

## 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

### Palm Beach County Area, Florida

#### 2—Anclote fine sand

##### Map Unit Setting

*National map unit symbol:* 1j7cn

*Elevation:* 10 to 100 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Anclote and similar soils:* 90 percent

*Minor components:* 10 percent

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

### Description of Anclote

#### Setting

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Parent material:* Sandy marine deposits

#### Typical profile

*A - 0 to 19 inches:* fine sand

*Cg - 19 to 72 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):* 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:* 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 5.3 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 flats of mesic or hydric lowlands (G156AC141FL)

### Minor Components

#### Basinger

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

**Okeelanta, drained**

*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 (G156AC645FL)

**Pompano**

*Percent of map unit:* 2 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

**Sanibel**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**4—Arents-Urban land complex, 0 to 5 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 1j7cp  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Arents and similar soils:* 60 percent  
*Urban land:* 35 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Arents**

**Setting**

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

### Typical profile

*A - 0 to 4 inches:* sand  
*C1 - 4 to 32 inches:* sand  
*C2 - 32 to 72 inches:* sand

### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Somewhat poorly drained  
*Runoff class:* Low  
*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 24 to 36 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):* 6s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Forage suitability group not assigned (G156AC999FL)

### Description of Urban Land

#### Setting

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* No parent material

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Other vegetative classification:* Forage suitability group not assigned (G156AC999FL)

### Minor Components

#### Basinger

*Percent of map unit:* 5 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Forage suitability group not assigned (G156AC999FL)

## 5—Arents-Urban land complex, organic substratum

### Map Unit Setting

*National map unit symbol:* 1j7cq  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Arents, organic substratum, and similar soils:* 55 percent  
*Urban land:* 40 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Arents, Organic Substratum

#### Setting

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

#### Typical profile

*A - 0 to 29 inches:* sand  
*E - 29 to 38 inches:* sand  
*Oa - 38 to 72 inches:* muck  
*Cg - 72 to 80 inches:* 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:* Low  
*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 24 to 36 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 8.6 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 (G156AC999FL)

### Description of Urban Land

#### Setting

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* No parent material

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

### Minor Components

#### Immokalee

*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:* Forage suitability group not assigned  
(G156AC999FL)

## 6—Basinger fine sand, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2svym  
*Elevation:* 0 to 20 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

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

### Description of Basinger

#### Setting

*Landform:* Drainageways  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Concave, convex  
*Across-slope shape:* Concave, linear  
*Parent material:* Sandy marine deposits

#### Typical profile

*Ag - 0 to 2 inches:* fine sand

*Eg - 2 to 18 inches: fine sand*  
*Bh/E - 18 to 36 inches: fine sand*  
*Cg - 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: Very high*  
*Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)*  
*Depth to water table: About 2 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 5.6 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**

**Eaugallie**

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

**Margate**

*Percent of map unit: 3 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: Sandy soils on stream terraces, flood plains, or in depressions (G156AC145FL)*

**Placid, depressional**

*Percent of map unit: 3 percent*  
*Landform: Depressions on marine terraces*  
*Landform position (three-dimensional): Tread, dip*  
*Down-slope shape: Convex, concave*  
*Across-slope shape: Linear, concave*  
*Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)*

## 7—Basinger-Urban land complex

### Map Unit Setting

*National map unit symbol:* 1j7cs  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Basinger and similar soils:* 55 percent  
*Urban land:* 40 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Basinger

#### Setting

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

#### Typical profile

*A - 0 to 4 inches:* fine sand  
*Eg - 4 to 29 inches:* fine sand  
*Bh/Eg - 29 to 36 inches:* fine sand  
*Cg - 36 to 72 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 high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high  
(19.98 to 39.96 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:* Very low (about 2.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

## Description of Urban Land

### Setting

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* No parent material

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

## Minor Components

### Myakka

*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:* Forage suitability group not assigned  
(G156AC999FL)

### Immokalee

*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:* Forage suitability group not assigned  
(G156AC999FL)

### Pompano

*Percent of map unit:* 1 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

## 8—Basinger and Myakka sands, depressional

### Map Unit Setting

*National map unit symbol:* 1j7ct  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Myakka, depressional, and similar soils: 47 percent*

*Basinger, depressional, and similar soils: 47 percent*

*Minor components: 6 percent*

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

### Description of Basinger, Depressional

#### Setting

*Landform: Depressions on marine terraces*

*Landform position (three-dimensional): Dip*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Sandy marine deposits*

#### Typical profile

*A - 0 to 4 inches: sand*

*Eg - 4 to 29 inches: sand*

*Bh/Eg - 29 to 36 inches: sand*

*Cg - 36 to 72 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): Very high  
(19.98 to 39.96 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 low (about 2.9 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7w*

*Hydrologic Soil Group: A/D*

*Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G156AC145FL)*

### Description of Myakka, Depressional

#### Setting

*Landform: Depressions on marine terraces*

*Landform position (three-dimensional): Dip*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Sandy marine deposits*

### Typical profile

*A - 0 to 6 inches: sand*  
*E - 6 to 26 inches: sand*  
*Bh - 26 to 47 inches: sand*  
*C - 47 to 72 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):*  
*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 4.9 inches)*

### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 7w*  
*Hydrologic Soil Group: A/D*  
*Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G156AC145FL)*

### Minor Components

#### Pompano

*Percent of map unit: 2 percent*  
*Landform: Drainageways on marine terraces*  
*Landform position (three-dimensional): Dip*  
*Down-slope shape: Linear*  
*Across-slope shape: Concave*  
*Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)*

#### Sanibel

*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: Organic soils in depressions and on flood plains (G156AC645FL)*

#### Anclote

*Percent of map unit: 2 percent*  
*Landform: Flats on marine terraces, drainageways on marine terraces*  
*Landform position (three-dimensional): Talf, dip*  
*Down-slope shape: Linear*

*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

## 9—Beaches

### Map Unit Setting

*National map unit symbol:* 1j7cv  
*Elevation:* 0 to 20 feet  
*Mean annual precipitation:* 42 to 56 inches  
*Mean annual air temperature:* 52 to 77 degrees F  
*Frost-free period:* 190 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Beaches:* 90 percent  
*Minor components:* 10 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  
*Runoff class:* Very high  
*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 (G156AC999FL)

### Minor Components

#### Canaveral

*Percent of map unit:* 10 percent  
*Landform:* Dunes on marine terraces, ridges on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Forage suitability group not assigned (G156AC999FL)

## 10—Boca fine sand

### Map Unit Setting

*National map unit symbol:* 1j7cw  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Farmland of local importance

### Map Unit Composition

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

### Description of Boca

#### Setting

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

#### Typical profile

*A - 0 to 5 inches:* fine sand  
*E - 5 to 29 inches:* fine sand  
*Btg - 29 to 36 inches:* sandy clay loam  
*2R - 36 to 40 inches:* weathered bedrock

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 24 to 40 inches to paralithic bedrock  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very high  
*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  
*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:* A/D  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

## Minor Components

### Pineda

*Percent of map unit:* 4 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

### Pinellas

*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 over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

### Hallandale

*Percent of map unit:* 4 percent

*Landform:* Flats on marine terraces

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

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

### Riviera

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

## 11—Canaveral-Urban land complex, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 1j7cx

*Elevation:* 0 to 20 feet

*Mean annual precipitation:* 42 to 56 inches

*Mean annual air temperature:* 52 to 77 degrees F

*Frost-free period:* 190 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Canaveral and similar soils:* 55 percent

*Urban land: 40 percent*

*Minor components: 5 percent*

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

### **Description of Canaveral**

#### **Setting**

*Landform: Dunes on marine terraces, 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 8 inches: sand*

*C - 8 to 80 inches: sand*

#### **Properties and qualities**

*Slope: 0 to 5 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Somewhat poorly drained*

*Runoff class: Low*

*Capacity of the most limiting layer to transmit water (Ksat): Very high  
(19.98 to 39.96 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 1.9 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  
(G156AC999FL)*

### **Description of Urban Land**

#### **Setting**

*Landform: Marine terraces*

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

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: No parent material*

#### **Interpretive groups**

*Land capability classification (irrigated): None specified*

*Other vegetative classification: Forage suitability group not assigned  
(G156AC999FL)*

## Minor Components

### Beaches

*Percent of map unit:* 5 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  
(G156AC999FL)

## 12—Chobee fine sandy loam

### Map Unit Setting

*National map unit symbol:* 1j7cy

*Elevation:* 10 to 60 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Chobee and similar soils:* 88 percent

*Minor components:* 12 percent

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

### Description of Chobee

#### Setting

*Landform:* Drainageways on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Parent material:* Loamy alluvium

#### Typical profile

*A - 0 to 16 inches:* fine sandy loam

*E - 16 to 26 inches:* fine sandy loam

*Btg - 26 to 37 inches:* sandy clay loam

*Cg - 37 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:* Very high

*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

*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 6.9 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 (G156AC341FL)

#### **Minor Components**

##### **Winder**

*Percent of map unit:* 3 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G156AC341FL)

##### **Riviera**

*Percent of map unit:* 3 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

##### **Tequesta**

*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 (G156AC645FL)

##### **Floridana**

*Percent of map unit:* 3 percent  
*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G156AC245FL)

## 13—Cocoa-Urban land complex, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 1j7cz  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Cocoa and similar soils:* 60 percent  
*Urban land:* 40 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cocoa

#### Setting

*Landform:* 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 8 inches:* sand  
*E - 8 to 23 inches:* sand  
*Bw - 23 to 30 inches:* sand  
*2R - 30 to 34 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 0 to 5 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Negligible  
*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:* More than 80 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 1.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Forage suitability group not assigned (G156AC999FL)

## Description of Urban Land

### Setting

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* No parent material

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

## 14—Dania muck

### Map Unit Setting

*National map unit symbol:* 1j7d0  
*Elevation:* 0 to 30 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Dania, drained, and similar soils:* 92 percent  
*Minor components:* 8 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Dania, Drained

### 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 limestone

### Typical profile

*Oa - 0 to 16 inches:* muck  
*Cg - 16 to 18 inches:* sand  
*2R - 18 to 22 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* 8 to 20 inches to paralithic bedrock  
*Natural drainage class:* Very poorly drained  
*Runoff class:* Negligible  
*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 inches

*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*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:* Low (about 4.2 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Organic soils in depressions and on flood plains (G156AC645FL)

**Minor Components**

**Jupiter**

*Percent of map unit:* 2 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

**Boca**

*Percent of map unit:* 2 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

**Hallandale**

*Percent of map unit:* 2 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

**Lauderhill, drained**

*Percent of map unit:* 1 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 (G156AC645FL)

**Pahokee, drained**

*Percent of map unit:* 1 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 (G156AC645FL)

**15—Floridana fine sand**

**Map Unit Setting**

*National map unit symbol:* 1j7d1

*Elevation:* 10 to 100 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 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:* 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 18 inches:* fine sand

*E - 18 to 32 inches:* fine sand

*Btg - 32 to 44 inches:* fine sandy loam

*Cg - 44 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:* Very high

*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 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 6.4 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* B/D  
*Other vegetative classification:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G156AC245FL)

### **Minor Components**

#### **Riviera**

*Percent of map unit:* 4 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

#### **Holopaw**

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Anclote**

*Percent of map unit:* 4 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Tequesta**

*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 (G156AC645FL)

## 16—Hallandale fine sand

### Map Unit Setting

*National map unit symbol:* 1j7d2  
*Elevation:* 10 to 30 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 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):* Interfluve, 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  
*C - 6 to 15 inches:* fine sand  
*2R - 15 to 19 inches:* weathered bedrock

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 7 to 20 inches to paralithic bedrock  
*Natural drainage class:* Poorly drained  
*Runoff class:* High  
*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 6 to 18 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 0.9 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 (G156AC141FL)

## Minor Components

### Riviera

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

### Pineda

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

### Jupiter

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

### Pinellas

*Percent of map unit:* 3 percent

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

### Boca

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

## 17—Holopaw fine sand, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2vbpd  
*Elevation:* 0 to 130 feet  
*Mean annual precipitation:* 37 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

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

### Description of Holopaw

#### Setting

*Landform:* — error in exists on —  
*Landform position (three-dimensional):* Tread, talf, dip  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear, concave  
*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 6 inches:* fine sand  
*Eg - 6 to 42 inches:* fine sand  
*Btg - 42 to 60 inches:* fine sandy loam  
*Cg - 60 to 80 inches:* loamy sand

#### Properties and qualities

*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* About 0 to 12 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 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:* Low (about 4.5 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

### Basinger

*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

### Oldsmar

*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

### Boca

*Percent of map unit:* 3 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 over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

### Riviera

*Percent of map unit:* 1 percent  
*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Tread, dip  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, concave

## 18—Immokalee fine sand, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2s3lk  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 38 to 68 inches  
*Mean annual air temperature:* 68 to 79 degrees F  
*Frost-free period:* 325 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

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

## Description of Immokalee

### Setting

*Landform:* Flats 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 35 inches:* fine sand  
*Bh - 35 to 54 inches:* fine sand  
*BC - 54 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:* High  
*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  
*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):* 4w  
*Hydrologic Soil Group:* B/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:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Linear, concave  
*Other vegetative classification:* Slough (R155XY011FL), Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)

### Margate

*Percent of map unit:* 3 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 stream terraces, flood plains, or in depressions (G156AC145FL)

**Placid, depressional**

*Percent of map unit:* 2 percent  
*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear, concave  
*Other vegetative classification:* Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)

**19—Jupiter fine sand**

**Map Unit Setting**

*National map unit symbol:* 1j7d5  
*Elevation:* 0 to 60 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

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

**Description of Jupiter**

**Setting**

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

**Typical profile**

*A - 0 to 11 inches:* fine sand  
*C - 11 to 14 inches:* fine sand  
*2R - 14 to 18 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* 8 to 20 inches to lithic bedrock  
*Natural drainage class:* Poorly drained  
*Runoff class:* Very high  
*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 12 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 1.8 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 (G156AC141FL)

#### **Minor Components**

##### **Riviera**

*Percent of map unit:* 3 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

##### **Boca**

*Percent of map unit:* 3 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

##### **Hallandale**

*Percent of map unit:* 3 percent  
*Landform:* Flats on marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

##### **Tequesta**

*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 (G156AC645FL)

**Dania, drained**

*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 (G156AC645FL)

**20—Lauderhill muck**

**Map Unit Setting**

*National map unit symbol:* 1j7d6

*Elevation:* 0 to 100 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Farmland of unique importance

**Map Unit Composition**

*Lauderhill, drained, and similar soils:* 85 percent

*Minor components:* 15 percent

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

**Description of Lauderdale, Drained**

**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 limestone

**Typical profile**

*Oa - 0 to 26 inches:* muck

*2R - 26 to 30 inches:* unweathered bedrock

**Properties and qualities**

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock

*Natural drainage class:* Very poorly drained

*Runoff class:* Negligible

*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 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 6.5 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Organic soils in depressions and on flood plains (G156AC645FL)

### **Minor Components**

#### **Dania, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

#### **Pahokee, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

#### **Okeelanta, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

#### **Terra ceia, drained**

*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 (G156AC645FL)

## **21—Myakka fine sand, 0 to 2 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 2s3lg

*Elevation:* 10 to 130 feet

*Mean annual precipitation:* 38 to 62 inches

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

*Frost-free period:* 300 to 365 days

*Farmland classification:* Farmland of unique importance

### **Map Unit Composition**

*Myakka and similar soils:* 90 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)

### **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:* Convex, concave

*Across-slope shape:* Linear, concave

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

**22—Myakka-Urban land complex**

**Map Unit Setting**

*National map unit symbol:* 1j7d8

*Elevation:* 10 to 100 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Myakka and similar soils:* 50 percent

*Urban land:* 40 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):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy marine deposits

**Typical profile**

*A - 0 to 7 inches:* sand

*E - 7 to 26 inches:* sand

*Bh - 26 to 47 inches:* sand

*C - 47 to 72 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:* 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 4.9 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

### **Description of Urban Land**

#### **Setting**

*Landform:* Marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* No parent material

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

### **Minor Components**

#### **Basinger**

*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:* Forage suitability group not assigned  
(G156AC999FL)

#### **Immokalee**

*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:* Forage suitability group not assigned  
(G156AC999FL)

**Pompano**

*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:* Forage suitability group not assigned  
(G156AC999FL)

**23—Okeechobee muck**

**Map Unit Setting**

*National map unit symbol:* 1j7d9  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Farmland of unique importance

**Map Unit Composition**

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

**Description of Okeechobee**

**Setting**

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

**Typical profile**

*Oa1 - 0 to 28 inches:* muck  
*Oa2 - 28 to 50 inches:* muck  
*Oa3 - 50 to 66 inches:* muck

**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:* Very high (about 27.2 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 (G156AC645FL)

**Minor Components**

**Terra ceia, drained**

*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 (G156AC645FL)

**Okeelanta, drained**

*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 (G156AC645FL)

**Pahokee, drained**

*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 (G156AC645FL)

**24—Okeelanta muck, drained, 0 to 1 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2tzwc

*Elevation:* 0 to 30 feet

*Mean annual precipitation:* 48 to 68 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Farmland of unique importance

**Map Unit Composition**

*Okeelanta, drained, and similar soils:* 90 percent

*Minor components:* 10 percent

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

## Description of Okeelanta, Drained

### Setting

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

### Typical profile

*Oa - 0 to 31 inches:* muck  
*Cg - 31 to 65 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 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* Frequent  
*Calcium carbonate, maximum in profile:* 2 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:* High (about 11.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3w  
*Hydrologic Soil Group:* A/D  
*Other vegetative classification:* Organic soils in depressions and on flood plains (G156AC645FL)

## Minor Components

### Sanibel

*Percent of map unit:* 5 percent  
*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Tread, tal, dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Other vegetative classification:* Organic soils in depressions and on flood plains (G156AC645FL)

### Tequesta

*Percent of map unit:* 3 percent  
*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Tread, tal, dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave

*Other vegetative classification:* Organic soils in depressions and on flood plains (G156AC645FL)

**Basinger**

*Percent of map unit:* 2 percent

*Landform:* Depressions on marine terraces

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

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

**25—Oldsmar sand, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2sm4p

*Elevation:* 0 to 40 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**

*Oldsmar and similar soils:* 85 percent

*Minor components:* 15 percent

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

**Description of Oldsmar**

**Setting**

*Landform:* Flatwoods on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Parent material:* Sandy and loamy marine deposits

**Typical profile**

*A - 0 to 6 inches:* sand

*E - 6 to 38 inches:* sand

*Bh - 38 to 50 inches:* sand

*Btg - 50 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:* Poorly drained

*Runoff class:* High

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

Moderately low to moderately high (0.06 to 0.20 in/hr)

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

*Frequency of flooding:* None

*Frequency of ponding:* None

*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 4.0 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**

**Immokalee**

*Percent of map unit:* 7 percent  
*Landform:* Flatwoods on marine terraces  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric  
lowlands (G155XB141FL)

**Basinger**

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

**Boca**

*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)

**26—Pahokee muck**

**Map Unit Setting**

*National map unit symbol:* 1j7dd  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Farmland of unique importance

### Map Unit Composition

*Pahokee, drained, and similar soils:* 85 percent

*Minor components:* 15 percent

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

### Description of Pahokee, Drained

#### 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 limestone

#### Typical profile

*Oa - 0 to 42 inches:* muck

*2R - 42 to 46 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 0 to 1 percent

*Depth to restrictive feature:* 36 to 51 inches to lithic bedrock

*Natural drainage class:* Very poorly drained

*Runoff class:* Negligible

*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 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 9.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Organic soils in depressions and on flood plains (G156AC645FL)

### Minor Components

#### Lauderhill, drained

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

#### Terra ceia, drained

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**Okeelanta, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**Torry, drained**

*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 (G156AC645FL)

**27—Palm Beach-Urban land complex, 0 to 8 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 1j7df  
*Elevation:* 10 to 20 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Palm beach and similar soils:* 60 percent  
*Urban land:* 35 percent  
*Minor components:* 5 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Palm Beach**

**Setting**

*Landform:* Dunes on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Shells and sandy marine deposits

**Typical profile**

*A - 0 to 6 inches:* sand

C - 6 to 80 inches: sand

**Properties and qualities**

*Slope:* 0 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water (Ksat):* Very high  
(19.98 to 39.96 in/hr)

*Depth to water table:* More than 80 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 1.9 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* A

*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

**Description of Urban Land**

**Setting**

*Landform:* Marine terraces

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

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* No parent material

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

**Minor Components**

**Canaveral**

*Percent of map unit:* 5 percent

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

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

**29—Pineda fine sand, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2svyp

*Elevation:* 10 to 80 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**

*Pineda and similar soils:* 93 percent  
*Minor components:* 7 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Pineda**

#### **Setting**

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

#### **Typical profile**

*A - 0 to 1 inches:* fine sand  
*E - 1 to 5 inches:* fine sand  
*Bw - 5 to 36 inches:* fine sand  
*Bt/E - 36 to 54 inches:* fine sandy loam  
*Cg - 54 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:* 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 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 4.0 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 over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

### **Minor Components**

#### **Boca**

*Percent of map unit:* 4 percent

*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Tread, talf, dip  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Linear  
*Other vegetative classification:* Slough (R155XY011FL), Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL)

#### **Hallandale**

*Percent of map unit:* 3 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 soils on flats of mesic or hydric lowlands (G155XB141FL)

### **30—Pinellas fine sand**

#### **Map Unit Setting**

*National map unit symbol:* 1j7dh  
*Elevation:* 20 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

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

#### **Description of Pinellas**

##### **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 10 inches:* fine sand  
*Bk - 10 to 36 inches:* fine sand  
*Btg - 36 to 54 inches:* fine sandy loam  
*2C - 54 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:* High

*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

*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 5.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* B/D

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

#### **Minor Components**

##### **Riviera**

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

##### **Pineda**

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

##### **Holopaw**

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

##### **Boca**

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

#### **Hallandale**

*Percent of map unit:* 3 percent

*Landform:* Flats on marine terraces

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

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

### **31—Pits, 0 to 5 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 1j7dj

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

*Pits:* 90 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

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

*Slope:* 0 to 5 percent

*Natural drainage class:* Somewhat poorly drained

*Runoff class:* Medium

*Depth to water table:* About 18 to 36 inches

##### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

*Other vegetative classification:* Forage suitability group not assigned (G156AC999FL)

#### **Minor Components**

##### **Arents**

*Percent of map unit:* 10 percent

*Landform:* Rises on marine terraces

*Landform position (three-dimensional):* Rise  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

### **33—Pomello fine sand, 0 to 5 percent slopes**

#### **Map Unit Setting**

*National map unit symbol:* 1j7dk  
*Elevation:* 10 to 20 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

#### **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:* Ridges on marine terraces, knolls 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 44 inches:* fine sand  
*Bh - 44 to 60 inches:* fine sand  
*Bw/C - 60 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 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 3.6 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 and knolls of mesic uplands (G156AC131FL)

### **Minor Components**

#### **Basinger**

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Immokalee**

*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:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Myakka**

*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:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **St. lucie**

*Percent of map unit:* 2 percent

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

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

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on ridges and dunes of xeric uplands (G156AC111FL)

#### **Paola**

*Percent of map unit:* 2 percent

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

*Landform position (three-dimensional):* Interfluve, side slope

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy soils on ridges and dunes of xeric uplands (G156AC111FL)

#### **Palm beach**

*Percent of map unit:* 2 percent

*Landform:* Dunes on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Sandy soils on ridges and dunes of xeric uplands (G156AC111FL)

### **34—Pompano fine sand**

#### **Map Unit Setting**

*National map unit symbol:* 1j7dl  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

#### **Map Unit Composition**

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

#### **Description of Pompano**

##### **Setting**

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

##### **Typical profile**

*A - 0 to 8 inches:* fine sand  
*Cg - 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:* Poorly drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high (19.98 to 39.96 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 2.5 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 (G156AC141FL)

### **Minor Components**

#### **Riviera**

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

#### **Immokalee**

*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:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Holopaw**

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Basinger**

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Anclote**

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

## 35—Quartzipsamments, shaped, 0 to 5 percent slopes

### Map Unit Setting

*National map unit symbol:* 1j7dm  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Quartzipsamments and similar soils:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Quartzipsamments

#### 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 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:* Well drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high  
(19.98 to 39.96 in/hr)  
*Depth to water table:* More than 80 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 1.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

## 36—Riviera fine sand, 0 to 2 percent slopes

### Map Unit Setting

*National map unit symbol:* 2tzw2

*Elevation:* 0 to 70 feet

*Mean annual precipitation:* 45 to 58 inches

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

*Frost-free period:* 350 to 365 days

*Farmland classification:* Farmland of unique importance

### Map Unit Composition

*Riviera and similar soils:* 80 percent

*Minor components:* 20 percent

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

### Description of Riviera

#### Setting

*Landform:* Drainageways on marine terraces, flatwoods on marine terraces

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

*Down-slope shape:* Linear

*Across-slope shape:* Linear, concave

*Parent material:* Sandy and loamy marine deposits

#### Typical profile

*A - 0 to 6 inches:* fine sand

*E - 6 to 28 inches:* fine sand

*Bt/E - 28 to 36 inches:* sandy loam

*Btg - 36 to 42 inches:* sandy clay loam

*2C - 42 to 62 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 high

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

Moderately high to high (0.60 to 6.00 in/hr)

*Depth to water table:* About 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 4.9 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 flats of hydric or mesic lowlands (G156AC241FL)

### **Minor Components**

#### **Wabasso**

*Percent of map unit:* 8 percent

*Landform:* Flatwoods on marine terraces

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

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear

*Ecological site:* South florida flatwoods (R155XY003FL)

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Pinellas**

*Percent of map unit:* 4 percent

*Landform:* Flatwoods on marine terraces

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

*Down-slope shape:* Linear, 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 (G156AC241FL)

#### **Hallandale**

*Percent of map unit:* 4 percent

*Landform:* Flatwoods on marine terraces

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

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear

*Ecological site:* Slough (R155XY011FL)

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Oldsmar**

*Percent of map unit:* 2 percent

*Landform:* Flatwoods on marine terraces

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

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear

*Ecological site:* South florida flatwoods (R155XY003FL)

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Floridana**

*Percent of map unit:* 2 percent

*Landform:* Depressions on marine terraces

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

*Down-slope shape:* Concave, linear

*Across-slope shape:* Linear, concave

*Ecological site:* Freshwater marshes and ponds (R155XY010FL)

*Other vegetative classification:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G156BC245FL)

## 37—Riviera fine sand, depressional

### Map Unit Setting

*National map unit symbol:* 1j7dp  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Farmland of local importance

### Map Unit Composition

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

### Description of Riviera, 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 6 inches:* fine sand  
*E - 6 to 28 inches:* fine sand  
*Bt/E - 28 to 36 inches:* sandy loam  
*Btg - 36 to 42 inches:* sandy loam  
*2C - 42 to 62 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 5.95 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:* Low (about 4.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G156AC245FL)

### **Minor Components**

#### **Holopaw**

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Floridana**

*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 (G156AC245FL)

#### **Chobee**

*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 (G156AC341FL)

#### **Tequesta**

*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 (G156AC645FL)

## **38—Riviera-Urban land complex**

### **Map Unit Setting**

*National map unit symbol:* 1j7dq

*Elevation:* 10 to 100 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Riviera and similar soils:* 50 percent

*Urban land: 45 percent*

*Minor components: 5 percent*

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

### **Description of Riviera**

#### **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 28 inches: fine sand*

*Bt/E - 28 to 36 inches: sandy loam*

*Btg - 36 to 42 inches: sandy loam*

*2C - 42 to 62 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 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 12 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*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: Low (about 4.9 inches)*

#### **Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 3w*

*Hydrologic Soil Group: A/D*

*Other vegetative classification: Forage suitability group not assigned (G156AC999FL)*

### **Description of Urban Land**

#### **Setting**

*Landform: Marine terraces*

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

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: No parent material*

#### **Interpretive groups**

*Land capability classification (irrigated): None specified*

*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

### **Minor Components**

#### **Holopaw**

*Percent of map unit:* 2 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

#### **Pompano**

*Percent of map unit:* 2 percent  
*Landform:* Drainageways on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

#### **Riviera, depressional**

*Percent of map unit:* 1 percent  
*Landform:* Depressions on marine terraces  
*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

## **39—Sanibel muck**

### **Map Unit Setting**

*National map unit symbol:* 1j7dr  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Farmland of unique importance

### **Map Unit Composition**

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

### **Description of Sanibel**

#### **Setting**

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

*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Thin organic material over sandy marine deposits

**Typical profile**

*Oa - 0 to 12 inches:* muck  
*A - 12 to 18 inches:* sand  
*Cg - 18 to 72 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 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 (G156AC645FL)

**Minor Components**

**Holopaw**

*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 soils on flats of mesic or hydric lowlands (G156AC141FL)

**Anclote**

*Percent of map unit:* 4 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

**Okeelanta, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**Tequesta**

*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 (G156AC645FL)

**41—St. Lucie-Paola-Urban land complex, 0 to 8 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 1j7ds  
*Elevation:* 10 to 20 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*St. lucie and similar soils:* 35 percent  
*Paola and similar soils:* 33 percent  
*Urban land:* 30 percent  
*Minor components:* 2 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of St. Lucie**

**Setting**

*Landform:* Ridges on marine terraces, knolls on marine terraces  
*Landform position (three-dimensional):* Side slope, interfluvium  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Eolian or sandy marine deposits

**Typical profile**

*A - 0 to 5 inches:* sand  
*C - 5 to 80 inches:* sand

**Properties and qualities**

*Slope:* 0 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high (19.98 to 39.96 in/hr)

*Depth to water table:* More than 80 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 1.8 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

**Description of Paola**

**Setting**

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

**Typical profile**

*A - 0 to 3 inches:* sand  
*E - 3 to 20 inches:* sand  
*C - 20 to 80 inches:* sand

**Properties and qualities**

*Slope:* 0 to 8 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Negligible  
*Capacity of the most limiting layer to transmit water (Ksat):* Very high  
(19.98 to 39.96 in/hr)  
*Depth to water table:* More than 80 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 1.8 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  
(G156AC999FL)

**Description of Urban Land**

**Setting**

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

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* No parent material

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

**Minor Components**

**Pomello**

*Percent of map unit:* 1 percent  
*Landform:* Ridges on marine terraces, knolls on marine terraces  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

**Palm beach**

*Percent of map unit:* 1 percent  
*Landform:* 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  
(G156AC999FL)

**42—Tequesta muck**

**Map Unit Setting**

*National map unit symbol:* 1j7dt  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Farmland of unique importance

**Map Unit Composition**

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

**Description of Tequesta**

**Setting**

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

### Typical profile

*Oa - 0 to 12 inches:* muck  
*A - 12 to 25 inches:* fine sand  
*Eg - 25 to 42 inches:* fine sand  
*Btg - 42 to 60 inches:* fine sandy loam  
*2C - 60 to 72 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):*  
Moderately high to high (0.60 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:* 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 7.1 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 (G156AC645FL)

### Minor Components

#### Chobee

*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:* Loamy and clayey soils on flats of hydric or mesic lowlands (G156AC341FL)

#### Winder

*Percent of map unit:* 2 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Loamy and clayey soils on flats of hydric or mesic lowlands (G156AC341FL)

#### Holopaw

*Percent of map unit:* 2 percent  
*Landform:* Drainageways on marine terraces

*Landform position (three-dimensional):* Dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

**Sanibel**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**Floridana**

*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:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G156AC245FL)

**Riviera, depressional**

*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:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G156AC245FL)

**Okeelanta, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**43—Terra Ceia muck**

**Map Unit Setting**

*National map unit symbol:* 1j7dv  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Farmland of unique importance

### **Map Unit Composition**

*Terra ceia, drained, and similar soils:* 84 percent

*Minor components:* 16 percent

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

### **Description of Terra Ceia, Drained**

#### **Setting**

*Landform:* Depressions on marine terraces

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Herbaceous organic material

#### **Typical profile**

*Oa - 0 to 65 inches:* muck

*2R - 65 to 69 inches:* unweathered bedrock

#### **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 (1.98 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:* Very high (about 23.9 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* A/D

*Other vegetative classification:* Organic soils in depressions and on flood plains (G156AC645FL)

### **Minor Components**

#### **Torry, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

#### **Okeelanta, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**Pahokee, drained**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**Okeechobee**

*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:* Organic soils in depressions and on flood plains (G156AC645FL)

**44—Kesson mucky sand, tidal**

**Map Unit Setting**

*National map unit symbol:* 1j7dw  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Kesson, tidal, and similar soils:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Kesson, Tidal**

**Setting**

*Landform:* Mangrove swamps on marine terraces  
*Landform position (three-dimensional):* Interfluve, talf  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Sandy marine deposits with shells

**Typical profile**

*A - 0 to 6 inches:* mucky sand  
*C1 - 6 to 23 inches:* sand  
*C2 - 23 to 38 inches:* sand  
*C3 - 38 to 80 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:* Very high  
*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 inches  
*Frequency of flooding:* Very 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:* Moderate (about 7.4 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 (G156AC999FL)

## 45—Wulfert and Durbin muck, tidal

### Map Unit Setting

*National map unit symbol:* 1j7dx  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Durbin, tidal, and similar soils:* 50 percent  
*Wulfert, tidal, and similar soils:* 50 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Wulfert, Tidal

#### Setting

*Landform:* Mangrove swamps 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 55 inches:* muck  
*Cg - 55 to 80 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:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* Very 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 8.6 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 (G156AC999FL)

### **Description of Durbin, Tidal**

#### **Setting**

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

#### **Typical profile**

*Oa - 0 to 59 inches:* muck  
*Cg - 59 to 80 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:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Depth to water table:* About 0 inches  
*Frequency of flooding:* Very 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:* 40.0  
*Available water storage in profile:* Very high (about 13.7 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  
(G156AC999FL)

## 46—Torry muck

### Map Unit Setting

*National map unit symbol:* 1j7dy  
*Elevation:* 10 to 100 feet  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Farmland of unique importance

### Map Unit Composition

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

### Description of Torry, Drained

#### 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 limestone

#### Typical profile

*Oa1 - 0 to 36 inches:* muck  
*Oa2 - 36 to 77 inches:* muck  
*2R - 77 to 81 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* 51 to 80 inches to lithic bedrock  
*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 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 14.2 inches)

#### Interpretive groups

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

*Other vegetative classification:* Organic soils in depressions and on flood plains (G156AC645FL)

### **Minor Components**

#### **Terra ceia, drained**

*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 (G156AC645FL)

#### **Okeelanta, drained**

*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 (G156AC645FL)

#### **Pahokee, drained**

*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 (G156AC645FL)

## **47—Udorthents, 2 to 35 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1j7dz

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Udorthents and similar soils:* 95 percent

*Minor components:* 5 percent

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

### **Description of Udorthents**

#### **Setting**

*Landform:* Marine terraces

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Convex

*Across-slope shape:* Linear  
*Parent material:* Altered marine deposits

**Typical profile**

*A - 0 to 7 inches:* gravelly sand  
*C1 - 7 to 57 inches:* gravelly sand  
*C2 - 57 to 80 inches:* gravelly sand

**Properties and qualities**

*Slope:* 2 to 65 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* 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:* More than 80 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):* 7s  
*Hydrologic Soil Group:* A  
*Other vegetative classification:* Forage suitability group not assigned (G156AC999FL)

**Minor Components**

**Riviera**

*Percent of map unit:* 5 percent  
*Landform:* Flats on marine terraces, drainageways on marine terraces  
*Landform position (three-dimensional):* Talf, dip  
*Down-slope shape:* Linear  
*Across-slope shape:* Concave  
*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

**48—Urban land**

**Map Unit Composition**

*Urban land:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Urban Land**

**Setting**

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

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* No parent material

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

**49—Wabasso fine sand**

**Map Unit Setting**

*National map unit symbol:* 1j7f1  
*Mean annual precipitation:* 48 to 56 inches  
*Mean annual air temperature:* 70 to 77 degrees F  
*Frost-free period:* 358 to 365 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Wabasso and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Wabasso**

**Setting**

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

**Typical profile**

*A - 0 to 8 inches:* fine sand  
*E - 8 to 22 inches:* fine sand  
*Bh - 22 to 32 inches:* fine sand  
*Bt - 32 to 38 inches:* fine sandy loam  
*Cg - 38 to 72 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 (0.60 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:* Low (about 4.8 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* B/D

*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

### **Minor Components**

#### **Immokalee**

*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:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Pineda**

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

#### **Myakka**

*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:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Oldsmar**

*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:* Sandy soils on flats of mesic or hydric lowlands (G156AC141FL)

#### **Pinellas**

*Percent of map unit:* 3 percent

*Landform:* Flats on marine terraces

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Convex

*Across-slope shape:* Linear

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

**Boca**

*Percent of map unit:* 3 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

**Riviera**

*Percent of map unit:* 2 percent

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Other vegetative classification:* Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)

**50—Winder fine sand**

**Map Unit Setting**

*National map unit symbol:* 1j7f2

*Elevation:* 10 to 60 feet

*Mean annual precipitation:* 48 to 56 inches

*Mean annual air temperature:* 70 to 77 degrees F

*Frost-free period:* 358 to 365 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Winder and similar soils:* 90 percent

*Minor components:* 10 percent

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

**Description of Winder**

**Setting**

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

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

*Down-slope shape:* Linear

*Across-slope shape:* Concave

*Parent material:* Sandy and loamy marine deposits

**Typical profile**

*A - 0 to 2 inches:* fine sand

*E - 2 to 16 inches:* fine sand

*Btg - 16 to 24 inches:* fine sandy loam

*Cg1 - 24 to 30 inches: loamy fine sand*

*Cg2 - 30 to 50 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 high*

*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*

*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: Low (about 3.6 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 (G156AC341FL)*

#### **Minor Components**

##### **Chobee**

*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 (G156AC341FL)*

##### **Riviera**

*Percent of map unit: 3 percent*

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

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

*Down-slope shape: Linear*

*Across-slope shape: Concave*

*Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G156AC241FL)*

##### **Tequesta**

*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 (G156AC645FL)*

## 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  
(G156AC999FL)

## 100—Waters of the Atlantic Ocean

### Map Unit Composition

*Waters of the atlantic ocean:* 100 percent

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

### Description of Waters Of The Atlantic Ocean

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Other vegetative classification:* Forage suitability group not assigned  
(G156AC999FL)

## Data Source Information

Soil Survey Area: Palm Beach County Area, Florida

Survey Area Data: Version 9, Sep 9, 2014