

## Map Unit Description

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 in this report, 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*. All the soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of a given series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, 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.

Additional information about the map units described in this report is available in other soil reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the soil reports define some of the properties included in the map unit descriptions.

## Report—Map Unit Description

### Manatee County, Florida

#### 1—Adamsville variant fine sand

##### Map Unit Setting

*National map unit symbol:* 1hg7m

*Elevation:* 30 to 150 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Adamsville variant and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Adamsville Variant

#### Setting

*Landform:* Flats on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 8 inches:* fine sand

*C - 8 to 80 inches:* fine sand

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat 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 6 to 18 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Very low (about 2.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### Minor Components

#### Myakka, non-hydric

*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:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Ona, non-hydric**

*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:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Orlando**

*Percent of map unit:* 4 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 rises, knolls, and  
ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey  
Oak Hills (R155XY002FL)

**St. Johns, non-hydric**

*Percent of map unit:* 3 percent  
*Landform:* Seeps on marine terraces  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**2—Beaches**

**Map Unit Setting**

*National map unit symbol:* 1hg7z  
*Elevation:* 0 to 20 feet  
*Mean annual precipitation:* 42 to 56 inches  
*Mean annual air temperature:* 52 to 75 degrees F  
*Frost-free period:* 190 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Beaches:* 95 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the  
mapunit.*

**Description of Beaches**

**Setting**

*Landform:* Beaches on marine terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Convex

*Across-slope shape:* Linear

**Properties and qualities**

*Slope:* 1 to 3 percent

*Natural drainage class:* Poorly drained

*Depth to water table:* About 0 to 72 inches

*Frequency of flooding:* Frequent

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

**Minor Components**

**Canaveral**

*Percent of map unit:* 5 percent

*Landform:* Ridges on marine terraces, dunes on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

**3—Braden fine sand**

**Map Unit Setting**

*National map unit symbol:* 1hg8b

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Braden and similar soils:* 100 percent

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

**Description of Braden**

**Setting**

*Landform:* Stream terraces on flood plains on marine terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy and loamy alluvium

**Typical profile**

*A - 0 to 4 inches:* fine sand

*E - 4 to 28 inches:* fine sand

*Bt - 28 to 40 inches:* fine sandy loam

*Cg - 40 to 70 inches:* sand

### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat poorly drained

*Runoff class:* Very low

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

Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* About 30 to 42 inches

*Frequency of flooding:* Rare

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 5.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3s

*Hydrologic Soil Group:* A

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy over loamy soils on rises and knolls of mesic uplands (G155XB231FL)

## 4—Bradenton fine sand, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2svzf

*Elevation:* 0 to 130 feet

*Mean annual precipitation:* 38 to 62 inches

*Mean annual air temperature:* 68 to 77 degrees F

*Frost-free period:* 300 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Bradenton and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Bradenton

#### Setting

*Landform:* Flats on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Tread, talf, rise

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 4 inches:* fine sand

*E - 4 to 10 inches:* fine sand

*Btg - 10 to 19 inches:* fine sandy loam

*Btkg - 19 to 26 inches:* fine sandy loam

*Ckg - 26 to 80 inches: fine sandy loam*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Poorly drained*

*Runoff class: High*

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

*Moderately high to high (0.60 to 2.00 in/hr)*

*Depth to water table: About 0 to 12 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 11 percent*

*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 4.0*

*Available water storage in profile: Low (about 5.3 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: B/D*

*Other vegetative classification: South Florida Flatwoods*

*(R155XY003FL), Loamy and clayey soils on flats of hydric or*

*mesic lowlands (G155XB341FL), Wetland Hardwood Hammock*

*(R155XY012FL)*

**Minor Components**

**Felda**

*Percent of map unit: 6 percent*

*Landform: Drainageways on marine terraces*

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

*Down-slope shape: Convex, linear*

*Across-slope shape: Linear, concave*

*Other vegetative classification: Slough (R155XY011FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)*

**Wabasso**

*Percent of map unit: 5 percent*

*Landform: Flats on marine terraces*

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

*Down-slope shape: Convex*

*Across-slope shape: Linear*

*Other vegetative classification: South Florida Flatwoods*

*(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands*

*(G155XB141FL)*

**Parkwood**

*Percent of map unit: 3 percent*

*Landform: Flats on marine terraces*

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

*Down-slope shape: Convex, linear*

*Across-slope shape: Linear*

*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

#### **Copeland**

*Percent of map unit:* 1 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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

### **5—Bradenton fine sand, limestone substratum**

#### **Map Unit Setting**

*National map unit symbol:* 1hg91

*Elevation:* 20 to 40 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Bradenton, limestone substratum, and similar soils:* 90 percent

*Minor components:* 10 percent

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

#### **Description of Bradenton, Limestone Substratum**

##### **Setting**

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Sandy and loamy marine deposits over limestone

##### **Typical profile**

*A - 0 to 6 inches:* fine sand

*E - 6 to 13 inches:* fine sand

*Btg - 13 to 47 inches:* fine sandy loam

*2R - 47 to 51 inches:* unweathered bedrock

##### **Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* 40 to 80 inches to lithic bedrock

*Natural drainage class:* Poorly drained

*Runoff class:* Medium

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

Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* About 0 to 12 inches

*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* B/D  
*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

**Minor Components**

**Bradenton**

*Percent of map unit:* 10 percent  
*Landform:* Rises on marine terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

**6—Broward variant fine sand**

**Map Unit Setting**

*National map unit symbol:* 1hg99  
*Elevation:* 20 to 40 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Broward variant, non-hydric, and similar soils:* 70 percent  
*Broward variant, hydric, and similar soils:* 20 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Broward Variant, Non-hydric**

**Setting**

*Landform:* Flatwoods on marine terraces, rises on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits over limestone

### Typical profile

*A - 0 to 6 inches: fine sand*  
*E - 6 to 14 inches: fine sand*  
*Bh - 14 to 20 inches: fine sand*  
*C - 20 to 34 inches: fine sand*  
*2R - 34 to 55 inches: unweathered bedrock*  
*3Cg - 55 to 80 inches: fine sand*

### Properties and qualities

*Slope: 0 to 2 percent*  
*Depth to restrictive feature: 20 to 40 inches to lithic bedrock*  
*Natural drainage class: Poorly drained*  
*Runoff class: Medium*  
*Capacity of the most limiting layer to transmit water (Ksat):*  
*Moderately high to high (0.57 to 1.98 in/hr)*  
*Depth to water table: About 6 to 18 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum in profile: 15 percent*  
*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum in profile: 4.0*  
*Available water storage in profile: Very low (about 2.3 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 4w*  
*Hydrologic Soil Group: C/D*  
*Other vegetative classification: South Florida Flatwoods*  
*(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands*  
*(G155XB141FL)*

## Description of Broward Variant, Hydric

### Setting

*Landform: Flats on marine terraces*  
*Landform position (three-dimensional): Talf*  
*Down-slope shape: Linear*  
*Across-slope shape: Linear*  
*Parent material: Sandy marine deposits over limestone*

### Typical profile

*A - 0 to 6 inches: fine sand*  
*E - 6 to 14 inches: fine sand*  
*Bh - 14 to 20 inches: fine sand*  
*C - 20 to 34 inches: fine sand*  
*2R - 34 to 55 inches: unweathered bedrock*  
*3Cg - 55 to 80 inches: fine sand*

### Properties and qualities

*Slope: 0 to 2 percent*  
*Depth to restrictive feature: 20 to 40 inches to lithic bedrock*  
*Natural drainage class: Poorly drained*  
*Runoff class: Medium*

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

Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* About 0 to 12 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Very low (about 2.3 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* C/D

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

#### **Minor Components**

##### **Myakka, non-hydric**

*Percent of map unit:* 5 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

##### **Wabasso variant**

*Percent of map unit:* 5 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL)

## **7—Canova, Anclote, and Okeelanta soils**

#### **Map Unit Setting**

*National map unit symbol:* 1hg9b

*Elevation:* 10 to 80 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Canova and similar soils:* 40 percent

*Anclote and similar soils:* 25 percent

*Okeelanta and similar soils:* 20 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Canova**

#### **Setting**

*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Loamy marine deposits

#### **Typical profile**

*Oa - 0 to 8 inches:* muck  
*A - 8 to 24 inches:* fine sand  
*B/C - 24 to 68 inches:* sandy clay loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 6.5 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Organic soils in depressions and on flood plains (G155XB645FL)

### **Description of Anclote**

#### **Setting**

*Landform:* Depressions on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 16 inches:* fine sand  
*Cg2 - 16 to 80 inches:* fine sand

### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural 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 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.2 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

### **Description of Okeelanta**

#### **Setting**

*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Herbaceous organic material over sandy marine deposits

#### **Typical profile**

*Oa - 0 to 20 inches:* muck  
*C - 20 to 54 inches:* sand

### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural 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  
*Calcium carbonate, maximum in profile:* 5 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 7.7 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group: A/D*

*Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL)*

### **Minor Components**

#### **Chobee**

*Percent of map unit: 5 percent*

*Landform: Depressions on marine terraces*

*Landform position (three-dimensional): Dip*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)*

#### **Floridana**

*Percent of map unit: 5 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 (G155XB241FL), Freshwater Marshes and Ponds (R155XY010FL)*

#### **Manatee**

*Percent of map unit: 5 percent*

*Landform: Depressions on marine terraces*

*Landform position (three-dimensional): Dip*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)*

## **8—Canaveral fine sand, 0 to 5 percent slopes**

### **Map Unit Setting**

*National map unit symbol: 1hg9c*

*Elevation: 10 to 20 feet*

*Mean annual precipitation: 48 to 56 inches*

*Mean annual air temperature: 68 to 75 degrees F*

*Frost-free period: 350 to 365 days*

*Farmland classification: Not prime farmland*

### **Map Unit Composition**

*Canaveral and similar soils: 90 percent*

*Minor components: 10 percent*

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

## Description of Canaveral

### Setting

*Landform:* Ridges on marine terraces, dunes on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

### Typical profile

*A - 0 to 6 inches:* fine sand  
*C - 6 to 65 inches:* fine sand

### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high  
(19.98 to 49.88 in/hr)  
*Depth to water table:* About 12 to 36 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 6.0  
*Available water storage in profile:* Very low (about 2.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## Minor Components

### Myakka, non-hydric

*Percent of map unit:* 10 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

## 9—Canaveral sand, filled

### Map Unit Setting

*National map unit symbol:* 1hg9d  
*Elevation:* 10 to 20 feet

*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Canaveral, filled, and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Canaveral, Filled**

#### **Setting**

*Landform:* Marine terraces, flats, ridges  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A/C - 0 to 80 inches:* sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high  
(19.98 to 49.88 in/hr)  
*Depth to water table:* About 12 to 36 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 6.0  
*Available water storage in profile:* Very low (about 2.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

### **Minor Components**

#### **Canaveral, organic substratum**

*Percent of map unit:* 10 percent  
*Landform:* Flats on ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## **10—Canaveral sand, organic substratum**

### **Map Unit Setting**

*National map unit symbol:* 1hg7n  
*Elevation:* 10 to 20 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Canaveral, organic substratum, and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Canaveral, Organic Substratum**

#### **Setting**

*Landform:* Flats on ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*C - 0 to 45 inches:* sand  
*Oa - 45 to 70 inches:* muck  
*C' - 70 to 80 inches:* sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* About 30 to 60 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 6.0  
*Available water storage in profile:* Moderate (about 6.3 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* A

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

### **Minor Components**

#### **Canaveral, filled**

*Percent of map unit:* 10 percent

*Landform:* Marine terraces, flats, ridges

*Landform position (three-dimensional):* Interfluve, talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## **11—Cassia fine sand**

### **Map Unit Setting**

*National map unit symbol:* 1hg7p

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Farmland of unique importance

### **Map Unit Composition**

*Cassia and similar soils:* 85 percent

*Minor components:* 15 percent

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

### **Description of Cassia**

#### **Setting**

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 3 inches:* fine sand

*E - 3 to 24 inches:* fine sand

*Bh - 24 to 33 inches:* fine sand

*C - 33 to 80 inches:* fine sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat poorly drained

*Runoff class:* Very low

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

Moderately high to high (0.57 to 5.95 in/hr)

*Depth to water table:* About 18 to 42 inches

*Frequency of flooding:* None

*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 3.7 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

**Minor Components**

**Myakka, non-hydric**

*Percent of map unit:* 8 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Pomello**

*Percent of map unit:* 7 percent  
*Landform:* Flats on marine terraces, rises on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

**12—Cassia fine sand, moderately well drained**

**Map Unit Setting**

*National map unit symbol:* 1hg7q  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Cassia, moderately well drained, and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Cassia, Moderately Well Drained

### Setting

*Landform:* Rises on marine terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

### Typical profile

*A - 0 to 5 inches:* fine sand  
*E - 5 to 29 inches:* fine sand  
*Bh - 29 to 41 inches:* fine sand  
*C - 41 to 80 inches:* fine sand

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* About 42 to 60 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 3.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Sand Pine Scrub (R155XY001FL)

## Minor Components

### Pomello

*Percent of map unit:* 10 percent  
*Landform:* Flats on marine terraces, rises on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

## 13—Chobee loamy fine sand

### Map Unit Setting

*National map unit symbol:* 1hg7r  
*Elevation:* 10 to 80 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### 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

#### Setting

*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Loamy alluvium

#### Typical profile

*A - 0 to 8 inches:* loamy fine sand  
*Bt - 8 to 51 inches:* sandy clay loam  
*B/Cg - 51 to 80 inches:* loamy fine sand

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural 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 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 8.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

## Minor Components

### Floridana, depressional

*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 (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

### Felda, hydric

*Percent of map unit:* 3 percent

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Slough (R155XY011FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

### Manatee

*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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

### Gator

*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:* Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

### Delray

*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 soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

## 14—Chobee variant sandy clay loam

### Map Unit Setting

*National map unit symbol:* 1hg7s  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Chobee variant and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Chobee Variant

#### Setting

*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Loamy and sandy marine deposits

#### Typical profile

*A - 0 to 20 inches:* sandy clay loam  
*E - 20 to 35 inches:* sandy clay loam  
*Bkg - 35 to 40 inches:* sandy loam  
*Cg - 40 to 80 inches:* loamy sand

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural 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 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very high (about 13.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

## Minor Components

### Floridana, depressional

*Percent of map unit:* 8 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 (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

### Gator

*Percent of map unit:* 7 percent

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Other vegetative classification:* Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

## 15—Delray mucky loamy fine sand

### Map Unit Setting

*National map unit symbol:* 1hg7t

*Elevation:* 10 to 80 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Delray and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Delray

#### Setting

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 8 inches:* mucky loamy fine sand

*E - 8 to 51 inches:* fine sand

*Btg - 51 to 80 inches:* sandy clay loam

### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.7 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

### **Minor Components**

#### **Floridana, depressional**

*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 over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

#### **Felda, hydric**

*Percent of map unit:* 4 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Slough (R155XY011FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

#### **Chobee**

*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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

### **Manatee**

*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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

## **16—Delray complex**

### **Map Unit Setting**

*National map unit symbol:* 1hg7v  
*Elevation:* 10 to 60 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Delray and similar soils:* 75 percent  
*Minor components:* 25 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Delray**

#### **Setting**

*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear, concave  
*Parent material:* Sandy and loamy marine deposits

#### **Typical profile**

*A - 0 to 15 inches:* fine sand  
*E - 15 to 55 inches:* fine sand  
*Btg - 55 to 80 inches:* sandy clay loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.4 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Slough (R155XY011FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

### **Minor Components**

#### **Ona, non-hydric**

*Percent of map unit:* 5 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

#### **Floridana, depressional**

*Percent of map unit:* 5 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 (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

#### **Felda, hydric**

*Percent of map unit:* 5 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Slough (R155XY011FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

#### **Anclote**

*Percent of map unit:* 5 percent  
*Landform:* Depressions on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

#### **Gator**

*Percent of map unit:* 5 percent  
*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Other vegetative classification:* Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

## 17—Delray-EauGallie complex

### Map Unit Setting

*National map unit symbol:* 1hg7w

*Elevation:* 10 to 60 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Delray and similar soils:* 45 percent

*Eaugallie and similar soils:* 35 percent

*Minor components:* 20 percent

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

### Description of Delray

#### Setting

*Landform:* Drainageways on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 15 inches:* fine sand

*E - 15 to 55 inches:* fine sand

*Btg - 55 to 80 inches:* sandy clay loam

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Very poorly drained

*Runoff class:* Negligible

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

Moderately high to high (0.57 to 5.95 in/hr)

*Depth to water table:* About 0 to 6 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 5.4 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Slough (R155XY011FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

### **Description of Eugallie**

#### **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 4 inches:* fine sand  
*E - 4 to 9 inches:* fine sand  
*Bh - 9 to 35 inches:* fine sand  
*E' - 35 to 40 inches:* fine sand  
*Btg - 40 to 76 inches:* fine sandy loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.2 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

### **Minor Components**

#### **Wabasso, non-hydric**

*Percent of map unit:* 5 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Floridana, depressional**

*Percent of map unit:* 5 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 (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

**Felda, hydric**

*Percent of map unit:* 5 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Slough (R155XY011FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

**Anclote**

*Percent of map unit:* 5 percent  
*Landform:* Depressions on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

**18—Delray-Pomona complex**

**Map Unit Setting**

*National map unit symbol:* 1hg7x  
*Elevation:* 10 to 120 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Farmland of unique importance

**Map Unit Composition**

*Delray and similar soils:* 50 percent  
*Pomona, non-hydric, and similar soils:* 20 percent  
*Pomona, hydric, and similar soils:* 20 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Delray

### Setting

*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy and loamy marine deposits

### Typical profile

*A - 0 to 15 inches:* fine sand  
*E - 15 to 55 inches:* fine sand  
*Btg - 55 to 80 inches:* fine sandy loam

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Slough (R155XY011FL), Sandy soils  
on flats of mesic or hydric lowlands (G155XB141FL)

## Description of Pomona, Hydric

### Setting

*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy and loamy marine deposits

### Typical profile

*A - 0 to 6 inches:* fine sand  
*E - 6 to 22 inches:* fine sand  
*Bh - 22 to 36 inches:* fine sand  
*E' - 36 to 51 inches:* fine sand  
*Btg - 51 to 60 inches:* fine sandy loam  
*Cg - 60 to 80 inches:* loamy fine sand

### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.20 to 1.98 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 6.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

#### **Description of Pomona, Non-hydric**

##### **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 6 inches:* fine sand  
*E - 6 to 22 inches:* fine sand  
*Bh - 22 to 36 inches:* fine sand  
*E' - 36 to 51 inches:* fine sand  
*Btg - 51 to 60 inches:* fine sandy loam  
*Cg - 60 to 80 inches:* loamy fine sand

##### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.20 to 1.98 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 6.4 inches)

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group: A/D*

*Other vegetative classification: South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)*

### **Minor Components**

#### **Palmetto**

*Percent of map unit: 3 percent*

*Landform: Drainageways on marine terraces*

*Landform position (three-dimensional): Dip*

*Down-slope shape: Linear*

*Across-slope shape: Concave*

*Other vegetative classification: Slough (R155XY011FL), Sandy soils  
on flats of mesic or hydric lowlands (G155XB141FL)*

#### **Myakka, hydric**

*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: South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)*

#### **Waveland, non-hydric**

*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: South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)*

#### **Wauchula, non-hydric**

*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: South Florida Flatwoods  
(R155XY003FL), Sandy over loamy soils on flats of hydric or  
mesic lowlands (G155XB241FL)*

## **19—Duette fine sand, 0 to 5 percent slopes**

### **Map Unit Setting**

*National map unit symbol: 1hg7y*

*Mean annual precipitation: 48 to 56 inches*

*Mean annual air temperature: 68 to 75 degrees F*

*Frost-free period: 350 to 365 days*

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Duette and similar soils:* 85 percent

*Minor components:* 15 percent

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

### **Description of Duette**

#### **Setting**

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 4 inches:* fine sand

*E - 4 to 58 inches:* fine sand

*Bh - 58 to 80 inches:* fine sand

#### **Properties and qualities**

*Slope:* 0 to 5 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* About 48 to 72 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Very low (about 2.6 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6s

*Hydrologic Soil Group:* A

*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Sand Pine Scrub (R155XY001FL)

### **Minor Components**

#### **Cassia**

*Percent of map unit:* 8 percent

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

**Pomello**

*Percent of map unit:* 7 percent

*Landform:* Flats on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

**20—EauGallie fine sand, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2svz1

*Elevation:* 10 to 130 feet

*Mean annual precipitation:* 38 to 62 inches

*Mean annual air temperature:* 68 to 77 degrees F

*Frost-free period:* 300 to 365 days

*Farmland classification:* Farmland of unique importance

**Map Unit Composition**

*Eaugallie and similar soils:* 85 percent

*Minor components:* 15 percent

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

**Description of EauGallie**

**Setting**

*Landform:* — error in exists on —

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

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy and loamy marine deposits

**Typical profile**

*A - 0 to 5 inches:* fine sand

*E - 5 to 28 inches:* fine sand

*Bh - 28 to 42 inches:* fine sand

*Btg - 42 to 50 inches:* sandy clay loam

*C - 50 to 65 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* Very low

*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  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 3.5 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Ecological site:* South florida flatwoods (R155XY003FL)  
*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Minor Components**

**Wabasso**

*Percent of map unit:* 6 percent  
*Landform:* — error in exists on —  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* South florida flatwoods (R155XY003FL)  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Unnamed (G155XU141FL)

**Delray**

*Percent of map unit:* 5 percent  
*Landform:* — error in exists on —  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Ecological site:* Slough (R155XY011FL)  
*Other vegetative classification:* Unnamed (G155XU001FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Felda**

*Percent of map unit:* 2 percent  
*Landform:* — error in exists on —  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Ecological site:* Slough (R154XY011FL)  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Unnamed (G154XU003FL)

**Pinellas**

*Percent of map unit:* 2 percent  
*Landform:* — error in exists on —  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex

*Across-slope shape:* Linear  
*Ecological site:* Cabbage palm flatwoods (R155XY005FL)  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Unnamed (G155XU003FL)

## 21—Estero muck

### Map Unit Setting

*National map unit symbol:* 1hg81  
*Elevation:* 10 to 20 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Estero and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Estero

#### Setting

*Landform:* Tidal marshes on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### Typical profile

*Oa - 0 to 6 inches:* muck  
*A - 6 to 14 inches:* fine sand  
*E - 14 to 31 inches:* fine sand  
*Bh - 31 to 56 inches:* fine sand  
*C - 56 to 80 inches:* fine sand

#### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* Frequent  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 70.0  
*Available water storage in profile:* Moderate (about 8.0 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

### **Minor Components**

#### **Kesson**

*Percent of map unit:* 4 percent

*Landform:* Tidal marshes on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

#### **Canaveral**

*Percent of map unit:* 4 percent

*Landform:* Ridges on marine terraces, dunes on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

#### **Myakka, tidal**

*Percent of map unit:* 4 percent

*Landform:* Tidal marshes on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

#### **Wulfert**

*Percent of map unit:* 3 percent

*Landform:* Tidal marshes on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## **22—Felda fine sand, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2tzvy

*Elevation:* 0 to 180 feet

*Mean annual precipitation:* 40 to 60 inches

*Mean annual air temperature:* 68 to 77 degrees F

*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Felda and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Felda

#### Setting

*Landform:* Flatwoods, marine terraces, drainageways  
*Landform position (three-dimensional):* Tread, talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear, concave  
*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 4 inches:* fine sand  
*Eg - 4 to 35 inches:* fine sand  
*Btg - 35 to 43 inches:* fine sandy loam  
*Cg - 43 to 80 inches:* extremely paragravelly fine sand

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Negligible  
*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 0 to 12 inches  
*Frequency of flooding:* Frequent  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 3.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Ecological site:* Slough (R155XY011FL)  
*Other vegetative classification:* Slough (R155XY011FL), Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL)

### Minor Components

#### 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  
*Ecological site:* Wetland hardwood hammock (R156BY012FL)  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

**Myakka**

*Percent of map unit:* 2 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear  
*Ecological site:* South florida flatwoods (R155XY003FL)  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Oldsmar**

*Percent of map unit:* 2 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear  
*Ecological site:* South florida flatwoods (R155XY003FL)  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Wabasso**

*Percent of map unit:* 2 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Tread, talf  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear  
*Ecological site:* South florida flatwoods (R155XY003FL)  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**23—Felda-Palmetto complex**

**Map Unit Setting**

*National map unit symbol:* 1hg83  
*Elevation:* 10 to 60 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Felda and similar soils:* 40 percent  
*Palmetto, hydric, and similar soils:* 20 percent  
*Palmetto, non-hydric, and similar soils:* 15 percent  
*Minor components:* 25 percent

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

### **Description of Felda**

#### **Setting**

*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy and loamy marine deposits

#### **Typical profile**

*A - 0 to 3 inches:* fine sand  
*E - 3 to 24 inches:* fine sand  
*Btg - 24 to 62 inches:* sandy loam  
*BCg - 62 to 80 inches:* fine sandy loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.6 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Wetland Hardwood Hammock (R155XY012FL)

### **Description of Palmetto, Hydric**

#### **Setting**

*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy and loamy marine deposits

#### **Typical profile**

*A - 0 to 8 inches:* sand  
*E - 8 to 25 inches:* sand  
*Bh - 25 to 45 inches:* sand

*Btg - 45 to 64 inches: sandy clay loam*

*BCg - 64 to 68 inches: loamy sand*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Poorly drained*

*Runoff class: Negligible*

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

*Moderately high (0.20 to 0.57 in/hr)*

*Depth to water table: About 0 to 12 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 4.0*

*Available water storage in profile: Low (about 5.5 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 4w*

*Hydrologic Soil Group: A/D*

*Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Wetland Hardwood Hammock (R155XY012FL)*

**Description of Palmetto, Non-hydric**

**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 8 inches: sand*

*E - 8 to 25 inches: sand*

*Bh - 25 to 45 inches: sand*

*Btg - 45 to 64 inches: sandy clay loam*

*BCg - 64 to 68 inches: loamy sand*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Poorly drained*

*Runoff class: Negligible*

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

*Moderately high (0.20 to 0.57 in/hr)*

*Depth to water table: About 6 to 18 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 4.0*

*Available water storage in profile: Low (about 5.5 inches)*

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Wetland Hardwood Hammock (R155XY012FL)

### **Minor Components**

#### **Delray**

*Percent of map unit:* 9 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 (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

#### **Myakka, non-hydric**

*Percent of map unit:* 8 percent

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

#### **Floridana**

*Percent of map unit:* 8 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 (G155XB241FL), Freshwater Marshes and Ponds (R155XY010FL)

## **24—Felda-Wabasso association, frequently flooded**

### **Map Unit Setting**

*National map unit symbol:* 1hg84

*Elevation:* 10 to 80 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Felda and similar soils:* 60 percent

*Wabasso, hydric, and similar soils: 15 percent*  
*Wabasso, non-hydric, and similar soils: 10 percent*  
*Minor components: 15 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Felda**

#### **Setting**

*Landform: Flood plains 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 3 inches: fine sand*  
*E - 3 to 24 inches: fine sand*  
*Btg - 24 to 64 inches: sandy clay loam*  
*BCg - 64 to 80 inches: fine sandy loam*

#### **Properties and qualities**

*Slope: 0 to 2 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Natural drainage class: Poorly drained*  
*Runoff class: Very low*  
*Capacity of the most limiting layer to transmit water (Ksat):*  
*Moderately high to high (0.57 to 5.95 in/hr)*  
*Depth to water table: About 0 to 12 inches*  
*Frequency of flooding: Frequent*  
*Frequency of ponding: None*  
*Calcium carbonate, maximum in profile: 15 percent*  
*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum in profile: 4.0*  
*Available water storage in profile: Low (about 5.6 inches)*

#### **Interpretive groups**

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 5w*  
*Hydrologic Soil Group: A/D*  
*Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL)*

### **Description of Wabasso, Hydric**

#### **Setting**

*Landform: Flood plains 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 7 inches: fine sand*

*E - 7 to 21 inches: fine sand*  
*Bh - 21 to 31 inches: fine sand*  
*Bw - 31 to 37 inches: fine sand*  
*Bt - 37 to 65 inches: sandy loam*  
*Cg - 65 to 80 inches: sand*

**Properties and qualities**

*Slope: 0 to 2 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Natural drainage class: Poorly drained*  
*Runoff class: Medium*  
*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: Frequent*  
*Frequency of ponding: None*  
*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum in profile: 4.0*  
*Available water storage in profile: Low (about 5.1 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 5w*  
*Hydrologic Soil Group: C/D*  
*Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)*

**Description of Wabasso, Non-hydric**

**Setting**

*Landform: Flood plains 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: fine sand*  
*E - 7 to 21 inches: fine sand*  
*Bh - 21 to 31 inches: fine sand*  
*Bw - 31 to 37 inches: fine sand*  
*Bt - 37 to 65 inches: sandy loam*  
*Cg - 65 to 80 inches: sand*

**Properties and qualities**

*Slope: 0 to 2 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Natural drainage class: Poorly drained*  
*Runoff class: Medium*  
*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: Frequent*  
*Frequency of ponding: None*

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 5w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

**Minor Components**

**Bradenton**

*Percent of map unit:* 4 percent  
*Landform:* Rises on marine terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

**Anclote**

*Percent of map unit:* 4 percent  
*Landform:* Depressions on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave, linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

**Chobee**

*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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

**Floridana, depressional**

*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 (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

## 25—Floridana fine sand

### Map Unit Setting

*National map unit symbol:* 1hg85  
*Elevation:* 10 to 60 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Floridana and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Floridana

#### Setting

*Landform:* Flats 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 15 inches:* fine sand  
*E - 15 to 32 inches:* fine sand  
*Btg - 32 to 65 inches:* sandy loam  
*Cg - 65 to 80 inches:* fine sand

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural 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 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 7.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), Freshwater Marshes and Ponds (R155XY010FL)

### Minor Components

#### Delray

*Percent of map unit:* 8 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Slough (R155XY011FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

#### Felda

*Percent of map unit:* 7 percent  
*Landform:* Drainageways 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 (G155XB241FL), Wetland Hardwood Hammock (R155XY012FL)

## 26—Floridana-Immokalee-Okeelanta association

### Map Unit Setting

*National map unit symbol:* 1hg86  
*Elevation:* 10 to 120 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Floridana, depressional, and similar soils:* 35 percent  
*Immokalee and similar soils:* 30 percent  
*Okeelanta and similar soils:* 20 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Floridana, Depressional

#### Setting

*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 19 inches:* fine sand  
*E - 19 to 36 inches:* fine sand  
*Btg - 36 to 63 inches:* sandy clay loam

*Cg - 63 to 80 inches: fine sand*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural 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*

*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 4.0*

*Available water storage in profile: Moderate (about 7.8 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7w*

*Hydrologic Soil Group: C/D*

*Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)*

**Description of Immokalee**

**Setting**

*Landform: Depressions on marine terraces*

*Landform position (three-dimensional): Interfluve, tal*

*Down-slope shape: Linear, concave*

*Across-slope shape: Linear, concave*

*Parent material: Sandy marine deposits*

**Typical profile**

*A - 0 to 10 inches: fine sand*

*E - 10 to 34 inches: fine sand*

*Bh - 34 to 43 inches: fine sand*

*C - 43 to 80 inches: fine sand*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Poorly drained*

*Runoff class: Very low*

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

*Moderately high to high (0.57 to 1.98 in/hr)*

*Depth to water table: About 0 inches*

*Frequency of flooding: None*

*Frequency of ponding: Frequent*

*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 4.0*

*Available water storage in profile: Low (about 3.5 inches)*

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group:* B/D

*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

### **Description of Okeelanta**

#### **Setting**

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Interfluve, talf

*Down-slope shape:* Linear, concave

*Across-slope shape:* Linear, concave

*Parent material:* Herbaceous organic material over sandy marine deposits

#### **Typical profile**

*Oa - 0 to 20 inches:* muck

*C - 20 to 54 inches:* sand

#### **Properties and qualities**

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* More than 80 inches

*Natural 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

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Moderate (about 7.7 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

### **Minor Components**

#### **Anclote**

*Percent of map unit:* 3 percent

*Landform:* Depressions on marine terraces, drainageways on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave, linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

**Chobee**

*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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

**Delray**

*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 soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

**Myakka, non-hydric**

*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:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Pomona, non-hydric**

*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:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Manatee**

*Percent of map unit:* 2 percent

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Other vegetative classification:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

## 27—Gator muck

### Map Unit Setting

*National map unit symbol:* 1hg87  
*Elevation:* 10 to 80 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Gator and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Gator

#### Setting

*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Herbaceous organic material over loamy and sandy marine deposits

#### Typical profile

*Oa - 0 to 18 inches:* muck  
*C1 - 18 to 55 inches:* sandy loam  
*C2 - 55 to 80 inches:* loamy sand

#### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 1.98 in/hr)  
*Depth to water table:* About 0 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* High (about 11.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* B/D  
*Other vegetative classification:* Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

## Minor Components

### Bradenton

*Percent of map unit:* 5 percent

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

### Floridana, depressional

*Percent of map unit:* 5 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 (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

### Chobee

*Percent of map unit:* 5 percent

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Other vegetative classification:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

## 28—Hallandale fine sand

### Map Unit Setting

*National map unit symbol:* 1hg88

*Elevation:* 20 to 100 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Hallandale and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Hallandale

#### Setting

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits over limestone

**Typical profile**

*A - 0 to 6 inches:* sand  
*C - 6 to 15 inches:* sand  
*2R - 15 to 19 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 7 to 20 inches to lithic bedrock  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (1.98 to 19.98 in/hr)  
*Depth to water table:* About 0 to 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 30 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 1.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Cabbage Palm Flatwoods  
(R155XY005FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Minor Components**

**Wabasso, non-hydric**

*Percent of map unit:* 4 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Parkwood variant**

*Percent of map unit:* 4 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

**Broward variant, non-hydric**

*Percent of map unit:* 4 percent

*Landform:* Flats on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

**Rock outcrop**

*Percent of map unit:* 3 percent

*Other vegetative classification:* Forage suitability group not assigned

(G155XB999FL)

**29—Manatee mucky loamy fine sand**

**Map Unit Setting**

*National map unit symbol:* 1hg89

*Elevation:* 10 to 80 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Manatee and similar soils:* 80 percent

*Manatee and similar soils:* 10 percent

*Minor components:* 10 percent

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

**Description of Manatee**

**Setting**

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Sandy and loamy marine deposits

**Typical profile**

*A - 0 to 13 inches:* mucky loamy fine sand

*Bt - 13 to 34 inches:* fine sandy loam

*BCg - 34 to 52 inches:* loamy fine sand

*Cg - 52 to 80 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Very poorly drained

*Runoff class:* Negligible

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

Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* About 0 to 12 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Moderate (about 7.5 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* B/D

*Other vegetative classification:* Freshwater Marshes and Ponds (R155XY010FL), Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL)

#### **Description of Manatee**

##### **Setting**

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Sandy and loamy marine deposits

##### **Typical profile**

*A - 0 to 13 inches:* mucky loamy fine sand

*Bt - 13 to 34 inches:* fine sandy loam

*BCg - 34 to 52 inches:* loamy fine sand

*Cg - 52 to 80 inches:* fine sand

##### **Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Very poorly drained

*Runoff class:* Negligible

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

Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* About 0 to 12 inches

*Frequency of flooding:* None

*Frequency of ponding:* Frequent

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Moderate (about 7.5 inches)

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* B/D

*Other vegetative classification:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

### Minor Components

#### Floridana, depressional

*Percent of map unit:* 5 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 (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

#### Chobee

*Percent of map unit:* 5 percent

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Other vegetative classification:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

## 30—Myakka-Myakka, wet, fine sands, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tw7

*Elevation:* 10 to 130 feet

*Mean annual precipitation:* 38 to 62 inches

*Mean annual air temperature:* 64 to 75 degrees F

*Frost-free period:* 280 to 365 days

*Farmland classification:* Farmland of unique importance

### Map Unit Composition

*Myakka and similar soils:* 75 percent

*Myakka, wet, and similar soils:* 15 percent

*Minor components:* 10 percent

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

### Description of Myakka

#### Setting

*Landform:* Flatwoods on marine terraces

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

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 6 inches:* fine sand

*E - 6 to 20 inches: fine sand*  
*Bh - 20 to 36 inches: fine sand*  
*C - 36 to 80 inches: fine sand*

**Properties and qualities**

*Slope: 0 to 2 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Natural drainage class: Poorly drained*  
*Runoff class: High*  
*Capacity of the most limiting layer to transmit water (Ksat):*  
*Moderately high to high (0.57 to 5.95 in/hr)*  
*Depth to water table: About 6 to 18 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum in profile: 4.0*  
*Available water storage in profile: Low (about 3.9 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 4w*  
*Hydrologic Soil Group: A/D*  
*Other vegetative classification: South Florida Flatwoods*  
*(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands*  
*(G155XB141FL)*

**Description of Myakka, Wet**

**Setting**

*Landform: Flatwoods on marine terraces*  
*Landform position (three-dimensional): Tread, talf*  
*Down-slope shape: Convex*  
*Across-slope shape: Linear*  
*Parent material: Sandy marine deposits*

**Typical profile**

*A - 0 to 6 inches: fine sand*  
*E - 6 to 20 inches: fine sand*  
*Bh - 20 to 36 inches: fine sand*  
*C - 36 to 80 inches: fine sand*

**Properties and qualities**

*Slope: 0 to 2 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Natural drainage class: Poorly drained*  
*Runoff class: High*  
*Capacity of the most limiting layer to transmit water (Ksat):*  
*Moderately high to high (0.57 to 5.95 in/hr)*  
*Depth to water table: About 0 to 6 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*  
*Sodium adsorption ratio, maximum in profile: 4.0*  
*Available water storage in profile: Low (about 3.9 inches)*

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### **Minor Components**

#### **Basinger**

*Percent of map unit:* 5 percent

*Landform:* Drainageways on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear, concave

*Other vegetative classification:* Sandy soils on flats of mesic or hydric  
lowlands (G155XB141FL)

#### **Eaugallie, non-hydric**

*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:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

#### **Placid, depressional**

*Percent of map unit:* 1 percent

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave, convex

*Across-slope shape:* Concave, linear

*Other vegetative classification:* Sandy soils on stream terraces, flood  
plains, or in depressions (G155XB145FL)

## **31—Myakka fine sand, 2 to 5 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1hg8d

*Elevation:* 20 to 150 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Farmland of unique importance

### **Map Unit Composition**

*Myakka, non-hydric, and similar soils:* 70 percent

*Myakka, hydric, and similar soils:* 15 percent

*Minor components:* 15 percent

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

### **Description of Myakka, Non-hydric**

#### **Setting**

*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 6 inches:* fine sand  
*E - 6 to 12 inches:* fine sand  
*Bh - 12 to 33 inches:* fine sand  
*E' - 33 to 61 inches:* fine sand  
*B'h - 61 to 80 inches:* fine sand

#### **Properties and qualities**

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 4.7 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### **Description of Myakka, Hydric**

#### **Setting**

*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 6 inches:* fine sand  
*E - 6 to 12 inches:* fine sand  
*Bh - 12 to 33 inches:* fine sand

*E'* - 33 to 61 inches: fine sand  
*B'h* - 61 to 80 inches: fine sand

**Properties and qualities**

*Slope*: 2 to 5 percent  
*Depth to restrictive feature*: More than 80 inches  
*Natural drainage class*: Poorly drained  
*Runoff class*: Very low  
*Capacity of the most limiting layer to transmit water (Ksat)*:  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table*: About 0 to 12 inches  
*Frequency of flooding*: None  
*Frequency of ponding*: None  
*Salinity, maximum in profile*: Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile*: 4.0  
*Available water storage in profile*: Low (about 4.7 inches)

**Interpretive groups**

*Land capability classification (irrigated)*: None specified  
*Land capability classification (nonirrigated)*: 4w  
*Hydrologic Soil Group*: A/D  
*Other vegetative classification*: South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Minor Components**

**Pomona, non-hydric**

*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*: South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Ona, non-hydric**

*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*: South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**St. Johns, non-hydric**

*Percent of map unit*: 4 percent  
*Landform*: Seeps on marine terraces  
*Landform position (three-dimensional)*: Base slope  
*Down-slope shape*: Concave  
*Across-slope shape*: Linear

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Wauchula, non-hydric**

*Percent of map unit:* 3 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy over loamy soils on flats of hydric or  
mesic lowlands (G155XB241FL)

**32—Myakka fine sand, shell substratum**

**Map Unit Setting**

*National map unit symbol:* 1hg8f  
*Elevation:* 10 to 20 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Myakka, shelly/non-hydric, and similar soils:* 85 percent  
*Myakka, shelly/hydric, and similar soils:* 5 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Myakka, Shelly/non-hydric**

**Setting**

*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

**Typical profile**

*A - 0 to 15 inches:* fine sand  
*E - 15 to 26 inches:* fine sand  
*Bh - 26 to 41 inches:* fine sand  
*C - 41 to 80 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)

*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 3.9 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Description of Myakka, Shelly/hydric**

**Setting**

*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

**Typical profile**

*A - 0 to 15 inches:* fine sand  
*E - 15 to 26 inches:* fine sand  
*Bh - 26 to 41 inches:* fine sand  
*C - 41 to 80 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 3.9 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Minor Components**

**Canaveral**

*Percent of map unit:* 10 percent

*Landform:* Ridges on marine terraces, dunes on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

### **33—Myakka fine sand, tidal**

#### **Map Unit Setting**

*National map unit symbol:* 1hg8g  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Myakka, tidal, and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Myakka, Tidal**

##### **Setting**

*Landform:* Tidal marshes on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

##### **Typical profile**

*A - 0 to 3 inches:* fine sand  
*E - 3 to 15 inches:* fine sand  
*Bh - 15 to 37 inches:* fine sand  
*C - 37 to 75 inches:* fine sand

##### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* Frequent  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Moderately saline to strongly saline  
(16.0 to 32.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 4.0 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

### **Minor Components**

#### **Wulfert**

*Percent of map unit:* 8 percent  
*Landform:* Tidal marshes on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

#### **Kesson**

*Percent of map unit:* 7 percent  
*Landform:* Tidal marshes on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## **34—Okeelanta muck, tidal**

### **Map Unit Setting**

*National map unit symbol:* 1hg8h  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Okeelanta, tidal, and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Okeelanta, Tidal**

#### **Setting**

*Landform:* Tidal marshes on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Herbaceous organic material over sandy marine deposits

### Typical profile

*Oa - 0 to 39 inches:* muck

*C - 39 to 60 inches:* sand

### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural 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:* Frequent

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* High (about 11.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Forage suitability group not assigned (G155XB999FL), Salt Marsh (R155XY009FL)

### Minor Components

#### Gator

*Percent of map unit:* 5 percent

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Other vegetative classification:* Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

#### Myakka, tidal

*Percent of map unit:* 5 percent

*Landform:* Tidal marshes on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned (G155XB999FL)

## 35—Ona fine sand, orstein substratum

### Map Unit Setting

*National map unit symbol:* 1hg8j

*Elevation:* 30 to 150 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Ona, non-hydric, and similar soils:* 70 percent  
*Ona, hydric, and similar soils:* 15 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Ona, Non-hydric**

#### **Setting**

*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 5 inches:* fine sand  
*Bh - 5 to 16 inches:* fine sand  
*E - 16 to 52 inches:* fine sand  
*B'h1 - 52 to 68 inches:* fine sand  
*B'h2 - 68 to 80 inches:* fine sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Medium  
*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  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 6.0 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* B/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### **Description of Ona, Hydric**

#### **Setting**

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

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 5 inches:* fine sand  
*Bh - 5 to 16 inches:* fine sand  
*E - 16 to 52 inches:* fine sand  
*B'h1 - 52 to 68 inches:* fine sand  
*B'h2 - 68 to 80 inches:* fine sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Medium  
*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  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 6.0 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* B/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

#### **Minor Components**

##### **St. Johns, non-hydric**

*Percent of map unit:* 4 percent  
*Landform:* Seeps on marine terraces  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

##### **Myakka, non-hydric**

*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:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Wauchula, non-hydric**

*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:* South Florida Flatwoods (R155XY003FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

**Waveland, non-hydric**

*Percent of map unit:* 3 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**36—Orlando fine sand, moderately wet, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 1hg8k  
*Elevation:* 20 to 120 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Orlando and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Orlando**

**Setting**

*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits over fluviomarine deposits

**Typical profile**

*A - 0 to 12 inches:* fine sand  
*C - 12 to 80 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well 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 42 to 72 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 2.4 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)

#### **Minor Components**

##### **Tavares**

*Percent of map unit:* 10 percent  
*Landform:* Flats on marine terraces, ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)

### **37—Orsino fine sand, 0 to 5 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 1hg8l  
*Elevation:* 10 to 140 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Orsino and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### **Description of Orsino**

##### **Setting**

*Landform:* Knolls on marine terraces, ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Eolian or sandy marine deposits

**Typical profile**

*A - 0 to 4 inches:* fine sand  
*E - 4 to 18 inches:* fine sand  
*Bw - 18 to 59 inches:* fine sand  
*C - 59 to 80 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high  
(19.98 to 50.02 in/hr)  
*Depth to water table:* About 42 to 60 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 3.0 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Sand Pine Scrub (R155XY001FL)

**Minor Components**

**Pomello**

*Percent of map unit:* 5 percent  
*Landform:* Flats on marine terraces, rises on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

**Cassia**

*Percent of map unit:* 5 percent  
*Landform:* Rises on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

## 38—Palmetto sand

### Map Unit Setting

*National map unit symbol:* 1hg8m  
*Elevation:* 10 to 60 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Palmetto and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Palmetto

#### Setting

*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 8 inches:* sand  
*E - 8 to 25 inches:* sand  
*Bh - 25 to 45 inches:* sand  
*Btg - 45 to 64 inches:* sandy clay loam  
*BCg - 64 to 68 inches:* loamy sand

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Slough (R155XY011FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

### Minor Components

#### Delray

*Percent of map unit:* 10 percent

*Landform:* Drainageways on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Slough (R155XY011FL), Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

### 39—Parkwood variant-Chobee, limestone substratum-Parkwood complex

#### Map Unit Setting

*National map unit symbol:* 1hg8n

*Elevation:* 10 to 100 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Parkwood variant and similar soils:* 40 percent

*Chobee, limestone substratum, and similar soils:* 30 percent

*Parkwood and similar soils:* 15 percent

*Minor components:* 15 percent

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

#### Description of Parkwood Variant

##### Setting

*Landform:* Drainageways on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Parent material:* Sandy and loamy marine deposits over soft limestone

##### Typical profile

*A - 0 to 9 inches:* loamy fine sand

*Bt<sub>kg</sub> - 9 to 37 inches:* fine sandy loam

*2R - 37 to 41 inches:* weathered bedrock

##### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* 30 to 60 inches to paralithic bedrock

*Natural drainage class:* Poorly drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* About 6 to 18 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 20 percent

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 3.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

#### **Description of Chobee, Limestone Substratum**

##### **Setting**

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Loamy alluvium

##### **Typical profile**

*A - 0 to 6 inches:* loamy fine sand

*Bt - 6 to 22 inches:* fine sandy loam

*Bt - 22 to 50 inches:* sandy clay loam

*2R - 50 to 54 inches:* unweathered bedrock

##### **Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* 40 to 79 inches to lithic bedrock

*Natural 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 in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Moderate (about 7.1 inches)

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* C/D

*Other vegetative classification:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Wetland Hardwood Hammock (R155XY012FL)

## **Description of Parkwood**

### **Setting**

*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Parent material:* Sandy and loamy marine deposits

### **Typical profile**

*A - 0 to 9 inches:* fine sand  
*Btkg1 - 9 to 22 inches:* fine sandy loam  
*Btkg2 - 22 to 52 inches:* loamy fine sand  
*Ck - 52 to 80 inches:* loamy fine sand

### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural 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 0.57 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 20 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 7.6 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

## **Minor Components**

### **Felda**

*Percent of map unit:* 4 percent  
*Landform:* Drainageways 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 (G155XB241FL), Wetland Hardwood Hammock (R155XY012FL)

**Anclote**

*Percent of map unit:* 4 percent

*Landform:* Depressions on marine terraces, drainageways on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave, linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

**Delray**

*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 (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

**Manatee**

*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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

**40—Pinellas fine sand**

**Map Unit Setting**

*National map unit symbol:* 1hg8q

*Elevation:* 20 to 40 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Pinellas, non-hydric, and similar soils:* 70 percent

*Pinellas, hydric, and similar soils:* 15 percent

*Minor components:* 15 percent

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

**Description of Pinellas, Non-hydric**

**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 5 inches:* fine sand  
*E - 5 to 11 inches:* fine sand  
*Bk - 11 to 33 inches:* fine sand  
*Btg - 33 to 45 inches:* sandy clay loam  
*2Cg - 45 to 60 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 1.98 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 20 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* B/D  
*Other vegetative classification:* Cabbage Palm Flatwoods  
(R155XY005FL), Sandy over loamy soils on flats of hydric or  
mesic lowlands (G155XB241FL)

**Description of Pinellas, Hydric**

**Setting**

*Landform:* Flats 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 5 inches:* fine sand  
*E - 5 to 11 inches:* fine sand  
*Bk - 11 to 33 inches:* fine sand  
*Btg - 33 to 45 inches:* sandy clay loam  
*2Cg - 45 to 60 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained

*Runoff class:* Very low

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

Moderately high to high (0.57 to 1.98 in/hr)

*Depth to water table:* About 0 to 12 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 20 percent

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 5.4 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* B/D

*Other vegetative classification:* Cabbage Palm Flatwoods (R155XY005FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

### **Minor Components**

#### **Bradenton**

*Percent of map unit:* 4 percent

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G155XB341FL), Wetland Hardwood Hammock (R155XY012FL)

#### **Eaugallie**

*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:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

#### **Broward variant, non-hydric**

*Percent of map unit:* 4 percent

*Landform:* Flatwoods on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

#### **Wabasso, non-hydric**

*Percent of map unit:* 3 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

## 41—Pits and Dumps

### Map Unit Composition

*Pits:* 50 percent

*Dumps:* 40 percent

*Minor components:* 10 percent

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

### Description of Pits

#### Setting

*Landform:* Marine terraces

*Landform position (three-dimensional):* Interfluve, dip

*Down-slope shape:* Linear

*Across-slope shape:* Linear

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

### Description of Dumps

#### Setting

*Landform:* Marine terraces

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear

*Across-slope shape:* Convex

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

### Minor Components

#### Aquents

*Percent of map unit:* 10 percent

*Landform:* Depressions

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## 42—Pomello fine sand, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tzw1

*Elevation:* 0 to 130 feet

*Mean annual precipitation:* 42 to 60 inches

*Mean annual air temperature:* 68 to 77 degrees F

*Frost-free period:* 325 to 365 days

*Farmland classification:* Farmland of unique importance

### Map Unit Composition

*Pomello and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Pomello

#### Setting

*Landform:* Flatwoods on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, tread, talf

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 2 inches:* fine sand

*E - 2 to 46 inches:* fine sand

*Bh - 46 to 80 inches:* fine sand

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Moderately well drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)

*Depth to water table:* About 24 to 42 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 2.0

*Available water storage in profile:* Low (about 3.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6s

*Hydrologic Soil Group:* A

*Ecological site:* Sand pine scrub (R155XY001FL)

*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

### **Minor Components**

#### **Immokalee**

*Percent of map unit:* 5 percent

*Landform:* Flatwoods on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, tread, talf

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Ecological site:* South florida flatwoods (R155XY003FL)

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

#### **Duette**

*Percent of map unit:* 5 percent

*Landform:* Flatwoods on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, tread, talf

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Ecological site:* Sand pine scrub (R155XY001FL)

*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)

#### **Jonathan**

*Percent of map unit:* 3 percent

*Landform:* Flatwoods on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, tread, talf

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Ecological site:* South florida flatwoods (R156BY003FL)

*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)

#### **Tavares**

*Percent of map unit:* 2 percent

*Landform:* Flatwoods on marine terraces, ridges on marine terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope, tread, talf

*Down-slope shape:* Convex, linear

*Across-slope shape:* Linear

*Ecological site:* Longleaf pine-turkey oak hills (R155XY002FL)

*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)

## 43—St. Johns fine sand, 2 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 1hg8t  
*Elevation:* 30 to 150 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*St. johns, non-hydric, and similar soils:* 45 percent  
*St. johns, hydric, and similar soils:* 40 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of St. Johns, Non-hydric

#### Setting

*Landform:* Seeps on marine terraces  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 13 inches:* fine sand  
*E - 13 to 28 inches:* fine sand  
*Bh - 28 to 60 inches:* fine sand  
*E' - 60 to 68 inches:* fine sand  
*B'h - 68 to 80 inches:* fine sand

#### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.60 to 1.98 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 6.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* B/D

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### **Description of St. Johns, Hydric**

#### **Setting**

*Landform:* Seeps on marine terraces  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 13 inches:* fine sand  
*E - 13 to 28 inches:* fine sand  
*Bh - 28 to 60 inches:* fine sand  
*E' - 60 to 68 inches:* fine sand  
*B'h - 68 to 80 inches:* fine sand

#### **Properties and qualities**

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.60 to 1.98 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 6.7 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* B/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### **Minor Components**

#### **Felda**

*Percent of map unit:* 8 percent  
*Landform:* Drainageways 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 (G155XB241FL), Wetland Hardwood  
Hammock (R155XY012FL)

**Myakka, non-hydric**

*Percent of map unit:* 7 percent

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

**44—St. Johns-Myakka complex**

**Map Unit Setting**

*National map unit symbol:* 1hg8v

*Elevation:* 30 to 150 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*St. Johns and similar soils:* 45 percent

*Myakka and similar soils:* 40 percent

*Minor components:* 15 percent

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

**Description of St. Johns**

**Setting**

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

**Typical profile**

*A - 0 to 11 inches:* fine sand

*E - 11 to 26 inches:* fine sand

*Bh - 26 to 43 inches:* fine sand

*E' - 43 to 80 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* Very low

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

Moderately high to high (0.60 to 1.98 in/hr)

*Depth to water table:* About 0 to 6 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.5 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* B/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Description of Myakka**

**Setting**

*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

**Typical profile**

*A - 0 to 5 inches:* fine sand  
*E - 5 to 24 inches:* fine sand  
*Bh - 24 to 46 inches:* fine sand  
*E' - 46 to 80 inches:* fine sand

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 4.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Minor Components**

**Ona, non-hydric**

*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:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Palmetto**

*Percent of map unit:* 4 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Slough (R155XY011FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Immokalee**

*Percent of map unit:* 4 percent  
*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Linear, concave  
*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

**Wauchula, non-hydric**

*Percent of map unit:* 3 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

**45—Tavares fine sand, 0 to 5 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 1hg8w  
*Elevation:* 10 to 140 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Tavares and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Tavares

### Setting

*Landform:* Flats on marine terraces, ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Eolian or sandy marine deposits

### Typical profile

*A - 0 to 6 inches:* fine sand  
*C - 6 to 80 inches:* fine sand

### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high  
(19.98 to 50.02 in/hr)  
*Depth to water table:* About 42 to 72 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 2.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)

## Minor Components

### Orsino

*Percent of map unit:* 4 percent  
*Landform:* Knolls on marine terraces, ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Sand Pine Scrub (R155XY001FL)

### Adamsville variant

*Percent of map unit:* 4 percent  
*Landform:* Flats on marine terraces, rises on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods (R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

**Orlando**

*Percent of map unit:* 4 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 rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)

**Zolfo**

*Percent of map unit:* 3 percent  
*Landform:* Ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), South Florida Flatwoods (R155XY003FL)

**46—Tavares fine sand, cemented substratum, 2 to 5 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 1hg8x  
*Elevation:* 20 to 120 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Tavares, cemented substratum, and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Tavares, Cemented Substratum**

**Setting**

*Landform:* Stream terraces on flood plains on marine terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Eolian or sandy marine deposits

**Typical profile**

*A - 0 to 7 inches:* fine sand  
*C - 7 to 60 inches:* fine sand

*Cm - 60 to 80 inches: sand*

**Properties and qualities**

*Slope: 2 to 5 percent*

*Depth to restrictive feature: 40 to 80 inches to cemented horizon*

*Natural drainage class: Moderately well 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 42 to 72 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 4.0*

*Available water storage in profile: Low (about 3.6 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3s*

*Hydrologic Soil Group: A*

*Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)*

**Minor Components**

**Tavares**

*Percent of map unit: 8 percent*

*Landform: Flats on marine terraces, ridges on marine terraces*

*Landform position (three-dimensional): Interfluve*

*Down-slope shape: Convex*

*Across-slope shape: Linear*

*Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)*

**Braden**

*Percent of map unit: 7 percent*

*Landform: Stream terraces on flood plains on marine terraces*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Convex*

*Across-slope shape: Linear*

*Other vegetative classification: South Florida Flatwoods (R155XY003FL), Sandy over loamy soils on rises and knolls of mesic uplands (G155XB231FL)*

**47—Tomoka muck**

**Map Unit Setting**

*National map unit symbol: 1hg8y*

*Elevation: 10 to 80 feet*

*Mean annual precipitation: 48 to 56 inches*

*Mean annual air temperature: 68 to 75 degrees F*

*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Tomoka and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Tomoka**

#### **Setting**

*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Herbaceous organic material over sandy and loamy marine deposits

#### **Typical profile**

*Oa - 0 to 28 inches:* muck  
*2C - 28 to 35 inches:* sand  
*3C - 35 to 75 inches:* sandy clay loam

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very high (about 15.0 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

### **Minor Components**

#### **Floridana, depressional**

*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 over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

**Chobee**

*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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL)

**Delray**

*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 (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

**Manatee**

*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:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)

**48—Wabasso fine sand**

**Map Unit Setting**

*National map unit symbol:* 1hg8z

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Farmland of unique importance

**Map Unit Composition**

*Wabasso, non-hydric, and similar soils:* 70 percent

*Wabasso, hydric, and similar soils:* 25 percent

*Minor components:* 5 percent

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

**Description of Wabasso, Non-hydric**

**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 7 inches:* fine sand  
*E - 7 to 21 inches:* fine sand  
*Bh - 21 to 31 inches:* fine sand  
*E' - 31 to 37 inches:* fine sand  
*B'tg - 37 to 65 inches:* sandy clay loam  
*Cg - 65 to 80 inches:* sand

**Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Medium  
*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  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Description of Wabasso, Hydric**

**Setting**

*Landform:* Flats 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 7 inches:* fine sand  
*E - 7 to 21 inches:* fine sand  
*Bh - 21 to 31 inches:* fine sand  
*E' - 31 to 37 inches:* fine sand  
*B'tg - 37 to 65 inches:* sandy clay loam  
*Cg - 65 to 80 inches:* sand

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Medium  
*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  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 5.1 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

#### **Minor Components**

##### **Felda**

*Percent of map unit:* 3 percent  
*Landform:* Drainageways 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 (G155XB241FL), Wetland Hardwood  
Hammock (R155XY012FL)

##### **Eaugallie, non-hydric**

*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:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### **49—Wabasso fine sand, rarely flooded**

#### **Map Unit Setting**

*National map unit symbol:* 1hg90  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Wabasso, non-hydric, and similar soils:* 70 percent

*Wabasso, hydric, and similar soils:* 15 percent

*Minor components:* 15 percent

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

### Description of Wabasso, Non-hydric

#### Setting

*Landform:* Stream terraces on flood plains on marine terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 7 inches:* fine sand

*E - 7 to 21 inches:* fine sand

*Bh - 21 to 31 inches:* fine sand

*E' - 31 to 37 inches:* fine sand

*B'tg - 37 to 65 inches:* sandy clay loam

*Cg - 65 to 80 inches:* sand

#### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* Medium

*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:* Rare

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 5.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* C/D

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

### Description of Wabasso, Hydric

#### Setting

*Landform:* Stream terraces on flood plains on marine terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy and loamy marine deposits

**Typical profile**

*A - 0 to 7 inches:* fine sand

*E - 7 to 21 inches:* fine sand

*Bh - 21 to 31 inches:* fine sand

*E' - 31 to 37 inches:* fine sand

*B'tg - 37 to 65 inches:* sandy clay loam

*Cg - 65 to 80 inches:* sand

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Poorly drained

*Runoff class:* Medium

*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:* Rare

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 4.0

*Available water storage in profile:* Low (about 5.1 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* C/D

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

**Minor Components**

**Braden**

*Percent of map unit:* 8 percent

*Landform:* Stream terraces on flood plains on marine terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy over loamy soils on rises and knolls of

mesic uplands (G155XB231FL)

**Myakka, non-hydric**

*Percent of map unit:* 7 percent

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods

(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands

(G155XB141FL)

## 50—Wabasso variant fine sand

### Map Unit Setting

*National map unit symbol:* 1hg92  
*Elevation:* 20 to 40 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Wabasso variant and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Wabasso Variant

#### 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 over limestone

#### Typical profile

*A - 0 to 4 inches:* fine sand  
*E - 4 to 23 inches:* fine sand  
*Bh - 23 to 30 inches:* fine sand  
*Btg - 30 to 36 inches:* sandy clay loam  
*2R - 36 to 56 inches:* unweathered bedrock  
*3Cg - 56 to 80 inches:* fine sand

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Natural drainage class:* Poorly drained  
*Runoff class:* Medium  
*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 in profile:* 10 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 2.4 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* B/D

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL)

### **Minor Components**

#### **Myakka, non-hydric**

*Percent of map unit:* 5 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

#### **Broward variant, non-hydric**

*Percent of map unit:* 5 percent

*Landform:* Flatwoods on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

#### **Wabasso, non-hydric**

*Percent of map unit:* 5 percent

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

## **51—Wauchula fine sand**

### **Map Unit Setting**

*National map unit symbol:* 1hg93

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 68 to 75 degrees F

*Frost-free period:* 350 to 365 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Wauchula, non-hydric, and similar soils:* 75 percent

*Wauchula, hydric, and similar soils:* 10 percent

*Minor components:* 15 percent

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

## Description of Wauchula, Non-hydric

### 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 7 inches:* fine sand  
*E - 7 to 20 inches:* fine sand  
*Bh - 20 to 29 inches:* fine sand  
*E' - 29 to 34 inches:* fine sand  
*B'tg - 34 to 71 inches:* sandy clay loam  
*Cg - 71 to 80 inches:* loamy fine sand

### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.60 to 5.95 in/hr)  
*Depth to water table:* About 6 to 18 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Moderate (about 7.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy over loamy soils on flats of hydric or  
mesic lowlands (G155XB241FL)

## Description of Wauchula, Hydric

### Setting

*Landform:* Flats 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 7 inches:* fine sand  
*E - 7 to 20 inches:* fine sand  
*Bh - 20 to 29 inches:* fine sand  
*E' - 29 to 34 inches:* fine sand

*B'tg - 34 to 71 inches: sandy clay loam*

*Cg - 71 to 80 inches: loamy fine sand*

**Properties and qualities**

*Slope: 0 to 2 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Poorly drained*

*Runoff class: Very low*

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

*Moderately high to high (0.60 to 5.95 in/hr)*

*Depth to water table: About 0 to 6 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Salinity, maximum in profile: Nonsaline (0.0 to 2.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 4.0*

*Available water storage in profile: Moderate (about 7.0 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: A/D*

*Other vegetative classification: South Florida Flatwoods*

*(R155XY003FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)*

**Minor Components**

**Myakka, non-hydric**

*Percent of map unit: 5 percent*

*Landform: Flatwoods on marine terraces*

*Landform position (three-dimensional): Talf*

*Down-slope shape: Convex*

*Across-slope shape: Linear*

*Other vegetative classification: South Florida Flatwoods*

*(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)*

**Ona, non-hydric**

*Percent of map unit: 5 percent*

*Landform: Flatwoods on marine terraces*

*Landform position (three-dimensional): Talf*

*Down-slope shape: Convex*

*Across-slope shape: Linear*

*Other vegetative classification: South Florida Flatwoods*

*(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)*

**Immokalee**

*Percent of map unit: 5 percent*

*Landform: Depressions on marine terraces*

*Landform position (three-dimensional): Interfluve, talf*

*Down-slope shape: Linear, concave*

*Across-slope shape: Linear, concave*

*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)

## **52—Waveland fine sand**

### **Map Unit Setting**

*National map unit symbol:* 1hg94  
*Elevation:* 20 to 120 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Farmland of unique importance

### **Map Unit Composition**

*Waveland, non-hydric, and similar soils:* 60 percent  
*Waveland, hydric, and similar soils:* 25 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Waveland, Non-hydric**

#### **Setting**

*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 5 inches:* fine sand  
*E - 5 to 32 inches:* sand  
*Bh1 - 32 to 40 inches:* sand  
*Bh2 - 40 to 51 inches:* sand  
*C - 51 to 80 inches:* sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 30 to 50 inches to ortstein  
*Natural drainage class:* Poorly drained  
*Runoff class:* Medium  
*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  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 0.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### **Description of Waveland, Hydric**

#### **Setting**

*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 5 inches:* fine sand  
*E - 5 to 32 inches:* sand  
*Bh1 - 32 to 40 inches:* sand  
*Bh2 - 40 to 51 inches:* sand  
*C - 51 to 80 inches:* sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 31 to 50 inches to ortstein  
*Natural drainage class:* Poorly drained  
*Runoff class:* Medium  
*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 6 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Very low (about 0.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* C/D  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

### **Minor Components**

#### **Pomona, non-hydric**

*Percent of map unit:* 5 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear

*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Ona, non-hydric**

*Percent of map unit:* 5 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**Myakka, non-hydric**

*Percent of map unit:* 5 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* South Florida Flatwoods  
(R155XY003FL), Sandy soils on flats of mesic or hydric lowlands  
(G155XB141FL)

**53—Wulfert-Kesson association**

**Map Unit Setting**

*National map unit symbol:* 1hg95  
*Elevation:* 0 to 10 feet  
*Mean annual precipitation:* 42 to 56 inches  
*Mean annual air temperature:* 52 to 75 degrees F  
*Frost-free period:* 190 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Wulfert and similar soils:* 50 percent  
*Kesson and similar soils:* 40 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Wulfert**

**Setting**

*Landform:* Tidal marshes on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Organic material over sandy marine deposits

**Typical profile**

*Oa1 - 0 to 12 inches:* muck  
*Oa2 - 12 to 36 inches:* muck

*C - 36 to 60 inches: fine sand*

**Properties and qualities**

*Slope: 0 to 1 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural 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 to 6 inches*

*Frequency of flooding: Frequent*

*Frequency of ponding: None*

*Salinity, maximum in profile: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 80.0*

*Available water storage in profile: Moderate (about 7.0 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8*

*Hydrologic Soil Group: A/D*

*Other vegetative classification: Forage suitability group not assigned (G155XB999FL)*

**Description of Kesson**

**Setting**

*Landform: Tidal marshes on marine terraces*

*Landform position (three-dimensional): Talf*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Sandy marine deposits with shells*

**Typical profile**

*A - 0 to 6 inches: fine sand*

*C1 - 6 to 25 inches: fine sand*

*C2 - 25 to 45 inches: fine sand*

*C3 - 45 to 80 inches: fine sand*

**Properties and qualities**

*Slope: 0 to 1 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Very poorly drained*

*Runoff class: Very low*

*Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)*

*Depth to water table: About 0 to 6 inches*

*Frequency of flooding: Frequent*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 15 percent*

*Salinity, maximum in profile: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)*

*Sodium adsorption ratio, maximum in profile: 30.0*

*Available water storage in profile: Low (about 5.8 inches)*

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

### **Minor Components**

#### **Beaches**

*Percent of map unit:* 10 percent  
*Landform:* Beaches on marine terraces  
*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## **54—Zolfo fine sand, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2tzw7  
*Elevation:* 0 to 130 feet  
*Mean annual precipitation:* 45 to 55 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**

*Zolfo and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Zolfo**

#### **Setting**

*Landform:* Flatwoods on marine terraces, rises on marine terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve, riser, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### **Typical profile**

*A - 0 to 7 inches:* fine sand  
*E - 7 to 63 inches:* fine sand  
*Bh - 63 to 80 inches:* fine sand

#### **Properties and qualities**

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.60 to 2.00 in/hr)  
*Depth to water table:* About 24 to 42 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 4.6 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), South Florida Flatwoods (R155XY003FL)

#### **Minor Components**

##### **Tavares**

*Percent of map unit:* 10 percent  
*Landform:* Flatwoods on marine terraces, rises on marine terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve, riser, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL)

##### **Myakka**

*Percent of map unit:* 3 percent  
*Landform:* Flatwoods on marine terraces, rises on marine terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve, riser, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

##### **Ona, non-hydric**

*Percent of map unit:* 2 percent  
*Landform:* Flatwoods on marine terraces, rises on marine terraces  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve, riser, rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

## 55—Zolfo fine sand, 2 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 1hg97  
*Elevation:* 10 to 140 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 68 to 75 degrees F  
*Frost-free period:* 350 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Zolfo and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Zolfo

#### Setting

*Landform:* Ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 4 inches:* fine sand  
*E - 4 to 65 inches:* fine sand  
*Bh - 65 to 80 inches:* fine sand

#### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately high to high (0.57 to 1.98 in/hr)  
*Depth to water table:* About 24 to 42 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum in profile:* 4.0  
*Available water storage in profile:* Low (about 4.2 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), South Florida Flatwoods (R155XY003FL)

## Minor Components

### Tavares

*Percent of map unit:* 3 percent

*Landform:* Flats on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)

### Orsino

*Percent of map unit:* 3 percent

*Landform:* Knolls on marine terraces, ridges on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Sand Pine Scrub (R155XY001FL)

### Pomello

*Percent of map unit:* 3 percent

*Landform:* Flats on marine terraces, rises on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

### Cassia

*Percent of map unit:* 3 percent

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)

### Duette

*Percent of map unit:* 3 percent

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on rises, knolls, and ridges of mesic uplands (G155XB121FL), Sand Pine Scrub (R155XY001FL)

## 99—Water

### Map Unit Composition

*Water:* 100 percent

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

### Description of Water

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## 100—Waters of the Gulf of Mexico

### Map Unit Composition

*Waters of the gulf of mexico:* 100 percent

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

### Description of Waters Of The Gulf Of Mexico

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Other vegetative classification:* Forage suitability group not assigned  
(G155XB999FL)

## Data Source Information

Soil Survey Area: Manatee County, Florida

Survey Area Data: Version 10, Sep 9, 2014