USDA icon **Natural Resources Conservation Service**

Major Land Resource Area 155X
Southern Florida Flatwoods

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Description

MLRA 155, Southern Florida Flatwoods, makes up about 19,973 square miles (51,731 square kilometers) and is entirely in Florida. It stretches across the mid-section of the State, from the Gulf of Mexico to the Atlantic Ocean, and north and south from the Everglades (MLRA 156A) to Jacksonville. This MLRA consists of a young sandy marine plain of Pleistocene age that is underlain by Tertiary-age limestone bedrock. The terrain is nearly level to gently sloping with large areas of swamp and marsh. Sinkholes affect land use and management. MLRA 155 is extensively intertwined with MLRA 154 across the western mid-section of Florida. These two MLRAs differ slightly based on elevation and depth to limestone bedrock. As depth to bedrock decreases, sinkhole formation and the accumulation of surface waters into water bodies increase. MLRA 155 surrounds MLRA 156B, which occurs as a pocket of significantly wetter, low-lying wetland with a diffuse boundary. To the south, MLRA 155 borders MLRA 156A, which has distinctly different use and management and an isohyperthermic soil temperature regime. Along the coastline and around the city of Orlando, this MLRA has been heavily urbanized. However, a significant acreage remains in agriculture for the production of citrus, specialty crops, and cattle. Surface water runoff from agriculture and urbanization are carefully monitored to help mitigate sinkhole development. The forestland in this area consists mainly of low-quality pine. It is grazed extensively. More than one-third of the area is improved pasture or native range grazed by cattle. The cropland is reserved for many kinds of winter vegetables. Some citrus fruits are grown. Other subtropical fruits are grown in the southern part of the MLRA. The major soil resource concerns are wind erosion, maintenance of the content of organic matter and productivity of the soils, and management of soil moisture. Conservation practices on cropland generally include conservation crop rotations, cover crops, irrigation water management (including micro irrigation systems), nutrient management, and pest management. Conservation practices on pasture and rangeland generally include prescribed grazing, brush management, pest management, prescribed burning, and watering facilities. Conservation practices on forestland generally include forest stand improvement, forest site preparation, prescribed burning, firebreaks, establishment of trees and shrubs, pest management, and management of upland wildlife habitat.

Ecological site keys

MLRA 155, Southern Florida Flatwoods, Ecological Site Key

I. Terrestrial sites occurring along coastline landscapes

1 Site occurring in intertidal areas and experiences regular very frequent tidal flooding ... R155XY020FL – Haline Intertidal Marshes and Swamps

2 Site not occurring in intertidal areas and do not experience regular very frequent tidal flooding

A. Soils somewhat poorly and/ or moderately well drained ... R155XY170FL – Sandy Coastal Grasslands and Forests

B. Soils well and/ or excessively well drained

i. Site occurs on ridges

1 Soils have coquinoid limestone between 20 to 40 inches ... F155XY200FL – Shallow to Moderately Deep Sandy over Loamy Maritime Forests

2 Soils have coquinoid limestone deeper than 40 ... F155XY210FL – Deep Sandy over Loamy Maritime Forests

ii. Site occurs on beach dunes ... R155XY220FL – Sandy Coastal Beach Dunes

II. Terrestrial sites not occurring along coastline landscapes

1 Site occurring along major rivers and streams and experiences regular frequent flooding, or would in the absence of water control structures

A. 40 inches to ? 80 inches of fine sand or sand and a spodic horizon, an argillic horizon below 40 inches, or both ...

R155XY030FL – Sandy Freshwater Floodplain Marshes and Swamps

B. Fine sand or sand over an argillic horizon between 20 inches to 40 inches ... R155XY040FL – Sandy over Loamy Freshwater Floodplain Marshes and Swamps

C. Argillic horizon within 20 inches of the soil surface ... R155XY050FL – Loamy and Clayey Freshwater Floodplain Marshes and Swamps

D. Organic material throughout or organic material (histic epipedon) over sandy, loamy, or clayey deposits ... R155XY060FL – Organic Freshwater Floodplain Marshes and Swamps

2 Site not occurring along major rivers and streams, or if it does occur near major rivers and streams it is not influenced by regular flooding events (even in the absence of water control structures)

A. Soils very poorly and/ or poorly drained

i. Site occurs on concave depressional areas consisting of multiple plant communities

1 40 inches to ? 80 inches of fine sand or sand and a spodic horizon, an argillic horizon below 40 inches, or both ...

R155XY070FL – Sandy Freshwater Isolated Marshes and Swamps

2 Fine sand or sand over an argillic horizon between 20 inches to 40 inches ... R155XY080FL – Sandy over Loamy Freshwater Isolated Marshes and Swamps

3 Argillic horizon within 20 inches of the soil surface ... R155XY090FL – Loamy and Clayey Freshwater Isolated Marshes and Swamps

4 Organic material throughout or organic material (histic epipedon) over sandy, loamy, or clayey deposits ...

R155XY100FL – Organic Freshwater Isolated Marshes and Swamps

ii. Site occurs on seepage slopes ... R155XY110FL – Wet Sandy Cutthroat Seeps and Flatwoods

iii. Site occurs on flats or flatwoods

1 40 inches to ? 80 inches of fine sand or sand and a spodic horizon, an argillic horizon below 40 inches, or both ...

F155XY120FL – Sandy Flatwoods and Hammocks

2 Fine sand or sand over an argillic horizon between 20 inches to 40 inches ... F155XY130FL – Sandy over Loamy Flatwoods and Hammocks

3 Argillic horizon within 20 inches of the soil surface ... F155XY140FL – Loamy and Clayey Flats and Hammocks

B. Soils somewhat poorly and/ or moderately well drained

i. Site occurs in low landscape rises or knolls

1 40 inches to ? 80 inches of fine sand or sand and a spodic horizon, an argillic horizon below 40 inches, or both ...

F155XY150FL – Sandy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands

2 Fine sand or sand over an argillic horizon between 20 inches to 40 inches ... F155XY160FL – Sandy over Loamy Flatwoods and Hammocks on Rises and Knolls of Mesic Uplands

ii. Site occurs in high landscape rises, knolls, or ridges ... R155XY180FL – Sandy Scrub on Rises, Ridges, and Knolls of Mesic Uplands

C. Soils well drained or better ... R155XY230FL – Sandy Scrub on Ridges, Knolls, and Dunes of Xeric Uplands

III. Subaqueous sites occurring along coastline landscapes *DISCLAIMER* - These sites are under development and will be updated and created following Coastal Zone Soil Survey mapping projects throughout this MLRA

1 Water salinity is less than 0.5 ppt

A. Site occurs as freshwater riverine systems ... R155XY500FL – Subaqueous Freshwater Riverine Systems

B. Site occurs as freshwater lacustrine systems ... R155XY550FL – Subaqueous Freshwater Lacustrine Systems

2 Water salinity is greater than 0.5 ppt but less than 35.0 ppt

A. Site occurs as estuarine systems within the Indian River Lagoon

i. Water depths range from 0.5 to 1 meter under natural conditions

1 Site occurs on washover-fans and relict flood-tidal deltas ... R155XY600FL – Subaqueous Haline Indian River Estuarine Washover-Fan Flats / Relict Flood-Tidal Delta-Flats 0.5-1m

2 Site occurs on wave cut platforms and barrier coves ... R155XY610FL – Subaqueous Haline Indian River Estuarine Submerged Wave Cut Platform / Barrier Cove 0.5-1m

3 Site occurs on rivers and streams entering the lagoon system ... R155XY620FL – Subaqueous Haline Indian River Estuarine Tidal Streams 0.5-1m

4 Site occurs on active flood-tidal deltas ... R155XY630FL – Subaqueous Haline Indian River Estuarine Active Flood-Tidal Delta-Flats 0.5-1m

ii. Water depths range from 1 to 2 meters under natural conditions

1 Site occurs on washover-fans and relict flood-tidal deltas ... R155XY640FL – Subaqueous Haline Indian River Estuarine Washover Fan Flats / Relict Flood-Tidal Delta-Flats 1-2m

2 Site occurs on wave cut platforms and barrier coves ... R155XY650FL – Subaqueous Haline Indian River Estuarine Submerged Wave Cut Platform / Barrier Cove 1-2m

3 Site occurs on lagoon bottoms ... R155XY660FL – Subaqueous Haline Indian River Estuarine Lagoon Bottom 1-2m

4 Site occurs on rivers and streams entering the lagoon system ... R155XY670FL – Subaqueous Haline Indian River Estuarine Tidal Streams 1-2m

5 Site occurs on active flood-tidal deltas ... R155XY680FL – Subaqueous Haline Indian River Estuarine Active Flood-Tidal Delta-Flat 1-2m

iii. Water depths range from 2 to 3 meters under natural conditions

1 **Site occurs on wave cut platforms and barrier coves** … R155XY690FL – Subaqueous Haline Indian River Estuarine Submerged Wave Cut Platform / Barrier Cove 2-3m

2 **Site occurs on lagoon bottoms** … R155XY695FL – Subaqueous Haline Indian River Estuarine Lagoon Bottom 2-3m

iv. **Water depths range from 3 meters or deeper under natural conditions** … R155XY699FL – Subaqueous Haline Indian River Estuarine Lagoon Bottom 3-4m

B. **Site occurs as estuarine systems within the Gulf of Mexico** … R155XY700FL – Subaqueous Haline Gulf Estuarine Systems

3 **Water salinity is greater than or equal to 35.0 ppt**

A. **Site occurs as marine systems within the Atlantic Ocean** … R155XY800FL – Subaqueous Haline Atlantic Marine Systems

B. **Site occurs as marine systems within the Gulf of Mexico** … R155XY900FL – Subaqueous Haline Gulf Marine Systems