

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

Monroe County, Keys Area, Florida

2—Pennekamp gravelly muck, 0-2 percent slopes, extremely stony

Map Unit Setting

Mean annual precipitation: 43 to 51 inches

Mean annual air temperature: 72 to 79 degrees F

Frost-free period: 358 to 365 days

Map Unit Composition

Pennekamp and similar soils: 95 percent

Minor components: 5 percent

Description of Pennekamp

Setting

Landform: Rises, islands

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Loamy residuum over coral limestone

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: 4 to 16 inches to paralithic bedrock

Drainage class: Well drained

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

Depth to water table: About 42 to 60 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

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

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very low (about 1.1 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: D

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

Typical profile

0 to 3 inches: Gravelly muck

3 to 8 inches: Very gravelly loam

8 to 12 inches: Weathered bedrock

Minor Components

Tavernier, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

Islamorada, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

Keylargo, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Lignumvitae, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Cudjoe, tidal

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

3—Matecumbe muck, occasionally flooded

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Matecumbe and similar soils: 95 percent
Minor components: 5 percent

Description of Matecumbe

Setting

Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Herbaceous organic material over coral or oolitic limestone

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 2 to 9 inches to paralithic bedrock
Drainage class: Moderately well drained
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 18 to 36 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 1.1 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7s
Hydrologic Soil Group: D
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Typical profile

0 to 6 inches: Muck
6 to 10 inches: Weathered bedrock

Minor Components**Cudjoe, tidal**

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

Tavernier, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Islamorada, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Keylargo, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

Lignumvitae, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

4—Rock outcrop-Tavernier complex, tidal

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Rock outcrop, tidal: 60 percent
Tavernier, tidal, and similar soils: 35 percent
Minor components: 5 percent

Description of Rock Outcrop, Tidal

Setting

Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Depth to water table: About 0 to 6 inches
Frequency of flooding: Very frequent

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

Description of Tavernier, Tidal

Setting

Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Herbaceous organic material over coral limestone

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 3 to 20 inches to paralithic bedrock
Drainage class: Very poorly drained
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
Maximum salinity: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)
Available water capacity: Very low (about 1.8 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8
Hydrologic Soil Group: A/D
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Typical profile

0 to 8 inches: Muck
8 to 12 inches: Weathered bedrock

Minor Components**Saddlebunch**

Percent of map unit: 1 percent
Landform: Rises on islands
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Cudjoe, tidal

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

Islamorada, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear

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

Keylargo, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Matecumbe

Percent of map unit: 1 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

5—Islamorada muck, tidal

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Islamorada, tidal, and similar soils: 95 percent
Minor components: 5 percent

Description of Islamorada, Tidal

Setting

Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Herbaceous organic material over oolitic limestone

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 50 inches to paralithic bedrock
Drainage class: Very poorly drained
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
Maximum salinity: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)
Sodium adsorption ratio, maximum: 70.0

Available water capacity: Moderate (about 8.1 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 8

Hydrologic Soil Group: A/D

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

Typical profile

0 to 35 inches: Muck

35 to 39 inches: Weathered bedrock

Minor Components

Saddlebunch

Percent of map unit: 1 percent

Landform: Rises on islands

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Linear

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

Cudjoe, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Concave

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

Tavernier, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

Keylargo, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

Matecumbe

Percent of map unit: 1 percent

Landform: Flats on islands

Landform position (three-dimensional): Talf

Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

6—Keylargo muck, tidal

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Keylargo, tidal, and similar soils: 95 percent
Minor components: 5 percent

Description of Keylargo, Tidal

Setting

Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Organic material over coral or oolitic limestone

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 51 to 90 inches to paralithic bedrock
Drainage class: Very poorly drained
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
Maximum salinity: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)
Sodium adsorption ratio, maximum: 60.0
Available water capacity: Very high (about 13.8 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8
Hydrologic Soil Group: A/D
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

Typical profile

0 to 70 inches: Muck
70 to 74 inches: Weathered bedrock

Minor Components

Saddlebunch

Percent of map unit: 1 percent
Landform: Rises on islands
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Cudjoe, tidal

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

Tavernier, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Islamorada, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Matecumbe

Percent of map unit: 1 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

7—Udorthents-Urban land complex

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F

Frost-free period: 358 to 365 days

Map Unit Composition

Udorthents and similar soils: 65 percent

Urban land: 35 percent

Description of Udorthents

Setting

Landform: Islands

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Altered marine deposits

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 60 to 90 inches to paralithic bedrock

Drainage class: Somewhat poorly drained

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 24 to 48 inches

Frequency of flooding: Rare

Frequency of ponding: None

Maximum salinity: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 5.7 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: A

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

Typical profile

0 to 32 inches: Extremely gravelly sand

32 to 60 inches: Marly silt loam

60 to 64 inches: Weathered bedrock

Description of Urban Land

Setting

Landform: Islands

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: No parent material

Properties and qualities

Slope: 0 to 1 percent

Frequency of flooding: Rare

Interpretive groups

Farmland classification: Not prime farmland

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

8—Rock outcrop-Cudjoe complex, tidal**Map Unit Setting**

Mean annual precipitation: 43 to 51 inches

Mean annual air temperature: 72 to 79 degrees F

Frost-free period: 358 to 365 days

Map Unit Composition

Rock outcrop, tidal: 55 percent

Cudjoe, tidal, and similar soils: 40 percent

Minor components: 5 percent

Description of Rock Outcrop, Tidal**Setting**

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 0 inches to lithic bedrock

Depth to water table: About 0 to 6 inches

Frequency of flooding: Very frequent

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 8

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

Description of Cudjoe, Tidal**Setting**

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Loamy marl over coral or oolitic limestone

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 3 to 20 inches to lithic bedrock

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water

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

Depth to water table: About 0 to 6 inches

Frequency of flooding: Very frequent
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent
Maximum salinity: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8
Hydrologic Soil Group: B/D
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Typical profile

0 to 9 inches: Marly silt loam
9 to 16 inches: Marly silt loam
16 to 20 inches: Unweathered bedrock

Minor Components**Tavernier, tidal**

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Pennekamp

Percent of map unit: 1 percent
Landform: Islands, rises
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Matecumbe

Percent of map unit: 1 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Saddlebunch

Percent of map unit: 1 percent
Landform: Rises on islands
Landform position (three-dimensional): Rise
Down-slope shape: Convex

Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

Keyvaca

Percent of map unit: 1 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

9—Lignumvitae marl, tidal

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Lignumvitae, tidal, and similar soils: 95 percent
Minor components: 5 percent

Description of Lignumvitae, Tidal

Setting

Landform: Mangrove swamps on islands
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy marl over coral or oolitic limestone

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Calcium carbonate, maximum content: 100 percent
Maximum salinity: Moderately saline to strongly saline (16.0 to 32.0
 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Low (about 5.7 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7w
Hydrologic Soil Group: B/D

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

Typical profile

0 to 4 inches: Marly silt loam

4 to 32 inches: Marly silt loam

32 to 36 inches: Weathered bedrock

Minor Components**Tavernier, tidal**

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

Pennekamp

Percent of map unit: 1 percent

Landform: Islands, rises

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Linear

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

Matecumbe

Percent of map unit: 1 percent

Landform: Flats on islands

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

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

Saddlebunch

Percent of map unit: 1 percent

Landform: Rises on islands

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Linear

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

Keyvaca

Percent of map unit: 1 percent

Landform: Flats on islands

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

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

11—Urban land

Map Unit Setting

Elevation: 0 to 10 feet

Mean annual precipitation: 30 to 51 inches

Mean annual air temperature: 72 to 82 degrees F

Frost-free period: 358 to 365 days

Map Unit Composition

Urban land: 95 percent

Minor components: 5 percent

Description of Urban Land

Setting

Landform: Islands

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: No parent material

Properties and qualities

Slope: 0 to 1 percent

Frequency of flooding: Rare

Interpretive groups

Farmland classification: Not prime farmland

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

Minor Components

Udorthents

Percent of map unit: 3 percent

Landform: Islands

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

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

Beaches, tidal

Percent of map unit: 2 percent

Landform: Beaches on islands

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Linear

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

12—Rock outcrop-Cudjoe complex, frequently flooded

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Rock outcrop: 55 percent
Cudjoe and similar soils: 40 percent
Minor components: 5 percent

Description of Rock Outcrop

Setting

Landform: Marshes on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 0 inches to lithic bedrock
Depth to water table: About 0 to 6 inches
Frequency of flooding: Frequent

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Description of Cudjoe

Setting

Landform: Marshes on islands
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Loamy marl over coral or oolitic limestone

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 3 to 20 inches to paralithic bedrock
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent

Maximum salinity: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)

Sodium adsorption ratio, maximum: 15.0

Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 8

Hydrologic Soil Group: B/D

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

Typical profile

0 to 9 inches: Marly silt loam

9 to 16 inches: Marly silt loam

16 to 20 inches: Weathered bedrock

Minor Components

Matecumbe

Percent of map unit: 1 percent

Landform: Flats on islands

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

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

Saddlebunch

Percent of map unit: 1 percent

Landform: Rises on islands

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Linear

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

Keyvaca

Percent of map unit: 1 percent

Landform: Flats on islands

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

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

Islamorada, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

Pennekamp

Percent of map unit: 1 percent

Landform: Islands, rises

Landform position (three-dimensional): Rise

Down-slope shape: Convex

Across-slope shape: Linear

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

13—Keyvaca very gravelly loam, extremely stony**Map Unit Setting**

Mean annual precipitation: 43 to 51 inches

Mean annual air temperature: 72 to 79 degrees F

Frost-free period: 358 to 365 days

Map Unit Composition

Keyvaca and similar soils: 95 percent

Minor components: 5 percent

Description of Keyvaca**Setting**

Landform: Flats on islands

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Loamy residuum over oolitic limestone

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 3 to 6 inches to paralithic bedrock

Drainage class: Well drained

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

Depth to water table: About 36 to 60 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum content: 30 percent

Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Very low (about 0.4 inches)

Interpretive groups

Farmland classification: Not prime farmland

Land capability (nonirrigated): 7s

Hydrologic Soil Group: D

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

Typical profile

0 to 4 inches: Very gravelly loam

4 to 8 inches: Weathered bedrock

Minor Components**Keylargo, tidal**

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

Matecumbe

Percent of map unit: 1 percent

Landform: Flats on islands

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

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

Cudjoe, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Concave

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

Tavernier, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

Islamorada, tidal

Percent of map unit: 1 percent

Landform: Mangrove swamps on islands

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

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

15—Cudjoe marl, tidal

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Cudjoe, tidal, and similar soils: 95 percent
Minor components: 5 percent

Description of Cudjoe, Tidal

Setting

Landform: Mangrove swamps on islands
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Loamy marl over coral or oolitic limestone

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 3 to 20 inches to paralithic bedrock
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Calcium carbonate, maximum content: 95 percent
Maximum salinity: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)
Sodium adsorption ratio, maximum: 15.0
Available water capacity: Very low (about 2.9 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8
Hydrologic Soil Group: B/D
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Typical profile

0 to 9 inches: Marly silt loam
9 to 16 inches: Marly silt loam
16 to 20 inches: Weathered bedrock

Minor Components

Saddlebunch

Percent of map unit: 1 percent
Landform: Rises on islands

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

Keyvaca

Percent of map unit: 1 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Islamorada, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Pennekamp

Percent of map unit: 1 percent
Landform: Islands, rises
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Matecumbe

Percent of map unit: 1 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

16—Bahiahonda fine sand, 0 to 3 percent slopes**Map Unit Setting**

Elevation: 0 to 10 feet
Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 72 to 82 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Bahiahonda and similar soils: 95 percent
Minor components: 5 percent

Description of Bahiahonda

Setting

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

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 60 to 90 inches to paralithic bedrock
Drainage class: Moderately well drained
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 30 to 42 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Low (about 3.6 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 6s
Hydrologic Soil Group: A
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Typical profile

0 to 8 inches: Fine sand
8 to 35 inches: Fine sand
35 to 68 inches: Sand
68 to 82 inches: Very gravelly sand
82 to 86 inches: Weathered bedrock

Minor Components

Saddlebunch

Percent of map unit: 1 percent
Landform: Rises on islands
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Beaches, tidal

Percent of map unit: 1 percent
Landform: Beaches on islands
Landform position (three-dimensional): Rise
Down-slope shape: Convex

Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

Cudjoe, tidal

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

Islamorada, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

Keylargo, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
 (G156AC999FL)

17—Keywest marl, tidal**Map Unit Setting**

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Keywest, tidal, and similar soils: 95 percent
Minor components: 5 percent

Description of Keywest, Tidal**Setting**

Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy marl over coral or oolitic limestone

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 40 to 90 inches to paralithic bedrock
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water
(Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Calcium carbonate, maximum content: 100 percent
Maximum salinity: Moderately saline to strongly saline (16.0 to 32.0 mmhos/cm)
Sodium adsorption ratio, maximum: 60.0
Available water capacity: High (about 11.7 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7w
Hydrologic Soil Group: A/D
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Typical profile

0 to 9 inches: Marly silt loam
9 to 15 inches: Muck
15 to 27 inches: Mucky silt loam
27 to 65 inches: Marly silt loam
65 to 69 inches: Weathered bedrock

Minor Components

Saddlebunch

Percent of map unit: 1 percent
Landform: Rises on islands
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Keyvaca

Percent of map unit: 1 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Keylargo, tidal

Percent of map unit: 1 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear

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

Pennekamp

Percent of map unit: 1 percent
Landform: Islands, rises
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Matecumbe

Percent of map unit: 1 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

18—Beaches

Map Unit Setting

Elevation: 0 to 10 feet
Mean annual precipitation: 30 to 51 inches
Mean annual air temperature: 72 to 82 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

Beaches, tidal: 90 percent
Minor components: 10 percent

Description of Beaches, Tidal

Setting

Landform: Beaches on islands
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear

Properties and qualities

Slope: 0 to 2 percent
Drainage class: Poorly drained
Depth to water table: About 0 to 72 inches
Frequency of flooding: Very frequent

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 8
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Minor Components

Bahiahonda

Percent of map unit: 5 percent
Landform: Rises on islands
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Convex
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

Urban land

Percent of map unit: 5 percent
Landform: Islands
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)

19—Saddlebunch marl, occasionally flooded

Map Unit Setting

Mean annual precipitation: 43 to 51 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 358 to 365 days

Map Unit Composition

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

Description of Saddlebunch

Setting

Landform: Rises on islands
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy marl over coral limestone

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 4 to 20 inches to paralithic bedrock
Drainage class: Somewhat poorly drained
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 12 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 100 percent
Maximum salinity: Slightly saline to moderately saline (8.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 15.0
Available water capacity: Low (about 3.0 inches)

Interpretive groups

Farmland classification: Not prime farmland
Land capability (nonirrigated): 7w
Hydrologic Soil Group: B/D
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Typical profile

0 to 5 inches: Marly silt loam
5 to 17 inches: Marly silt loam
17 to 21 inches: Weathered bedrock

Minor Components**Rock outcrop**

Percent of map unit: 8 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Islamorada, tidal

Percent of map unit: 2 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Keylargo, tidal

Percent of map unit: 2 percent
Landform: Mangrove swamps on islands
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Keyvaca

Percent of map unit: 2 percent
Landform: Flats on islands
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned
(G156AC999FL)

Pennekamp

Percent of map unit: 1 percent

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

99—Water

Map Unit Composition

Water: 100 percent

Description of Water

Interpretive groups

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

Description of Waters Of The Atlantic Ocean

Interpretive groups

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

NOTCOM—No Digital Data Available

Map Unit Composition

Notcom: 100 percent

Description of Notcom

Properties and qualities

Data Source Information

Soil Survey Area: Monroe County, Keys Area, Florida

Survey Area Data: Version 4, Dec 4, 2013