

NRCS

Natural Resources Conservation Service A product 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 participants

Custom Soil Resource Report for St. Lucie County, Florida

CN St Lucie Soil Survey



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is 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.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

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.

The National Cooperative Soil Survey is 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 (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

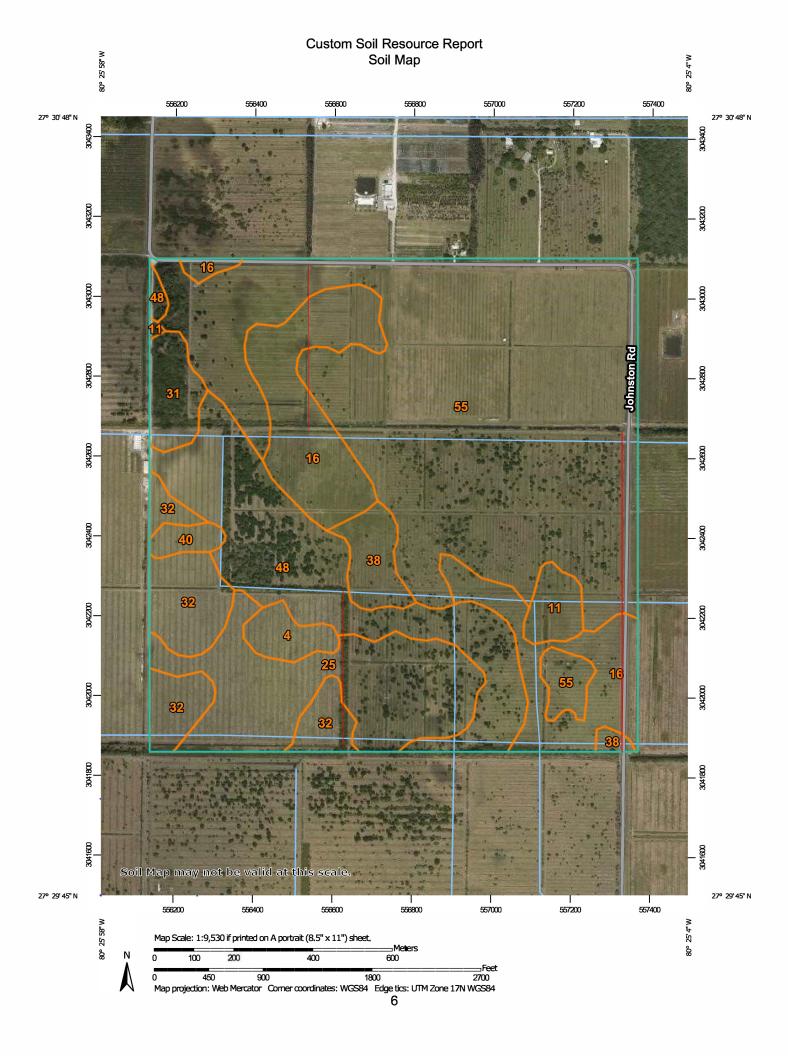
Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

Special Point Features

(0)

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

â

Spoil Area Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

Water Features

Streams and Canals

Transportation

+++

Rails

Interstate Highways

US Routes



Major Roads Local Roads

seut.

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: St. Lucie County, Florida Survey Area Data: Version 14, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 6, 2019—Mar 23, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
4	Arents, 0 to 5 percent slopes	5.6	1.5%	
11	Chobee loamy sand, frequently ponded, 0 to 1 percent slopes	5.9	1.6%	
16	Hilolo loamy sand	50.7	13.4%	
25	Nettles and Oldsmar sands	42.6	11.3%	
31	Pepper and EauGallie sands	8.2	2.2%	
32	Pineda sand, 0 to 2 percent slopes	24.8	6.6%	
38	Riviera fine sand, 0 to 2 percent slopes	9.2	2.5%	
40	Samsula muck, frequently ponded, 0 to 1 percent slopes	3.2	0.8%	
48	Wabasso sand, 0 to 2 percent slopes	52.7	14.0%	
55	Winder loamy sand	173.9	46.1%	
Totals for Area of Interest		376.9	100.0%	

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

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. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. 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 important soil properties and qualities.

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

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

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

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

St. Lucie County, Florida

4—Arents, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1jptx

Elevation: 0 to 30 feet

Mean annual precipitation: 49 to 58 inches Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Arents and similar soils: 90 percent Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arents

Setting

Landform: Rises on marine terraces

Landform position (three-dimensional): Rise

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Altered marine deposits

Typical profile

C1 - 0 to 10 inches: sand C2 - 10 to 51 inches: sand A/Eb - 51 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95

to 19.98 in/hr)

Depth to water table: About 18 to 36 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A

Forage suitability group: Forage suitability group not assigned (G156BC999FL)

Other vegetative classification: Forage suitability group not assigned

(G156BC999FL) Hydric soil rating: No

Minor Components

Sanitary landfill

Percent of map unit: 5 percent Hydric soil rating: Unranked

Canaveral

Percent of map unit: 5 percent

Landform: Dunes on marine terraces, ridges on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Forage suitability group not assigned

(G156BC999FL) Hydric soil rating: No

11—Chobee loamy sand, frequently ponded, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2tzwd

Elevation: 0 to 70 feet

Mean annual precipitation: 48 to 58 inches Mean annual air temperature: 68 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Chobee and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chobee

Settina

Landform: Depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave Across-slope shape: Concave Parent material: Loamy alluvium

Typical profile

A - 0 to 11 inches: loamy sand
Btg - 11 to 40 inches: sandy clay loam
Btkg - 40 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr) Depth to water table: About 0 inches

Frequency of flooding: None Frequency of ponding: Frequent

Calcium carbonate, maximum content: 14 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: C/D

Forage suitability group: Loamy and clayey soils on stream terraces, flood plains,

or in depressions (G156BC345FL)

Other vegetative classification: Freshwater Marshes and Ponds (R156BY010FL),

Loamy and clayey soils on stream terraces, flood plains, or in depressions

(G156BC345FL) Hydric soil rating: Yes

Minor Components

Hallandale

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: Yes

Floridana

Percent of map unit: 4 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave, convex Across-slope shape: Concave, linear

Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL),

Sandy over loamy soils on stream terraces, flood plains, or in depressions

(G155XB245FL)

Hydric soil rating: Yes

Kaliga

Percent of map unit: 4 percent

Landform: Depressions on flatwoods on marine terraces Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Concave, linear Across-slope shape: Concave, linear

Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL),

Organic soils in depressions and on flood plains (G155XB645FL)

Hvdric soil rating: Yes

Winder

Percent of map unit: 3 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Linear, convex Across-slope shape: Linear, concave

Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL), Loamy and clayey soils on stream terraces, flood plains, or in depressions

(G155XB345FL)

Hydric soil rating: Yes

16—Hilolo loamy sand

Map Unit Setting

National map unit symbol: 1jpv9

Elevation: 0 to 100 feet

Mean annual precipitation: 49 to 58 inches Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Hilolo and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hilolo

Setting

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 7 inches: loamy sand

Btkg1 - 7 to 12 inches: fine sandy loam Btkg2 - 12 to 28 inches: sandy clay loam Btkg3 - 28 to 53 inches: fine sandy loam Cg1 - 53 to 74 inches: loamy fine sand Cg2 - 74 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: B/D

Forage suitability group: Loamy and clayey soils on flats of hydric or mesic

lowlands (G156BC341FL)

Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic

lowlands (G156BC341FL)

Hydric soil rating: Yes

Minor Components

Winder, shell substratum, hydric

Percent of map unit: 4 percent Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Concave, linear

Across-slope shape: Linear

Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic

lowlands (G156BC341FL)

Hydric soil rating: Yes

Pineda

Percent of map unit: 4 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear Across-slope shape: Concave

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic

lowlands (G156BC241FL)

Hydric soil rating: Yes

Hallandale

Percent of map unit: 4 percent Landform: Flats on marine terraces

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL)

Hydric soil rating: No

Riviera

Percent of map unit: 4 percent Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic

lowlands (G156BC241FL)

Hydric soil rating: Yes

Pople

Percent of map unit: 4 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear Across-slope shape: Concave

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic

lowlands (G156BC241FL)

Hydric soil rating: Yes

25—Nettles and Oldsmar sands

Map Unit Setting

National map unit symbol: 1jpvl

Elevation: 0 to 30 feet

Mean annual precipitation: 49 to 58 inches Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Nettles and similar soils: 41 percent Oldsmar and similar soils: 39 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nettles

Settina

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 8 inches: sand E - 8 to 33 inches: sand Bh1 - 33 to 39 inches: sand Bh2 - 39 to 55 inches: sand

Btg - 55 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 31 to 50 inches to ortstein

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr) Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very low (about 1.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: C/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Description of Oldsmar

Setting

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 5 inches: sand E - 5 to 32 inches: sand Bh - 32 to 42 inches: sand

Btg - 42 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Minor Components

Pineda

Percent of map unit: 4 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear Across-slope shape: Concave

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic

lowlands (G156BC241FL)

Hydric soil rating: Yes

Pepper

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Ankona

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Wabasso

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Oldsmar

Percent of map unit: 4 percent

Landform: Depressions on marine terraces Landform position (three-dimensional): Dip

Down-slope shape: Concave Across-slope shape: Concave

Other vegetative classification: Sandy soils on stream terraces, flood plains, or in

depressions (G156BC145FL)

Hydric soil rating: Yes

31—Pepper and EauGallie sands

Map Unit Setting

National map unit symbol: 1jpvs

Elevation: 0 to 30 feet

Mean annual precipitation: 49 to 58 inches Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Pepper and similar soils: 46 percent Eaugallie and similar soils: 44 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pepper

Setting

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: sand E - 6 to 23 inches: sand Bh1 - 23 to 33 inches: sand Bh2 - 33 to 57 inches: sand Btg - 57 to 80 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 16 to 31 inches to ortstein

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very low (about 1.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Description of Eaugallie

Setting

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 5 inches: sand E - 5 to 26 inches: sand Bh - 26 to 47 inches: sand

Btg - 47 to 62 inches: sandy loam

Cg - 62 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.06 to 1.98 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Minor Components

Lawnwood

Percent of map unit: 2 percent

Landform: Marine terraces on flatwoods Landform position (three-dimensional): Talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL)

Hydric soil rating: No

Pineda

Percent of map unit: 2 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear Across-slope shape: Concave

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic

lowlands (G156BC241FL)

Hydric soil rating: Yes

Nettles

Percent of map unit: 2 percent

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Wabasso

Percent of map unit: 2 percent

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Tantile

Percent of map unit: 2 percent

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

32—Pineda sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2x1nb

Elevation: 0 to 100 feet

Mean annual precipitation: 47 to 58 inches
Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 355 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Pineda and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pineda

Setting

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Concave, linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 5 inches: sand E - 5 to 19 inches: sand Bw - 19 to 35 inches: sand

Btg/E - 35 to 38 inches: sandy loam Btg - 38 to 60 inches: sandy loam Cg - 60 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 3 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 4 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Forage suitability group: Sandy over loamy soils on flats of hydric or mesic

lowlands (G155XB241FL)

Other vegetative classification: Slough (R155XY011FL), Sandy over loamy soils

on flats of hydric or mesic lowlands (G155XB241FL)

Hydric soil rating: Yes

Minor Components

Malabar

Percent of map unit: 6 percent Landform: — error in exists on —

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear, concave Across-slope shape: Linear, concave

Ecological site: R155XY011FL - Slough

Other vegetative classification: Slough (R155XY011FL), Sandy soils on flats of

mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: Yes

Wabasso

Percent of map unit: 5 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: No

Valkaria

Percent of map unit: 2 percent

Landform: Drainageways on flatwoods on marine terraces Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Linear, concave

Other vegetative classification: Slough (R155XY011FL), Sandy soils on flats of

mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: Yes

Hallandale

Percent of map unit: 2 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: Yes

38—Riviera fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2tzw2

Elevation: 0 to 80 feet

Mean annual precipitation: 44 to 59 inches Mean annual air temperature: 68 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Riviera and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riviera

Setting

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Linear, concave

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: fine sand E - 6 to 28 inches: fine sand

Bt/E - 28 to 32 inches: fine sandy loam Btg - 32 to 42 inches: sandy clay loam

C - 42 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.60 to 6.00 in/hr)

Depth to water table: About 3 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: A/D

Forage suitability group: Sandy over loamy soils on flats of hydric or mesic

lowlands (G155XB241FL)

Other vegetative classification: Slough (R155XY011FL), Sandy over loamy soils

on flats of hydric or mesic lowlands (G155XB241FL)

Hydric soil rating: Yes

Minor Components

Wabasso

Percent of map unit: 8 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear, convex

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: No

Pinellas

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex, linear

Across-slope shape: Linear

Other vegetative classification: Cabbage Palm Flatwoods (R155XY005FL), Sandy

over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

Hydric soil rating: No

Hallandale

Percent of map unit: 4 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: Yes

Floridana

Percent of map unit: 2 percent

Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave, linear Across-slope shape: Concave, linear

Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL), Sandy over loamy soils on stream terraces, flood plains, or in depressions

(G155XB245FL) Hydric soil rating: Yes

Oldsmar

Percent of map unit: 2 percent

Landform: Flatwoods on marine terraces Landform position (three-dimensional): Talf

Down-slope shape: Linear, convex

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: No

40—Samsula muck, frequently ponded, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 2tzw9

Elevation: 0 to 250 feet

Mean annual precipitation: 44 to 63 inches Mean annual air temperature: 68 to 77 degrees F

Frost-free period: 335 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Samsula and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Samsula

Setting

Landform: Depressions on marine terraces Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Herbaceous organic material over sandy marine deposits

Typical profile

Oa1 - 0 to 24 inches: muck Oa2 - 24 to 32 inches: muck Cg1 - 32 to 35 inches: sand Cg2 - 35 to 44 inches: sand Cg3 - 44 to 80 inches: sand

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95

to 19.98 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None Frequency of ponding: Frequent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very high (about 13.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: A/D

Forage suitability group: Organic soils in depressions and on flood plains

(G155XB645FL)

Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL),

Organic soils in depressions and on flood plains (G155XB645FL)

Hydric soil rating: Yes

Minor Components

Basinger

Percent of map unit: 3 percent

Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave, linear Across-slope shape: Concave, linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

Hydric soil rating: Yes

Myakka

Percent of map unit: 3 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave, linear Across-slope shape: Concave, linear

Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL),

Sandy soils on stream terraces, flood plains, or in depressions

(G155XB145FL) Hydric soil rating: Yes

Kaliga

Percent of map unit: 3 percent

Landform: Depressions on flatwoods on marine terraces Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Concave, linear Across-slope shape: Concave, linear

Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL),

Organic soils in depressions and on flood plains (G155XB645FL)

Hydric soil rating: Yes

Sanibel

Percent of map unit: 2 percent

Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip

Down-slope shape: Linear, concave Across-slope shape: Concave

Other vegetative classification: Organic soils in depressions and on flood plains

(G155XB645FL) Hydric soil rating: Yes

Floridana

Percent of map unit: 2 percent

Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave, linear Across-slope shape: Concave, linear

Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL), Sandy over loamy soils on stream terraces, flood plains, or in depressions

(G155XB245FL) Hydric soil rating: Yes

Anclote

Percent of map unit: 2 percent

Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip

Down-slope shape: Convex, concave Across-slope shape: Linear, concave

Other vegetative classification: Sandy soils on stream terraces, flood plains, or in

depressions (G155XB145FL)

Hydric soil rating: Yes

48—Wabasso sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2svyr

Elevation: 0 to 70 feet

Mean annual precipitation: 46 to 55 inches Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 355 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Wabasso and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wabasso

Setting

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: sand E - 6 to 25 inches: sand Bh - 25 to 30 inches: sand

Btg - 30 to 58 inches: sandy clay loam Cg - 58 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 9 to 50 inches to strongly contrasting textural

stratification

Drainage class: Poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: No

Minor Components

Hallandale

Percent of map unit: 6 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

soils on flats of mesic or hydric lowlands (G155XB141FL)

Hydric soil rating: Yes

Boca

Percent of map unit: 5 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear, convex Across-slope shape: Linear, concave

Ecological site: R155XY003FL - South Florida Flatwoods

Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy

over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

Hydric soil rating: Yes

Pineda

Percent of map unit: 4 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Tread, dip, talf

Down-slope shape: Linear

Across-slope shape: Linear, concave

Other vegetative classification: Slough (R155XY011FL), Sandy over loamy soils

on flats of hydric or mesic lowlands (G155XB241FL)

Hydric soil rating: Yes

55—Winder loamy sand

Map Unit Setting

National map unit symbol: 1 jpwk

Elevation: 0 to 30 feet

Mean annual precipitation: 49 to 58 inches Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Farmland of unique importance

Map Unit Composition

Winder, drained and bedded, and similar soils: 67 percent

Winder, hydric, and similar soils: 15 percent

Minor components: 18 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Winder, Drained And Bedded

Setting

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf Down-slope shape: Concave, convex

Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: loamy sand E - 6 to 12 inches: sand

Btg1 - 12 to 33 inches: sandy clay loam Btg2 - 33 to 49 inches: sandy loam Cg1 - 49 to 61 inches: loamy sand Cg2 - 61 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 12 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Forage suitability group: Loamy and clayey soils on flats of hydric or mesic

lowlands (G156BC341FL)

Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic

lowlands (G156BC341FL)

Hydric soil rating: No

Description of Winder, Hydric

Setting

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear, concave

Across-slope shape: Linear

Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: loamy sand E - 6 to 12 inches: sand

Btg1 - 12 to 33 inches: sandy clay loam Btg2 - 33 to 49 inches: sandy loam Cg1 - 49 to 61 inches: loamy sand Cg2 - 61 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: C/D

Forage suitability group: Loamy and clayey soils on flats of hydric or mesic

lowlands (G156BC341FL)

Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic

lowlands (G156BC341FL)

Hydric soil rating: Yes

Minor Components

Pineda

Percent of map unit: 3 percent

Landform: Drainageways on marine terraces, flats on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Linear Across-slope shape: Concave

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic

lowlands (G156BC241FL)

Hydric soil rating: Yes

Hallandale

Percent of map unit: 3 percent Landform: Flats on marine terraces

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Riviera

Percent of map unit: 3 percent Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear Across-slope shape: Linear

Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic

lowlands (G156BC241FL)

Hydric soil rating: Yes

Floridana

Percent of map unit: 3 percent

Landform: Depressions on marine terraces Landform position (three-dimensional): Dip

Down-slope shape: Concave Across-slope shape: Concave

Other vegetative classification: Sandy over loamy soils on stream terraces, flood

plains, or in depressions (G156BC245FL)

Hydric soil rating: Yes

Wabasso

Percent of map unit: 2 percent Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No

Winder, shell substratum, hydric

Percent of map unit: 2 percent Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Concave, linear

Across-slope shape: Linear

Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic

lowlands (G156BC341FL)

Hydric soil rating: Yes

Wabasso, gravelly substratum

Percent of map unit: 2 percent Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL) Hydric soil rating: No