aquents	---	---	---	---	---
ATB: Aquents	---	---	---	---	---
BdA: Baldwin	buttonbush; silky dogwood	Amur honeysuckle	eastern redcedar	baldcypress; green ash; loblolly pine; water oak	American sycamore; eastern cottonwood; pin oak; sweetgum
BEA: Balize	---	---	---	---	---
BNA: Bancker	---	---	---	---	---
BRA: Barbary	---	---	---	---	---
CoA: Coteau	---	---	---	---	---
CvA: Carville	American plum	autumn olive; Manchurian crabapple; possumhaw	eastern arborvitae; eastern redcedar; Virginia pine	green ash; water oak	baldcypress; loblolly pine; sweetgum
Hydraquents	---	---	---	---	---
CYA: Clovelly	---	---	---	---	---
DP: Dumps	---	---	---	---	---

Table 13.--Windbreaks and Environmental Plantings--Continued

Map symbol and Soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
DrA:					
Dupuy	---	Amur honeysuckle; Amur maple; autumn olive; possumhaw	eastern redcedar; Virginia pine	cherrybark oak; green ash; pecan; sweetgum	baldcypress; loblolly pine
DsA:					
Dupuy	---	Amur honeysuckle; Amur maple; autumn olive; possumhaw	eastern redcedar; Virginia pine	cherrybark oak; green ash; pecan; sweetgum	baldcypress; loblolly pine
DuD:					
Duson	---	---	---	---	---
FAA:					
Fausse	---	---	---	---	---
GaA:					
Galvez	---	---	---	---	---
GxA:					
Uderts	---	---	---	---	---
Glenwild	---	---	---	---	---
HRA:					
Harahan	---	---	---	---	---
HSA:					
Harahan	---	---	---	---	---
Allemands	buttonbush; silky dogwood	Amur honeysuckle	eastern redcedar	baldcypress; green ash; loblolly pine; water oak	American sycamore; eastern cottonwood; pin oak; sweetgum
HYA:					
Hydraquents	---	---	---	---	---
Carville	American plum	autumn olive; Manchurian crabapple; possumhaw	eastern arborvitae; eastern redcedar; Virginia pine	green ash; water oak	baldcypress; loblolly pine; sweetgum
Glenwild	---	---	---	---	---

Table 13.--Windbreaks and Environmental Plantings--Continued

Map symbol and Soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
IbA:					
Iberia	---	---	---	---	---
IEA:					
Iberia	---	---	---	---	---
JaA:					
Jeanerette	---	---	---	---	---
KEA:					
Kenner	---	---	---	---	---
KpC:					
Kleinpeter	---	Amur honeysuckle; Amur maple; autumn olive; possumhaw	eastern redcedar	cherrybark oak; green ash	loblolly pine
LAA:					
Lafitte	---	---	---	---	---
LEA:					
Larose	---	---	---	---	---
LoA:					
Loreauville	---	---	---	---	---
M-W:					
Water, small	---	---	---	---	---
MAA:					
Maurepas	---	---	---	---	---
PaA:					
Patoutville	---	---	---	---	---
ShA:					
Schriever	---	---	---	---	---
SIA:					
Schriever	---	---	---	---	---
UB:					
Urban land	---	---	---	---	---

Table 13.--Windbreaks and Environmental Plantings--Continued

Map symbol and Soil name	Trees having predicted 20-year average height, in feet, of--				
	<8	8-15	16-25	26-35	>35
UD:					
Udorthents--------------	---	---	---	---	---
W:					
Water, large------------	---	---	---	---	---

Table 14.--Grain and Seed Crops, Domestic Grasses and Legumes, Upland Wild Herbaceous Plants, Upland Shrubs and Vines, and Upland Decidiuous Trees

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 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	Grain and seed crops (for use as food and cover)		Domestic grasses and legumes (for use as food and cover)		Upland wild herbaceous plants		Upland shrubs and vines		Upland deciduous trees	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AEA:										
Allemands----	Very limited		Very limited		Very limited		Very limited		Very limited	
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
ATA:										
Aquents------	Not rated		Not rated		Not rated		Not rated		Not rated	
ATB:										
Aquents------	Not rated		Not rated		Not rated		Not rated		Not rated	
BdA:										
Baldwin------	Very limited		Very limited		Limited		Limited		Very limited	
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Wetness (limited)	0.99	Wetness (limited)	0.99	Wetness (very limited)	1.00
	Wetness (limited)	0.99	Wetness (limited)	0.99	too clayey (slightly limited)	0.11	too clayey (slightly limited)	0.11		
	too clayey (slightly limited)	0.11	too clayey (slightly limited)	0.11						
BEA:										
Balize-------	Very limited		Very limited		Very limited		Very limited		Very limited	
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90
	Flooding (limited)	0.90	Flooding (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
BNA:										
Bancker------	Very limited		Very limited		Very limited		Very limited		Very limited	
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Excess sodium (very limited)	1.00	Excess sodium (very limited)	1.00	Excess sodium (very limited)	1.00
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90

Table 14.—-Grain and Seed Crops, Domestic Grasses and Legumes, Upland Wild Herbaceous Plants, Upland Shrubs and Vines, and Upland Decidiuous Trees--Continued

Map symbol and Soil name	Grain and seed crops (for use as food and cover)		Domestic grasses and legumes (for use as food and cover)		Upland wild herbaceous plants		Upland shrubs and vines		Upland deciduous trees	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
BRA:										
Barbary------	Not rated		Not rated		Not rated		Not rated		Very limited	
									Wetness (very limited)	1.00
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Flooding (prolonged) (limited)	0.90
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80
CoA:										
Coteau-------	Moderately limited		Moderately limited		Moderately limited		Moderately limited		Moderately limited	
	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.51
	percs slowly (slightly limited)	0.15	percs slowly (slightly limited)	0.15						
CvA:										
Carville-----	Limited		Limited		Slightly limited		Slightly limited		Moderately limited	
	Flooding (limited)	0.90	Flooding (limited)	0.90	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20	Wetness (moderately limited)	0.37
	Wetness (slightly limited)	0.13	Wetness (slightly limited)	0.13	Wetness (slightly limited)	0.13	Wetness (slightly limited)	0.13	Flooding (prolonged) (slightly limited)	0.20
Hydraquents--	Not rated		Not rated		Not rated		Not rated		Very limited	
									Wetness (very limited)	1.00
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Flooding (prolonged) (limited)	0.90
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80
CYA:										
Clovelly-----	Very limited		Very limited		Very limited		Very limited		Very limited	
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
DP:										
Dumps--------	Not rated		Not rated		Not rated		Not rated		Not rated	

Table 14.--Grain and Seed Crops, Domestic Grasses and Legumes, Upland Wild Herbaceous Plants, Upland Shrubs and Vines, and Upland Decidiuous Trees--Continued

Map symbol and Soil name	Grain and seed crops (for use as food and cover)		Domestic grasses and legumes (for use as food and cover)		Upland wild herbaceous plants		Upland shrubs and vines		Upland deciduous trees	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DrA:										
Dupuy--------	Slightly limited		Slightly limited		Slightly limited		Slightly limited		Moderately limited	
	Wetness (slightly limited)	0.26	Wetness (slightly limited)	0.26	Wetness (slightly limited)	0.26	Wetness (slightly limited)	0.26	Wetness (moderately limited)	0.44
	percs slowly (slightly limited)	0.15	percs slowly (slightly limited)	0.15						
DsA:										
Dupuy--------	Not rated		Not rated		Not rated		Not rated		Moderately limited	
									Wetness (moderately limited)	0.44
	Flooding (moderately limited)	0.60	Flooding (moderately limited)	0.60	Wetness (slightly limited)	0.26	Wetness (slightly limited)	0.26		
	Wetness (slightly limited)	0.26	Wetness (slightly limited)	0.26						
DuD:										
Duson--------	Moderately limited		Moderately limited		Moderately limited		Moderately limited		Moderately limited	
	percs slowly (moderately limited)	0.40	percs slowly (moderately limited)	0.40	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.51
	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36						
FAA:										
Fausse-------	Very limited		Very limited		Very limited		Very limited		Very limited	
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90
	Flooding (limited)	0.90	Flooding (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
GaA:										
Galvez-------	Moderately limited		Moderately limited		Moderately limited		Moderately limited		Moderately limited	
	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.51
	percs slowly (slightly limited)	0.15	percs slowly (slightly limited)	0.15						
GxA:										
Uderts-------	Very limited		Very limited		Very limited		Very limited		Very limited	
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	too clayey (moderately limited)	0.45	too clayey (moderately limited)	0.45		
	moderate erodibility (moderately limited)	0.50	moderate erodibility (moderately limited)	0.50						

Table 14.—-Grain and Seed Crops, Domestic Grasses and Legumes, Upland Wild Herbaceous Plants, Upland Shrubs and Vines, and Upland Decidiuous Trees--Continued

Map symbol and Soil name	Grain and seed crops (for use as food and cover)		Domestic grasses and legumes (for use as food and cover)		Upland wild herbaceous plants		Upland shrubs and vines		Upland deciduous trees	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Glenwild-----	Moderately limited		Moderately limited		Slightly limited		Slightly limited		Moderately limited	
	moderate erodibility (moderately limited)	0.50	moderate erodibility (moderately limited)	0.50	Wetness (slightly limited)	0.28	Wetness (slightly limited)	0.28	Wetness (moderately limited)	0.45
	Wetness (slightly limited)	0.28	Wetness (slightly limited)	0.28	too clayey (slightly limited)	0.05	too clayey (slightly limited)	0.05		
	percs slowly (slightly limited)	0.17	percs slowly (slightly limited)	0.17						
HRA:										
Harahan------	Very limited		Very limited		Limited		Limited		Moderately limited	
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	too clayey (limited)	0.90	too clayey (limited)	0.90	Wetness (moderately limited)	0.59
	too clayey (limited)	0.90	too clayey (limited)	0.90	Wetness (moderately limited)	0.44	Wetness (moderately limited)	0.44		
	Wetness (moderately limited)	0.44	Wetness (moderately limited)	0.44						
HSA:										
Harahan------	Very limited		Very limited		Limited		Limited		Moderately limited	
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	too clayey (limited)	0.90	too clayey (limited)	0.90	Wetness (moderately limited)	0.59
	too clayey (limited)	0.90	too clayey (limited)	0.90	Wetness (moderately limited)	0.44	Wetness (moderately limited)	0.44		
	Wetness (moderately limited)	0.44	Wetness (moderately limited)	0.44						
Allemands----	Not rated		Not rated		Not rated		Not rated		Moderately limited	
									Wetness (moderately limited)	0.51
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36		
	Wetness (moderately limited)	0.36	Wetness (moderately limited)	0.36						
HYA:										
Hydraquents--	Not rated		Not rated		Not rated		Not rated		Very limited	
									Wetness (very limited)	1.00
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Flooding (prolonged) (limited)	0.90
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80

Table 14.--Grain and Seed Crops, Domestic Grasses and Legumes, Upland Wild Herbaceous Plants, Upland Shrubs and Vines, and Upland Decidiuous Trees--Continued

Map symbol and Soil name	Grain and seed crops (for use as food and cover)		Domestic grasses and legumes (for use as food and cover)		Upland wild herbaceous plants		Upland shrubs and vines		Upland deciduous trees	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Carville-----	Limited		Limited		Slightly limited		Slightly limited		Moderately limited	
	Flooding (limited)	0.90	Flooding (limited)	0.90	Wetness (slightly limited)	0.28	Wetness (slightly limited)	0.28	Wetness (moderately limited)	0.45
	Wetness (slightly limited)	0.28	Wetness (slightly limited)	0.28	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20
Glenwild-----	Limited		Limited		Slightly limited		Slightly limited		Moderately limited	
	Flooding (limited)	0.90	Flooding (limited)	0.90	Wetness (slightly limited)	0.28	Wetness (slightly limited)	0.28	Wetness (moderately limited)	0.45
	Wetness (slightly limited)	0.28	Wetness (slightly limited)	0.28	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20
	percs slowly (slightly limited)	0.17	percs slowly (slightly limited)	0.17						
IbA:										
Iberia-------	Very limited		Very limited		Limited		Limited		Very limited	
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Wetness (limited)	0.99	Wetness (limited)	0.99	Wetness (very limited)	1.00
	Wetness (limited)	0.99	Wetness (limited)	0.99	too clayey (limited)	0.61	too clayey (limited)	0.61		
	too clayey (limited)	0.61	too clayey (limited)	0.61						
IEA:										
Iberia-------	Very limited		Very limited		Limited		Limited		Very limited	
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Wetness (limited)	0.99	Wetness (limited)	0.99	Wetness (very limited)	1.00
	Wetness (limited)	0.99	Wetness (limited)	0.99	too clayey (limited)	0.61	too clayey (limited)	0.61	Flooding (prolonged) (slightly limited)	0.20
	Flooding (limited)	0.90	Flooding (limited)	0.90	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20		
JaA:										
Jeanerette---	Moderately limited		Moderately limited		Moderately limited		Moderately limited		Limited	
	Wetness (moderately limited)	0.53	Wetness (moderately limited)	0.53	Wetness (moderately limited)	0.53	Wetness (moderately limited)	0.53	Wetness (limited)	0.79
	percs slowly (slightly limited)	0.15	percs slowly (slightly limited)	0.15						
KEA:										
Kenner-------	Very limited		Very limited		Very limited		Very limited		Very limited	
	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00	Wetness (very limited)	1.00
	ponded (Wetness) (very limited)	1.00	ponded (Wetness) (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80

Table 14.—-Grain and Seed Crops, Domestic Grasses and Legumes, Upland Wild Herbaceous Plants, Upland Shrubs and Vines, and Upland Decidiuous Trees--Continued

Map symbol and Soil name	Grain and seed crops (for use as food and cover)		Domestic grasses and legumes (for use as food and cover)		Upland wild herbaceous plants		Upland shrubs and vines		Upland deciduous trees	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
KpC:										
Kleinpeter---	Moderately limited		Moderately limited		Not limited		Not limited		Slightly limited	
	moderate erodibility	0.50	moderate erodibility	0.50					Wetness	0.29
	(moderately limited)		(moderately limited)						(slightly limited)	
LAA:										
Lafitte------	Not rated		Not rated		Not rated		Not rated		Very limited	
	Not Rated		Not Rated		Not Rated		Not Rated		Wetness	1.00
									(very limited)	
	Wetness	1.00	Wetness	1.00	Wetness	1.00	Wetness	1.00	Flooding (prolonged)	0.90
	(very limited)		(very limited)		(very limited)		(very limited)		(limited)	
	ponded (Wetness)	1.00	ponded (Wetness)	1.00	Flooding (prolonged)	0.90	Flooding (prolonged)	0.90	Seasonally ponded	0.80
	(very limited)		(very limited)		(limited)		(limited)		(limited)	
LEA:										
Larose-------	Not rated		Not rated		Not rated		Not rated		Very limited	
									Wetness	1.00
									(very limited)	
	Wetness	1.00	Wetness	1.00	Wetness	1.00	Wetness	1.00	Flooding (prolonged)	0.90
	(very limited)		(very limited)		(very limited)		(very limited)		(limited)	
	ponded (Wetness)	1.00	ponded (wetness)	1.00	Flooding (prolonged)	0.90	Flooding (prolonged)	0.90	Seasonally ponded	0.80
	(very limited)		(very limited)		(limited)		(limited)		(limited)	
LoA:										
Loreauville--	Moderately limited		Moderately limited		Moderately limited		Moderately limited		Limited	
	Wetness	0.53	Wetness	0.53	Wetness	0.53	Wetness	0.53	Wetness	0.79
	(moderately limited)		(moderately limited)		(moderately limited)		(moderately limited)		(limited)	
	percs slowly	0.15	percs slowly	0.15						
	(slightly limited)		(slightly limited)							
M-W:										
Water, small-	Not rated		Not rated		Not rated		Not rated		Not rated	
MAA:										
Maurepas-----	Not rated		Not rated		Not rated		Not rated		Very limited	
									Wetness	1.00
									(very limited)	
	Wetness	1.00	Wetness	1.00	Wetness	1.00	Wetness	1.00	Flooding (prolonged)	0.90
	(very limited)		(very limited)		(very limited)		(very limited)		(limited)	
	ponded (Wetness)	1.00	ponded (Wetness)	1.00	Flooding (prolonged)	0.90	Flooding (prolonged)	0.90	Seasonally ponded	0.80
	(very limited)		(very limited)		(limited)		(limited)		(limited)	

Table 14.--Grain and Seed Crops, Domestic Grasses and Legumes, Upland Wild Herbaceous Plants, Upland Shrubs and Vines, and Upland Decidiuous Trees--Continued

Map symbol and Soil name	Grain and seed crops (for use as food and cover)		Domestic grasses and legumes (for use as food and cover)		Upland wild herbaceous plants		Upland shrubs and vines		Upland deciduous trees	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
PaA:										
Patoutville--	Moderately limited		Moderately limited		Moderately limited		Moderately limited		Limited	
	Wetness (moderately limited)	0.53	Wetness (moderately limited)	0.53	Wetness (moderately limited)	0.53	Wetness (moderately limited)	0.53	Wetness (limited)	0.79
	percs slowly (moderately limited)	0.40	percs slowly (moderately limited)	0.40						
ShA:										
Schriever----	Very limited		Very limited		Limited		Limited		Very limited	
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Wetness (limited)	0.99	Wetness (limited)	0.99	Wetness (very limited)	1.00
	Wetness (limited)	0.99	Wetness (limited)	0.99	too clayey (limited)	0.75	too clayey (limited)	0.75		
	droughty (limited)	0.82	too clayey (limited)	0.75						
SIA:										
Schriever----	Very limited		Very limited		Limited		Limited		Very limited	
	percs slowly (very limited)	1.00	percs slowly (very limited)	1.00	Wetness (limited)	0.99	Wetness (limited)	0.99	Wetness (very limited)	1.00
	Wetness (limited)	0.99	Wetness (limited)	0.99	too clayey (limited)	0.75	too clayey (limited)	0.75	Flooding (prolonged) (slightly limited)	0.20
	Flooding (limited)	0.90	Flooding (limited)	0.90	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20		
UB:										
Urban land---	Not rated		Not rated		Not rated		Not rated		Not rated	
UD:										
Udorthents---	Not rated		Not rated		Not rated		Not rated		Not rated	
W:										
Water, large-	Not rated		Not rated		Not rated		Not rated		Not rated	

Table 15.--Upland Mixed Deciduous-Coniferious Trees, Riparian Herbaceous Plants, Riparian Shrubs, Vines, and Trees, and Freshwater Wetland Plants

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 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	Upland mixed deciduous-coniferious trees		Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AEA: Allemands	Very limited		Limited		Limited		Limited		Limited	
	Wetness (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80				
	Seasonally ponded (limited)	0.80								
ATA: Aquents	Not rated		Not rated		Not Rated		Not rated		Not rated	
			Deep to water (very limited)	1.00						
							Deep to water (very limited)	1.00	Not Rated	
ATB: Aquents	Not rated		Not rated		Not Rated		Not rated		Not rated	
			Deep to water (very limited)	1.00						
			Infrequent Flooding (moderately limited)	0.50			Deep to water (very limited)	1.00		
BdA: Baldwin	Very limited		Slightly limited		Not limited		Slightly limited		Not limited	
	Wetness (very limited)	1.00	Deep to water (slightly limited)	0.02			Deep to water (slightly limited)	0.02		
BEA: Balize	Very limited		Limited		Limited		Limited		Limited	
	Wetness (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Soil reaction (limited)	0.60	Soil reaction (limited)	0.60
	Seasonally ponded (limited)	0.80								
BNA: Bancker	Very limited		Limited		Limited		Very limited		Very limited	
	Wetness (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Excess sodium (very limited)	1.00	Excess sodium (very limited)	1.00
	Excess sodium (very limited)	1.00	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
	Flooding (prolonged) (limited)	0.90								

Table 15.--Upland Mixed Deciduous-Coniferious Trees, Riparian Herbaceous Plants, Riparian Shrubs, Vines, and Trees, and Freshwater Wetland Plants--Continued

Map symbol and Soil name	Upland mixed deciduous-coniferious trees: Rating class and limiting features	Value	Riparian herbaceous plants: Rating class and limiting features	Value	Riparian shrubs, vines, and trees: Rating class and limiting features	Value	Freshwater wetland plants: Rating class and limiting features	Value	Irrigated freshwater wetland plants: Rating class and limiting features	Value
BRA:										
Barbary--------	Very limited		Not rated		Limited		Not rated		Not rated	
	Wetness	1.00	Not Rated		Flooding (prolonged)	0.90	Not Rated		Not Rated	
	(very limited)				(limited)					
	Flooding (prolonged)	0.90	Flooding (prolonged)	0.90	Seasonally ponded	0.80	Seasonally ponded	0.80	Seasonally ponded	0.80
	(limited)		(limited)		(limited)		(limited)		(limited)	
	Seasonally ponded	0.80	Seasonally ponded	0.80						
	(limited)		(limited)							
CoA:										
Coteau---------	Moderately limited		Limited		Not limited		Moderately limited		Slightly limited	
	Wetness	0.51	Infrequent Flooding	0.80			Deep to water	0.53	Seepage	0.16
	(moderately limited)		(limited)				(moderately limited)		(slightly limited)	
			Deep to water	0.53						
			(moderately limited)							
CvA:										
Carville-------	Moderately limited		Limited		Slightly limited		Limited		Moderately limited	
	Wetness	0.37	Deep to water	0.82	Flooding (prolonged)	0.20	Deep to water	0.82	Seepage	0.46
	(moderately limited)		(limited)		(slightly limited)		(limited)		(moderately limited)	
	Flooding (prolonged)	0.20	Flooding (prolonged)	0.20						
	(slightly limited)		(slightly limited)							
Hydraquents----	Very limited		Not rated		Limited		Not rated		Not rated	
	Wetness	1.00	Not Rated		Flooding (prolonged)	0.90	Not Rated		Not Rated	
	(very limited)				(limited)					
	Flooding (prolonged)	0.90	Flooding (prolonged)	0.90	Seasonally ponded	0.80	Seasonally ponded	0.80	Seasonally ponded	0.80
	(limited)		(limited)		(limited)		(limited)		(limited)	
	Seasonally ponded	0.80	Seasonally ponded	0.80						
	(limited)		(limited)							
CYA:										
Clovelly-------	Very limited		Limited		Limited		Limited		Limited	
	Wetness	1.00	Flooding (prolonged)	0.90	Flooding (prolonged)	0.90	Seasonally ponded	0.80	Seasonally ponded	0.80
	(very limited)		(limited)		(limited)		(limited)		(limited)	
	Flooding (prolonged)	0.90	Seasonally ponded	0.80	Seasonally ponded	0.80	Excess sodium	0.32	Excess sodium	0.32
	(limited)		(limited)		(limited)		(moderately limited)		(moderately limited)	
	Seasonally ponded	0.80								
	(limited)									
DP:										
Dumps----------	Not rated		Not rated		Not rated		Not rated		Not rated	

Table 15.--Upland Mixed Deciduous-Coniferious Trees, Riparian Herbaceous Plants, Riparian Shrubs, Vines, and Trees, and Freshwater Wetland Plants--Continued

Map symbol and Soil name	Upland mixed deciduous-coniferious trees		Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
DrA:										
Dupuy----------	Moderately limited		Limited		Not limited		Limited		Slightly limited	
	Wetness (moderately limited)	0.44	Infrequent Flooding (limited)	0.80			Deep to water (limited)	0.63	Seepage (slightly limited)	0.16
			Deep to water (limited)	0.63						
DsA:										
Dupuy----------	Moderately limited		Not rated		Not limited		Not rated		Not rated	
	Wetness (moderately limited)	0.44	Not Rated				Not Rated		Not Rated	
			Deep to water (limited)	0.63			Deep to water (limited)	0.63	Seepage (slightly limited)	0.16
			Infrequent Flooding (moderately limited)	0.50			Soil reaction (slightly limited)	0.06	Soil reaction (slightly limited)	0.06
DuD:										
Duson----------	Moderately limited		Limited		Not limited		Moderately limited		Very limited	
	Wetness (moderately limited)	0.51	Infrequent Flooding (limited)	0.80			Deep to water (moderately limited)	0.53	Slope (very limited)	1.00
			Deep to water (moderately limited)	0.53						
FAA:										
Fausse---------	Very limited		Limited		Limited		Limited		Limited	
	Wetness (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80				
	Seasonally ponded (limited)	0.80								
	Wetness (moderately limited)	0.51	Infrequent Flooding (limited)	0.80			Deep to water (moderately limited)	0.53	Seepage (slightly limited)	0.16
			Deep to water (moderately limited)	0.53						
GaA:										
Galvez---------	Moderately limited		Limited		Not limited		Moderately limited		Slightly limited	
GxA:										
Uderts---------	Very limited		Limited		Not limited		Not limited		Not limited	
	Wetness (very limited)	1.00	Infrequent Flooding (limited)	0.80						

Table 15.--Upland Mixed Deciduous-Coniferious Trees, Riparian Herbaceous Plants, Riparian Shrubs, Vines, and Trees, and Freshwater Wetland Plants--Continued

Map symbol and Soil name	Upland mixed deciduous-coniferious trees		Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Glenwild-------	Moderately limited		Limited		Not limited		Limited		Slightly limited	
	Wetness (moderately limited)	0.45	Infrequent Flooding (limited)	0.80			Deep to water (limited)	0.60	Seepage (slightly limited)	0.15
			Deep to water (limited)	0.60						
HRA:										
Harahan--------	Moderately limited		Moderately limited		Not limited		Moderately limited		Not limited	
	Wetness (moderately limited)	0.59	Deep to water (moderately limited)	0.45			Deep to water (moderately limited)	0.45		
HSA:										
Harahan--------	Moderately limited		Moderately limited		Not limited		Moderately limited		Not limited	
	Wetness (moderately limited)	0.59	Deep to water (moderately limited)	0.45			Deep to water (moderately limited)	0.45		
Allemands------	Moderately limited		Not rated		Not limited		Not rated		Not rated	
	Wetness (moderately limited)	0.51	Not Rated				Not Rated		Not Rated	
			Deep to water (moderately limited)	0.53			Deep to water (moderately limited)	0.53		
HYA:										
Hydraquents----	Very limited		Not rated		Limited		Not rated		Not rated	
	Wetness (very limited)	1.00	Not Rated		Flooding (prolonged) (limited)	0.90	Not Rated		Not Rated	
	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80						
Carville-------	Moderately limited		Limited		Slightly limited		Limited		Moderately limited	
	Wetness (moderately limited)	0.45	Deep to water (limited)	0.60	Flooding (prolonged) (slightly limited)	0.20	Deep to water (limited)	0.60	Seepage (moderately limited)	0.46
	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20						
Glenwild-------	Moderately limited		Limited		Slightly limited		Limited		Slightly limited	
	Wetness (moderately limited)	0.45	Deep to water (limited)	0.60	Flooding (prolonged) (slightly limited)	0.20	Deep to water (limited)	0.60	Seepage (slightly limited)	0.15
	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20						
IbA:										
Iberia---------	Very limited		Slightly limited		Not limited		Slightly limited		Not limited	
	Wetness (very limited)	1.00	Deep to water (slightly limited)	0.02			Deep to water (slightly limited)	0.02		

Table 15.--Upland Mixed Deciduous-Coniferious Trees, Riparian Herbaceous Plants, Riparian Shrubs, Vines, and Trees, and Freshwater Wetland Plants--Continued

Map symbol and Soil name	Upland mixed deciduous-coniferious trees: Rating class and limiting features	Value	Riparian herbaceous plants: Rating class and limiting features	Value	Riparian shrubs, vines, and trees: Rating class and limiting features	Value	Freshwater wetland plants: Rating class and limiting features	Value	Irrigated freshwater wetland plants: Rating class and limiting features	Value
IEA:										
Iberia	Very limited		Slightly limited		Slightly limited		Slightly limited		Not limited	
	Wetness (very limited)	1.00	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20	Deep to water (slightly limited)	0.02		
	Flooding (prolonged) (slightly limited)	0.20	Deep to water (slightly limited)	0.02						
JaA:										
Jeanerette	Limited		Limited		Not limited		Moderately limited		Slightly limited	
	Wetness (limited)	0.79	Infrequent Flooding (limited)	0.80			Deep to water (moderately limited)	0.37	Seepage (slightly limited)	0.16
			Deep to water (moderately limited)	0.37						
KEA:										
Kenner	Very limited		Limited		Limited		Limited		Limited	
	Wetness (very limited)	1.00	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80				
	Seasonally ponded (limited)	0.80								
KpC:										
Kleinpeter	Slightly limited		Very limited		Slightly limited		Very limited		Moderately limited	
	Wetness (slightly limited)	0.29	Deep to water (very limited)	1.00	Deep to water (slightly limited)	0.02	Deep to water (very limited)	1.00	Seepage (moderately limited)	0.46
									Slope (slightly limited)	0.08
									Deep to water (slightly limited)	0.02
LAA:										
Lafitte	Very limited		Not rated		Limited		Not rated		Not rated	
	Wetness (very limited)	1.00	Not Rated		Flooding (prolonged) (limited)	0.90	Not Rated		Not Rated	
	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80			Soil reaction (limited)	0.60	Seepage (limited)	0.80
LEA:										
Larose	Very limited		Not rated		Limited		Not rated		Not rated	
	Wetness (very limited)	1.00	Not Rated		Flooding (prolonged) (limited)	0.90	Not Rated		Not Rated	
	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80
	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80						

Table 15.--Upland Mixed Deciduous-Coniferious Trees, Riparian Herbaceous Plants, Riparian Shrubs, Vines, and Trees, and Freshwater Wetland Plants--Continued

Map symbol and Soil name	Upland mixed deciduous-coniferious trees		Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
LoA:										
Loreauville----	Limited		Limited		Not limited		Moderately limited		Slightly limited	
	Wetness (limited)	0.79	Infrequent Flooding (limited)	0.80			Deep to water (moderately limited)	0.37	Seepage (slightly limited)	0.16
			Deep to water (moderately limited)	0.37						
M-W:										
Water, small---	Not rated		Not rated		Not rated		Not rated		Not rated	
MAA:										
Maurepas-------	Very limited		Not rated		Limited		Not rated		Not rated	
	Wetness (very limited)	1.00	Not Rated		Flooding (prolonged) (limited)	0.90	Not Rated		Not Rated	
	Flooding (prolonged) (limited)	0.90	Flooding (prolonged) (limited)	0.90	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80	Seepage (very limited)	1.00
	Seasonally ponded (limited)	0.80	Seasonally ponded (limited)	0.80			Soil reaction (limited)	0.60	Seasonally ponded (limited)	0.80
PaA:										
Patoutville----	Limited		Limited		Not limited		Moderately limited		Not limited	
	Wetness (limited)	0.79	Infrequent Flooding (limited)	0.80			Deep to water (moderately limited)	0.37		
			Deep to water (moderately limited)	0.37						
ShA:										
Schriever------	Very limited		Slightly limited		Not limited		Slightly limited		Not limited	
	Wetness (very limited)	1.00	Deep to water (slightly limited)	0.02			Deep to water (slightly limited)	0.02		
SIA:										
Schriever------	Very limited		Slightly limited		Slightly limited		Slightly limited		Not limited	
	Wetness (very limited)	1.00	Flooding (prolonged) (slightly limited)	0.20	Flooding (prolonged) (slightly limited)	0.20	Deep to water (slightly limited)	0.02		
	Flooding (prolonged) (slightly limited)	0.20	Deep to water (slightly limited)	0.02						
UB:										
Urban land-----	Not rated		Not rated		Not rated		Not rated		Not rated	

Table 15.--Upland Mixed Deciduous-Coniferious Trees, Riparian Herbaceous Plants, Riparian Shrubs, Vines, and Trees, and Freshwater Wetland Plants--Continued

Map symbol and Soil name	Upland mixed deciduous-coniferious trees		Riparian herbaceous plants		Riparian shrubs, vines, and trees		Freshwater wetland plants		Irrigated freshwater wetland plants	
	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
UD:										
Udorthents-----	Not rated		Not rated		Not Rated		Not rated		Not rated	
			Deep to water (very limited)	1.00						
			Infrequent Flooding (limited)	0.80			Deep to water (very limited)	1.00	Not Rated	
W:										
Water, large---	Not rated		Not rated		Not rated		Not rated		Not rated	

Table 16.--Camp Areas, Picnic Areas, and Playgrounds

(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
AEA:							
Allemands	85	Not rated		Not rated		Not rated	
ATA:							
Aquents	85	Not rated		Not rated		Not rated	
ATB:							
Aquents	85	Not rated		Not rated		Not rated	
BdA:							
Baldwin	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Slow water movement	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	0.99	Slow water movement	1.00
		Slow water movement	1.00				
BEA:							
Balize	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Slow water movement	0.96	Ponding	1.00
		Slow water movement	0.96	Flooding	0.60	Slow water movement	0.96
BNA:							
Bancker	85	Not rated		Not rated		Not rated	
BRA:							
Barbary	85	Not rated		Not rated		Not rated	
CoA:							
Coteau	87	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
		Depth to saturated zone	0.07	Depth to saturated zone	0.03	Depth to saturated zone	0.07

Table 16.--Camp Areas, Picnic Areas, and Playgrounds--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
CvA:							
Carville	50	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
Hydraquents	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Too clayey	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Too clayey	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Too clayey	1.00	Slow water movement	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	0.60	Slow water movement	1.00
CYA:							
Clovelly	85	Not rated		Not rated		Not rated	
DP:							
Dumps	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
DsA:							
Dupuy	85	Not rated		Not rated		Not rated	
DuD:							
Duson	93	Somewhat limited		Somewhat limited		Very limited	
		Slow water movement	0.96	Slow water movement	0.96	Slope	1.00
		Depth to saturated zone	0.07	Depth to saturated zone	0.03	Slow water movement	0.96
		Slope	0.01	Slope	0.01	Depth to saturated zone	0.07
FAA:							
Fausse	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Ponding	1.00	Slow water movement	0.99	Ponding	1.00
		Slow water movement	0.99	Flooding	0.40	Slow water movement	0.99
GaA:							
Galvez	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
		Depth to saturated zone	0.07	Depth to saturated zone	0.03	Depth to saturated zone	0.07

Table 16.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and Soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
GxA:							
Uderts	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Slow water movement	1.00	Slow water movement	1.00
		Slow water movement	1.00	Too clayey	1.00	Too clayey	1.00
		Too clayey	1.00				
Glenwild	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.26	Slow water movement	0.26	Slow water movement	0.26
HRA:							
Harahan	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Too clayey	1.00	Too clayey	1.00
		Too clayey	1.00	Slow water movement	1.00	Slow water movement	1.00
		Slow water movement	1.00	Depth to saturated zone	0.19	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
HSA:							
Harahan	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Too clayey	1.00	Too clayey	1.00
		Too clayey	1.00	Slow water movement	1.00	Slow water movement	1.00
		Slow water movement	1.00	Depth to saturated zone	0.19	Depth to saturated zone	0.39
		Depth to saturated zone	0.39				
Allemands	40	Not rated		Not rated		Not rated	
HYA:							
Hydraquents	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Too clayey	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Ponding	1.00	Too clayey	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Too clayey	1.00	Slow water movement	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	0.60	Slow water movement	1.00
Carville	30	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
Glenwild	20	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.40	Flooding	1.00
		Slow water movement	0.26	Slow water movement	0.26	Slow water movement	0.26

Table 16.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and Soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
IbA:							
Iberia	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Slow water movement	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Too clayey	1.00	Slow water movement	1.00
		Slow water movement	1.00	Depth to saturated zone	0.99	Too clayey	1.00
		Too clayey	1.00				
IEA:							
Iberia	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Slow water movement	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Too clayey	1.00	Flooding	1.00
		Slow water movement	1.00	Depth to saturated zone	0.99	Slow water movement	1.00
		Too clayey	1.00	Flooding	0.40	Too clayey	1.00
JaA:							
Jeanerette	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	0.48	Depth to saturated zone	0.81
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
KEA:							
Kenner	85	Not rated		Not rated		Not rated	
KpC:							
Kleinpeter	85	Very limited		Not limited		Somewhat limited	
		Flooding	1.00			Slope	0.12
LAA:							
Lafitte	85	Not rated		Not rated		Not rated	
LEA:							
Larose	85	Not rated		Not rated		Not rated	
LoA:							
Loreauville	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	0.48	Depth to saturated zone	0.81
		Slow water movement	0.21	Slow water movement	0.21	Slow water movement	0.21
M-W:							
Water, small	100	Not rated		Not rated		Not rated	
MAA:							
Maurepas	85	Not rated		Not rated		Not rated	

Table 16.--Camp Areas, Picnic Areas, and Playgrounds--Continued

Map symbol and Soil name	Pct. of map unit	Camp areas: Rating class and limiting features	Camp areas: Value	Picnic areas: Rating class and limiting features	Picnic areas: Value	Playgrounds: Rating class and limiting features	Playgrounds: Value
PaA:							
Patoutville	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Slow water movement	0.96	Slow water movement	0.96	Slow water movement	0.96
		Depth to saturated zone	0.81	Depth to saturated zone	0.48	Depth to saturated zone	0.81
ShA:							
Schriever	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Slow water movement	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Too clayey	1.00	Slow water movement	1.00
		Slow water movement	1.00	Depth to saturated zone	0.99	Too clayey	1.00
		Too clayey	1.00				
SIA:							
Schriever	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Slow water movement	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Too clayey	1.00	Flooding	1.00
		Slow water movement	1.00	Depth to saturated zone	0.99	Slow water movement	1.00
		Too clayey	1.00	Flooding	0.40	Too clayey	1.00
UB:							
Urban land	93	Not rated		Not rated		Not rated	
UD:							
Udorthents	85	Not rated		Not rated		Not rated	
W:							
Water, large	100	Not rated		Not rated		Not rated	

Table 17.--Paths, Trails, and Golf Course Fairways

(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 course fairways	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AEA:							
Allemands	85	Not rated		Not rated		Not rated	
ATA:							
Aquents	85	Not rated		Not rated		Not rated	
ATB:							
Aquents	85	Not rated		Not rated		Not rated	
BdA:							
Baldwin	90	Somewhat limited		Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.99	Depth to saturated zone	0.99
BEA:							
Balize	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00
BNA:							
Bancker	85	Not rated		Not rated		Not rated	
BRA:							
Barbary	85	Not rated		Not rated		Not rated	
CoA:							
Coteau	87	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.03
CvA:							
Carville	50	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
Hydraquents	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00	Too clayey	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00
CYA:							
Clovelly	85	Not rated		Not rated		Not rated	
DP:							
Dumps	85	Not rated		Not rated		Not rated	

Table 17.--Paths, Trails, and Golf Course Fairways--Continued

Map symbol and Soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf course fairways: Rating class and limiting features	Value
DrA:							
Dupuy	85	Not limited		Not limited		Not limited	
DsA:							
Dupuy	85	Not rated		Not rated		Not rated	
DuD:							
Duson	93	Very limited		Very limited		Somewhat limited	
		Water erosion	1.00	Water erosion	1.00	Depth to saturated zone	0.03
						Slope	0.01
FAA:							
Fausse	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	1.00
GaA:							
Galvez	85	Not limited		Not limited		Somewhat limited	
						Depth to saturated zone	0.03
GxA:							
Uderts	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
Glenwild	40	Not limited		Not limited		Not limited	
HRA:							
Harahan	85	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
						Depth to saturated zone	0.19
HSA:							
Harahan	50	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
						Depth to saturated zone	0.19
Allemands	40	Not rated		Not rated		Not rated	
HYA:							
Hydraquents	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00	Too clayey	1.00	Ponding	1.00
		Ponding	1.00	Ponding	1.00	Flooding	1.00
		Flooding	0.60	Flooding	0.60	Depth to saturated zone	1.00

Table 17.--Paths, Trails, and Golf Course Fairways--Continued

Map symbol and Soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Value	Off-road motorcycle trails: Rating class and limiting features	Value	Golf course fairways: Rating class and limiting features	Value
Carville	30	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
Glenwild	20	Somewhat limited		Somewhat limited		Very limited	
		Flooding	0.40	Flooding	0.40	Flooding	1.00
IbA:							
Iberia	85	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99	Depth to saturated zone	0.99
IEA:							
Iberia	85	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Flooding	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99	Too clayey	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.99
JaA:							
Jeanerette	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11	Depth to saturated zone	0.48
KEA:							
Kenner	85	Not rated		Not rated		Not rated	
KpC:							
Kleinpeter	85	Not limited		Not limited		Not limited	
LAA:							
Lafitte	85	Not rated		Not rated		Not rated	
LEA:							
Larose	85	Not rated		Not rated		Not rated	
LoA:							
Loreauville	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11	Depth to saturated zone	0.48
M-W:							
Water, small	100	Not rated		Not rated		Not rated	
MAA:							
Maurepas	85	Not rated		Not rated		Not rated	
PaA:							
Patoutville	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.11	Depth to saturated zone	0.11	Depth to saturated zone	0.48

Table 17.--Paths, Trails, and Golf Course Fairways--Continued

Map symbol and Soil name	Pct. of map unit	Paths and trails: Rating class and limiting features	Paths and trails: Value	Off-road motorcycle trails: Rating class and limiting features	Off-road motorcycle trails: Value	Golf course fairways: Rating class and limiting features	Golf course fairways: Value
ShA:							
Schriever	85	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Too clayey	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99	Depth to saturated zone	0.99
SIA:							
Schriever	85	Very limited		Very limited		Very limited	
		Too clayey	1.00	Too clayey	1.00	Flooding	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.99	Too clayey	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.99
UB:							
Urban land	93	Not rated		Not rated		Not rated	
UD:							
Udorthents	85	Not rated		Not rated		Not rated	
W:							
Water, large	100	Not rated		Not rated		Not rated	

Table 18.--Dwellings and Small Commercial Buildings

(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: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
AEA:							
Allemands-----------	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
ATA:							
Aquents-------------	85	Not rated		Not rated		Not rated	
ATB:							
Aquents-------------	85	Not rated		Not rated		Not rated	
BdA:							
Baldwin-------------	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	0.50	Shrink-swell	1.00
BEA:							
Balize--------------	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
BNA:							
Bancker-------------	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
BRA:							
Barbary-------------	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00

Table 18.--Dwellings and Small Commercial Buildings--Continued

Map symbol and Soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
CoA:							
Coteau	87	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.07	Shrink-swell	0.50	Depth to saturated zone	0.07
CvA:							
Carville	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.99		
Hydraquents	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
CYA:							
Clovelly	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
DP:							
Dumps	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy	85	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		
DsA:							
Dupuy	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		
DuD:							
Duson	93	Somewhat limited		Very limited		Very limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Slope	1.00
		Depth to saturated zone	0.07	Shrink-swell	1.00	Shrink-swell	0.50
		Slope	0.01	Slope	0.01	Depth to saturated zone	0.07

Table 18.--Dwellings and Small Commercial Buildings--Continued

Map symbol and Soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
FAA:							
Fausse	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
GaA:							
Galvez	85	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.07	Shrink-swell	0.50	Depth to saturated zone	0.07
GxA:							
Uderts	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
Glenwild	40	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		
HRA:							
Harahan	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
HSA:							
Harahan	50	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.39	Depth to saturated zone	1.00	Depth to saturated zone	0.39
Allemands	40	Very limited		Very limited		Very limited	
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Organic matter content	1.00	Depth to saturated zone	1.00	Organic matter content	1.00
		Depth to saturated zone	0.07	Shrink-swell	1.00	Depth to saturated zone	0.07

Table 18.--Dwellings and Small Commercial Buildings--Continued

Map symbol and Soil name	Pct. of map unit	Dwellings without basements: Rating class and limiting features	Value	Dwellings with basements: Rating class and limiting features	Value	Small commercial buildings: Rating class and limiting features	Value
HYA:							
Hydraquents	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
Carville	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.99		
Glenwild	20	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.50	Depth to saturated zone	0.99	Shrink-swell	0.50
				Shrink-swell	0.50		
IbA:							
Iberia	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
IEA:							
Iberia	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
JaA:							
Jeanerette	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
KEA:							
Kenner	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
KpC:							
Kleinpeter	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
				Depth to saturated zone	0.95		

Table 18.--Dwellings and Small Commercial Buildings--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
LAA:							
Lafitte	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00			Organic matter content	1.00
LEA:							
Larose	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
LoA:							
Loreauville	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
M-W:							
Water, small	100	Not rated		Not rated		Not rated	
MAA:							
Maurepas	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Subsidence	1.00	Subsidence	1.00	Subsidence	1.00
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Organic matter content	1.00	Organic matter content	1.00	Organic matter content	1.00
PaA:							
Patoutville	85	Somewhat limited		Very limited		Somewhat limited	
		Depth to saturated zone	0.81	Depth to saturated zone	1.00	Depth to saturated zone	0.81
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
ShA:							
Schriever	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
SIA:							
Schriever	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00

Table 18.--Dwellings and Small Commercial Buildings--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
UB:							
Urban land----------	93	Not rated		Not rated		Not rated	
UD:							
Udorthents----------	85	Not rated		Not rated		Not rated	
W:							
Water, large--------	100	Not rated		Not rated		Not rated	

Table 19.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping

(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
AEA:							
Allemands	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Flooding	1.00		
		Subsidence	1.00	Depth to saturated zone	1.00		
		Flooding	1.00	Too clayey	1.00		
				Organic matter content	1.00		
ATA:							
Aquents	85	Not rated		Not rated		Not rated	
ATB:							
Aquents	85	Not rated		Not rated		Not rated	
BdA:							
Baldwin	90	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.99
		Low strength	1.00	Too clayey	0.28		
		Depth to saturated zone	0.99	Cutbanks cave	0.10		
		Flooding	0.40				
BEA:							
Balize	85	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Flooding	1.00	Flooding	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Low strength	1.00	Cutbanks cave	0.10		
BNA:							
Bancker	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Flooding	1.00		
		Flooding	1.00	Depth to saturated zone	1.00		
		Low strength	1.00	Too clayey	1.00		
				Organic matter content	1.00		

Table 19.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and Soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
BRA:							
Barbary	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Flooding	1.00	Too clayey	1.00		
		Low strength	1.00	Organic matter content	1.00		
				Flooding	0.80		
CoA:							
Coteau	87	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.03
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Depth to saturated zone	0.03				
CvA:							
Carville	50	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Depth to saturated zone	0.99	Flooding	1.00
				Flooding	0.80		
				Cutbanks cave	0.10		
Hydraquents	40	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Too clayey	1.00
		Depth to saturated zone	1.00	Flooding	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Low strength	1.00	Too clayey	1.00	Depth to saturated zone	1.00
				Organic matter content	1.00		
CYA:							
Clovelly	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Flooding	1.00		
		Subsidence	1.00	Depth to saturated zone	1.00		
		Flooding	1.00	Too clayey	1.00		
				Organic matter content	1.00		
DP:							
Dumps	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy	85	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Cutbanks cave	0.10		

Table 19.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--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
DsA:							
Dupuy	85	Very limited		Very limited		Not rated	
		Flooding	1.00	Depth to saturated zone	0.99		
		Low strength	1.00	Flooding	0.60		
		Shrink-swell	0.50	Cutbanks cave	0.10		
DuD:							
Duson	93	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.03
		Shrink-swell	0.50	Cutbanks cave	0.10	Slope	0.01
		Depth to saturated zone	0.03	Slope	0.01		
		Slope	0.01	Too clayey	0.01		
FAA:							
Fausse	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Ponding	1.00	Ponding	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Too clayey	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.80		
		Low strength	1.00	Cutbanks cave	0.10		
GaA:							
Galvez	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.03
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Depth to saturated zone	0.03				
GxA:							
Uderts	50	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Cutbanks cave	1.00	Too clayey	1.00
		Low strength	1.00	Too clayey	0.45		
		Flooding	0.40				
Glenwild	40	Very limited		Very limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.99		
		Shrink-swell	0.50	Cutbanks cave	0.10		
HRA:							
Harahan	85	Very limited		Very limited		Very limited	
		Low strength	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Flooding	0.40	Too clayey	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Cutbanks cave	0.10		

Table 19.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--Continued

Map symbol and Soil name	Pct. of map unit	Local roads and streets: Rating class and limiting features	Value	Shallow excavations: Rating class and limiting features	Value	Lawns and landscaping: Rating class and limiting features	Value
HSA:							
Harahan	50	Very limited		Very limited		Very limited	
		Low strength	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Flooding	0.40	Too clayey	1.00	Depth to saturated zone	0.19
		Depth to saturated zone	0.19	Cutbanks cave	0.10		
Allemands	40	Very limited		Very limited		Not rated	
		Subsidence	1.00	Depth to saturated zone	1.00		
		Flooding	0.40	Too clayey	1.00		
		Depth to saturated zone	0.03	Organic matter content	1.00		
				Cutbanks cave	0.10		
HYA:							
Hydraquents	35	Very limited		Very limited		Very limited	
		Ponding	1.00	Ponding	1.00	Too clayey	1.00
		Depth to saturated zone	1.00	Flooding	1.00	Ponding	1.00
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Low strength	1.00	Too clayey	1.00	Depth to saturated zone	1.00
				Organic matter content	1.00		
Carville	30	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	0.99	Flooding	1.00
				Flooding	0.80		
				Cutbanks cave	0.10		
Glenwild	20	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	0.99	Flooding	1.00
		Low strength	1.00	Flooding	0.80		
		Shrink-swell	0.50	Cutbanks cave	0.10		
IbA:							
Iberia	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Low strength	1.00	Too clayey	1.00	Depth to saturated zone	0.99
		Depth to saturated zone	0.99	Cutbanks cave	1.00		
		Flooding	0.40				

Table 19.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--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
IEA:							
Iberia	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Low strength	1.00	Cutbanks cave	1.00	Too clayey	1.00
		Shrink-swell	1.00	Flooding	0.80	Depth to saturated zone	0.99
		Depth to saturated zone	0.99	Too clayey	0.72		
JaA:							
Jeanerette	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.48
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Depth to saturated zone	0.48				
KEA:							
Kenner	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Flooding	1.00		
		Subsidence	1.00	Depth to saturated zone	1.00		
		Flooding	1.00	Too clayey	1.00		
				Organic matter content	1.00		
KpC:							
Kleinpeter	85	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.95		
		Flooding	0.40	Cutbanks cave	0.10		
LAA:							
Lafitte	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Flooding	1.00		
		Subsidence	1.00	Depth to saturated zone	1.00		
		Flooding	1.00	Organic matter content	1.00		
				Too clayey	1.00		
LEA:							
Larose	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Flooding	1.00		
		Flooding	1.00	Depth to saturated zone	1.00		
		Low strength	1.00	Organic matter content	1.00		
				Too clayey	1.00		

Table 19.--Roads and Streets, Shallow Excavations, and Lawns and Landscaping--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
LoA:							
Loreauville	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.48
		Depth to saturated zone	0.48	Cutbanks cave	0.10		
M-W:							
Water, small	100	Not rated		Not rated		Not rated	
MAA:							
Maurepas	85	Very limited		Very limited		Not rated	
		Ponding	1.00	Ponding	1.00		
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
		Subsidence	1.00	Organic matter content	1.00		
		Flooding	1.00	Flooding	0.80		
PaA:							
Patoutville	85	Very limited		Very limited		Somewhat limited	
		Low strength	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.48
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Depth to saturated zone	0.48				
ShA:							
Schriever	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Low strength	1.00	Too clayey	1.00	Depth to saturated zone	0.99
		Depth to saturated zone	0.99	Cutbanks cave	1.00		
		Flooding	0.40				
SIA:							
Schriever	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Too clayey	1.00	Too clayey	1.00
		Low strength	1.00	Cutbanks cave	1.00	Depth to saturated zone	0.99
		Depth to saturated zone	0.99	Flooding	0.80		
UB:							
Urban land	93	Not rated		Not rated		Not rated	
UD:							
Udorthents	85	Not rated		Not rated		Not rated	
W:							
Water, large	100	Not rated		Not rated		Not rated	

Table 20.--Sewage Disposal

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and Soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
AEA:					
Allemands-----------	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
ATA:					
Aquents-------------	85	Not rated		Not rated	
ATB:					
Aquents-------------	85	Not rated		Not rated	
BdA:					
Baldwin-------------	90	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	0.40
		Flooding	0.40		
BEA:					
Balize--------------	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
BNA:					
Bancker-------------	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00

Table 20.--Sewage Disposal--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
BRA:					
Barbary	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
CoA:					
Coteau	87	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
CvA:					
Carville	50	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
Hydraquents	40	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
CYA:					
Clovelly	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
DP:					
Dumps	85	Not rated		Not rated	
DrA:					
Dupuy	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53

Table 20.--Sewage Disposal--Continued

Map symbol and Soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
DsA:					
Dupuy	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.53
DuD:					
Duson	93	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	0.44
		Slope	0.01		
FAA:					
Fausse	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
GaA:					
Galvez	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
GxA:					
Uderts	50	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	0.40
		Flooding	0.40		
Glenwild	40	Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Seepage	0.50
		Slow water movement	1.00	Depth to saturated zone	0.19
HRA:					
Harahan	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Flooding	0.40	Flooding	0.40

Table 20.--Sewage Disposal--Continued

Map symbol and Soil name	Pct. of map unit	Septic tank absorption fields: Rating class and limiting features	Value	Sewage lagoons: Rating class and limiting features	Value
HSA:					
Harahan	50	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
		Flooding	0.40	Flooding	0.40
Allemands	40	Very limited		Very limited	
		Slow water movement	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
		Flooding	0.40	Flooding	0.40
HYA:					
Hydraquents	35	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
Carville	30	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
Glenwild	20	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Seepage	0.50
		Slow water movement	1.00	Depth to saturated zone	0.19
IbA:					
Iberia	85	Very limited		Very limited	
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Flooding	0.40
		Flooding	0.40		
IEA:					
Iberia	85	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		

Table 20.--Sewage Disposal--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
JaA:					
Jeanerette	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00		
KEA:					
Kenner	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
KpC:					
Kleinpeter	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
		Flooding	0.40	Flooding	0.40
				Slope	0.08
LAA:					
Lafitte	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Seepage	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Subsidence	1.00	Organic matter content	1.00
LEA:					
Larose	85	Very limited		Very limited	
		Flooding	1.00	Ponding	1.00
		Slow water movement	1.00	Flooding	1.00
		Ponding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Organic matter content	1.00
LoA:					
Loreauville	85	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53

Table 20.--Sewage Disposal--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
M-W:					
Water, small	100	Not rated		Not rated	
MAA:					
Maurepas	85	Very limited Flooding Ponding Depth to saturated zone Filtering capacity Subsidence	 1.00 1.00 1.00 1.00 1.00	Very limited Ponding Flooding Organic matter content Seepage Depth to saturated zone	 1.00 1.00 1.00 1.00 1.00
PaA:					
Patoutville	85	Very limited Slow water movement Depth to saturated zone	 1.00 1.00	Somewhat limited Depth to saturated zone	 0.94
ShA:					
Schriever	85	Very limited Slow water movement Depth to saturated zone Flooding	 1.00 1.00 0.40	Very limited Depth to saturated zone Flooding	 1.00 0.40
SIA:					
Schriever	85	Very limited Flooding Slow water movement Depth to saturated zone	 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	 1.00 1.00
UB:					
Urban land	93	Not rated		Not rated	
UD:					
Udorthents	85	Not rated		Not rated	
W:					
Water, large	100	Not rated		Not rated	

Table 21.--Landfills

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and Soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
AEA:							
Allemands	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00	Seepage	1.00	Hard to compact	1.00
ATA:							
Aquents	85	Not rated		Somewhat limited		Not rated	
				Flooding	0.40		
ATB:							
Aquents	85	Not rated		Very limited		Not rated	
				Flooding	1.00		
BdA:							
Baldwin	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00	Flooding	0.40	Too clayey	1.00
		Flooding	0.40				
BEA:							
Balize	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50				
BNA:							
Bancker	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
		Organic matter content	1.00				

Table 21.—Landfills--Continued

Map symbol and Soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
BRA:							
Barbary	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
		Organic matter content	1.00				
CoA:							
Coteau	87	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.68
CvA:							
Carville	50	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.24
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
Hydraquents	40	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
		Organic matter content	1.00				
CYA:							
Clovelly	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00	Seepage	1.00	Hard to compact	1.00
DP:							
Dumps	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50			Depth to saturated zone	0.44

Table 21.--Landfills--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
DsA:							
Dupuy	85	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Too clayey	0.50
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.44
		Too clayey	0.50				
DuD:							
Duson	93	Very limited		Somewhat limited		Very limited	
		Too clayey	1.00	Depth to saturated zone	0.44	Hard to compact	1.00
		Depth to saturated zone	0.95	Slope	0.01	Depth to saturated zone	0.68
		Slope	0.01			Too clayey	0.50
						Slope	0.01
FAA:							
Fausse	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
GaA:							
Galvez	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.68
GxA:							
Uderts	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00	Flooding	0.40	Too clayey	1.00
		Flooding	0.40			Hard to compact	1.00
Glenwild	40	Somewhat limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.86	Depth to saturated zone	0.19	Depth to saturated zone	0.47
HRA:							
Harahan	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00	Flooding	0.40	Hard to compact	1.00
		Flooding	0.40			Depth to saturated zone	0.86
HSA:							
Harahan	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00	Flooding	0.40	Hard to compact	1.00
		Flooding	0.40			Depth to saturated zone	0.86

Table 21.--Landfills--Continued

Map symbol and Soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Trench sanitary landfill: Value	Area sanitary landfill: Rating class and limiting features	Area sanitary landfill: Value	Daily cover for landfill: Rating class and limiting features	Daily cover for landfill: Value
Allemands-----------	40	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00	Seepage	1.00	Hard to compact	1.00
		Flooding	0.40	Flooding	0.40	Depth to saturated zone	0.68
HYA:							
Hydraquents---------	35	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
		Organic matter content	1.00				
Carville------------	30	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.47
		Depth to saturated zone	1.00	Depth to saturated zone	1.00		
Glenwild------------	20	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	0.47
		Depth to saturated zone	0.86	Depth to saturated zone	0.19		
IbA:							
Iberia--------------	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	0.50	Flooding	0.40	Hard to compact	1.00
		Flooding	0.40			Too clayey	0.50
IEA:							
Iberia--------------	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Hard to compact	1.00
		Too clayey	0.50			Too clayey	0.50
JaA:							
Jeanerette----------	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.96
		Too clayey	0.50			Too clayey	0.50

Table 21.--Landfills--Continued

Map symbol and Soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Value	Area sanitary landfill: Rating class and limiting features	Value	Daily cover for landfill: Rating class and limiting features	Value
KEA:							
Kenner	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Organic matter content	1.00
		Organic matter content	1.00				
KpC:							
Kleinpeter	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	0.50
		Too clayey	0.50	Flooding	0.40	Depth to saturated zone	0.09
		Flooding	0.40				
LAA:							
Lafitte	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Organic matter content	1.00
		Organic matter content	1.00	Seepage	1.00	Seepage	0.52
LEA:							
Larose	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
		Organic matter content	1.00				
LoA:							
Loreauville	85	Very limited		Very limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.96
M-W:							
Water, small	100	Not rated		Not rated		Not rated	

Table 21.--Landfills--Continued

Map symbol and Soil name	Pct. of map unit	Trench sanitary landfill: Rating class and limiting features	Trench sanitary landfill: Value	Area sanitary landfill: Rating class and limiting features	Area sanitary landfill: Value	Daily cover for landfill: Rating class and limiting features	Daily cover for landfill: Value
MAA:							
Maurepas	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Ponding	1.00
		Depth to saturated zone	1.00	Ponding	1.00	Depth to saturated zone	1.00
		Ponding	1.00	Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Seepage	1.00	Organic matter content	1.00
		Organic matter content	1.00				
PaA:							
Patoutville	85	Very limited		Somewhat limited		Somewhat limited	
		Depth to saturated zone	1.00	Depth to saturated zone	0.94	Depth to saturated zone	0.96
ShA:							
Schriever	85	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Too clayey	1.00	Flooding	0.40	Too clayey	1.00
		Flooding	0.40			Hard to compact	1.00
SIA:							
Schriever	85	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Too clayey	1.00
		Too clayey	1.00			Hard to compact	1.00
UB:							
Urban land	93	Not rated		Not rated		Not rated	
UD:							
Udorthents	85	Not rated		Somewhat limited		Not rated	
				Slope	0.16		
W:							
Water, large	100	Not rated		Not rated		Not rated	

Table 22.--Source of Sand and Gravel

(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
AEA:					
Allemands	85	Not rated		Not rated	
ATA:					
Aquents	85	Not rated		Not rated	
ATB:					
Aquents	85	Not rated		Not rated	
BdA:					
Baldwin	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
BEA:					
Balize	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
BNA:					
Bancker	85	Not rated		Not rated	
BRA:					
Barbary	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CoA:					
Coteau	87	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CvA:					
Carville	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Hydraquents	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
CYA:					
Clovelly	85	Not rated		Not rated	
DP:					
Dumps	85	Not rated		Not rated	

Table 22.--Source of Sand and Gravel--Continued

Map symbol and Soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
DrA:					
Dupuy	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
DsA:					
Dupuy	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
DuD:					
Duson	93	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
FAA:					
Fausse	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
GaA:					
Galvez	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
GxA:					
Uderts	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Glenwild	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HRA:					
Harahan	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
HSA:					
Harahan	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Allemands	40	Not rated		Not rated	
HYA:					
Hydraquents	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Carville	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 22.--Source of Sand and Gravel--Continued

Map symbol and Soil name	Pct. of map unit	Potential source of gravel: Rating class	Value	Potential source of sand: Rating class	Value
Glenwild------------	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
IbA:					
Iberia--------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
IEA:					
Iberia--------------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
JaA:					
Jeanerette----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
KEA:					
Kenner--------------	85	Not rated		Not rated	
KpC:					
Kleinpeter----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
LAA:					
Lafitte-------------	85	Not rated		Not rated	
LEA:					
Larose--------------	85	Not rated		Not rated	
LoA:					
Loreauville---------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
M-W:					
Water, small--------	100	Not rated		Not rated	
MAA:					
Maurepas------------	85	Not rated		Not rated	
PaA:					
Patoutville---------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
ShA:					
Schriever-----------	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

Table 22.--Source of Sand and Gravel--Continued

Map symbol and Soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
SIA:					
Schriever	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
UB:					
Urban land	93	Not rated		Not rated	
UD:					
Udorthents	85	Not rated		Not rated	
W:					
Water, large	100	Not rated		Not rated	

Table 23.--Source of Reclamation Material, Roadfill, and Topsoil

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and Soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AEA:							
Allemands-----------	85	Not rated		Poor		Not rated	
				Wetness depth	0.00		
				Low strength	0.00		
ATA:							
Aquents-------------	85	Not rated		Not rated		Not rated	
ATB:							
Aquents-------------	85	Not rated		Not rated		Not rated	
BdA:							
Baldwin-------------	90	Poor		Poor		Poor	
		Too clayey	0.00	Shrink-swell	0.00	Too clayey	0.00
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.00
		Too acid	0.68	Wetness depth	0.00		
		Water erosion	0.99				
BEA:							
Balize--------------	85	Fair		Poor		Poor	
		Sodium content	0.60	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.88	Low strength	0.00	Sodium content	0.60
		Water erosion	0.90				
BNA:							
Bancker-------------	85	Poor		Poor		Poor	
		Too clayey	0.00	Wetness depth	0.00	Too clayey	0.00
		Sodium content	0.00	Low strength	0.00	Wetness depth	0.00
						Sodium content	0.00
						Salinity	0.50
BRA:							
Barbary-------------	85	Poor		Poor		Poor	
		Too clayey	0.00	Wetness depth	0.00	Too clayey	0.00
				Low strength	0.00	Wetness depth	0.00
CoA:							
Coteau--------------	87	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.76
		Water erosion	0.68	Wetness depth	0.76		
		Too acid	0.74	Shrink-swell	0.91		
CvA:							
Carville------------	50	Fair		Fair		Fair	
		Organic matter content low	0.88	Wetness depth	0.98	Wetness depth	0.98
		Water erosion	0.90				

Table 23.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map symbol and Soil name	Pct. of map unit	Potential source of reclamation material: Rating class and limiting features	Value	Potential source of roadfill: Rating class and limiting features	Value	Potential source of topsoil: Rating class and limiting features	Value
Hydraquents	40	Poor		Poor		Poor	
		Too clayey	0.00	Wetness depth	0.00	Too clayey	0.00
				Low strength	0.00	Wetness depth	0.00
CYA:							
Clovelly	85	Not rated		Poor		Not rated	
				Wetness depth	0.00		
				Low strength	0.00		
DP:							
Dumps	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy	85	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Too acid	0.88
		Too acid	0.32	Wetness depth	0.91	Wetness depth	0.91
		Water erosion	0.90	Shrink-swell	0.99		
DsA:							
Dupuy	85	Fair		Poor		Fair	
		Too acid	0.05	Low strength	0.00	Too acid	0.41
		Organic matter content low	0.12	Wetness depth	0.91	Wetness depth	0.91
				Shrink-swell	0.99		
DuD:							
Duson	93	Fair		Poor		Fair	
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.76
		Too acid	0.50	Shrink-swell	0.56	Too acid	0.88
		Water erosion	0.68	Wetness depth	0.76	Slope	0.99
FAA:							
Fausse	85	Poor		Poor		Poor	
		Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.88	Shrink-swell	0.00	Too clayey	0.00
				Low strength	0.00		
GaA:							
Galvez	85	Fair		Poor		Fair	
		Too acid	0.68	Low strength	0.00	Wetness depth	0.76
		Organic matter content low	0.88	Wetness depth	0.76		
		Water erosion	0.90	Shrink-swell	0.87		
GxA:							
Uderts	50	Poor		Poor		Poor	
		Too clayey	0.00	Wetness depth	0.00	Wetness depth	0.00
		Organic matter content low	0.88	Low strength	0.00	Too clayey	0.00
				Shrink-swell	0.00		

Table 23.--Source of Reclamation Material, Roadfill, and Topsoil--Continued

Map symbol and Soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
SIA:							
Schriever	85	Poor		Poor		Poor	
		Too clayey	0.00	Shrink-swell	0.00	Too clayey	0.00
		Organic matter content low	0.12	Low strength	0.00	Wetness depth	0.00
		Too acid	0.84	Wetness depth	0.00		
UB:							
Urban land	93	Not rated		Not rated		Not rated	
UD:							
Udorthents	85	Not rated		Not rated		Not rated	
W:							
Water, large	100	Not rated		Not rated		Not rated	

Table 24.--Ponds and Embankments

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and Soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
AEA:							
Allemands-----------	85	Very limited		Not rated		Somewhat limited	
		Seepage	1.00			Cutbanks cave	0.10
ATA:							
Aquents-------------	85	Not limited		Not rated		Not rated	
ATB:							
Aquents-------------	85	Not limited		Not rated		Not rated	
BdA:							
Baldwin-------------	90	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
				Hard to pack	0.37	Cutbanks cave	0.10
BEA:							
Balize--------------	85	Not limited		Very limited		Very limited	
				Ponding	1.00	Slow refill	1.00
				Depth to saturated zone	1.00	Cutbanks cave	0.10
				Piping	0.96		
BNA:							
Bancker-------------	85	Not limited		Not rated		Somewhat limited	
						Cutbanks cave	0.10
						Salinity and saturated zone	0.06
BRA:							
Barbary-------------	85	Not limited		Very limited		Somewhat limited	
				Organic matter content	1.00	Cutbanks cave	0.10
				Ponding	1.00		
				Depth to saturated zone	1.00		
				Hard to pack	1.00		
CoA:							
Coteau--------------	87	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.04	Depth to saturated zone	0.95	Slow refill	0.96
				Piping	0.62	Cutbanks cave	0.10
						Depth to saturated zone	0.02

Table 24.--Ponds and Embankments--Continued

Map symbol and Soil name	Pct. of map unit	Pond reservoir areas		Embankments, dikes, and levees		Aquifer-fed excavated ponds	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
CvA:							
Carville------------	50	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Piping	1.00	Slow refill	0.28
				Depth to saturated zone	0.68	Depth to saturated zone	0.14
						Cutbanks cave	0.10
Hydraquents---------	40	Not limited		Very limited		Somewhat limited	
				Organic matter content	1.00	Cutbanks cave	0.10
				Ponding	1.00		
				Depth to saturated zone	1.00		
				Hard to pack	1.00		
CYA:							
Clovelly------------	85	Very limited		Not rated		Somewhat limited	
		Seepage	1.00			Cutbanks cave	0.10
						Salinity and saturated zone	0.06
DP:							
Dumps---------------	85	Not rated		Not rated		Not rated	
DrA:							
Dupuy---------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	0.84	Slow refill	0.28
				Piping	0.10	Cutbanks cave	0.10
						Depth to saturated zone	0.07
DsA:							
Dupuy---------------	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	0.84	Slow refill	0.28
				Piping	0.24	Cutbanks cave	0.10
						Depth to saturated zone	0.07
DuD:							
Duson---------------	93	Very limited		Somewhat limited		Very limited	
		Slope	1.00	Depth to saturated zone	0.95	Depth to water	1.00
		Seepage	0.04				
FAA:							
Fausse--------------	85	Not limited		Very limited		Very limited	
				Ponding	1.00	Slow refill	1.00
				Depth to saturated zone	1.00	Cutbanks cave	0.10
				Hard to pack	1.00		

Table 24.--Ponds and Embankments--Continued

Map symbol and Soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
GaA:							
Galvez	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.04	Depth to saturated zone	0.95	Slow refill	0.96
				Piping	0.22	Cutbanks cave	0.10
						Depth to saturated zone	0.02
GxA:							
Uderts	50	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
				Hard to pack	0.89	Cutbanks cave	0.10
Glenwild	40	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.97	Depth to water	1.00
				Depth to saturated zone	0.86		
HRA:							
Harahan	85	Not limited		Very limited		Very limited	
				Hard to pack	1.00	Slow refill	1.00
				Depth to saturated zone	0.99	Cutbanks cave	0.10
						Depth to saturated zone	0.01
HSA:							
Harahan	50	Not limited		Very limited		Very limited	
				Hard to pack	1.00	Slow refill	1.00
				Depth to saturated zone	0.99	Cutbanks cave	0.10
						Depth to saturated zone	0.01
Allemands	40	Very limited		Not rated		Somewhat limited	
		Seepage	1.00			Cutbanks cave	0.10
						Depth to saturated zone	0.02
HYA:							
Hydraquents	35	Not limited		Very limited		Somewhat limited	
				Organic matter content	1.00	Cutbanks cave	0.10
				Ponding	1.00		
				Depth to saturated zone	1.00		
				Hard to pack	1.00		
Carville	30	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Piping	1.00	Slow refill	0.28
				Depth to saturated zone	0.86	Cutbanks cave	0.10
						Depth to saturated zone	0.06

Table 24.--Ponds and Embankments--Continued

Map symbol and Soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
Glenwild	20	Somewhat limited		Somewhat limited		Very limited	
		Seepage	0.70	Piping	0.97	Depth to water	1.00
				Depth to saturated zone	0.86		
IbA:							
Iberia	85	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
				Hard to pack	0.60	Cutbanks cave	0.10
IEA:							
Iberia	85	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
				Hard to pack	0.38	Cutbanks cave	0.10
JaA:							
Jeanerette	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.04	Depth to saturated zone	1.00	Slow refill	0.96
				Piping	0.41	Cutbanks cave	0.10
KEA:							
Kenner	85	Very limited		Not rated		Somewhat limited	
		Seepage	1.00			Cutbanks cave	0.10
KpC:							
Kleinpeter	85	Somewhat limited		Somewhat limited		Somewhat limited	
		Seepage	0.72	Piping	0.79	Slow refill	0.28
				Depth to saturated zone	0.43	Depth to saturated zone	0.25
						Cutbanks cave	0.10
LAA:							
Lafitte	85	Very limited		Not rated		Somewhat limited	
		Seepage	1.00			Cutbanks cave	0.10
						Salinity and saturated zone	0.06
LEA:							
Larose	85	Not limited		Not rated		Somewhat limited	
						Cutbanks cave	0.10
LoA:							
Loreauville	85	Somewhat limited		Very limited		Somewhat limited	
		Seepage	0.72	Depth to saturated zone	1.00	Slow refill	0.28
				Piping	0.92	Cutbanks cave	0.10
M-W:							
Water, small	100	Not rated		Not rated		Not rated	
MAA:							
Maurepas	85	Very limited		Not rated		Somewhat limited	
		Seepage	1.00			Cutbanks cave	0.10

Table 24.--Ponds and Embankments--Continued

Map symbol and Soil name	Pct. of map unit	Pond reservoir areas: Rating class and limiting features	Value	Embankments, dikes, and levees: Rating class and limiting features	Value	Aquifer-fed excavated ponds: Rating class and limiting features	Value
PaA:							
Patoutville	85	Somewhat limited		Very limited		Very limited	
		Seepage	0.02	Depth to saturated zone	1.00	Depth to water	1.00
				Piping	0.87		
ShA:							
Schriever	85	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
				Hard to pack	1.00	Cutbanks cave	0.10
SIA:							
Schriever	85	Not limited		Very limited		Very limited	
				Depth to saturated zone	1.00	Slow refill	1.00
				Hard to pack	1.00	Cutbanks cave	0.10
UB:							
Urban land	93	Not rated		Not rated		Not rated	
UD:							
Udorthents	85	Very limited		Not rated		Not rated	
		Slope	1.00				
W:							
Water, large	100	Not rated		Not rated		Not rated	

Table 25.--Engineering Index Properties

(Absence of an entry indicates that the data were not estimated.)

Map symbol and Soil name	Horizon	Depth	USDA texture	Classification		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	4	10	40	200		
		In								Pct	
AEA:											
Allemands-------	Oa1	0-9	Muck	PT	A-8	---	---	---	---	---	---
	Oa2	9-27	Muck	PT	A-8	---	---	---	---	---	---
	Ag, Cg	27-72	Clay, mucky clay	MH, CH	A-7-6	100	100	95-100	80-100	63-95	32-69
ATA:											
Aquents---------		---	---	---	---	---	---	---	---	---	---
ATB:											
Aquents---------		---	---	---	---	---	---	---	---	---	---
BdA:											
Baldwin---------	Ap	0-5	Silty clay loam	CH, CL	A-6, A-7-6	100	100	100	95-100	38-57	19-28
	Btg	5-32	Clay, silty clay, silty clay loam	CH	A-7-6	95-100	95-100	95-100	90-100	52-76	29-42
	BCg	32-40	Clay, silty clay, silty clay loam	CH, CL	A-6, A-7-6	95-100	95-100	95-100	90-100	38-65	19-40
	Cg	40-80	Silt loam, silty clay, silty clay loam, very fine sandy loam	CL	A-6, A-7-6	95-100	95-100	90-100	60-90	29-59	12-36
BEA:											
Balize----------	A	0-11	Silt loam	CL, CL-ML	A-4, A-6, A-7-6	100	100	90-100	80-95	27-54	6-28
	Cg1, Cg2	11-48	Silt loam, silty clay loam, mucky silty clay loam	CL, CL-ML	A-4, A-6, A-7-6	100	100	90-100	80-95	26-50	6-28
	Cg3, Cg4	48-72	Silt loam, silty clay loam, very fine sandy loam	CL, CL-ML, ML	A-4, A-6, A-7-6	100	100	90-100	75-95	20-41	3-21

Table 25.--Engineering Index Properties--Continued

Map symbol and Soil name	Horizon	Depth	USDA texture	Classification		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	4	10	40	200		
		In								Pct	
BNA:											
Bancker----------	Oa	0-9	Muck	PT	A-8	---	---	---	---	---	---
	Cg	9-74	Clay, silty clay, mucky clay	MH, OH	A-7-5	100	100	90-100	70-95	55-90	15-45
BRA:											
Barbary----------	Oa	0-6	Muck	PT	A-8	---	---	---	---	---	---
	Ag	6-12	Silty clay, mucky clay, clay	MH, OH	A-7-5, A-8	100	100	100	95-100	58-137	35-63
	Cg	12-84	Mucky clay, clay	MH, OH	A-7-5, A-8	100	100	100	95-100	67-137	43-63
CoA:											
Coteau-----------	Ap	0-5	Silt	CL-ML, ML	A-4	100	100	100	95-100	17-37	2-12
	Bt,Bt/E	5-55	Silty clay loam, silt loam	CL	A-6, A-7-6	100	100	100	95-100	29-44	12-23
	BCg	55-85	Silt loam	CL, CL-ML	A-4, A-6, A-7-6	100	100	100	95-100	25-42	5-18
CvA:											
Carville---------	A	0-6	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	100	100	95-100	75-100	0-31	NP-12
	Bg,Cg,Abg	6-80	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	100	100	95-100	75-100	0-31	NP-12
Hydraquents------	Oa, Ag	0-6	Muck, mucky clay, clay	PT	A-8	100	100	100	95-100	54-134	31-59
	Cg	6-80	Mucky clay, clay	MH, OH	A-7-5, A-8	100	100	100	95-100	67-137	43-63
CYA:											
Clovelly---------	Oa	0-28	Muck	PT	A-8	---	---	---	---	---	---
	Ag, Cg	28-84	Clay, silty clay, mucky clay	CH, CL, MH, ML	A-7-5, A-7-6	100	100	95-100	85-95	47-87	25-45
DP:											
Dumps------------		---	---	---	---	---	---	---	---	---	---

Table 25.--Engineering Index Properties--Continued

Map symbol and Soil name	Horizon	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plasticity index
		In								Pct	
DrA:											
Dupuy-----------	A	0-10	Silt loam	CL-ML, ML, CL	A-4, A-6	100	100	90-100	75-98	20-35	3-11
	Bt,Btg	10-42	Silty clay loam, clay loam, silt loam, loam	CL	A-6, A-7	100	100	90-100	70-95	29-44	12-24
	BCg,2Cg	42-80	Loam, very fine sandy loam, silt loam, silty clay loam	CL	A-6	100	100	85-100	60-90	27-42	12-24
DsA:											
Dupuy-----------	Oe	0-2	Slightly decomposed plant material	PT	A-8	100	100	100	100	---	---
	A	2-10	Silt loam	CL-ML, ML, CL	A-4, A-6	100	100	90-100	75-98	20-35	3-11
	Bt,Btg	10-42	Silty clay loam, clay loam, silt loam, loam	CL	A-6, A-7	100	100	90-100	70-95	29-44	12-24
	BCg	42-80	Silty clay loam, loam, very fine sandy loam, silt loam	CL	A-6	100	100	85-100	60-90	27-42	12-24
DuD:											
Duson-----------	A	0-4	Silt	CL-ML, ML	A-4	100	100	100	95-100	17-32	2-7
	E	4-7	Silt loam, silt	CL-ML, ML	A-4	100	100	100	95-100	17-37	2-12
	Bt	7-38	Silty clay loam, silt loam	CL	A-6, A-7-6	100	100	100	95-100	29-46	12-25
	Btg	38-80	Clay, silty clay, silty clay loam	CL, CH	A-6, A-7-6	100	100	95-100	85-100	38-65	19-40

Table 25.--Engineering Index Properties--Continued

Map symbol and Soil name	Horizon	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Percentage passing sieve number--: 4	10	40	200	Liquid limit	Plas- ticity index
		In								Pct	
FAA:											
Fausse----------	A	0-6	Loam, silty clay loam, clay	CH, CL, MH, ML	A-7-6	100	100	100	95-100	34-78	14-46
	Bg1	6-24	Clay, silty clay, silty clay loam	CH, CL, MH, ML	A-7-6	100	100	100	95-100	47-108	25-72
	Bg2,BC,C	24-80	Clay, silty clay, silty clay loam	CH, CL, MH, ML	A-7-6	100	100	100	95-100	47-108	25-72
GaA:											
Galvez----------	Ap	0-8	Silt loam	CL-ML, ML	A-6	100	100	100	90-100	5-27	NP-11
	Bt,BC,Bg	8-83	Silty clay loam, silt loam	CL	A-6, A-7-6	100	100	100	90-100	26-51	9-28
	2Cg	83-91	Silt loam, silty clay loam, silty clay	CL, CL-ML	A-4, A-6, A-7-6	100	100	100	90-100	25-50	5-27
GxA:											
Uderts----------	Ap	0-6	Clay, silty clay	CH	A-7-5	100	95-100	90-100	90-100	52-77	28-38
	Bss	6-40	Silty clay, clay	CH	A-7-6	100	95-100	90-100	90-100	51-80	28-46
	Bg, BCg	40-80	Clay, silty clay loam, silty clay	CH, CL	A-6, A-7-6	100	100	100	90-100	40-70	25-44
Glenwild--------	Ap	0-4	Silty clay loam	CL	A-7-6	100	100	100	90-100	38-49	19-25
	Bt	4-22	Silt loam, silty clay loam, clay loam	CL	A-6	100	100	100	90-100	30-47	12-25
	2Btk, 2BCk, 2C, 3C, 3Ck, 3C’, 3Ck’	22-80	Stratified silty clay loam to silty clay to silt loam, silty clay loam, silt loam	CL, CL-ML	A-4, A-6	100	100	100	90-100	23-34	4-12

Table 25.--Engineering Index Properties--Continued

Map symbol and Soil name	Horizon	Depth	USDA texture	Classification		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	4	10	40	200		
		In								Pct	
HRA:											
Harahan---------	A	0-11	Clay	CH, MH, OH	A-7-5, A-7-6, A-8	100	100	100	95-100	64-151	36-66
	Bg	11-23	Clay, silty clay	CH, MH	A-7-5, A-7-6	100	100	100	95-100	60-90	35-50
	Cg	23-84	Clay, silty clay, mucky clay	CH, MH, OH	A-7-5, A-7-6, A-8	100	100	100	95-100	60-90	35-50
HSA:											
Harahan---------	A	0-6	Silty clay, clay	CH, MH, OH	A-7-5, A-7-6, A-8	100	100	100	95-100	64-151	36-66
	Bg	6-23	Clay, silty clay	CH, MH	A-7-5, A-7-6	100	100	100	95-100	60-90	35-50
	Cg	23-60	Clay, silty clay, mucky clay	CH, MH, OH	A-7-5, A-7-6, A-8	100	100	100	95-100	60-90	35-50
Allemands-------	Oa1, Oe	0-9	Muck	PT	A-8	---	---	---	---	---	---
	Oa2	9-28	Muck	PT	A-8	---	---	---	---	---	---
	Abg, Cg	28-60	Clay, mucky clay	MH, CH	A-7-5	100	100	95-100	80-100	68-108	33-72
HYA:											
Hydraquents-----	Oa or Ag	0-6	Muck, mucky clay, clay	PT	A-8	100	100	100	95-100	---	---
	Cg	6-80	Mucky clay, clay	MH, OH	A-7-5, A-8	100	100	100	95-100	67-137	43-63
Carville--------	A	0-6	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	100	100	95-100	75-100	0-31	NP-12
	Cg, Abg	6-80	Silt loam, very fine sandy loam, loam	CL-ML, ML	A-4	100	100	95-100	75-100	0-31	NP-12

Table 25.--Engineering Index Properties--Continued

Map symbol and Soil name	Horizon	Depth	USDA texture	Classification		Percentage passing sieve number--				Liquid limit	Plasticity index
				Unified	AASHTO	4	10	40	200		
		In								Pct	
Glenwild--------	A	0-6	Silty clay loam, silt loam	CL	A-6	100	100	100	90-100	28-47	12-24
	Bt	6-24	Silt loam, silty clay loam, clay loam	CL	A-6	100	100	100	90-100	30-47	12-25
	2Btk,2BCk,Ck	24-80	Silty clay loam, stratified very fine sandy loam to silty clay, silt loam	CL, CL-ML	A-4, A-6	100	100	100	90-100	23-34	4-12
IbA:											
Iberia----------	Ap	0-17	Clay	CH, MH	A-7-5, A-7-6	100	100	100	95-100	55-88	29-45
	Bssg	17-37	Clay, silty clay	CH	A-7-5, A-7-6	95-100	90-100	90-100	85-100	57-82	33-46
	Bg, Cg	37-80	Silty clay, silty clay loam, clay	CH, CL	A-7-5, A-7-6	100	100	100	95-100	41-88	17-52
IEA:											
Iberia----------	A1	0-8	Clay	CH, MH	A-7-5, A-7-6	100	100	100	95-100	55-88	29-45
	A2, Bg1	8-22	Clay, silty clay	CH	A-7-5, A-7-6	95-100	90-100	90-100	85-100	57-82	33-46
	Bg2, Cg	22-80	Silty clay, silty clay loam, clay	CH, CL	A-7-5, A-7-6	100	100	100	95-100	41-88	17-53
JaA:											
Jeanerette------	Ap	0-6	Silt loam	CL, CL-ML, ML	A-6	100	100	95-100	90-100	21-44	6-18
	A, Btg	6-25	Silty clay loam, silt loam	CL	A-7-6, A-6	100	95-100	90-100	85-98	30-49	12-25
	Btkg	25-50	Silty clay loam, silt loam	CL	A-7-6, A-6	65-100	60-95	50-95	45-95	30-47	12-25
	BCg	50-80	Silt loam, very fine sandy loam, silty clay loam	CL, CL-ML	A-4, A-6, A-7-6, A-5	100	95-100	90-100	85-98	23-41	4-17

Table 25.--Engineering Index Properties--Continued

Map symbol and Soil name	Horizon	Depth	USDA texture	Classification		Percentage passing sieve number--				Liquid limit	Plas- ticity index
				Unified	AASHTO	4	10	40	200		
		In								Pct	
KEA:											
Kenner----------	Oe	0-10	Muck	PT	A-8	---	---	---	---	---	---
	Oa	10-30	Muck	PT	A-8	---	---	---	---	---	---
	Cg	30-32	Clay, silty clay, mucky clay	CH, OH	A-7-6	100	100	100	95-100	50-104	32-60
	O'a	32-80	Muck	PT	A-8	---	---	---	---	---	---
KpC:											
Kleinpeter------	Ap, E	0-11	Silt, silt loam	CL-ML, CL	A-4	100	100	100	95-100	21-36	4-15
	Bt,Bt/E	11-50	Silt loam, silty clay loam	CL	A-6, A-7	100	100	100	90-100	27-43	12-25
	Bt/E	50-80	Silty clay loam, silt loam	CL, ML	A-4, A-6	100	100	100	90-100	15-36	2-15
LAA:											
Lafitte---------	Oa	0-69	Muck	PT	A-8	---	---	---	---	---	---
	Cg	69-80	Clay, silty clay	CH, CL, MH, ML	A-7-5, A-7-6	100	100	95-100	85-95	45-100	16-60
LEA:											
Larose----------	Oa	0-8	Muck	PT	A-8	---	---	---	---	---	---
	Ag, Cg	8-80	Clay, silty clay, mucky clay	CH, OH	A-7-5	100	100	100	90-100	64-127	35-53
LoA:											
Loreauville-----	Ap1	0-5	Silt loam	CL, CL-ML, ML	A-4	100	100	100	85-100	17-45	2-18
	Ap2,Btk,	5-20	Silty clay loam, silt loam	CL	A-6, A-7-6	95-100	90-100	90-100	85-100	30-45	12-23
	Btg,BC,C	20-80	Loam, silt loam, very fine sandy loam	CL, CL-ML	A-6	95-100	90-100	90-100	85-100	20-39	4-19
M-W:											
Water, Small----		---	---	---	---	---	---	---	---	---	---
MAA:											
Maurepas--------	Oa	0-70	Muck	PT	A-8	---	---	---	---	---	---

Table 25.--Engineering Index Properties--Continued

Map symbol and Soil name	Horizon	Depth	USDA texture	Classification: Unified	Classification: AASHTO	Percentage passing sieve number-- 4	10	40	200	Liquid limit	Plas-ticity index
		In								Pct	
PaA:											
Patoutville-----	Ap	0-10	Silt, silt loam	CL-ML, ML	A-4	100	100	100	95-100	18-32	3-7
	Btg, Bt	10-28	Silty clay loam, silt loam	CL	A-6, A-7-6, A-4	100	100	100	95-100	29-46	8-23
	B'tg,B't	28-65	Silty clay loam, silt loam	CL	A-4, A-6, A-7-6	100	100	100	95-100	29-46	8-23
	Bg, 2Bt	65-80	Silty clay loam, silt loam, silty clay	CH, CL	A-7-6, A-6	100	100	100	95-100	32-59	15-36
ShA:											
Schriever-------	Ap	0-5	Clay	CH, CL	A-7-5, A-7-6	100	100	100	95-100	46-86	29-45
	Bg, Bssg	5-62	Clay, silty clay	CH	A-7-5, A-7-6	100	100	100	95-100	68-105	44-68
	Bkssg	62-80	Clay, silty clay loam, silt loam	CH, CL	A-6, A-7-5, A-7-6	100	100	100	95-100	32-85	11-50
SIA:											
Schriever-------	A	0-8	Clay	CH, CL	A-7-5, A-7-6	100	100	100	95-100	46-86	29-45
	Bg,Bssg, BC	8-65	Clay, silty clay	CH	A-7-5, A-7-6	100	100	100	95-100	68-105	44-68
	2Cg	65-80	Clay, silty clay loam, silt loam	CH, CL	A-6, A-7-6	100	100	100	95-100	37-95	18-66
UB:											
Urban Land------		---	---	---	---	---	---	---	---	---	---
UD:											
Udorthents------		---	---	---	---	---	---	---	---	---	---
W:											
Water, Large----		---	---	---	---	---	---	---	---	---	---

Table 26.--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	Horizon	Depth	Sand	Clay	Moist bulk density	Saturated hydraulic conductivity (K-sat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors			Wind erodi-bility group	Wind erodi-bility index
										Kw	Kf	T		
		In	Pct	Pct	g/cc	µm/sec	In/in	Pct	Pct					
AEA:														
Allemands------	Oa1	0-9	---	---	0.05-0.25	14.11-141.14	0.20-0.50	0.0-2.9	30-85	---	---	2	8	0
	Oa2	9-27	---	---	0.05-0.25	14.11-141.14	0.20-0.50	0.0-2.9	20-40	---	---			
	Ag, Cg	27-72	---	60-95	0.15-1.00	0.00-0.42	0.14-0.18	0.0-2.9	0.0-10	.32	.32			
ATA:														
Aquents--------		---	---	---	---	---	---	---	---	---	---	5	8	0
ATB:														
Aquents--------		---	---	---	---	---	---	---	---	---	---	5	8	0
BdA:														
Baldwin--------	Ap	0-5	---	27-39	1.35-1.65	0.42-1.41	0.18-0.22	3.0-5.9	0.5-4.0	.37	.37	5	7	38
	Btg	5-32	0-3	37-55	1.20-1.60	0.00-0.42	0.12-0.21	9.0-25.0	0.5-1.0	.32	.32			
	BCg	32-40	---	27-55	1.20-1.65	0.42-1.41	0.12-0.21	6.0-8.9	0.0-0.5	.32	.32			
	Cg	40-80	---	18-50	1.20-1.65	0.42-1.41	0.12-0.21	3.0-5.9	0.0-0.5	.37	.37			
BEA:														
Balize---------	A	0-11	---	15-40	0.25-1.00	0.42-1.41	0.15-0.25	0.0-2.9	1.0-3.0	.43	.43	5	5	56
	Cg1, Cg2	11-48	---	18-35	0.25-1.00	0.42-1.41	0.15-0.25	0.0-2.9	0.5-1.0	.43	.43			
	Cg3, Cg4	48-72	---	10-30	0.25-1.00	0.42-1.41	0.15-0.20	0.0-2.9	0.0-0.5	.37	.37			
BNA:														
Bancker--------	Oa	0-9	---	---	0.10-0.40	14.11-141.14	0.20-0.50	0.0-2.9	30-70	---	---	2	8	0
	Cg	9-74	---	60-85	0.20-1.00	0.00-0.42	0.14-0.18	0.0-2.9	0.5-2.0	.28	.28			
BRA:														
Barbary--------	Oa	0-6	---	---	0.15-0.50	14.11-42.34	0.20-0.50	0.0-2.9	30-70	---	---	5	8	0
	Ag	6-12	0-3	50-95	0.25-1.00	0.00-0.42	0.18-0.20	0.0-2.9	2.0-25	.32	.32			
	Cg	12-84	0-3	60-95	0.25-1.00	0.00-0.42	0.18-0.20	0.0-2.9	2.0-25	.32	.32			
CoA:														
Coteau---------	Ap	0-5	---	5-18	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	Bt,Bt/E	5-55	---	18-32	1.35-1.65	1.41-4.23	0.20-0.23	3.0-5.9	0.0-0.5	.32	.32			
	BCg	55-85	---	8-27	1.35-1.65	1.41-4.23	0.20-0.23	0.0-2.9	0.0-0.5	.37	.37			

Table 26.--Physical Soil Properties--Continued

Map symbol and Soil name	Horizon	Depth	Sand	Clay	Moist bulk density	Saturated hydraulic conductivity (K-sat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Kf	T	Wind erodi-bility group	Wind erodi-bility index
		In	Pct	Pct	g/cc	µm/sec	In/in	Pct	Pct					
CvA:														
Carville--------	A	0-6	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.43	.43	5	5	56
	Bg,Cg,Ab g	6-80	---	6-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
Hydraquents----	Oa, Ag	0-6	0-3	45-90	0.15-0.50	14.11-42.34	0.20-0.50	0.0-2.9	2.0-25	.20	.20	5	4	86
	Cg	6-80	0-3	60-95	0.25-1.00	0.00-0.42	0.18-0.20	0.0-2.9	2.0-25	.32	.32			
CYA:														
Clovelly--------	Oa	0-28	---	---	0.05-0.25	14.11-141.14	0.10-0.45	0.0-2.9	30-60	---	---	2	8	0
	Ag, Cg	28-84	---	50-90	0.15-1.00	0.00-0.42	0.11-0.18	0.0-2.9	0.0-10	.28	.28			
DP:														
Dumps----------		---	---	---	---	---	---	---	---	---	---	--	---	---
DrA:														
Dupuy----------	A	0-10	---	10-30	1.30-1.70	4.23-14.11	0.15-0.20	0.0-2.9	0.5-1.0	.43	.43	5	5	56
	Bt,Btg	10-42	---	18-34	1.30-1.70	1.41-4.23	0.15-0.20	3.0-5.9	0.0-0.5	.32	.32			
	BCg,2Cg	42-80	---	18-34	1.30-1.70	4.23-14.11	0.15-0.20	0.0-2.9	0.0-0.5	.32	.32			
DsA:														
Dupuy----------	Oe	0-2	---	---	0.80-1.00	32.34-141.14	---	---	60-95	---	---	5	5	56
	A	2-10	---	10-30	1.30-1.70	4.23-14.11	0.15-0.20	0.0-2.9	0.5-1.0	.43	.43			
	Bt,Btg	10-42	---	18-34	1.30-1.70	1.41-4.23	0.15-0.20	3.0-5.9	0.0-0.5	.32	.32			
	BCg	42-80	---	18-34	1.30-1.70	4.23-14.11	0.15-0.20	0.0-2.9	0.0-0.5	.32	.32			
DuD:														
Duson----------	A	0-4	---	5-12	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	E	4-7	---	5-18	1.35-1.65	1.41-4.23	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49			
	Bt	7-38	---	18-35	1.35-1.65	1.41-4.23	0.20-0.23	3.0-5.9	0.0-0.5	.32	.32			
	Btg	38-80	---	27-55	1.30-1.65	0.42-1.41	0.20-0.22	6.0-8.9	0.0-0.5	.37	.37			
FAA:														
Fausse---------	A	0-6	---	20-60	1.10-1.45	0.00-1.41	0.18-0.20	9.0-25.0	1.0-3.0	.20	.20	5	6	48
	Bg1	6-24	---	35-95	1.10-1.45	0.00-1.41	0.18-0.22	9.0-25.0	0.5-1.0	.24	.24			
	Bg2,BC,C	24-80	---	35-95	1.10-1.45	0.00-1.41	0.18-0.22	9.0-25.0	0.5-1.0	.24	.24			
GaA:														
Galvez---------	Ap	0-8	---	14-27	1.35-1.70	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.43	.43	5	5	56
	Bt,BC,Bg	8-83	---	20-35	1.35-1.70	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	2Cg	83-91	---	20-50	1.20-1.70	1.41-4.23	0.20-0.23	3.0-5.9	0.0-0.5	.32	.32			

Table 26.--Physical Soil Properties--Continued

Map symbol and Soil name	Horizon	Depth	Sand	Clay	Moist bulk density	Saturated hydraulic conductivity (K-sat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi-bility group	Wind erodi-bility index
		In	Pct	Pct	g/cc	µm/sec	In/in	Pct	Pct					
GxA:														
Uderts----------	Ap	0-6	---	39-50	1.20-1.50	0.00-0.42	0.12-0.18	9.0-25.0	1.0-4.0	.32	.32	5	4	86
	Bss	6-40	---	39-60	1.20-1.45	0.00-0.42	0.12-0.18	9.0-25.0	0.5-1.0	.32	.32			
	Bg, BCg	40-80	---	35-60	1.20-1.70	0.00-1.41	0.12-0.21	6.0-8.9	0.5-1.0	.32	.32			
Glenwild--------	Ap	0-4	---	27-35	1.35-1.65	4.00-14.00	0.20-0.22	3.0-5.9	0.5-2.0	.37	.37	5	7	38
	Bt	4-22	---	18-35	1.35-1.70	4.00-14.00	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	2Btk, 2BCk, 2C, 3C, 3Ck,3C’, 3Ck’	22-80	---	14-40	1.35-1.70	1.40-4.00	0.20-0.23	3.0-5.9	0.0-0.5	.37	.37			
HRA:														
Harahan---------	A	0-11	0-3	50-95	0.50-1.50	0.00-0.42	0.11-0.25	9.0-25.0	2.0-25	.37	.37	5	4	86
	Bg	11-23	0-3	60-95	1.20-1.50	0.00-0.42	0.11-0.20	9.0-25.0	1.0-3.0	.37	.37			
	Cg	23-84	0-3	60-95	0.25-1.00	0.00-0.42	0.11-0.25	0.0-2.9	0.5-1.0	.37	.37			
HSA:														
Harahan---------	A	0-6	0-3	50-95	0.50-1.50	0.00-0.42	0.11-0.25	9.0-25.0	2.0-25	.37	.37	5	4	86
	Bg	6-23	0-3	60-95	1.20-1.50	0.00-0.42	0.11-0.20	9.0-25.0	1.0-3.0	.37	.37			
	Cg	23-60	0-3	60-95	0.25-1.00	0.00-0.42	0.11-0.25	0.0-2.9	0.5-1.0	.37	.37			
Allemands-------	Oa1	0-9	---	---	0.05-0.25	14.11-141.14	0.20-0.50	0.0-2.9	30-85	---	---	2	8	0
	Oa2	9-28	---	---	0.05-0.25	14.11-141.14	0.20-0.50	0.0-2.9	20-40	---	---			
	Abg, Cg	28-60	0-3	60-95	0.15-1.00	0.00-0.42	0.14-0.18	9.0-25.0	0.0-10	.32	.32			
HYA:														
Hydraquents-----	Oa or Ag	0-6	0-3	45-90	0.15-0.50	14.11-42.34	0.20-0.50	0.0-2.9	2.0-25	.20	.20	5	4	86
	Cg	6-80	0-3	60-95	0.25-1.00	0.00-0.42	0.18-0.20	0.0-2.9	2.0-25	.32	.32			
Carville--------	A	0-6	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.43	.43	5	5	56
	Cg, Abg	6-80	---	0-18	1.30-1.65	4.23-14.11	0.20-0.23	0.0-2.9	0.5-1.0	.37	.37			
Glenwild--------	A	0-6	---	18-35	1.35-1.65	4.00-14.00	0.20-0.22	0.0-2.9	0.5-2.0	.37	.43	5	5	56
	Bt	6-24	---	18-35	1.35-1.70	4.00-14.00	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	2Btk,2BCk,Ck	24-80	---	14-45	1.35-1.70	1.40-4.00	0.20-0.23	3.0-5.9	0.0-0.5	.37	.37			
IbA:														
Iberia----------	Ap	0-17	---	40-60	1.20-1.35	0.42-1.41	0.15-0.19	9.0-25.0	2.0-5.0	.32	.32	5	4	86
	Bssg	17-37	---	60-80	1.20-1.35	0.00-0.42	0.14-0.18	9.0-25.0	0.5-2.0	.32	.32			
	Bg, Cg	37-80	---	30-60	1.20-1.65	0.00-1.41	0.14-0.20	6.0-8.9	0.5-1.0	.32	.32			

Table 26.--Physical Soil Properties--Continued

Map symbol and Soil name	Horizon	Depth	Sand	Clay	Moist bulk density	Saturated hydraulic conductivity (K-sat)	Available water capacity	Linear extensi-bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi-bility group	Wind erodi-bility index
		In	Pct	Pct	g/cc	µm/sec	In/in	Pct	Pct					
IEA:														
Iberia---------	A1	0-8	---	40-60	1.20-1.35	0.42-1.41	0.15-0.19	9.0-25.0	2.0-5.0	.32	.32	5	4	86
	A2, Bg1	8-22	---	45-60	1.20-1.35	0.00-0.42	0.14-0.18	9.0-25.0	0.5-2.0	.32	.32			
	Bg2, Cg	22-80	---	30-60	1.20-1.65	0.00-1.41	0.14-0.20	6.0-8.9	0.5-1.0	.32	.32			
JaA:														
Jeanerette-----	Ap	0-6	---	10-26	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	A, Btg	6-25	---	18-35	1.35-1.70	1.41-4.23	0.14-0.23	3.0-5.9	0.5-2.0	.37	.37			
	Btkg	25-50	---	18-35	1.35-1.70	1.41-4.23	0.09-0.21	3.0-5.9	0.5-1.0	.37	.37			
	BCg	50-80	---	14-35	1.35-1.70	1.41-4.23	0.14-0.23	3.0-5.9	0.5-1.0	.37	.37			
KEA:														
Kenner---------	Oe	0-10	---	---	0.05-0.25	42.34-141.14	0.20-0.25	0.0-2.9	30-85	---	---	2	8	0
	Oa	10-30	---	---	0.05-0.50	42.34-141.14	0.20-0.25	0.0-2.9	30-85	---	---			
	Cg	30-32	---	45-85	0.15-1.00	0.00-0.42	0.12-0.18	0.0-2.9	0.0-10	.32	.32			
	O'a	32-80	---	---	0.05-0.50	42.34-141.14	0.20-0.25	0.0-2.9	20-40	---	---			
KpC:														
Kleinpeter-----	A, E	0-11	---	8-22	1.35-1.50	4.23-14.11	0.20-0.23	0.0-2.9	1.0-2.0	.49	.49	5	5	56
	Bt,Bt/E	11-50	---	18-35	1.30-1.50	4.23-14.11	0.20-0.22	0.0-2.9	0.5-1.0	.49	.49			
	Bt/E	50-80	---	12-35	1.30-1.50	4.23-14.11	0.20-0.23	0.0-2.9	0.0-0.5	.49	.49			
LAA:														
Lafitte--------	Oa	0-69	---	---	0.05-0.25	14.11-42.34	0.18-0.45	0.0-2.9	30-70	---	---	2	8	0
	Cg	69-80	---	50-90	0.15-1.00	0.00-0.42	0.11-0.18	0.0-2.9	0.0-10	.28	.28			
LEA:														
Larose---------	Oa	0-8	---	---	0.05-0.25	14.11-141.14	0.20-0.50	0.0-2.9	30-85	---	---	2	8	0
	Ag, Cg	8-80	---	50-80	0.15-1.00	0.00-0.42	0.14-0.18	0.0-2.9	5.0-25	.28	.28			
LoA:														
Loreauville----	Ap1	0-5	---	5-27	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-4.0	.43	.43	5	5	56
	Ap2,Btk,	5-20	---	18-32	1.35-1.65	1.41-4.23	0.20-0.22	3.0-5.9	0.5-1.0	.32	.32			
	Btg,BC,C	20-80	---	8-27	1.35-1.65	4.23-14.11	0.21-0.23	0.0-2.9	0.5-1.0	.37	.37			
M-W:														
Water, small---		---	---	---	---	---	---	---	---	---	---	--	---	---
MAA:														
Maurepas-------	Oa	0-70	---	---	0.05-0.25	42.34-141.14	0.20-0.50	0.0-2.9	20-60	---	---	2	8	0

Table 26.--Physical Soil Properties--Continued

Map symbol and Soil name	Horizon	Depth	Sand	Clay	Moist bulk density	Saturated hydraulic conductivity (K-sat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors Kw	Erosion factors Kf	Erosion factors T	Wind erodi- bility group	Wind erodi- bility index
		In	Pct	Pct	g/cc	µm/sec	In/in	Pct	Pct					
PaA:														
Patoutville----	Ap	0-10	---	8-15	1.35-1.65	1.41-4.23	0.20-0.23	0.0-2.9	0.5-4.0	.49	.49	5	5	56
	Btg, Bt	10-28	---	18-35	1.35-1.65	0.42-1.41	0.20-0.22	3.0-5.9	0.0-0.5	.37	.37			
	B'tg,B't	28-65	---	18-35	1.35-1.65	0.42-4.23	0.20-0.22	3.0-5.9	0.0-0.5	.37	.37			
	Bg, 2Bt	65-80	---	18-41	1.35-1.70	0.42-1.41	0.20-0.25	3.0-5.9	0.0-0.5	.37	.37			
ShA:														
Schriever------	Ap	0-5	0-3	40-78	1.20-1.50	0.00-0.42	0.12-0.18	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	Bg, Bssg	5-62	0-3	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	Bkssg	62-80	---	25-90	1.20-1.65	0.42-1.41	0.12-0.18	6.0-8.9	0.0-0.5	.28	.28			
SIA:														
Schriever------	A	0-8	0-3	40-78	1.20-1.50	0.00-0.42	0.12-0.18	9.0-25.0	0.5-4.0	.32	.32	5	4	86
	Bg,Bssg, BC	8-65	0-3	60-90	1.20-1.50	0.00-0.42	0.07-0.14	9.0-25.0	0.0-0.5	.28	.28			
	2Cg	65-80	---	25-90	1.20-1.65	0.42-1.41	0.12-0.18	6.0-8.9	0.0-0.5	.28	.28			
UB:														
Urban land-----		---	---	---	---	---	---	---	---	---	---	--	8	0
UD:														
Udorthents-----		---	---	---	---	---	---	---	---	---	---	1	8	0
W:														
Water, large---		---	---	---	---	---	---	---	---	---	---	--	---	---

Table 27.--Chemical Soil Properties

(Absence of an entry indicates that data were not estimated.)

Map symbol and Soil name	Horizon	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Salinity	Sodium adsorption ratio
		In	meq/100 g	meq/100 g	pH	Pct	dS/m	
AEA:								
Allemands-----	Oa1	0-9	77-172	---	5.1-8.4	---	0.0-4.0	0-15
	Oa2	9-27	65-117	---	5.1-8.4	---	0.0-4.0	0-15
	Ag, Cg	27-72	37-68	---	6.1-8.4	---	0.0-4.0	5-15
ATA:								
Aquents-------		---	---	---	---	---	---	---
ATB:								
Aquents-------		---	---	---	---	---	---	---
BdA:								
Baldwin-------	Ap	0-5	10-25	---	4.5-7.3	---	---	---
	Btg	5-32	15-40	---	5.1-7.8	---	---	---
	BCg	32-40	15-40	---	5.6-8.4	0-5	---	---
	Cg	40-80	10-40	---	5.6-8.4	0-5	---	---
BEA:								
Balize--------	A	0-11	20-90	---	6.6-8.4	---	0.0-2.0	5-10
	Cg1, Cg2	11-48	20-90	---	6.6-8.4	---	0.0-2.0	5-10
	Cg3, Cg4	48-72	20-90	---	6.6-8.4	---	0.0-2.0	5-15
BNA:								
Bancker-------	Oa	0-9	70-100	---	5.1-7.8	0	4.0-8.0	5-10
	Cg	9-74	50-100	---	5.6-8.4	0	4.0-8.0	5-15
BRA:								
Barbary-------	Oa	0-6	---	---	5.1-7.8	0	0.0-2.0	---
	Ag	6-12	37-70	---	5.6-7.8	0	0.0-2.0	---
	Cg	12-84	44-70	---	6.6-8.4	0	0.0-2.0	---
CoA:								
Coteau--------	Ap	0-5	4.0-15	---	5.1-6.5	---	---	---
	Bt,Bt/E	5-55	10-25	---	5.1-6.5	---	---	---
	BCg	55-85	4.0-20	---	5.1-7.3	---	---	---
CvA:								
Carville------	A	0-6	5.0-22	---	5.6-8.4	0-5	---	---
	Bg,Cg,Ab g	6-80	5.0-22	---	5.6-8.4	0-5	---	---
Hydraquents---	Oa, Ag	0-6	31-68	---	5.1-7.8	---	0.0-2.0	---
	Cg	6-80	39-71	---	6.6-8.4	---	0.0-2.0	---
CYA:								
Clovelly------	Oa	0-28	70-100	---	6.6-8.4	---	4.0-8.0	5-15
	Ag, Cg	28-84	40-100	---	6.6-8.4	---	4.0-8.0	5-15
DP:								
Dumps---------		---	---	---	---	---	---	---
DrA:								
Dupuy---------	A	0-10	---	2.7-10	4.0-6.0	---	---	---
	Bt,Btg	10-42	---	5.7-17	4.0-6.0	---	---	---
	BCg,2Cg	42-80	9.1-18	---	4.5-7.3	---	---	---

Table 27.--Chemical Soil Properties--Continued

Map symbol and Soil name	Horizon	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Salinity	Sodium adsorption ratio
		In	meq/100 g	meq/100 g	pH	Pct	dS/m	
DsA:								
Dupuy----------	Oe	0-2	---	---	---	---	---	---
	A	2-10	---	2.7-10	3.5-6.0	---	---	---
	Bt,Btg	10-42	---	5.7-17	3.5-6.0	---	---	---
	BCg	42-80	9.1-18	---	4.5-6.5	---	---	---
DuD:								
Duson----------	A	0-4	4.0-15	---	4.5-6.5	---	---	---
	E	4-7	4.0-15	---	4.5-6.5	---	---	---
	Bt	7-38	10-25	---	4.5-7.3	---	---	---
	Btg	38-80	12-26	---	4.5-7.3	---	---	---
FAA:								
Fausse---------	A	0-6	17-44	---	6.1-7.3	---	---	---
	Bg1	6-24	26-63	---	6.6-8.4	---	---	---
	Bg2,BC,C	24-80	26-63	---	6.6-8.4	---	---	---
GaA:								
Galvez---------	Ap	0-8	5.0-15	---	5.1-6.5	---	---	---
	Bt,BC,Bg	8-83	5.0-25	---	5.1-8.4	---	---	---
	2Cg	83-91	10-40	---	6.6-8.4	---	---	---
GxA:								
Uderts---------	Ap	0-6	20-40	---	6.1-7.8	---	---	---
	Bss	6-40	20-40	---	6.6-8.4	---	---	---
	Bg, BCg	40-80	15-40	---	6.6-8.4	---	---	---
Glenwild-------	Ap	0-4	5.0-15	---	5.6-7.3	---	---	---
	Bt	4-22	5.0-25	---	5.6-8.4	---	---	---
	2Btk, 2BCk, 2C, 3C, 3Ck,3C′, 3Ck′	22-80	5.0-30	---	6.6-9.0	1-5	---	---
HRA:								
Harahan--------	A	0-11	37-70	---	5.1-7.3	---	0.0-2.0	---
	Bg	11-23	43-66	---	5.1-7.3	---	0.0-2.0	---
	Cg	23-84	42-63	---	6.6-8.4	---	0.0-2.0	---
HSA:								
Harahan--------	A	0-6	37-70	---	5.1-7.3	---	0.0-2.0	---
	Bg	6-23	43-66	---	5.1-7.3	---	0.0-2.0	---
	Cg	23-60	42-63	---	6.6-8.4	---	0.0-2.0	---
Allemands------	Oa1	0-9	62-172	---	3.6-7.8	---	0.0-4.0	---
	Oa2	9-28	50-117	---	3.6-7.8	---	0.0-4.0	---
	Abg, Cg	28-60	37-68	---	3.6-8.4	---	0.0-4.0	---
HYA:								
Hydraquents----	Oa or Ag	0-6	31-68	---	5.1-7.8	---	0.0-2.0	---
	Cg	6-80	39-71	---	6.6-8.4	---	0.0-2.0	---
Carville-------	A	0-6	5.0-22	---	5.6-8.4	0-5	---	---
	Cg, Abg	6-80	5.0-22	---	5.6-8.4	0-5	---	---

Table 27.--Chemical Soil Properties--Continued

Map symbol and Soil name	Horizon	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Salinity	Sodium adsorption ratio
		In	meq/100 g	meq/100 g	pH	Pct	dS/m	
Glenwild------	A	0-6	5.0-15	---	5.6-7.3	---	---	---
	Bt	6-24	5.0-25	---	5.6-8.4	---	---	---
	2Btk,2BCk,Ck	24-80	5.0-30	---	6.6-9.0	1-5	---	---
IbA:								
Iberia--------	Ap	0-17	15-40	---	5.6-7.8	---	---	---
	Bssg	17-37	15-40	---	6.6-8.4	0-1	---	---
	Bg, Cg	37-80	10-40	---	6.6-8.4	0-1	---	---
IEA:								
Iberia--------	A1	0-8	15-40	---	5.6-7.8	---	---	---
	A2, Bg1	8-22	15-40	---	6.6-8.4	0-1	---	---
	Bg2, Cg	22-80	10-40	---	6.6-8.4	0-1	---	---
JaA:								
Jeanerette----	Ap	0-6	6.0-15	---	5.6-7.8	0	---	---
	A, Btg	6-25	12-30	---	6.6-8.4	0-2	---	---
	Btkg	25-50	12-30	---	6.6-8.4	0-5	---	---
	BCg	50-80	10-30	---	6.6-8.4	0-2	---	---
KEA:								
Kenner--------	Oe	0-10	49-187	---	5.6-8.4	---	0.0-4.0	---
	Oa	10-30	49-187	---	5.6-8.4	---	0.0-4.0	---
	Cg	30-32	4.5-47	---	5.6-8.4	---	0.0-4.0	---
	O'a	32-80	24-74	---	5.6-8.4	---	0.0-4.0	---
KpC:								
Kleinpeter----	A, E	0-11	4.0-15	---	5.1-6.5	---	---	---
	Bt,Bt/E	11-50	10-25	---	4.5-6.0	---	---	---
	Bt/E	50-80	12-26	---	4.5-6.0	---	---	---
LAA:								
Lafitte-------	Oa	0-69	50-100	---	6.1-8.4	---	4.0-8.0	5-10
	Cg	69-80	40-100	---	6.1-8.4	0	4.0-6.0	5-15
LEA:								
Larose--------	Oa	0-8	70-100	---	5.6-7.8	---	0.0-4.0	0-15
	Ag, Cg	8-80	50-100	---	6.1-8.4	---	0.0-4.0	0-15
LoA:								
Loreauville---	Ap1	0-5	5.0-15	---	6.1-7.8	0-5	---	---
	Ap2,Btk,	5-20	10-25	---	6.6-8.4	1-5	---	---
	Btg,BC,C	20-80	5.0-20	---	7.4-8.4	1-5	---	---
M-W:								
Water, Small--		---	---	---	---	---	---	---
MAA:								
Maurepas------	Oa	0-70	24-124	---	5.6-8.4	---	0.0-4.0	---
PaA:								
Patoutville---	Ap	0-10	5.0-15	---	4.5-7.8	---	---	---
	Btg, Bt	10-28	10-20	---	5.1-7.3	---	---	---
	B'tg,B't	28-65	10-18	---	5.1-7.3	---	---	---
	Bg, 2Bt	65-80	10-18	---	6.1-8.4	---	---	---

Table 27.--Chemical Soil Properties--Continued

Map symbol and Soil name	Horizon	Depth	Cation-exchange capacity	Effective cation-exchange capacity	Soil reaction	Calcium carbonate	Salinity	Sodium adsorption ratio
		In	meq/100 g	meq/100 g	pH	Pct	dS/m	
ShA:								
Schriever-----	Ap	0-5	20-40	---	5.1-8.4	---	---	---
	Bg, Bssg	5-62	20-40	---	5.1-8.4	0-5	---	---
	Bkssg	62-80	10-40	---	6.6-8.4	0-5	---	---
SIA:								
Schriever-----	A	0-8	20-40	---	5.6-8.4	---	---	---
	Bg,Bssg, BC	8-65	20-40	---	5.6-8.4	0-5	---	---
	2Cg	65-80	10-40	---	6.6-8.4	0-5	---	---
UB:								
Urban Land----		---	---	---	---	---	---	---
UD:								
Udorthents----		---	---	---	---	---	---	---
W:								
Water, Large--		---	---	---	---	---	---	---

Table 28.--Water Features

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and Flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and Soil name	Hydrologic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
AEA:										
Allemands	D	High								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Very frequent
ATA:										
Aquents	D	---								
			Jun-Oct	---	---	---	---	None	Brief	Rare
ATB:										
Aquents	D	---								
			Jun-Oct	---	---	---	---	None	Brief	Occasional
BdA:										
Baldwin	D	Very high								
			Jan-Apr	0.0-2.0	>6.0	---	---	None	---	Rare
			Dec	0.0-2.0	>6.0	---	---	None	---	Rare
BEA:										
Balize	D	High								
			Jan-Dec	0.0	>6.0	0.0-3.0	Long	Frequent	Very long	Very frequent
BNA:										
Bancker	D	High								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Very frequent
BRA:										
Barbary	D	Negligible								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Frequent
CoA:										
Coteau	C	Medium								
			Jan-Apr	1.5-3.0	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
			Dec	1.5-3.0	>6.0	---	---	None	---	None

Table 28.--Water Features--Continued

Map symbol and Soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
CvA:										
Carville	C	Low								
			Jan-Apr	1.5-4.0	>6.0	---	---	None	Long	Frequent
			May-Jun	---	---	---	---	None	Long	Frequent
			Dec	1.5-4.0	>6.0	---	---	None	Long	Frequent
Hydraquents	D	Negligible								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Very frequent
CYA:										
Clovelly	D	High								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Very frequent
DP:										
Dumps	---	---								
			Jan-Dec	---	---	---	---	None	---	---
DrA:										
Dupuy	C	Medium								
			Jan-Apr	1.5-3.5	>6.0	---	---	None	---	None
			May-Dec	---	---	---	---	None	---	None
DsA:										
Dupuy	C	Medium								
			Jan-Apr	1.5-3.5	>6.0	---	---	None	---	---
			Jun-Nov	---	---	---	---	None	Very brief	Occasional
			Dec	1.5-3.5	>6.0	---	---	None	---	---
DuD:										
Duson	C	Very high								
			Jan-Apr	1.5-3.0	2.5-5.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
			Dec	1.5-3.0	2.5-5.0	---	---	None	---	None
FAA:										
Fausse	D	Negligible								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Frequent

Table 28.--Water Features--Continued

Map symbol and Soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
GaA:										
Galvez	C	Medium								
			Jan-Apr	1.5-3.0	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
			Dec	1.5-3.0	>6.0	---	---	None	---	None
GxA:										
Uderts	D	Very high								
			Jan-Apr	0.0-1.5	>6.0	---	---	None	Brief	Rare
			May-Nov	---	---	---	---	None	Brief	Rare
			Dec	0.0-1.5	>6.0	---	---	None	Brief	Rare
Glenwild	B	Low								
			Jan-Mar	1.7-3.3	2.1-5.0	---	---	None	---	None
			Apr-Dec	---	---	---	---	None	---	None
HRA:										
Harahan	D	Very high								
			Jan-Jun	1.0-3.0	>6.0	---	---	None	---	---
			Jul-Nov	1.0-3.0	>6.0	---	---	None	Brief	Rare
			Dec	1.0-3.0	>6.0	---	---	None	---	---
HSA:										
Harahan	D	Very high								
			Jan-Jun	1.0-3.0	>6.0	---	---	None	---	---
			Jul-Nov	1.0-3.0	>6.0	---	---	None	Brief	Rare
			Dec	1.0-3.0	>6.0	---	---	None	---	---
Allemands	D	Very high								
			Jan-Jun	0.5-4.0	>6.0	---	---	None	---	---
			Jul-Nov	0.5-4.0	>6.0	---	---	None	Brief	Rare
			Dec	0.5-4.0	>6.0	---	---	None	---	---

Table 28.--Water Features--Continued

Map symbol and Soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
HYA:										
Hydraquents	D	Negligible								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Very frequent
Carville	C	Very high								
			Jan-Apr	1.5-4.0	>6.0	---	---	None	Long	Frequent
			May-Jun	---	---	---	---	None	Long	Frequent
			Dec	1.5-4.0	>6.0	---	---	None	Long	Frequent
Glenwild	B	Very low								
			Jan-Mar	1.7-3.3	2.1-5.0	---	---	None	Long	Frequent
			Apr-May	---	---	---	---	None	Long	Frequent
			Dec	---	---	---	---	None	Long	Frequent
IbA:										
Iberia	D	Low								
			Jan-Apr	0.0-2.0	>6.0	---	---	None	---	Rare
			Dec	0.0-2.0	>6.0	---	---	None	---	Rare
IEA:										
Iberia	D	Low								
			Jan-Apr	0.0-2.0	>6.0	---	---	None	Long	Frequent
			May-Jun	---	---	---	---	None	Long	Frequent
			Dec	0.0-2.0	>6.0	---	---	None	Long	Frequent
JaA:										
Jeanerette	D	Low								
			Jan-Apr	1.0-2.5	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
			Dec	1.0-2.5	>6.0	---	---	None	---	None
KEA:										
Kenner	D	High								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Very frequent
KpC:										
Kleinpeter	B	Low								
			Jan-Apr	2.5-3.5	>6.0	---	---	None	---	---
			Jun-Nov	---	---	---	---	None	---	Rare
			Dec	2.5-3.5	>6.0	---	---	None	---	---

Table 28.--Water Features--Continued

Map symbol and Soil name	Hydro-logic group	Surface runoff	Month	Water table: Upper limit	Water table: Lower limit	Ponding: Surface water depth	Ponding: Duration	Ponding: Frequency	Flooding: Duration	Flooding: Frequency
				Ft	Ft	Ft				
LAA:										
Lafitte	D	High								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Very frequent
LEA:										
Larose	D	High								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Very frequent
LoA:										
Loreauville	C	Medium								
			Jan-Apr	1.0-2.5	>6.0	---	---	None	---	None
			May-Nov	---	---	---	---	None	---	None
			Dec	1.0-2.5	>6.0	---	---	None	---	None
M-W:										
Water, small	---	---								
			Jan-Dec	---	---	---	---	None	---	---
MAA:										
Maurepas	D	Negligible								
			Jan-Dec	0.0	>6.0	0.0-1.0	Very long	Frequent	Very long	Frequent
PaA:										
Patoutville	C	Medium								
			Jan-May	0.5-3.0	1.0-3.5	---	---	None	---	None
			Jun-Nov	---	---	---	---	None	---	None
			Dec	0.5-3.0	1.0-3.5	---	---	None	---	None
ShA:										
Schriever	D	Very high								
			Jan-Apr	0.0-2.0	>6.0	---	---	None	---	Rare
			May	---	---	---	---	None	---	Rare
			Jun	---	---	---	---	None	---	Rare
			Jul	---	---	---	---	None	---	Rare
			Dec	0.0-2.0	>6.0	---	---	None	---	Rare
SIA:										
Schriever	D	Very high								
			Jan-Apr	0.0-2.0	>6.0	---	---	None	Long	Frequent
			May-Jul	---	---	---	---	None	Long	Frequent
			Dec	0.0-2.0	>6.0	---	---	None	Long	Frequent

Table 28.--Water Features--Continued

Map symbol and Soil name	Hydro-logic group	Surface runoff	Month	Water table		Ponding			Flooding	
				Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
				Ft	Ft	Ft				
UB:										
Urban land	---	---								
			Jan-Dec	---	---	---	---	None	---	---
UD:										
Udorthents	D	---								
			Jan-Dec	---	---	---	---	None	---	None
W:										
Water, large	---	---								
			Jan-Dec	---	---	---	---	None	---	---

Table 29.--Soil Features

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and Soil name	Restrictive layer				Subsidence		Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total	Uncoated steel	Concrete
		In	In		In	In		
AEA:								
Allemands	---	---	---	---	8-25	16-51	High	Moderate
ATA:								
Aquents	---	---	---	---	---	---	---	---
ATB:								
Aquents	---	---	---	---	---	---	---	---
BdA:								
Baldwin	---	---	---	---	---	---	High	Moderate
BEA:								
Balize	---	---	---	---	2-6	6-15	High	Moderate
BNA:								
Bancker	---	---	---	---	2-4	5-15	High	Moderate
BRA:								
Barbary	---	---	---	---	3-12	6-15	High	Moderate
CoA:								
Coteau	---	---	---	---	---	---	High	Moderate
CvA:								
Carville	---	---	---	---	---	---	High	Low
Hydraquents	---	---	---	---	3-12	6-15	High	Moderate
CYA:								
Clovelly	---	---	---	---	8-20	16-51	High	Low
DP:								
Dumps	---	---	---	---	---	---	---	---

Table 29.--Soil Features--Continued

Map symbol and Soil name	Restrictive layer				Subsidence		Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total	Uncoated steel	Concrete
		In	In		In	In		
DrA:								
Dupuy	---	---	---	---	---	---	High	Moderate
DsA:								
Dupuy	---	---	---	---	---	---	High	Moderate
DuD:								
Duson	Abrupt textural change	30-60	---	Noncemented	---	---	High	Moderate
FAA:								
Fausse	---	---	---	---	---	---	High	Low
GaA:								
Galvez	---	---	---	---	---	---	High	Moderate
GxA:								
Uderts	---	---	---	---	---	---	High	Low
Glenwild	---	---	---	---	---	---	Moderate	Low
HRA:								
Harahan	---	---	---	---	2-5	4-10	High	Moderate
HSA:								
Harahan	---	---	---	---	2-5	4-10	High	Moderate
Allemands	---	---	---	---	8-25	16-51	High	High
HYA:								
Hydraquents	---	---	---	---	3-12	6-15	High	Moderate
Carville	---	---	---	---	---	---	High	Low
Glenwild	---	---	---	---	---	---	Moderate	Low
IbA:								
Iberia	---	---	---	---	---	---	High	Low

Table 29.--Soil Features--Continued

Map symbol and Soil name	Restrictive layer: Kind	Restrictive layer: Depth to top	Restrictive layer: Thickness	Restrictive layer: Hardness	Subsidence: Initial	Subsidence: Total	Risk of corrosion: Uncoated steel	Risk of corrosion: Concrete
		In	In		In	In		
IEA:								
Iberia-----------------	---	---	---	---	---	---	High	Low
JaA:								
Jeanerette-------------	---	---	---	---	---	---	High	Low
KEA:								
Kenner-----------------	---	---	---	---	15-30	51	High	Moderate
KpC:								
Kleinpeter-------------	---	---	---	---	---	---	Moderate	Moderate
LAA:								
Lafitte----------------	---	---	---	---	15-30	51	High	Moderate
LEA:								
Larose-----------------	---	---	---	---	2-8	5-15	High	Moderate
LoA:								
Loreauville------------	---	---	---	---	---	---	High	Low
M-W:								
Water, small-----------	---	---	---	---	---	---	---	---
MAA:								
Maurepas---------------	---	---	---	---	15-30	51	High	High
PaA:								
Patoutville------------	---	---	---	---	---	---	High	Moderate
ShA:								
Schriever--------------	---	---	---	---	---	---	High	Moderate
SIA:								
Schriever--------------	---	---	---	---	---	---	High	Moderate
UB:								
Urban land-------------	---	---	---	---	---	---	---	---

Table 29.--Soil Features--Continued

Map symbol and Soil name	Restrictive layer				Subsidence		Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Initial	Total	Uncoated steel	Concrete
		In	In		In	In		
UD:								
Udorthents	---	---	---	---	---	---	---	---
W:								
Water, large	---	---	---	---	---	---	---	---

Table 30.--Fertility Test Data for Selected Soils

(Analyses by the National Soil Survey Laboratory, USDA-NRCS, Lincoln, Nebraska. Dashes indicate that analyses were not made.)

Soil name and sample number	Horizon	Depth	Organic matter content	pH 1:1 H_2O	Extractable phosphorous	Exchangeable cations Ca	Exchangeable cations Mg	Exchangeable cations K	Exchangeable cations Na	Exchangeable cations Al	Exchangeable cations H	Extractable acidity	Cation-exchange capacity (sum)	Base saturation (sum)	Saturation: Sum of cation-exchange capacity Na	Saturation: Effective cation-exchange capacity Al	Ca/Mg
		In	Pct		Ppm	meq/100 grams of soil								Pct	Pct	Pct	
Baldwin silty clay loam (1,2)	Ap	0-5	---	5.7	133	14.6	4.70	0.50	0.20	0.00	0.60	13.06	32.96	60.4	0.8	0.0	3.09
(S97-LA101-007)	Btg1	5-12	---	5.4	73	13.2	5.10	0.40	0.20	0.50	0.70	13.06	32.01	59.2	1.1	2.7	2.60
	Btg2	12-20	---	5.4	58	15.1	7.00	0.60	0.40	0.20	0.60	23.66	46.73	49.4	1.6	0.8	2.14
	Btg3	20-32	---	5.7	20	11.2	7.10	0.50	0.50	0.50	0.80	8.98	28.25	68.2	2.4	2.2	1.58
	BCg	32-40	---	5.9	71	10.8	6.90	0.50	0.50	0.10	0.60	6.53	25.26	74.1	2.7	0.3	1.57
	Cg1	40-48	---	5.7	120	9.0	5.60	0.40	0.40	0.20	0.80	0.82	16.20	94.9	2.7	1.1	1.62
	Cg2	48-60	---	6.0	182	10.6	6.80	0.50	0.50	0.00	0.00	0.00	18.36	100.0	2.7	0.0	1.55
Carville silt loam (1,2)	A	0-6	1.30	7.5	221	23.7	1.09	0.35	0.07	0.00	0.00	10.61	35.76	70.3	0.3	0.0	21.66
(S97-LA101-015)	Bg	6-22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Cg1	22-27	0.30	7.4	255	11.1	3.45	0.47	0.13	0.00	0.00	4.90	20.00	75.5	0.8	0.0	3.21
	Cg2	27-36	0.16	7.5	275	10.0	3.12	0.80	0.06	0.00	0.00	1.63	15.59	89.5	0.4	0.0	3.20
	Cg3	36-44	0.10	7.7	316	10.5	3.18	0.84	0.07	0.00	0.00	1.63	16.26	90.0	0.5	0.0	3.32
	Cg4	44-65	0.23	7.5	329	11.5	3.48	0.83	0.10	0.00	0.00	4.90	20.80	76.4	0.6	0.0	3.30
Coteau silt (1,2)	Ap	0-5	0.64	5.6	24	5.7	2.63	0.23	0.21	0.00	0.80	5.50	14.30	61.4	2.4	0.0	2.16
(S98-LA101-003)	Bt1	5-14	0.34	6.9	18	9.5	6.03	0.25	0.62	0.00	0.00	4.50	20.90	78.4	3.8	0.0	1.57
	Bt2	14-24	0.21	6.4	31	6.8	4.90	0.45	0.69	0.00	0.00	5.50	18.30	70.0	5.4	0.0	1.39
	Bt3	24-31	0.13	7.3	28	7.1	5.38	0.28	1.20	0.00	0.00	2.50	16.50	84.8	8.6	0.0	1.32
	Bt4	31-42	0.12	7.6	61	7.9	6.63	0.26	1.37	0.00	0.00	4.00	20.20	80.2	8.5	0.0	1.19
	Bt/E	42-55	0.02	7.4	206	7.3	6.39	0.31	1.09	0.00	0.00	3.00	18.10	83.4	7.2	0.0	1.14
	BCg1	55-65	0.00	7.2	270	6.2	4.92	0.24	0.62	0.00	0.00	3.00	15.00	80.0	5.1	0.0	1.27
	BCg2	65-72	0.00	7.2	241	6.6	5.29	0.26	0.73	0.00	0.00	1.50	14.40	89.6	5.7	0.0	1.24
Duson silt (1,2)	Ap	0-4	---	6.4	49	11.8	2.46	0.41	0.12	0.00	0.00	5.17	19.96	74.1	0.8	0.0	4.80
(S97-LA101-005)	E	4-7	---	5.6	25	3.2	1.18	0.15	0.10	0.00	0.00	3.16	7.83	59.7	2.1	0.0	2.74
	Bt1	7-24	---	4.8	22	3.0	1.62	0.14	0.13	1.50	0.00	4.86	9.77	50.0	2.6	23.5	1.86
	Bt2	24-38	---	4.7	94	6.8	3.33	0.31	0.21	1.90	0.00	7.75	18.35	57.8	2.0	15.2	2.03
	2Btg	38-75	---	4.5	77	4.2	2.30	0.23	0.20	2.60	0.00	9.76	16.64	41.3	2.9	27.4	1.8
Fausse loam (1,2)	A	0-6	1.46	7.0	272	17.2	6.60	0.50	0.80	0.00	0.00	3.50	28.48	87.7	3.0	0.0	2.62
(S97-LA-01-005)	Bg1	6-24	1.42	7.0	249	23.8	10.60	0.70	1.20	0.00	0.00	3.50	39.85	91.2	3.4	0.0	2.23
	Bg2	24-60	0.39	7.3	92	25.0	13.80	0.80	1.80	0.00	0.00	3.50	46.80	88.2	4.4	0.0	1.82

See footnotes at end of table

Table 30.--Fertility Test Data for Selected Soils—Continued

Soil name and sample number	Horizon	Depth	Organic matter content	pH 1:1 H_2O	Extractable phosphorous	Exchangeable cations Ca	Exchangeable cations Mg	Exchangeable cations K	Exchangeable cations Na	Exchangeable cations Al	Exchangeable cations H	Extractable acidity	Cation-exchange capacity (sum)	Base saturation (sum)	Saturation: Sum of cation-exchange capacity Na	Saturation: Effective cation-exchange capacity Al	Ca/Mg
		In	Pct		Ppm	meq/100 grams of soil								Pct	Pct	Pct	
Galvez silt loam (1,3)	Ap	0-8	1.93	5.5	---	6.0	2.20	0.50	0.40	0.60	---	6.70	15.80	58.0	---	---	2.73
(S97-LA101-011)	Bt	8-17	0.95	5.7	---	9.2	6.10	0.80	0.60	1.10	---	7.10	23.80	70.0	---	---	1.51
	Btg1	17-26	0.48	6.3	---	9.5	5.50	0.80	1.20	---	---	3.80	20.80	82.0	---	---	1.73
	Btg2	26-35	0.28	6.6	---	6.5	4.70	0.50	0.60	---	---	2.60	14.90	83.0	---	---	1.38
	Btg3	35-45	0.16	6.9	---	7.4	5.10	0.60	0.70	---	---	3.60	17.40	79.0	---	---	1.45
	Bg	45-52	0.16	7.0	---	7.6	3.90	0.60	0.60	---	---	3.70	16.40	77.0	---	---	1.95
	BCg1	52-63	0.16	6.9	---	6.9	4.50	0.70	0.80	---	---	3.10	16.00	81.0	---	---	1.53
	BCg2	63-68	0.19	6.9	---	9.8	5.20	0.60	0.60	---	---	2.90	19.10	85.0	---	---	1.88
	BCg3	68-83	0.19	6.9	---	9.1	4.70	0.70	0.70	---	---	2.80	18.00	84.0	---	---	1.94
	2Cg	83-91	0.45	6.7	---	20.3	11.70	1.30	1.30	---	---	4.80	39.40	88.0	---	---	1.74
Glenwild silty clay loam (1,3)	Ap	0-4	---	5.8	---	12.8	6.80	0.50	0.30	---	---	4.50	24.90	82.0	---	---	---
(S98-LA101-005)	Bt1	4-10	---	7.0	---	13.3	7.70	0.50	0.40	---	---	1.10	23.30	95.0	---	---	---
	Bt2	10-17	---	7.5	---	9.7	5.80	0.30	0.40	---	---	0.80	17.00	95.0	---	---	---
	Bt3	17-22	---	8.0	---	11.6	6.30	0.30	0.40	---	---	0.90	19.50	95.0	---	---	---
(6)	2Btk1	22-26	---	8.3	---	---	11.10	0.40	0.50	---	---	---	---	100.0	---	---	---
(6)	2Btk2	26-30	---	8.5	---	---	10.00	0.40	0.50	---	---	---	---	100.0	---	---	---
(6)	2BCk1	30-33	---	8.4	---	---	9.70	0.50	0.50	---	---	0.40	---	---	---	---	---
(6)	2BCk2	33-35	---	8.1	---	---	8.70	0.40	0.40	---	---	0.90	---	---	---	---	---
	2C	35-42	---	8.2	---	15.1	8.10	0.60	0.50	---	---	0.60	24.90	98.0	---	---	---
	3C	42-45	---	8.1	---	---	11.10	0.70	0.50	---	---	---	---	100.0	---	---	---
	3Ck	45-52	---	7.9	---	---	13.60	0.70	0.60	---	---	---	---	100.0	---	---	---
	3C'	52-63	---	8.2	---	---	11.40	0.60	0.50	---	---	---	---	100.0	---	---	---
	3Ck'1	63-67	---	8.1	---	---	10.60	0.70	0.60	---	---	---	---	100.0	---	---	---
	3Ck'2	67-76	---	8.2	---	---	7.00	0.60	0.40	---	---	---	---	100.0	---	---	---
	3Ck'3	76-79	---	8.3	---	---	6.80	0.40	0.50	---	---	---	---	100.0	---	---	---
Iberia clay (1,2)	Ap	0-17	2.18	5.5	76	23.2	6.90	0.40	0.10	0.00	0.60	9.00	39.60	77.3	0.3	0.0	3.40
(S94-LA101-005)	Bssg	17-37	1.03	6.4	42	28.6	11.00	0.30	0.50	---	---	8.40	48.80	82.8	1.0	---	2.60
	Bg	37-60	0.42	6.4	139	13.4	5.40	0.20	0.30	---	---	3.60	22.90	84.3	1.3	---	2.50
(6)	Cg	60-72	0.26	6.4	329	12.5	5.20	0.20	0.20	---	---	3.50	21.60	83.8	0.9	---	2.40
(6)	Cg	72-80	0.29	6.9	276	15.7	6.50	0.30	0.30	---	---	2.40	25.20	90.5	1.2	---	2.40

See footnotes at end of table

Table 30.--Fertility Test Data for Selected Soils--Continued

Soil name and sample number	Horizon	Depth	Organic matter content	pH 1:1 H^2O	Extractable phosphorous	Exchangeable cations: Ca	Mg	K	Na	Al	H	Extractable acidity	Cation-exchange capacity (sum)	Base saturation (sum)	Saturation: Sum of cation-exchange capacity Na	Saturation: Effective cation-exchange capacity Al	Ca/Mg
		In	Pct		Ppm	---- meq/100 grams of soil ----								Pct	Pct	Pct	
Jeanerette silt loam (1,2)	Ap	0-6	1.39	6.9	220	24.3	2.83	0.37	0.04	0.00	0.00	5.71	33.19	82.8	0.2	0.0	8.58
(S97-LA101-012)	A	6-22	1.29	7.5	121	27.1	3.00	0.28	0.06	0.00	0.00	4.90	35.35	86.1	0.2	0.0	9.03
	Btg	22-25	1.02	7.7	33	34.8	4.53	0.25	0.12	0.00	0.00	6.53	46.26	85.9	0.3	0.0	7.68
	Btkg1	25-32	0.37	8.2	52	29.9	4.94	0.20	0.12	0.00	0.00	3.26	38.45	91.5	0.3	0.0	6.06
	Btkg2	32-50	0.34	7.9	171	21.0	5.64	0.27	0.10	0.00	0.00	0.82	27.83	97.1	0.4	0.0	3.72
	BCg	50-80	0.28	8.1	272	14.8	6.37	0.34	0.13	0.00	0.00	2.45	24.12	89.8	0.6	0.0	2.33
Jeanerette silt loam (3,4)	Ap1	0-9	3.02	8.2	---	---	4.10	0.40	0.20	---	---	0.10	---	---	---	---	0.00
(S97-LA101-010)	Ap2	9-14	3.02	8.0	---	---	4.20	0.40	0.90	---	---	---	---	100.0	---	---	0.00
	Btk1	14-20	1.95	8.2	---	---	4.10	0.40	0.70	---	---	---	---	100.0	---	---	0.00
	Btk2	20-24	1.05	8.2	---	---	4.70	0.40	0.20	---	---	---	---	100.0	---	---	0.00
	Btk3	24-30	0.57	8.5	---	---	6.90	0.40	0.40	---	---	---	---	100.0	---	---	0.00
	Bt1	30-41	0.29	8.3	---	---	7.80	0.50	0.50	---	---	0.80	---	---	---	---	0.00
	Btc	41-54	0.17	8.1	---	12.3	5.50	0.50	0.40	---	---	1.10	19.80	94.0	---	---	2.24
	Btcg1	54-66	0.19	7.9	---	12.9	6.80	0.60	0.20	---	---	0.80	21.30	96.0	---	---	1.90
	Btcg2	66-76	0.16	7.7	---	10.9	6.80	0.60	0.30	---	---	0.80	19.40	96.0	---	---	1.60
	BC	76-91	0.09	8.3	---	15.6	11.60	0.50	0.30	---	---	0.80	28.80	97.0	---	---	1.34
Kleinpeter silt (2,5)	Ap	0-3	2.05	5.5	52	8.7	2.47	1.17	0.28	0.00	0.40	8.00	20.60	61.1	2.2	0.0	3.51
(S98-LA101-004)	Bw	3-6	0.63	5.0	37	6.4	2.40	1.19	0.20	1.08	0.12	9.50	19.70	51.8	2.0	9.5	2.68
	Bt1	6-14	0.36	4.8	43	4.7	2.08	1.24	0.21	1.62	1.58	10.00	18.20	45.1	2.5	14.2	2.25
	Bt2	14-24	0.30	4.7	56	4.3	2.19	1.47	0.27	3.24	0.36	10.00	18.20	45.1	3.3	27.4	1.96
	Bt3	24-33	0.25	5.4	45	5.6	4.03	0.82	0.78	0.36	0.64	7.00	18.20	61.6	6.9	2.9	1.39
	Bt/E1	33-55	0.09	4.8	77	4.3	2.37	1.34	0.65	0.90	0.90	7.00	15.70	55.3	7.5	8.6	1.82
(6)	Bt/E2	55-60	0.07	4.8	106	5.4	2.63	1.02	1.25	0.54	0.86	7.00	17.30	59.5	12.1	4.6	2.04
(6)	Bt/E2	60-72	0.03	5.1	106	6.5	3.05	0.87	1.34	0.00	0.00	7.00	18.80	62.7	11.4	0.0	2.14
Loreauville silt loam (1,2)	Ap1	0-5	1.06	5.8	124	12.5	4.07	0.29	0.13	0.00	1.00	5.50	22.50	75.5	0.8	0.0	3.07
(S98-LA101-002)	Ap2	5-10	0.92	7.4	70	15.9	5.45	0.23	0.18	0.00	0.00	3.00	24.80	87.9	0.8	0.0	2.92
	Btk	10-20	0.28	8.2	128	23.1	5.61	0.25	0.20	0.00	0.00	1.50	30.70	95.1	0.7	0.0	4.13
	Btkg	20-30	0.19	8.5	126	27.3	5.33	0.23	0.18	0.00	0.00	1.50	34.60	95.7	0.6	0.0	5.12
	Btg	30-42	0.05	8.4	210	21.6	3.84	0.17	0.15	0.00	0.00	0.50	26.20	98.1	0.6	0.0	5.62
	BCg	42-57	0.04	8.2	225	21.7	3.94	0.22	0.14	0.00	0.00	0.50	26.50	98.1	0.5	0.0	5.51
	Cg1	57-65	0.04	8.1	288	10.5	4.39	0.24	0.18	0.00	0.00	1.50	16.80	91.1	1.2	0.0	2.39

See footnotes at end of table

Table 30.--Fertility Test Data for Selected Soils--Continued

Soil name and sample number	Horizon	Depth	Organic matter content	pH 1:1 H^2O	Extractable phosphorous	Exchangeable cations: Ca	Mg	K	Na	Al	H	Extractable acidity	Cation-exchange capacity (sum)	Base saturation (sum)	Saturation: Sum of cation-exchange capacity Na	Effective cation-exchange capacity Al	Ca/Mg
		In	Pct		Ppm	---- meq/100 grams of soil ----								Pct	Pct	Pct	
Maurepas muck (1,2)	Oa1	0-8	70.50	4.5	112	37.6	15.50	1.00	2.40	1.00	1.60	24.60	81.10	69.7	3.0	1.7	2.40
(S94-LA101-007)	Oa2	8-28	57.10	4.7	49	27.7	15.70	0.60	2.80	0.80	1.60	34.80	81.60	57.4	3.4	1.6	1.80
	Oa3	28-70	68.50	4.4	38	19.3	18.10	0.40	5.90	2.00	0.00	31.20	74.90	58.3	7.9	4.4	1.10
Patoutville silt (1,2)	Ap1	0-4	0.53	4.3	45	1.4	0.78	0.17	0.10	3.78	1.22	8.50	11.00	22.5	3.9	50.6	1.85
(S98-LA101-001)	Ap2	4-10	0.52	4.6	15	3.8	2.51	0.23	0.18	1.44	1.96	9.00	15.70	42.7	2.7	14.2	1.51
	Btg1	10-15	0.44	5.3	13	6.3	4.51	0.21	0.22	0.72	0.48	6.50	17.70	63.4	2.0	5.8	1.40
	Btg2	15-22	0.41	5.9	19	7.0	5.48	0.27	0.31	0.36	0.44	6.50	19.60	66.8	2.4	2.6	1.28
	Bt	22-28	0.70	6.2	16	7.0	6.46	0.23	1.35	0.00	0.00	6.00	21.10	71.5	9.0	0.0	1.09
	B'tg1	28-38	0.18	6.7	11	6.4	5.66	0.22	0.49	0.00	0.00	3.50	16.30	78.5	3.8	0.0	1.13
	B'tg2	38-55	0.07	6.4	21	6.0	6.04	0.26	1.03	0.00	0.00	4.00	17.40	77.0	7.7	0.0	1.00
	B'tg3	55-65	0.00	6.5	201	6.5	6.31	0.32	1.43	0.00	0.00	4.50	19.10	76.4	9.8	0.0	1.03
Schriever clay (1,2)	Ap	0-8	---	5.3	143	19.1	10.51	0.72	0.42	0.00	0.00	11.77	42.51	72.3	1.4	0.0	1.82
(S97-LA101-004)	Bg	8-23	---	6.3	96	23.2	12.73	0.73	0.61	0.00	0.00	7.75	45.03	82.8	1.6	0.0	1.82
	Bssg1	23-38	---	7.1	137	28.0	15.56	1.01	0.90	0.00	0.00	4.88	50.38	90.3	2.0	0.0	1.80
	Bssg2	38-55	---	7.3	151	25.7	14.36	0.92	0.86	0.00	0.00	5.45	47.27	88.5	2.1	0.0	1.79
	BCg	55-65	---	6.9	198	20.3	10.98	0.78	0.63	0.00	0.00	4.30	36.94	88.4	1.9	0.0	1.85
	2Cg	65-75	---	7.0	232	14.2	7.48	0.55	0.46	0.00	0.00	2.01	24.70	91.9	2.0	0.0	1.90

(1) Typical pedon for series in the soil survey area; pedon location is given in the series description.
(2) Analyses by the Soil Characterization Laboratory, Louisiana Agricultural Experiment Station.
(3) Analyses by the National Soil Survey Laboratory, Lincoln, Nebraska.
(4) Pedon location: from the intersection of U.S. Highway 90 and LA Highway 671, south of Jeanerette, 1.24 miles east on U.S. Highway 90 to intersection with Pepper Road, 291 yards north on Pepper Road, and 22.2 yards east in area of natural vegetation.
(5) Pedon location: from the intersection of U.S. Highway 90 and LA Highway 318, southeast of Jeanerette, 2.72 miles south on LA Highway 318 to intersection with LA Highway 83, 5.71 miles southwest on LA Highway 83 to intersection with Cote Blanche Crossing Road, 2.69 miles south on Cote Blanche Crossing Road to T-intersection, 64.6 yards east (left) to Y-intersection, 1.05 miles south (right), 54.5 yards east in an area of natural vegetation.
(6) Horizon was subdivided for sampling.

Table 31.--Physical Test Data for Selected Soils

(Analyses by the National Soil Survey Laboratory, USDA-NRCS, Lincoln, Nebraska. Dashes indicate that analyses were not made.)

Soil name and sample number	Horizon	Depth	Very coarse sand (2-1 mm)	Coarse sand (1-0.5 mm)	Medium sand (0.5-0.25 mm)	Fine sand (0.25-0.1 mm)	Very fine sand (0.1-0.05 mm)	Total sand (2.0-0.05 mm)	Silt (0.05-0.002 mm)	Clay (<.002 mm)	Water content 1/3 bar	Water content 15 bar	Water retention	Bulk density 1/3 bar	Bulk density Oven-dry	COLE
		In	Pct								Pct (wt)			g/cc	g/cc	
Galvez silt loam (1)	Ap	0-8	0.2	0.4	0.5	0.5	5.0	6.6	76.3	17.1	25.5	9.1	0.24	1.46	1.56	0.022
(S97-LA101-011)	Bt	8-17	0.0	0.1	0.3	0.2	2.5	3.1	64.2	32.7	29.4	15.9	0.19	1.41	1.70	0.064
	Btg1	17-26	0.1	0.2	0.2	0.3	3.7	4.5	72.1	23.4	27.7	13.3	0.20	1.41	1.58	0.039
	Btg2	26-35	0.1	0.2	0.2	0.4	9.8	10.7	73.8	15.5	27.6	9.5	0.25	1.40	1.50	0.023
	Btg3	35-45	0.1	0.2	0.2	0.3	5.7	6.5	77.9	15.6	26.8	9.8	0.25	1.48	1.60	0.026
	Bg	45-52	0.1	0.1	0.3	0.7	17.0	18.2	69.1	12.7	26.6	7.9	0.27	1.43	1.47	0.009
	BCg1	52-63	0.0	0.2	0.3	1.1	22.0	23.6	64.0	12.4	26.2	7.9	0.27	1.45	1.48	0.007
	BCg2	63-68	0.0	0.1	0.3	0.7	10.3	11.4	72.6	16.0	27.6	9.7	0.26	1.47	1.51	0.009
	BCg3	68-83	0.0	0.1	0.4	0.9	16.5	17.9	67.4	14.7	26.5	9.0	0.26	1.47	1.52	0.011
	2Cg	83-91	0.0	0.1	0.2	0.3	0.5	1.1	52.1	46.8	44.2	24.3	0.22	1.12	1.71	0.151
Glenwild silty clay loam (1)	Ap	0-4	0.0	0.0	0.1	0.3	5.4	5.8	62.8	31.4	23.5	12.9	0.17	1.57	1.78	0.043
(S98-LA101-005)	Bt1	4-10	0.0	0.1	0.1	0.2	4.1	4.5	62.3	33.2	23.3	14.0	0.15	1.62	1.87	0.049
	Bt2	10-17	0.0	0.0	0.2	0.4	15.3	15.9	61.5	22.6	23.3	9.9	0.21	1.55	1.67	0.025
	Bt3	17-22	0.1	0.0	0.1	0.2	3.9	4.3	72.1	23.6	24.1	10.7	0.20	1.51	1.61	0.022
(3)	2Btk1	22-26	0.0	0.0	0.1	0.2	5.3	5.6	62.9	31.5	---	13.8	---	---	---	---
(3)	2Btk2	26-30	0.1	0.0	0.1	0.2	5.1	5.5	67.8	26.7	---	12.6	---	---	---	---
(3)	2BCk1	30-33	0.1	0.1	0.1	0.4	7.9	8.6	67.7	23.7	---	11.1	---	---	---	---
(3)	2BCk2	33-35	0.0	0.1	0.1	0.5	9.1	9.8	66.9	23.3	---	11.0	---	---	---	---
	2C	35-42	0.0	0.0	0.2	0.4	7.4	8.0	70.4	21.6	25.0	10.3	0.21	1.45	1.55	0.022
	3C	42-45	0.1	0.1	0.1	0.2	0.8	1.3	60.7	38.0	---	16.9	---	---	---	---
	3Ck	45-52	0.0	0.0	0.1	0.1	0.8	1.0	55.0	44.0	34.1	20.3	0.19	1.39	1.78	0.086
	3C'	52-63	0.0	0.1	0.2	0.2	1.7	2.2	66.4	31.4	25.8	15.6	0.16	1.57	1.72	0.031
	3Ck'1	63-67	0.9	0.1	0.2	0.4	8.5	10.1	57.4	32.5	33.9	16.4	0.24	1.39	1.81	0.092
	3Ck'2	67-76	0.6	0.3	0.3	1.6	26.2	29.0	55.5	15.5	21.1	7.9	0.19	1.47	1.51	0.009
	3Ck'3	76-79	0.6	0.3	0.1	1.2	20.9	23.1	61.0	15.9	25.5	8.2	0.26	1.50	1.54	0.009

See footnotes at end of table

Table 31.--Physical Test Data for Selected Soils--Continued

Soil name and sample number	Hori- zon	Depth	Particle-size distribution: Sand: Very coarse (2-1 mm)	Coarse (1-0.5 mm)	Medium (0.5- 0.25 mm)	Fine (0.25- 0.1 mm)	Very fine (0.1- 0.05 mm)	Total (2.0- 0.05 mm)	Silt (0.05- 0.002 mm)	Clay (<.002 mm)	Water content: 1/3 bar	15 bar	Water reten- tion	Bulk density: 1/3 bar	Oven- dry	COLE
		In	Pct								Pct (wt)			g/cc	g/cc	
Jeanerette silt loam (2)	Ap1	0-9	0.6	0.2	0.1	0.1	0.5	1.5	76.2	22.3	22.6	10.8	0.18	1.56	1.66	0.021
(S97-LA101-010)	Ap2	9-14	0.1	0.2	0.2	0.2	0.4	1.1	70.8	28.1	27.8	13.2	0.21	1.43	1.56	0.029
	Btk1	14-20	1.3	0.7	0.4	0.3	0.6	3.3	70.5	26.2	25.8	12.3	0.19	1.46	1.57	0.024
	Btk2	20-24	1.2	0.7	0.6	0.3	0.6	3.4	76.9	19.7	22.1	10.2	0.16	1.58	1.67	0.016
	Btk3	24-30	3.9	1.6	0.9	0.4	0.8	7.6	74.8	17.6	27.9	9.9	0.25	1.46	1.60	0.030
	Bt1	30-41	0.1	0.4	0.3	0.2	0.5	1.5	78.4	20.1	28.3	10.9	0.25	1.44	1.58	0.031
	Btc	41-54	0.2	0.4	0.4	0.2	0.5	1.7	79.6	18.7	28.1	10.7	0.26	1.47	1.59	0.027
	Btcg1	54-66	0.1	0.2	0.2	0.1	0.5	1.1	77.6	21.3	28.5	11.5	0.25	1.46	1.60	0.031
	Btcg2	66-76	0.1	0.3	0.4	0.2	0.8	1.8	77.1	21.1	28.0	11.6	0.24	1.48	1.60	0.026
	BC	76-91	0.1	0.3	0.5	0.4	1.3	2.6	82.4	15.0	27.5	9.1	0.27	1.46	1.52	0.014

(1) Typical pedon for series in the soil survey area; pedon location is given in the series description.

(2) Pedon location: from the intersection of U.S. Highway 90 and LA Highway 318, southeast of Jeanerette, 2.72 miles south on LA Highway 318 to intersection with LA Highway 83, 5.71 miles southwest on LA Highway 83 to intersection with Cote Blanche Crossing Road, 2.69 miles south on Cote Blanche Crossing Road to T-intersection, 64.6 yards east (left) to Y-intersection, 1.05 miles south (right), 54.5 yards east in an area of natural vegetation.

(3) Horizon was subdivided for sampling.

Table 32.--Taxonomic Classification of the Soils

Soil name	Family or higher taxonomic class
Allemands	Clayey, smectitic, euic, hyperthermic Terric Haplosaprists
Aquents	Nonacid, hyperthermic Aquents
Baldwin	Fine, smectitic, hyperthermic Chromic Vertic Epiaqualfs
Balize	Fine-silty, mixed, superactive, nonacid, hyperthermic Typic Hydraquents
Bancker	Very-fine, smectitic, nonacid, hyperthermic Sodic Hydraquents
Barbary	Very-fine, smectitic, nonacid, hyperthermic Typic Hydraquents
Carville	Coarse-silty, mixed, superactive, calcareous, hyperthermic Fluventic Endoaquepts
Clovelly	Clayey, smectitic, euic, hyperthermic Terric Haplosaprists
Coteau	Fine-silty, mixed, active, hyperthermic Glossaquic Hapludalfs
Dupuy	Fine-silty, mixed, active, hyperthermic Aeric Endoaqualfs
Duson	Fine-silty, mixed, superactive, hyperthermic Aquic Paleudalfs
Fausse	Very-fine, smectitic, nonacid, hyperthermic Vertic Endoaquepts
Galvez	Fine-silty, mixed, superactive, hyperthermic Aeric Endoaqualfs
Glenwild	Fine-silty, mixed, superactive, hyperthermic Oxyaquic Hapludalfs
Harahan	Very-fine, smectitic, nonacid, hyperthermic Vertic Endoaquepts
Hydraquents	Nonacid, hyperthermic Hydraquents
Iberia	Very-fine, smectitic, hyperthermic Typic Epiaquerts
Jeanerette	Fine-silty, mixed, superactive, thermic Typic Argiaquolls
Kenner	Euic, hyperthermic Fluvaquentic Haplosaprists
Kleinpeter	Fine-silty, mixed, active, hyperthermic Oxyaquic Glossudalfs
Lafitte	Euic, hyperthermic Typic Haplosaprists
Larose	Very-fine, smectitic, nonacid, hyperthermic Typic Hydraquents
Loreauville	Fine-silty, mixed, superactive, hyperthermic Mollic Endoaqualfs
Maurepas	Euic, hyperthermic Typic Haplosaprists
Patoutville	Fine-silty, mixed, superactive, hyperthermic Aeric Epiaqualfs
Schriever	Very-fine, smectitic, hyperthermic Chromic Epiaquerts
Uderts	Smectitic, hyperthermic Uderts
Udorthents	Entisols

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