Prepared in cooperation with the: South Florida Water Management District, National Park Service, Fish and Wildlife Service, Florida International University, University of Georgia, Institute for Regional Conservation, and NatureServe

Vegetation Classification for South Florida Natural Areas

By Rutchey, K, T.N. Schall, R.F. Doren, A. Atkinson, M.S. Ross, D.T. Jones, M. Madden, L. Vilchek, K.A. Bradley, J.R. Snyder, J.N. Burch, T. Pernas, B. Witcher, M. Pyne, R. White, T.J. Smith III, J. Sadle, C.S. Smith, M.E. Patterson and G.D. Gann

Open-File Report 2006–1240

U.S. Department of the Interior

U.S. Geological Survey

U.S. Department of the Interior
Dirk Kempthorne, Secretary

U.S. Geological Survey
P. Patrick Leahy, Acting Director

U.S. Geological Survey, Reston, Virginia 2006

For product and ordering information:
World Wide Web: http://www.usgs.gov/pubprod
Telephone: 1-888-ASK-USGS

For more information on the USGS—the Federal source for science about the Earth, its natural and living resources, natural hazards, and the environment:
World Wide Web: http://www.usgs.gov
Telephone: 1-888-ASK-USGS

Suggested citation:
Rutchey, K., T.N. Schall, R.F. Doren, A. Atkinson, M.S. Ross, D.T. Jones, M. madden, L. Vilchek, K.A. Bradley, J.R. Snyder, J.N. Burch, T. Pernas, B. Witcher, M. Pyne, R. White, T.J. Smith III, J. Sadle, C.S. Smith, M.E. Patterson, and G.D. Gann, 2006, Vegetation Classification for South Florida Natural Areas: Saint Petersburg, Fl, United States Geological Survey, Open-File Report 2006-1240. 142 p.

Contents

Figures

Tables

Abbreviations and Acronyms

BICY	Big Cypress National Preserve
BISC	Biscayne National Park
EVER	Everglades National Park
IRC	Institute for Regional Conservation
NWR	National Wildlife Refuge
SFWMD	South Florida Water Management District
WCA	Water Conservation Area
WMA	Wildlife Management Area

Vegetation Classification for South Florida Natural Areas

Rutchey, K.*[,1], T.N. Schall[1], R.F. Doren[2], A. Atkinson[3], M.S. Ross[2], D.T. Jones[2], M. Madden[4], L. Vilchek[5], K.A. Bradley[6], J.R. Snyder[7], J.N. Burch[8], T. Pernas[9], B. Witcher[3], M. Pyne[10], R. White[10], T.J. Smith III[11], J. Sadle[8], C.S. Smith[12], M.E. Patterson[3], and G.D. Gann[6]

* Corresponding author: Email: Krutchey@sfwmd.gov Tel #: 561 682-6618

[1] South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, Florida 33412

[2] Florida International University, Southeast Environmental Research Center, University Park, OE-148, Miami, Florida 33199

[3] U.S. National Park Service – South Florida & Caribbean Inventory and Monitoring Network, 18001 Old Cutler Road, Suite 419, Palmetto Bay, Florida 33157

[4] University of Georgia, Center for Remote Sensing and Mapping Services, Department of Geography, Athens, Georgia 30602

[5] U.S. Fish and Wildlife Service, South Florida Ecological Services Office, 1339 20th Street, Vero Beach, Florida 32960

[6] The Institute for Regional Conservation, 22601 S.W. 152nd Avenue, Miami, Florida 33170

[7] U.S. Geological Survey, Florida Integrated Science Center, Big Cypress Field Station, 33100 Tamiami Trail, East, Ochopee, Florida 34141

[8] U.S. National Park Service, Big Cypress National Preserve, 33100 Tamiami Trail, East, Ochopee, Florida 34141

[9] U.S. National Park Service – Exotic Plant Management Team, 18001 Old Cutler Road, Suite 419, Palmetto Bay, Florida 33157

[10] NatureServe, 1101 Wilson Boulevard, 15th Floor, Arlington, Virginia 22209

[11] U.S. Geological Survey, Florida Integrated Science Center, 600 Fourth Street, South, Saint Petersburg, Florida 33701

[12] U.S. National Park Service, Everglades National Park, 40001 State Road 9336, Homestead, Florida 33034

Introduction

A critical component of any ecological restoration program is documenting the temporal changes in the spatial extent, pattern, and proportion of plant communities within the landscape. The Comprehensive Everglades Restoration Plan (CERP - www.evergladesplan.org), authorized as part of the Water Resources and Development Act (WRDA) of 2000 (U.S. Congress, 2000), is an $8 billion hydrologic restoration project for all of south Florida. CERP includes 68 separate projects to be managed over the next 30 years by the South Florida Water Management District (SFWMD), the U. S. Army Corp of Engineers (USACE), and other State and Federal agencies. Restoration Coordination and Verification (RECOVER) is a system-wide program of the CERP, designed to organize, manage, and provide the highest quality scientific and technical support during implementation of the restoration program (RECOVER, in prep.). It is the role of RECOVER to develop and implement a system-wide Monitoring and Assessment Plan (MAP) (RECOVER, 2004) and to document how well the CERP is meeting its objectives for ecosystem restoration. One critical component of the MAP is vegetation mapping to document changes in the spatial extent, pattern, and proportion of plant communities within the Everglades landscape.

A major aspect of the vegetation mapping project was determining a classification system for labeling vegetation categories utilizing a grid method. The grid method was created specifically for use in the CERP RECOVER vegetation monitoring and assessment project (Rutchey and others, in prep). The CERP RECOVER vegetation mapping project utilizes aerial photography and photointerpretation techniques (with ground truthing) to identify and label vegetation classes. A classification system that had sufficient flexibility and detail to enable the designation of vegetation classes using various remote sensing platforms and identification techniques needed to be developed. The classification system had to be hierarchical, represent

distinct ecological communities, individual species, and physical characteristics such as density and height. In addition, it was desirable to have a classification system that allowed exotic species and cattail to be identified using density classes.

The classification system was developed specifically for peninsular south Florida and the Florida Keys, from Lake Okeechobee in the north to Key West in the south (Figure 1). Specific areas of interest include Everglades National Park, Big Cypress National Preserve, Biscayne National Park, Florida Panther National Wildlife Refuge, Loxahatchee National Wildlife Refuge, the State of Florida Water Conservation Areas, Holeyland Wildlife Management Area, Rotenberger Wildlife Management Area, J.W. Corbett Wildlife Management Area, Pal-Mar Wildlife Management Area, the Lake Okeechobee Littoral Zones, and additional coastal wetlands of south eastern Miami-Dade County. In addition to being used for mapping of CERP affected areas, the National Park Service-South Florida/Caribbean Network is using the classification for mapping the remaining areas of Everglades National Park and Big Cypress National Preserve outside the CERP footprint, Florida Panther National Wildlife Refuge, Biscayne National Park, and Dry Tortugas National Park.

Background

A major vegetation mapping project was undertaken from 1995 to 2003, entitled "The South Florida Vegetation Mapping Project" (Doren and others, 1999, Welch and others, 1999, Rutchey and others, 2005). This project was a collaborative effort involving the Center of Remote Sensing and Mapping Science at the University of Georgia, the South Florida National Resources Center at Everglades National Park, and the South Florida Water Management District. As a result, a vegetation classification system (Jones and others, 1999; A Vegetation

Classification System for Southern Florida's National Parks and Preserves) and a photointerpretation key (Madden and others, 1999) were developed to map Everglades National Park, Big Cypress National Preserve, Biscayne National Park, the Florida Panther National Wildlife Refuge, and Water Conservation Area 3. A number of national and statewide classification systems (Anderson and others, 1976, Cowardin and others, 1979, FLUCCS, 1999) were considered at that time, but were rejected because they failed to include the desired level of detail or specificity of vegetation classes for south Florida ecosystems. However, the classification system did utilize data from a number of local mapping projects that had been conducted in the area (Davis, 1943, McPherson, 1973, Gunderson and Loope, 1982, Olmsted and others, 1983, and Rose and Draughn, 1991) and also detailed descriptions of Everglade's vegetation (Craighead, 1971, Davis and Ogden, 1994, Duever and others, 1986, and Egler, 1952). Eight major vegetation types were described in the final classification system. The designated vegetation types were: forest, scrub, savanna, prairies and marshes, shrublands, exotics, additional class headings, and special modifiers.

The previous Vegetation Classification System for Southern Florida's National Parks and Preserves (Jones and others, 1999) was reviewed for the CERP RECOVER Vegetation mapping project by a work-team consisting of personnel from South Florida Water Management District, Everglades National Park, Big Cypress National Preserve, National Park Service (NPS) -South Florida Caribbean Network, NPS-Exotic Plant Management Team, U.S. Geological Survey, Florida International University, Institute for Regional Conservation, NatureServe, U.S. Fish and Wildlife Service, and University of Georgia Center for Remote Sensing and Mapping. Although that previous work was a landmark effort in its attempt at creating a vegetation classification system that was specific to south Florida Parks and Preserves, it could be significantly improved

upon by utilizing suggested associations in an expanded list of vegetation field guides, newer vegetation studies, and improving compatibility to a new NatureServe classification system (NatureServe, 2003).

New field guides (Austin and Smith, 1997, Langeland and Craddock Burks, 1998, Miller, 2003, Nelson, 1996, Tobe and others, 1998, and USFWS, 1999) along with an expanded list of older guides (Bell and Taylor, 1982, Duncan and Duncan, 1988, Hilsenbeck and others, 1979, Long and Lakela, 1971, Myers and Ewel, 1990, Nellis, 1994, and Nelson, 1994) were used to improve upon the Jones and others (1999) classification system. In addition, two key field research initiatives that examined tree island types (Armentano and others, 2002) and the differentiation between marshes and wet prairies (Ross and others, 2006) were heavily relied upon in developing the new classification system for those habitats.

NatureServe is a primary partner in the U.S. Geological Survey and National Park Service effort to classify, describe, and map vegetation communities in more than 250 national park units across the United States. NatureServe has developed a U.S. National Vegetation Classification system that represents a standard and hierarchical approach to identifying and describing vegetation types. This classification system is the result of a decade of work that began under the auspices of The Nature Conservancy. The classification system currently includes more than 4,500 vegetation types and has been adopted by the Federal Geographic Data Committee for use by all U.S. federal agencies. A Tropical Florida Subset (NatureServe, 2003) was reviewed and found to lack the detail and specificity in vegetation classes that were needed for the CERP RECOVER Vegetation Mapping effort. The current CERP RECOVER classification system has been significantly modified to take into account any potential cross-walk that would need to occur between this CERP RECOVER classification system and the

USGS-NPS National Vegetation Classification System. The National Park Service-South Florida / Caribbean Network plans to use the findings of this current mapping project and classification system development to update, enhance and expand the NatureServe "Tropical Florida Subset".

Description

The authors intend that this classification system be sufficiently flexible and detailed to enable the classification of vegetation utilizing various identification techniques, from field investigations to remote sensing. The resulting classification system is hierarchical, designating up to six levels with lower levels of the classification (e.g. level 6) being more specific classifications nested within higher levels (e.g. level 5):

Level 1 **W Woodland**

Level 2 WM Mangrove Woodland

Level 2 WS Swamp Woodland

Level 2 WU Upland Woodland

Level 3 WUs Cabbage Palm Woodland

Level 3 WUp Pine Upland

Level 4 WUpR Pine Rockland

Level 4 WUpF Pine Flatwoods

Level 5 WUpFG Pine Flatwoods - Graminoid understory

Level 5 WUpFX Pine Flatwoods - Mixed understory

Level 5 WUpFO Pine Flatwoods - Open Prairie understory

Level 5	WUpFS Pine Flatwoods - Shrub understory
Level 6	WUpFSs - Pine Flatwoods - Saw Palmetto understory

The different levels of this classification system represent distinctions in ecological communities, taxonomy, individual species, and physical characteristics such as density and height. The appropriate level of classification to use depends on the needs of the project and level of detail discernable from the methods used. For example, it is expected that field investigations will allow for levels 5 & 6 to be classified while satellite remote sensing may only allow for the broadest levels of this classification system to be used. It should be understood that this document is not a complete list of south Florida plants and vegetative communities. Note that location fields aren't complete for all Levels because of lack of information as to where these categories are located within the system. This classification system will remain dynamic with additional revisions occurring to incorporate new research or conditions found in the field.

The CERP RECOVER vegetation mapping project is utilizing 1:24000 scale color-infrared aerial photography. A one-quarter hectare grid (50 x 50 meter) was generated and superimposed over the aerial photography. Vegetation within each individual grid cell is being photointerpreted utilizing analytical stereo-plotters and each grid cell is labeled with the majority vegetation category observed. The vegetation classification allows for additional modifying categories to be assigned as well as the dominant vegetation classification. For example, the classification system allows for exotic species to be identified within each grid cell using a density class. The density classes are: "monotypic" (greater than or equal to 90%), "dominant mix" (50% - 89%), or "sparse mix" (10% - 49%). A grid cell labeled with a majority category such as FSB-Bayhead Forest may also have a "sparse mix" modifier such as EIS- *Lygodium*

Sparse. Cattail (*Typha* spp.), although not an exotic, is also mapped using the same density class criteria. Presence of a Tree Island is another modifying category.

The classification system is presented in Table 1 below.

Primary Classifications

Forest (Acronym: F) - High-density stands of trees (>50% tree canopy cover) with heights greater than five meters. Tree canopy cover from 50% - 60% will be considered Forest unless specifically described in the Woodland section of this classification system.

Woodland (Acronym: W) - Specific described communities of low-density stands of trees (10 - 60% tree canopy cover) with heights greater than five meters in a matrix of shrubs, graminoids, and/or herbaceous vegetation.

Shrubland (Acronym: S) - High-density stands of small trees and/or shrubs (>50% tree/shrub canopy cover) with heights less than five meters. Exception: Mangrove shrubs less than or equal to 2 meters are scrub - see scrub section.

Scrub (Acronym: C) - Specific described communities of dwarf trees or low density shrubs typically in a matrix of graminoids, and/or herbaceous vegetation. Canopy cover ranges from 10% to 50% but can be as much as 100% for Mangrove and Cypress classes. Canopy heights are less than 5 meters with the exception being for Mangrove which is less than or equal to 2 meters.

Marsh (Acronym: M) - Graminoid and/or herbaceous emergent or floating vegetation in shallow water that stands at or above the ground surface for much of the year.

Dune (Acronym: D) - Beach-dune associated graminoids and/or herbaceous vegetation.

Submerged Aquatic Vegetation (Acronym: A) - Vegetation that has evolved the ability to carry out their entire life cycle completely submerged in an aquatic environment.

Exotic (Acronym: E) - Non-native and often invasive vegetation.

Non-Vegetative (Acronym: N) -Non-vegetative areal coverage.

Modifiers (Acronym: n/a) - Additional attributed information.

Acknowledgements

Dave Addison, Tom Dreschel, Larry Handley and Jamie Serino provided helpful comments on an earlier draft of the manuscript. Funding to support the work was provided by numerous agencies and organizations including: the SFWMD, USFWS, USNPS, USGS, FIU, IRC and NatureServe.

Literature Cited

Anderson, J.R., Hardy, E.E., Roach, J.T., and Witmer, R.E., 1976, A Land Use and Land Cover Classification System for Use with Remote Sensor Data: U.S. Geological Survey, Professional Paper 964, U.S. Government Printing Office, Washington, D.C., 28 p.

Armentano, T.V., Jones, D.T., Ross, M.S., and Gamble, B.W., 2002, Vegetation Pattern and Process in Tree Islands of the Southern Everglades and Adjacent Areas: *in* Sklar, F. and van der Valk, A., eds., Tree Islands of the Everglades, Boston, Ma, Kluwer Academic Publishers, Chapter 8.

Austin, D.F., and Smith, E., 1997, Pine Rockland Plant Guide: A field guide to the plants of South Florida's Pine Rockland Community: Miami, Fl, Miami-Dade County, Department of Environmental Resources Management, 44 p.

Bell, C.R. and Taylor, B.J., 1982, Florida Wild Flowers: Chapel Hill, NC, Laurel Hill Press, 308p.

Cowardin, L.M., Carter, V., Golet, F.C., and LaRoe, E.T., 1979, Classification of Wetlands and Deepwater Habitats of the United States: Fish and Wildlife Service, U.S. Department of the Interior, Washington, D.C., 103 p.

Craighead, F.C., 1971, The Trees of South Florida: Coral Gables, Fl, University of Miami Press, 212 p.

Davis, J.H., Jr., 1943, The natural features of southern Florida, especially the vegetation of the Everglades: Florida Geological Survey Bulletin, v. 25, p. 1-311.

Davis, S.M. and Ogden, J.C., Eds., 1994, Everglades: The Ecosystem and Its Restoration: Delray Beach, Fl, St. Lucie Press, 826 p.

Doren, R.F., Rutchey, K., and Welch, R., 1999, The Everglades: A Perspective on the Requirements and Applications for Vegetation Map and Database Products: Journal of Photogrammetric Engineering and Remote Sensing, v. 65, p. 155-161.

Duever, M.J., Carleson, J.E., Meeder, J.F., Duever, L.C., Gunderson, L.H., Riopelle, L.A., Alexander, T.R., Myers, R.L., and Spangler, D.P., 1986, The Big Cypress National Preserve: New York, NY, National Audubon Society, 444 p.

Duncan, W.H., and Duncan, M.B., 1988, Trees of the Southeastern United States: Athens, Ga, University of Georgia Press, 332 p.

Egler, F.E., 1952, Southeast saline Everglades vegetation, Florida, and its management: Vegetatio Acta Geobotanica, v. 3, p. 213-265.

FLUCCS, 1999. Florida Land Use, Cover and Forms Classification System (3rd Ed.): Tallahassee, Fl, Florida Department of Transportation, Surveying and Mapping Bureau, Geographic Mapping Section, 95 p. Available online: http://www.dot.state.fl.us/surveyingandmapping/geographic.htm#fluccs

Gunderson, L.H., and Loope, L.L., 1982, An Inventory of the Plant Communities within the Deep Lake Strand Area, Big Cypress National Preserve: Homestead, Fl, Technical Report T-666, South Florida Research Center, National Park Service, U.S. Department of Interior, 39 p.

Hilsenbeck, C.E., Hofstetter, R.H., and Alexander, T.R., 1979, Preliminary synopsis of major plant communities in the east Everglades area - vegetation maps supplement: Coral Gables, Fl, Report of the Department of Biology, University of Miami, 36 p.

Jones, D.T., Madden, M., Snyder, J., and Rutchey, K., 1999, A Vegetation Classification System for Southern Florida's National Parks and Preserves: Homestead, Fl, Un-numbered

Technical Report, South Florida Natural Resources Center, Everglades National Park, National Park Service, U.S. Department of the Interior, 36 p.

Langeland, K.A. and Craddock Burks, K., 1998, Identification and Biology of Non-Native Plants in Florida's Natural Areas: Gainesville, Fl, University of Florida Press, 165 p.

Long, R.W. and Lakela, O., 1971, Flora of Tropical Florida: Coral Gables, Fl, University of Miami Press, 962 p.

Madden, M., Jones, D.T., and Vilchek, L., 1999, Photointerpretation key for the Everglades Vegetation Classification System: Photogrammetric Engineering & Remote Sensing, v. 65, p.171-177.

McPherson, B.F., 1973, Vegetation Map of Southern Parts of Sub-areas A and C, Big Cypress Swamp, Florida, Hydrologic Investigations Atlas HA-492: Washington, D.C., Florida Department of Natural Resources and U.S. Geological Survey.

Miller, J.H., 2003, Nonnative Invasive Plants of Southern Forest: A Field Guide for Identification and Control: General Technical Report SRS-62, Asheville, NC, U.S. Department of Agriculture, Forest Service, Southern Research Station, 93 p. Available online: http://www.srs.fs.usda.gov/pubs/gtr/gtr_srs062/

Myers, R.L. and Ewel, J.J., eds., 1990, Ecosystems of Florida: Orlando, Fl, University of Central Florida Press, 765 p.

NatureServe, 2003, International classification of ecological communities: Terrestrial vegetation of the United States, Tropical Florida Subset, June 2003: Arlington, Va and Durham, NC, NatureServe, and NatureServe Ecology Southeast.

Nellis, D.W., 1994, Seashore Plants of South Florida and the Caribbean: A Guide to Knowing and Growing Drought and Salt Tolerant Plants: Sarasota, Fl, Pineapple Press, Inc., 164 p.

Nelson, G., 1994, The Trees of Florida: Sarasota, Fl, Pineapple Press, Inc., 338 p.

Nelson, G., 1996, The Shrubs and Woody Vines of Florida: Sarasota, Fl, Pineapple Press, Inc., 391 p.

Olmstead, I.C., Robertson, W.B., Jr., Johnson, J., and Bass, O.L., Jr., 1983, Vegetation of Long Pine Key, Everglades National Park: Technical Report SFRC-83/05, Homestead, Fl, South Florida Research Center, National Park Service, U.S. Department of the Interior, 64 p.

RECOVER, 2004, CERP Monitoring and Assessment Plan: Part 1 Monitoring and Supporting Research: Restoration Coordination and Verification (RECOVER): Jacksonville, Fl, United States Army Corps of Engineers, and West Palm Beach, Fl, South Florida Water Management District. Available online: http://www.evergladesplan.org/pm/recover/recover_map.cfm

RECOVER, in prep, CERP System-wide Performance Measures. Restoration Coordination and Verification (RECOVER): West Palm Beach, Fl, South Florida Water Management District, and Jacksonville, Fl, United States Army Corps of Engineers, Jacksonville District.

Rose, M., and Draughn, F., 1991, GIS applications at Everglades National Park: *GIS World*, v. 4, p. 49-51.

Ross M.S., Sah, J.P., Ruiz, P.L., Jones, D.T., Cooley, H., Travieso, R., Tobias, F., Snyder, J.R., and Hagyari, D., 2006, Effect of Hydrologic Restoration on the Habitat of the Cape Sable Seaside Sparrow - Annual Report of 2004-2005 for Everglades National Park: Miami, Fl, Southeast Environmental Research Center, Florida International University, 46 p.

Rutchey, K., Vilchek, L., and Love, M., 2005, Development of a Vegetation Map for Water Conservation Area 3: Technical Publication ERA #421, West Palm Beach, Fl, South Florida Water Management District, 40 p.

Rutchey, K., Godin, J., and Schall, T.N., In prep, Discussion on the Determination of a Minimum Mapping Unit for Everglades Vegetation Mapping Projects: Landscape Ecology.

Tobe, J.D., Craddock Burks, K., Cantrell, R.W., Garland, M.A., Sweeley, M.E., Hall, D.W., Wallace, P., Anglin, G., Nelson, G., Cooper, J.R., Bickner, D., Gilbert, K., Aymond, N., Greenwood, K., and Raymond, N., 1998, Florida Wetland Plants: An Identification Manual: Tallahassee, Fl, Florida Department of Environmental Protection, 598 p.

U.S. Congress, 2000, Section 601 of the Water Resources Development Act of 2000 (Public Law 106-541): Washington, D.C.

USFWS, 1999, South Florida Multi-Species Recovery Plan: Atlanta, Ga, U.S. Fish & Wildlife Service, 2172 p. Available online: http://www.fws.gov/verobeach/Programs/Recovery/vbms5.html

Welch, R., Madden, M., and Doren, R.F., 1999, Mapping the Everglades: Photogrammetric Engineering & Remote Sensing, v. 65, p. 163-170.

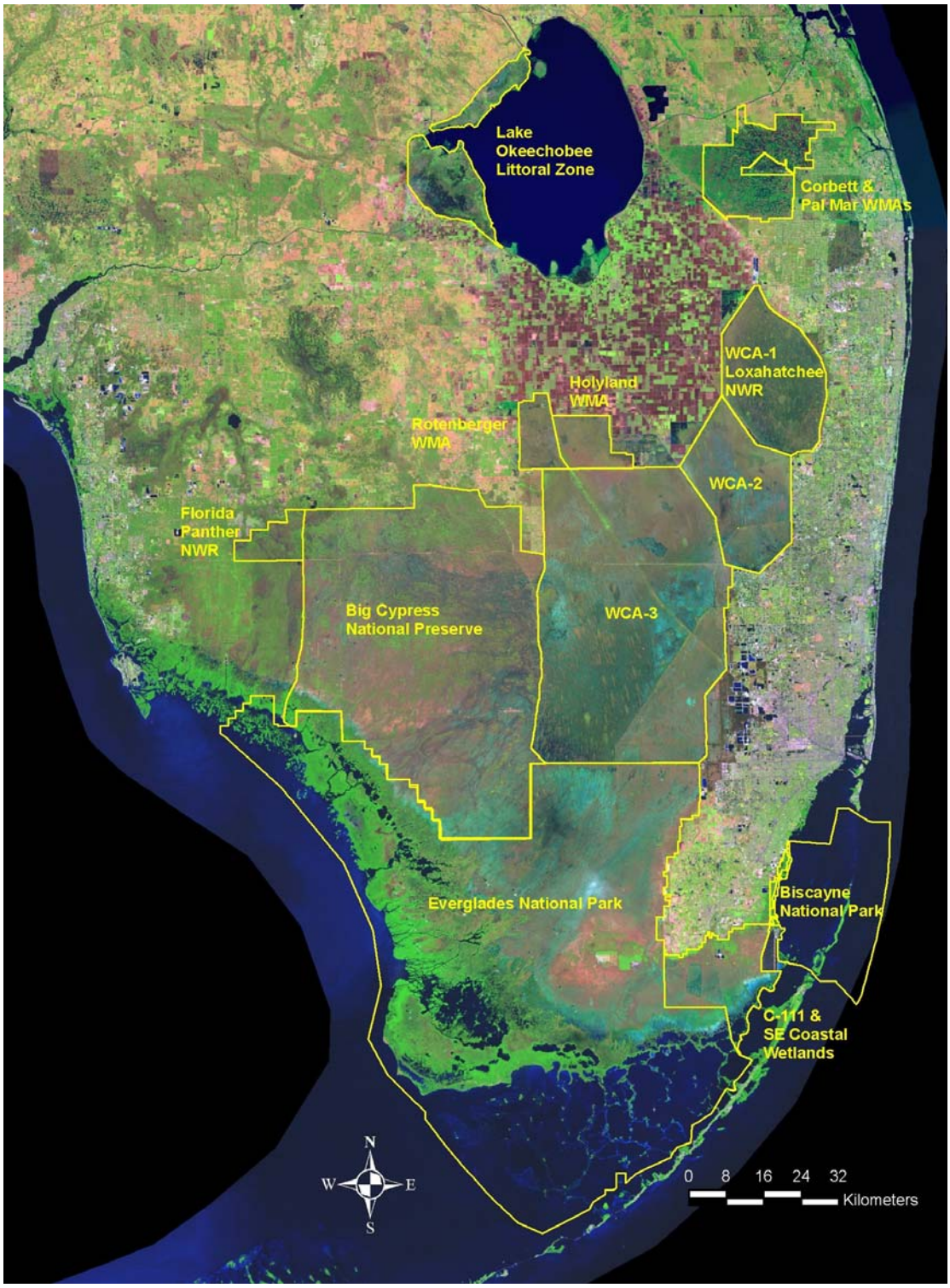

Figure 1. This satellite view of far southern Florida shows the region for which the vegetation classification was developed. Overlain are the approximate boundaries for state and federal conservation lands.

Table 1. Vegetation classification descriptors table.

Class ID	Raster ID	Name	Level	Description	Location	Reference
F	100000	Forest	1	High-density stands of trees (≥50% tree canopy cover) with heights greater than five meters. Tree canopy cover from 50% - 60% will be considered Forest unless specifically described in the Woodland section of this classification system.	Found throughout Florida.	
FM	110000	Mangrove Forest	2	Regularly flooded forests that are typically found along saltwater shorelines, including Black Mangrove (Avicennia germinans), White Mangrove (Laguncularia racemosa), Red Mangrove (Rhizophora mangle), and Buttonwood (Conocarpus erectus).	Found along coastal Florida.	
FMa	111000	Black Mangrove Forest	3	Black Mangrove (*Avicennia germinans*) dominant forest. Black mangrove is distinguishable from other mangrove species by leaves with grayish undersurfaces, by green, flattened "lima bean-like" fruits, by dark to blackish bark, and by the presence of numerous short breathing roots projecting vertically from the ground below and around the tree.	Found along coastal Florida. Predominates in the upper part of the intertidal zone and into the irregularly flooded higher elevations; common forest fringing Florida Bay along Snake Bite in ENP; sometimes found on higher drier soils than the red or white mangrove. However, it can be found amongt any of the other Mangrove communities.	

FMc	112000	Buttonwood Forest	3	Buttonwood (*Conocarpus erectus*) dominant forest with variable understory composition.	Generally coastal in distribution, normally found along the landward edge of the mangrove zone and along the edges of hammocks bordering the transition zone between freshwater and saltwater environments; thriving in areas that are only occasionally subjected to tidal washing (e.g., elevated ridges in or near the tidal zone); southern Florida and the Keys; more specifically found along the Buttonwood ridge in ENP and around Coot Bay. However, it can be found amongt any of the other Mangrove communities.	
FMl	113000	White Mangrove Forest	3	White Mangrove (*Laguncularia racemosa*) dominant forest.	Found along coastal Florida. Occurs throughout the intertidal zone, but predominatley in the irregularly flooded higher portions of the swamp. However, it can be found amongt any of the other Mangrove communities.	
FMr	114000	Red Mangrove Forest	3	Red Mangrove (*Rhizophora mangle*) dominant forest.	Found along coastal Florida primarily in the middle and lower portions of the intertidal and upper subtidal zone. However, it can be found amongt any of the other Mangrove communities.	
FMX	115000	Mixed Mangrove Forest	3	Mix of mangrove species with no particular species of dominance.		

FMXac	115100	Black Mangrove-Buttonwood Forest	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or Buttonwood (*Conocarpus erectus*) dominant mix.		
FMXal	115200	Black Mangrove-White Mangrove Forest	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or White Mangrove (*Laguncularia racemosa*) dominant mix.		
FMXar	115300	Black Mangrove-Red Mangrove Forest	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		
FMXcl	115400	Buttonwood-White Mangrove Forest	4	Co-dominant mix (60/40% split) of either Buttonwood (*Conocarpus erectus*) or White Mangrove (*Laguncularia racemosa*) dominant mix.		
FMXcr	115500	Buttonwood-Red Mangrove Forest	4	Co-dominant mix (60/40% split) of either Buttonwood (*Conocarpus erectus*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		

FMXlr	115600	White Mangrove-Red Mangrove Forest	4	Co-dominant mix (60/40% split) of either White Mangrove (*Laguncularia racemosa*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		
FS	120000	Swamp Forest	2	Seasonally to semi-permanently flooded freshwater forests.	Found throughout Florida.	
FSa	121000	Red Maple Forest	3	Red Maple (*Acer rubrum*) dominant forest.	Common to wet areas and moist woods throughout system southward to about Tamiami Trail.	
FSc	122000	Paurotis Palm Forest	3	Paurotis Palm (*Acoelorrhaphe wrightii*) dominant forest.	Commonly found landward of the mangrove zone from around US 1 west to Flamingo; also common to the Fakahatchee Strand State Preserve and can be a common understory component of swamp forests, including portions of Everglades tree islands.	
FSaf	123000	Pond Apple-Pop Ash Forest	3	Mix of Pond Apple (*Annona glabra*) and Pop Ash (*Fraxinus caroliniana*), generally including a diverse epiphytic assemblage.	Commonly inundated 9-12 months a year and occurring in the center of large cypress domes and strands, such as in Barnes Strand in BICY; also common to Florida Panther NWR.	

FSB	124000	Bayhead Forest	3	Mix of Cocoplum (Chrysobalanus icaco), Swamp Bay (Persea palustris), Red Bay (Persea borbonia), Dahoon Holly (Ilex cassine), Willow (Salix caroliniana), Wax Myrtle (Myrica cerifera), Sweetbay (Magnolia virginiana), Cypress (Taxodium spp.), Pond Apple (Annona glabra), among others. Note: the distinguishing feature of the Transitional Bayhead that is different from a Bayhead is the presence of Red Mangrove and Buttonwood. Once the Red Mangrove signature is gone it is nearly impossible to distinguish Buttonwood from Wax Myrtle and Dahoon Holly and so Bayheads may have some Buttonwood present if these species co-occur on a Bayhead island.	Typical of tree islands in Shark River Slough, C-111, and the WCAs; commonly inundated 4-10 months a year.	
FSBT	141000	Transitional Bayhead Forest	3	Mix of Buttonwood (Conocarpus erectus), Cocoplum (Chrysobalanus icaco), Red Mangrove (Rhizophora mangle), Wax Myrtle (Myrica cerifera), Mahogany (Swietenia mahagoni), Poisonwood (Metopium toxiferum), and occasionally Swamp Bay (Persea palustris), Red Bay (P. borbonia), Sweetbay (Magnolia virginiana), and Dahoon Holly (Ilex cassine). Note: the distinguishing feature of the Transitional Bayhead that is different from a Bayhead is the presence of Red Mangrove and Buttonwood. Once the Red Mangrove signature is gone it is nearly impossible to distinguish Buttonwood from Wax Myrtle and Dahoon Holly and so Bayheads may have some Buttonwood present if these species co-occur on a Bayhead island.	Typically occurring in a several kilometer wide band in the southern reaches of Taylor Slough and the Southeast Saline Everglades, extending west to Mahogany Hammock in ENP, and forming a transitional forest between the exclusively freshwater Bayhead forests to the north and the coastal Buttonwood and Mangrove forests to the south. Most often associated with tree islands within the scrub Red Mangrove zone.	Armentano and others, 2002

FSH	125000	Hardwood Swamp Forest	3	Mix of lowland hardwood trees such as Laural Oak (*Quercus laurifolia*), Red Maple (*Acer rubrum*), Cabbage Palm (*Sabal palmetto*), Pop Ash (*Fraxinus caroliniana*), Swamp Bay (*Persea palustris*), Red Bay (*P. borbonia*), and Sweetbay (*Magnolia virginiana*).	Found in Gator Hook Strand and East Crossing Strand in BICY, and in the Florida Panther NWR	
FSs	126000	Willow Forest	3	Willow (*Salix caroliniana*) dominant forest, commonly with sparse Leather Fern (*Acrostichum danaeifolium*), Cattail (*Typha* spp.), Sawgrass (*Cladium jamaicense*), Arrowhead (*Sagittaria* spp.), and other freshwater marsh species as possible understory components.	Florida's most widely distributed willow; typically found throughout the WCAs in monotypic stands adjacent to canals; commonly inundated 9-12 months a year.	
FSt	127000	Cypress Forest	3	Pond Cypress (*Taxodium ascendens*) and/or Bald Cypress (*T. distichum*) dominant forest with common understory vegetation consisting of Pond Apple (*Annona glabra*), Wax Myrtle (*Myrica cerifera*), Pop Ash (*Fraxinus caroliniana*), Cocoplum (*Chrysobalanus icaco*), and Leather Fern (*Acrostichum danaeifolium*).	Common in EVER, BICY, western WCA3, Strazzulla property adjacent to eastern Loxahatchee NWR, JW Corbett and Pal-Mar WMA; found throughout Florida, except in the southernmost peninsula and the Keys.	
FStD	127100	Cypress Forest-Dome	4	Pond Cypress (*Taxodium ascendens*) and/or Bald Cypress (*T. distichum*) dominant forest typically found in a pond-like depression.	Common in EVER, BICY, western WCA3, JW Corbett and Pal-Mar WMA.	
FStS	127300	Cypress Forest-Strand	4	Pond Cypress (*Taxodium ascendens*) and/or Bald Cypress (*T. distichum*) dominant forest typically found in an elongated slough-like or open ended depression.	Common in EVER, BICY, western WCA3.	

FStH	128000	Cypress-Hardwood Forest	3	Mix of Pond Cypress (*Taxodium ascendens*) and/or Bald Cypress (*T. distichum*) with a variable mixture of lowland hardwoods such as Red Maple (*Acer rubrum*) and Laurel Oak (*Quercus laurifolia*). Common understory vegetation often consists of Pond Apple (*Annona glabra*), Wax Myrtle (*Myrica cerifera*), Pop Ash (*Fraxinus caroliniana*), Cocoplum (*Chrysobalanus icaco*), and Leather Fern (*Acrostichum danaeifolium*).	Common in Sweetwater Strand in BICY and Florida Panther NWR.	
FStp	129000	Cypress-Pine Forest	3	Mix of Pond Cypress (*Taxodium ascendens*) and/or Bald Cypress (*T. distichum*) with Slash Pine (*Pinus elliottii var. densa*). Common understory vegetation can include mixed hardwood shrubs or various graminoids.	Common in BICY and Florida Panther NWR.	
FH	130000	Hammock Forest	2	Briefly flooded forests	Found throughout Florida.	
FHC	131000	Coastal Hardwood Hammock	3	Mix of Pigeon Plum (*Coccoloba diversifolia*), Jamaican Dogwood (*Piscidia piscipula*), False Mastic (*Sideroxylon foetidissimum*), Spanish Stopper (*Eugenia foetidia*), Mahogany (*Swietenia mahagoni*), Strangler Fig (*Ficus aurea*), Cabbage Palm (*Sabal Palmetto*), White Stopper (*Eugenia axillaris*), Wild Lime (*Zanthoxylum fagara*), Saffron Plum (*Sideroxylon celastrinum*), Greenheart (*Colubrina arborescens*), among others.	Common in EVER along Florida Bay.	

FHa	132000	Cabbage Palm Hammock	3	Cabbage Palm (*Sabal palmetto*) dominated forest with sparse, generally less than 25%, Laural Oak (*Quercus laurifolia*), Live Oak (*Q. virginiana*), Strangler Fig (*Ficus aurea*), and Swamp Fern (*Acrostichum* spp.) as a common understory component.	Common in BICY and Florida Panther NWR.	
FHS	133000	Tropical Hardwood Hammock	3	Mix of Live Oak (Quercus virginiana), False Tamarind (Lysiloma latisiliquum), Gumbo Limbo (Bursera simaruba), Poisonwood (Metopium toxiferum), Pigeon Plum (Coccoloba diversifolia), and White Stopper (Eugenia axillaris). May also contain Strangler Fig (Ficus aurea), Swamp Bay (Persea borbonia), Dahoon Holly (Ilex Cassine), Saffron Plum (Sideroxylon celastrinum), Sugarberry (Celtis laevigata), False Mastic (Sideroxylon foetidissimum), Wax Myrtle (Myrica cerifera), and Myrsine (Myrsine floridana). Canopy heights often exceed 8 meters, except in the Keys where the canopy is typically shorter.	Commonly found south of US 41 on limestone substrates, shell mounds and even in the interior of large tree islands where flooding is rare.	
FHT	134000	Temperate Hardwood Hammock	3	Mix of Laural Oak (*Quercus laurifolia*), Live Oak (*Q. virginiana*), Cabbage Palm (*Sabal palmetto*), and occasionally Strangler Fig (*Ficus aurea*), Red Mulberry (*Morus rubra*), Hackberry (*Celtis laevigata*), Common Persimmon (*Diospyros virginiana*), and/or Saw Palmetto (*Serenoa repens*).	Commonly found north of US 41 and on sandy substrates with a dense organic layer. Common to BICY, especially Bear Island, and JW Corbett WMA.	

W	200000	Woodland	1	Specific described communities of low-density stands of trees (10 - 60% tree canopy cover) with heights greater than five meters in a matrix of shrubs, graminoids, and/or herbaceous vegetation.	Found throughout Florida.	
WM	210000	Mangrove Woodland	2	Regularly flooded woodlands that are typically found along saltwater shorelines, including Buttonwood (Conocarpus erectus).	Found along coastal Florida.	
WMa	212000	Black Mangrove Woodland	3	Black Mangrove (*Avicennia germinans*) in a matrix composed of salt marsh graminoids, herbs, and/or succulents.		
WMaG	212010	Black Mangrove-Graminoid	5	Black Mangrove (*Avicennia germinans*) in a matrix composed predominately of graminoids.		
WMaO	212020	Black Mangrove Woodland-Open Marsh	5	Black Mangrove (*Avicennia germinans*) in a matrix composed predominately of Open Marsh. Mangroves can occur in both salt and freshwater dominated marshes.		

WMaS	212030	Black Mangrove Woodland-Succulent	5	Black Mangrove (*Avicennia germinans*) in a matrix composed predominately of succulents.		
WMc	211000	Buttonwood Woodland	3	Buttonwood (*Conocarpus erectus*) in a matrix composed of salt marsh graminoids, herbs, and/or succulents.	Generally coastal in distribution, normally found along the landward edge of the mangrove zone and along the edges of hammocks bordering the transition zone between freshwater and saltwater environments; thriving in areas that are only occasionally subjected to tidal washing (e.g., elevated ridges in or near the tidal zone); southern Florida and the Keys; more specifically found along the Buttonwood ridge in ENP and around Coot Bay. However, it can be found amongt any of the other Mangrove communities.	
WMcG	211010	Buttonwood Woodland-Graminoid	5	Buttonwood *(Conocarpus erectus)* in a matrix composed predominately of graminoids.		
WMcO	211020	Buttonwood Woodland-Open Marsh	5	Buttonwood *(Conocarpus erectus)* in a matrix composed predominately of Open Marsh. Mangroves can occur in both salt and freshwater dominated marshes.		

WMcS	211030	Buttonwood Woodland-Succulent	5	Buttonwood *(Conocarpus erectus)* in a matrix composed predominately of succulents.		
WS	220000	Swamp Woodland	2	Seasonally to semi-permanently flooded freshwater woodlands.	Found throughout Florida.	
WSp	221000	Pine Lowland	3	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed of marsh graminoids, herbs, and/or shrubs. Also known as hydric pine flatwoods.	Common to EVER and BICY.	
WSpG	221010	Pine Lowland-Graminoid	5	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed predominately of graminoids, such as Sawgrass (*Cladium jamaicense*), Muhly Grass (*Muhlenbergia capillaris*), Panicgrass (*Panicum* spp.), Paspalum (*Paspalum* spp.), Little Bluestem (*Schizachyrium scoparium*), Flatsedge (*Cyperus* spp.), Spikerush (*Eleocharis* spp.), Fimbry (*Fimbristylis* spp.), Beaksedge (*Rhynchospora* spp.), Bulrush (*Scirpus* spp.), Nutrush (*Scleria* spp.), Yelloweyed Grass (*Xyris* spp.), Bluestem (*Andropogon* spp.), Threeawn (*Aristida* spp.), Witchgrass (*Dichanthelium* spp.), Lovegrass (*Eragrostis* spp.), Dropseed (*Sporobolus* spp.), and Hairsedge (*Bulbostylis* spp.).		

WSpS	221030	Pine Lowland-Shrub	5	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed predominately of shrubs and small trees, such as Wax Myrtle (Myrica cerifera), Cabbage Palm (*Sabal palmetto*), Dahoon Holly (*Ilex cassine*), Red Bay (*Persea palustris*), Buttonbush (*Cephalanthus occidentalis*), and other hardwood swamp species.		
WSpX	221040	Pine Lowland-Mixed	5	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed of a co-dominant mix (60/40% split) of graminoids and shrubs.		
WSt	222000	Cypress Woodland	3	Bald Cypress (Taxodium distichum) and/or Pond Cypress (T. ascendens) in a matrix composed of Open Marsh, graminoids, herbs, and/or shrubs.	Common in BICY and Pa-hay-okee area of EVER.	
WStG	222010	Cypress Woodland-Graminoid	5	Bald Cypress (*Taxodium distichum*) and/or Pond Cypress (*T. ascendens*) in a matrix composed predominately of graminoids, such as Sawgrass (*Cladium jamaisense*), Switchgrass (*Panicum vergatum*), Maidencane (*P. hemitomon*), among others.		
WStO	222020	Cypress Woodland-Open Marsh	5	Bald Cypress (Taxodium distichum) and/or Pond Cypress (T. ascendens) in a matrix composed predominately of Open Marsh.		

WStS	222030	Cypress Woodland-Shrub	5	Bald Cypress (*Taxodium distichum*) and/or Pond Cypress (*T. ascendens*) in a matrix composed predominately of shrubs, such as Wax Myrtle (*Myrica cerifera*), Pond Apple (*Annona glabra*), and/or Cocoplum (*Chrysobalanus icaco*).		
WU	230000	Upland Woodland	2	Briefly flooded woodlands	Found throughout Florida.	
WUp	231000	Pine Upland	3	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed of upland graminoids, herbs, and/or shrubs. Also known as a mesic pine flatwoods.		
WUpG	231010	Pine Upland-Graminoid	5	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed predominately of graminoids, such as Broomgrass (*Andropogon longiberis*), Gamagrass (*Tripsacum* spp.), Threeawn (*Aristida* spp.), Lovegrass (*Eragrostis* spp.), Witchgrass (*Dichanthelium* spp.), Panicgrass (*Panicum* spp.), among others.		

WUpS	231020	Pine Upland-Shrub	5	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed predominately of shrubs and small trees, such as Wax Myrtle (*Myrica cerifera*), Saw Palmetto (*Serenoa repens*), Cabbage Palm (*Sabal palmetto*), Fetterbush (*Lyonia lucida*), Tarflower (*Bejaria racemosa*), Rusty Staggerbush (*Lyonia ferruginea*), St. John's Wort (*Hypericum* spp.), and other upland hardwood species.		
WUpSs	231021	Pine Upland-Saw Palmetto	6	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed predominately of Saw Palmetto (*Serenoa repens*).		
WUpX	231030	Pine Upland-Mixed	5	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed of a co-dominant mix (60/40% split) of graminoids and shrubs.		
WUpO	231040	Pine Upland-Open Prairie	5	Slash Pine (*Pinus elliottii var. densa*) in a matrix composed predominately of Open Prairie.		
WUpR	231100	Pine Rockland	4	Pine Upland found on low ridges of oolitic limestone.	Found on the Miami rock ridge, in the Florida Keys, EVER, and in BICY.	

WUpRG	231110	Pine Rockland-Graminoid	5	Pine Rockland in a matrix composed predominately of graminoids, such as Broomgrass (*Andropogon longiberis*), Gamagrass (*Tripsacum* spp.), Threeawn (*Aristida* spp.), Lovegrass (*Eragrostis* spp.), Witchgrass (*Dichanthelium* spp.), Panicgrass (*Panicum* spp.), among others.		
WUpRS	231120	Pine Rockland-Shrub	5	Pine Rockland in a matrix composed predominately of shrubs and small trees, such as Wax Myrtle (*Myrica cerifera*), Saw Palmetto (*Serenoa repens*), Cabbage Palm (*Sabal palmetto*), Fetterbush (*Lyonia lucida*), Tarflower (*Bejaria racemosa*), Rusty Staggerbush (*Lyonia ferruginea*), St. John's Wort (*Hypericum* spp.), and other upland hardwood species.		
WUpRSs	231121	Pine Rockland-Saw Palmetto	6	Pine Rockland in a matrix composed predominately of Saw Palmetto (*Serenoa repens*).		
WUpRX	231130	Pine Rockland-Mixed	5	Pine Rockland in a matrix composed of a co-dominant mix (60/40% split) of graminoids and shrubs.		

WUpRO	231140	Pine Rockland-Open Prairie	5	Pine Rockland in a matrix composed predominately of Open Prairie.		
WUpF	231200	Pine Flatwoods	4	Pine Upland found on moderately to well-drained sandy soils.		
WUpFG	231210	Pine Flatwoods - Graminoid	5	Pine Flatwoods in a matrix composed predominately of graminoids, such as Broomgrass (*Andropogon longiberis*), Gamagrass (*Tripsacum* spp.), Threeawn (*Aristida* spp.), Lovegrass (*Eragrostis* spp.), Witchgrass (*Dichanthelium* spp.), Panicgrass (*Panicum* spp.), among others.		
WUpFS	231220	Pine Flatwoods - Shrub	5	Pine Flatwoods in a matrix composed predominately of shrubs and small trees, such as Wax Myrtle (*Myrica cerifera*), Saw Palmetto (*Serenoa repens*), Cabbage Palm (*Sabal palmetto*), Fetterbush (*Lyonia lucida*), Tarflower (*Bejaria racemosa*), Rusty Staggerbush (*Lyonia ferruginea*), St. John's Wort (*Hypericum* spp.), and other upland hardwood species.		

WUpFSs	231221	Pine Flatwoods - Saw Palmetto	6	Pine Flatwoods in a matrix composed predominately of Saw Palmetto (*Serenoa repens*).		
WUpFX	231230	Pine Flatwoods - Mixed	5	Pine Flatwoods in a matrix composed of a co-dominant mix (60/40% split) of graminoids and shrubs.		
WUpFO	231240	Pine Flatwoods - Open Prairie	5	Pine Flatwoods in a matrix composed predominately of Open Prairie.		
WUs	232000	Cabbage Palm Woodland	3	Cabbage Palm (*Sabal palmetto*) in a matrix composed of graminoids, herbs, and/or shrubs.	Common in and around Florida Panther NWR and near the intersection of I-75 and State Route 29.	
WUsG	232010	Cabbage Palm Woodland-Graminoid	5	Cabbage Palm *(Sabal palmetto)* in a matrix composed predominately of graminoids, such as Muhly Grass (*Muhlenbergia filipes*), among others.		

WUsS	232020	Cabbage Palm Woodland-Shrub	5	Cabbage Palm *(Sabal palmetto)* in a matrix composed predominately of shrubs, such as Falsewillow (*Baccharis* spp.), Saw Palmetto (*Serenoa repens*), among others.		
WUsSs	232021	Cabbage Palm Woodland-Saw Palmetto	6	Cabbage Palm *(Sabal palmetto)* in a matrix composed predominately of Saw Palmetto (*Serenoa repens*).		
WUsX	232030	Cabbage Palm Woodland-Mixed	5	Cabbage Palm (*Sabal palmetto*) in a matrix composed of a co-dominant mix (60/40% split) of graminoids and shrubs.		
S	300000	Shrubland	1	High-density stands of small trees and/or shrubs (≥50% tree/shrub canopy cover) with heights less than five meters. Exception: Mangrove shrubs less than or equal to 2 meters are scrub - see scrub section.	Found throughout Florida.	

SM	310000	Mangrove Shrubland	2	Regularly flooded shrublands that are typically found along saltwater shorelines, including Black Mangrove (Avicennia germinans), White Mangrove (Laguncularia racemosa), Red Mangrove (Rhizophora mangle), Buttonwood (Conocarpus erectus), and Sea-Oxeye (Borrichia spp). Canopy heights are generally less than five meters and greater than two meters.	Found along coastal Florida.	
SMa	311000	Black Mangrove Shrubland	3	Black Mangrove (*Avicennia germinans*) dominant shrubland. Black mangrove is distinguishable from other mangrove species by leaves with grayish undersurfaces, by green, flattened "lima bean-like" fruits, by dark to blackish bark, and by the presence of numerous short breathing roots projecting vertically from the ground below and around the tree.	Found along coastal Florida. Predominates in the upper part of the intertidal zone and into the irregularly flooded higher elevations; common forest fringing Florida Bay along Snake Bite in ENP; sometimes found on higher drier soils than the red or white mangrove. However, it can be found amongt any of the other Mangrove communities.	
SMb	312000	Sea-Oxeye Shrubland	3	Sea-Oxeye (*Borrichia arborescens*) dominant shrubland.	Typically found in coastal areas of BISC and southern EVER where tidal flooding is common.	

SMc	313000	Buttonwood Shrubland	3	Buttonwood (*Conocarpus erectus*) dominant shrubland; often mixed with sparse Cocoplum (*Chrysobalanus icaco*), Wax Myrtle (Myrica cerifera), and/or Red Mangrove (*Rhizophora mangle*).	Generally coastal in distribution, normally found along the landward edge of the mangrove zone and along the edges of hammocks bordering the transition zone between freshwater and saltwater environments; thriving in areas that are only occasionally subjected to tidal washing (e.g., elevated ridges in or near the tidal zone); southern Florida and the Keys; more specifically found along the Buttonwood ridge in ENP and around Coot Bay. However, it can be found amongt any of the other Mangrove communities.	
SMl	314000	White Mangrove Shrubland	3	White Mangrove (*Laguncularia racemosa*) dominant shrubland.	Found along coastal Florida. Occurs throughout the intertidal zone, but predominatley in the irregularly flooded higher portions of the swamp. However, it can be found amongt any of the other Mangrove communities.	
SMr	315000	Red Mangrove Shrubland	3	Red Mangrove (*Rhizophora mangle*) dominant shrubland; often mixed with sparse Cocoplum (Chrysobalanus icaco), Wax Myrtle (Myrica cerifera), and/or Buttonwood (*Conocarpus erectus*).	Found along coastal Florida primarily in the middle and lower portions of the intertidal and upper subtidal zone. However, it can be found amongt any of the other Mangrove communities.	

SMX	316000	Mixed Mangrove Shrubland	3	Mix of mangrove species with no particular species of dominance.		
SMXac	316100	Black Mangrove-Buttonwood Shrubland	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or Buttonwood (*Conocarpus erectus*) dominant mix.		
SMXal	316200	Black Mangrove-White Mangrove Shrubland	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or White Mangrove (*Laguncularia racemosa*) dominant mix.		
SMXar	316300	Black Mangrove-Red Mangrove Shrubland	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		
SMXcc	316400	Buttonwood-Cocoplum Shrubland	4	Co-dominant mix (60/40% split) of either Buttonwood (*Conocarpus erectus*) or Cocoplum (*Chrysobalanus icaco*) dominant mix.	Commonly found in the transition zone between freshwater and tidal environments within EVER.	

SMXcl	316500	Buttonwood-White Mangrove Shrubland	4	Co-dominant mix (60/40% split) of either Buttonwood (*Conocarpus erectus*) or White Mangrove (*Laguncularia racemosa*) dominant mix.		
SMXcr	316600	Buttonwood-Red Mangrove Shrubland	4	Co-dominant mix (60/40% split) of either Buttonwood (*Conocarpus erectus*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		
SMXlr	316700	White Mangrove-Red Mangrove Shrubland	4	Co-dominant mix (60/40% split) of either White Mangrove (*Laguncularia racemosa*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		
SMXrc	316800	Red Mangrove-Cocoplum Shrubland	4	Co-dominant mix (60/40% split) of either Red Mangrove (*Rhizophora mangle*) or Cocoplum (*Chrysobalanus icaco*) dominant mix.	Found in the transition zone between freshwater and tidal environments within EVER.	
SS	320000	Swamp Shrubland	2	Seasonally to semi-permanently flooded freshwater shrublands.	Found throughout Florida. Some of these shrublands can be found in coastal areas along the transition zone between tidal and freshwater environments.	

SSa	321000	Pond Apple Shrubland	3	Pond Apple (*Annona glabra*) dominant shrubland.	Commonly found on the banks of freshwater ponds and streams and wet hammocks; from about Brevard County southward; sparsely distributed in the Keys, especially on Big Pine and Lignum Vitae Keys.	
SSr	322000	Falsewillow Shrubland	3	Broombush Falsewillow (*Baccharis dioica*), Silverling (*B. glomeruliflora*), and/or Groundsel Bush (*B. hamlimifolia*) dominant shrubland.	Found throughout Florida along the edges of freshwater and brackish marshes, wet coastal hammocks, shores of estuaries and bays, and various disturbed places, both wet and dry.	
SSB	323000	Bayhead Shrubland	3	Mix of Cocoplum (Chrysobalanus icaco), Swamp Bay (Persea palustris), Red Bay (Persea borbonia), Dahoon Holly (Ilex cassine), Willow (Salix caroliniana), Wax Myrtle (Myrica cerifera), Sweetbay (Magnolia virginiana), Cypress (Taxodium spp.), Pond Apple (Annona glabra), among others. Note: the distinguishing feature of the Transitional Bayhead that is different from a Bayhead is the presence of Red Mangrove and Buttonwood. Once the Red Mangrove signature is gone it is nearly impossible to distinguish Buttonwood from Wax Myrtle and Dahoon Holly and so Bayheads may have some Buttonwood present if these species co-occur on a Bayhead island.	Typical of tree islands within WCA2 and Loxahatchee NWR where tree heights rarely exceed 5 meters.	

SSBT	332000	Transitional Bayhead Shrubland	3	Mix of Buttonwood (Conocarpus erectus), Cocoplum (Chrysobalanus icaco), Red Mangrove (Rhizophora mangle), Wax Myrtle (Myrica cerifera), Mahogany (Swietenia mahagoni), Poisonwood (Metopium toxiferum), and occasionally Swamp Bay (Persea palustris), Red Bay (P. borbonia), Sweetbay (Magnolia virginiana), and Dahoon Holly (Ilex cassine). Note: the distinguishing feature of the Transitional Bayhead that is different from a Bayhead is the presence of Red Mangrove and Buttonwood. Once the Red Mangrove signature is gone it is nearly impossible to distinguish Buttonwood from Wax Myrtle and Dahoon Holly and so Bayheads may have some Buttonwood present if these species co-occur on a Bayhead island.	Typically occurring in a several kilometer wide band in the southern reaches of Taylor Slough and the Southeast Saline Everglades, extending west to Mahogany Hammock in ENP, and forming a transitional forest between the exclusively freshwater Bayhead forests to the north and the coastal Buttonwood and Mangrove forests to the south. Most often associated with tree islands within the scrub Red Mangrove zone.	Armentano and others, 2002
SSc	324000	Buttonbush Shrubland	3	Buttonbush (*Cephalanthus occidentalis*) dominant shrubland.	Commonly found in wet areas and sites with standing water, such as swamps, sloughs, stream banks, depressions, marshes, and edges of ponds and lakes; throughout Florida except in the Keys.	
SSy	325000	Cocoplum Shrubland	3	Cocoplum (*Chrysobalanus icaco*) dominant shrubland.	Found in low hammocks, beaches, sand dunes, cypress heads, and other wet habitats, primarily along the coast but occasionally in inland swamps; Brevard and Charlotte Counties southward and throughout the Keys; common component of tree islands within Loxahatchee NWR and of the tidal-freshwater transition zone within EVER.	

SSf	326000	Pop Ash Shrubland	3	Pop Ash (*Fraxinus caroliniana*) dominant shrubland.	Commonly found in areas of prolonged deep inundation; riverine swamps and flood plains, wooded sloughs, wet depressions in flatwoods, ponds; distributed throughout northern Florida, southward to about the Tamiami Trail on the west coast, Martin and Palm Beach counties on the east coast.	
SSi	327000	Dahoon Holly Shrubland	3	Dahoon Holly (*Ilex cassine*) dominant shrubland.	Occurring close to the coast in the Panhandle of Florida but found throughout the peninsula, south nearly to Flamingo in Monroe County and to the Ten Thousand Islands in Collier County, not present in the Keys; often associated with Cypress ponds, flatwoods, and tree islands of the Water Conservation Areas.	

SSl	328000	Primrosewillow Shrubland	3	Peruvian Primrosewillow (*Ludwigia peruviana*) dominant shrubland and occasionally Angelstem Primrosewillow (*L. leptocarpa*) and Mexican Primrosewillow (*L. octovalvis*).	Commonly found in in shallow water of ditches, canals (along the interior side of the bounding canals of the WCAs between the canal edge and the bounding Willow stands), marshes, and adjacent to alligator holes; throughout Florida but much more common in central and southern Florida from about Gainesville southward.	
SSm	329000	Wax Myrtle Shrubland	3	Wax Myrtle (*Myrica cerifera*) dominant shrubland.	Found in a wide variety of habitats throughout Florida including the Keys; common component of tree islands throughout the WCAs; one of the State's most widespread plants.	
SSs	331000	Willow Shrubland	3	Willow (*Salix caroliniana*) dominant shrubland with sparse Leather Fern (*Acrostichum danaeifolium*), Cattail (*Typha* spp.), Sawgrass (*Cladium jamaicense*), Arrowhead (*Sagittaria* spp.), and other freshwater marsh species as possible understory components.	Typically found throughout the WCAs in monotypic stands adjacent to canals.	
SU	340000	Upland Shrubland	2	Briefly flooded shrublands	Found throughout Florida.	

SUa	341000	Nicker Bean Shrubland	3	Nicker Bean (*Caesalpinia bundoc*) dominant shrubland.	Found primarily in coastal areas along western BISC, Flamingo, and the islands of the Gulf of Mexico and the Keys; does well in disturbed areas.	
SUC	342000	Coastal Hardwood Shrubland	3	Mix of Sea Grape (*Coccoloba uvifera*), Gumbo Limbo (*Bursera simaruba*), Mahogany (*Swietenia mahagoni*), Spanish Stopper (*Eugenia foetida*), Poisonwood (*Metopium toxiferum*), Willow Bustic (*Dipholis salicifolia*), Jamaican Dogwood (*Piscidia piscipula*), Florida Thatch Palm (*Thrinax radiata*), Bahama Maidenbush (*Savia bahamensis*), Florida Swampprivet (*Forestiera segregata*), Pride-of-Big-Pine (*Strumpfia maritima*), and Yellow Neclacepod (*Sophora tomentosa*). Common understory components include Pricklypear (*Opuntia stricta*), Triangle Cactus (*Acanthocereus tetragonus*), among others.	Commonly found along coastal South Florida and especially in the Florida Keys.	
SUr	343000	Indigoberry Shrubland	3	Indigoberry (*Randia aculeata*) dominant shrubland.	Found in a variety of habitats in southern Florida and the Keys, especially in unburned pinelands and along the margins of coastal hammocks; more specifically found along the margins and as an understory component of the Jamaican Dogwood dominated coastal hammocks along Snake Bite in EVER.	

SUs	344000	Saw Palmetto Shrubland	3	Saw Palmetto (*Serenoa repens*) dominant shrubland.	Typically located in sandy prairies, dunes, flatwoods, scrub oak ridges, and Cabbage Palm (*Sabal palmetto*) hammocks. Commonly found within BICY.	
SUT	345000	Temperate Hardwood Shrubland	3	Mix of Laural Oak (*Quercus laurifolia*), Live Oak (*Q. virginiana*), Cabbage Palm (*Sabal palmetto*), and occasionally Strangler Fig (*Ficus aurea*), Red Mulberry (*Morus rubra*), Hackberry (*Celtis laevigata*), Common Persimmon (*Diospyros virginiana*), and Saw Palmetto (*Serenoa repens*).	Found north of US 41; often associated with recovering lands.	
SUH	346000	Tropical Hardwood Shrubland	3	Mix of Gumbo Limbo (*Bursera simaruba*), Poisonwood (*Metopium toxiferum*), Pigeon Plum (*Coccoloba diversifolia*), White Stopper (*Eugenia axillaris*), Strangler Fig (*Ficus aurea*), Swamp Bay (*Persea borbonia*), Dahoon Holly (*Ilex Cassine*), Saffron Plum (*Sideroxylon celastrinum*), Sugarberry (*Celtis laevigata*), False Mastic (*Sideroxylon foetidissimum*), Wax Myrtle (*Myrica cerifera*), and Myrsine (*Myrsine floridana*); similar to Tropical Hardwood Hammock (FHS) except canopy heights are less than 5 meters.		

C	400000	Scrub	1	Specific described communities of dwarf trees or low density shrubs typically in a matrix of graminoids, and/or herbaceous vegetation. Canopy cover ranges from 10% to 50% but can be as much as 100% for Mangrove and Cypress classes. Canopy heights are less than 5 meters with the exception being for Mangrove which is less than or equal to 2 meters.	Found throughout Florida.	
CM	410000	Mangrove Scrub	2	Regularly flooded dwarf trees that are typically found along saltwater shorelines and especially in the transition zone between freshwater and saltwater dominated environments. Mangrove scrub includes dwarf Black Mangrove (Avicennia germinans), dwarf White Mangrove (Laguncularia racemosa), dwarf Red Mangrove (Rhizophora mangle), and/or dwarf Buttonwood (Conocarpus erectus) with canopy heights less than two meters. Canopy densities are generally from 10% - 50% but can be as high as 100%.	Found along coastal Florida.	
CMG	410010	Mangrove Scrub-Graminoid	5	Mangrove scrub in a matrix composed predominately of graminoids.		
CMGc	410011	Mangrove Scrub-Sawgrass	6	Mangrove scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		

CMGd	410012	Mangrove Scrub-Saltgrass	6	Mangrove scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		
CMGe	410013	Mangrove Scrub-Spikerush	6	Mangrove scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMGf	410014	Mangrove Scrub-Fimbry	6	Mangrove scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMGj	410015	Mangrove Scrub-Black Rush	6	Mangrove scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMGm	410016	Mangrove Scrub-Keysgrass	6	Mangrove scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		

CMGs	410017	Mangrove Scrub-Cordgrass	6	Mangrove scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMGp	410018	Mangrove Scrub-Dropseed	6	Mangrove scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMGt	410019	Mangrove Scrub-Cattail	6	Mangrove scrub in a matrix composed predominately of Cattail (*Typha* spp.).		
CMH	410020	Mangrove Scrub-Herbaceous	5	Mangrove scrub in a matrix composed predominately of herbaceous vegetation.		
CMO	410030	Mangrove Scrub-Open Marsh	5	Mangrove scrub in a matrix composed predominately of Open Marsh or Open Salt Marsh. Mangroves can occur in both salt and freshwater dominated marshes.		

CMS	410040	Mangrove Scrub-Succulent	5	Mangrove scrub in a matrix composed predominately of succulents.		
CMSb	410041	Mangrove Scrub-Saltwort	6	Mangrove scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMSs	410042	Mangrove Scrub-Glasswort	6	Mangrove scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		
CMD	410050	Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of Mangrove scrub.		
CMa	411000	Black Mangrove Scrub	3	Black Mangrove (*Avicennia germinans*) dominant scrub.	Found along coastal Florida. Predominates in the upper part of the intertidal zone and into the irregularly flooded higher elevations; common forest fringing Florida Bay along Snake Bite in ENP; sometimes found on higher drier soils than the red or white mangrove. However, it can be found amongt any of the other Mangrove communities.	

CMaG	411010	Black Mangrove Scrub-Graminoid	5	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of graminoids.		
CMaGd	411011	Black Mangrove Scrub-Saltgrass	6	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		
CMaGf	411012	Black Mangrove Scrub-Fimbry	6	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMaGj	411013	Black Mangrove Scrub-Black Rush	6	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMaGm	411014	Black Mangrove Scrub-Keysgrass	6	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		

CMaGs	411015	Black Mangrove Scrub-Cordgrass	6	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMaGp	411016	Black Mangrove Scrub-Dropseed	6	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMaH	411020	Black Mangrove Scrub-Herbaceous	5	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of herbaceous vegetation.		
CMaO	411030	Black Mangrove Scrub-Open Marsh	5	Black Mangrove (Avicennia germinans) scrub in a matrix composed predominately of Open Salt Marsh.		
CMaS	411040	Black Mangrove Scrub-Succulent	5	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of succulents.		

CMaSb	411041	Black Mangrove Scrub-Saltwort	6	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMaSs	411042	Black Mangrove Scrub-Glasswort	6	Black Mangrove (*Avicennia germinans*) scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		
CMaD	411050	Black Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of Black Mangrove (*Avicennia germinans*) scrub.		
CMc	412000	Buttonwood Scrub	3	Buttonwood (*Conocarpus erectus*) dominant scrub; occasionally mixed with sparse Cocoplum (*Chrysobalanus icaco*), Wax Myrtle (*Myrica cerifera*), and/or Red Mangrove (*Rhizophora mangle*).	Generally coastal in distribution, normally found along the landward edge of the mangrove zone and along the edges of hammocks bordering the transition zone between freshwater and saltwater environments; thriving in areas that are only occasionally subjected to tidal washing (e.g., elevated ridges in or near the tidal zone); southern Florida and the Keys; more specifically found along the Buttonwood ridge in ENP and around Coot Bay. However, it can be found amongt any of the other Mangrove communities.	

CMcG	412010	Buttonwood Scrub-Graminoid	5	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of graminoids.		
CMcGc	412011	Buttonwood Scrub-Sawgrass	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMcGd	412012	Buttonwood Scrub-Saltgrass	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		
CMcGe	412013	Buttonwood Scrub-Spikerush	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMcGf	412014	Buttonwood Scrub-Fimbry	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		

CMcGj	412015	Buttonwood Scrub-Black Rush	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Rush (*Juncus roemerianus*).		
CMcGm	412016	Buttonwood Scrub-Keysgrass	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMcGs	412017	Buttonwood Scrub-Cordgrass	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMcGp	412018	Buttonwood Scrub-Dropseed	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMcGt	412019	Buttonwood Scrub-Cattail	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Cattail (*Typha* spp.).		

CMcH	412020	Buttonwood Scrub-Herbaceous	5	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of herbaceous vegetation.		
CMcO	412030	Buttonwood Scrub-Open Marsh	5	Buttonwood (Conocarpus erectus) scrub in a matrix composed predominately of Open Marsh or Open Salt Marsh. Buttonwood can occur in both salt and freshwater dominated marshes.		
CMcS	412040	Buttonwood Scrub-Succulent	5	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of succulents.		
CMcSb	412041	Buttonwood Scrub-Saltwort	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMcSs	412042	Buttonwood Scrub-Glasswort	6	Buttonwood (*Conocarpus erectus*) scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		

CMcD	412050	Buttonwood Scrub-Dominant	5	Greater than 50% areal coverage of Buttonwood (*Conocarpus erectus*) scrub.		
CMl	413000	White Mangrove Scrub	3	White Mangrove (*Languncularia racemosa*) dominant scrub.	Found along coastal Florida. Occurs throughout the intertidal zone, but predominatley in the irregularly flooded higher portions of the swamp. However, it can be found amongt any of the other Mangrove communities.	
CMlG	413010	White Mangrove Scrub-Graminoid	5	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of graminoids.		
CMlGc	413011	White Mangrove Scrub-Sawgrass	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMlGd	413012	White Mangrove Scrub-Saltgrass	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		

CMlGf	413013	White Mangrove Scrub-Fimbry	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMlGj	413014	White Mangrove Scrub-Black Rush	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMlGm	413015	White Mangrove Scrub-Keysgrass	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMlGs	413016	White Mangrove Scrub-Cordgrass	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMlGp	413017	White Mangrove Scrub-Dropseed	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		

CMlH	413020	White Mangrove Scrub-Herbaceous	5	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of herbaceous vegetation.		
CMlO	413030	White Mangrove Scrub-Open Marsh	5	White Mangrove (Languncularia racemosa) scrub in a matrix composed predominately of Open Salt Marsh.		
CMlS	413040	White Mangrove Scrub-Succulent	5	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of succulents.		
CMlSb	413041	White Mangrove Scrub-Saltwort	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMlSs	413042	White Mangrove Scrub-Glasswort	6	White Mangrove (*Languncularia racemosa*) scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		

CMID	413050	White Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of White Mangrove (*Languncularia racemosa*) scrub.		
CMr	414000	Red Mangrove Scrub	3	Red Mangrove (*Rizophora mangle*) dominant scrub; occasionally mixed with sparse Cocoplum (*Chrysobalanus icaco*), Wax Myrtle (*Myrica cerifera*), and/or Buttonwood (*Conocarpus erectus*).	Found along coastal Florida primarily in the middle and lower portions of the intertidal and upper subtidal zone. However, it can be found amongt any of the other Mangrove communities.	
CMrG	414010	Red Mangrove Scrub-Graminoid	5	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of graminoids.		
CMrGc	414011	Red Mangrove Scrub-Sawgrass	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMrGd	414012	Red Mangrove Scrub-Saltgrass	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		

CMrGe	414013	Red Mangrove Scrub-Spikerush	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMrGf	414014	Red Mangrove Scrub-Fimbry	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMrGj	414015	Red Mangrove Scrub-Black Rush	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMrGm	414016	Red Mangrove Scrub-Keysgrass	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMrGs	414017	Red Mangrove Scrub-Cordgrass	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		

CMrGp	414018	Red Mangrove Scrub-Dropseed	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMrGt	414019	Red Mangrove Scrub-Cattail	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Cattail (*Typha* spp.).		
CMrH	414020	Red Mangrove Scrub-Herbaceous	5	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of herbaceous vegetation.		
CMrO	414030	Red Mangrove Scrub-Open Marsh	5	Red Mangrove (Rizophora mangle) scrub in a matrix composed predominately of Open Marsh or Open Salt Marsh. Red Mangrove can occur in both salt and freshwater dominated marshes.		
CMrS	414040	Red Mangrove Scrub-Succulent	5	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of succulents.		

CMrSb	414041	Red Mangrove Scrub-Saltwort	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMrSs	414042	Red Mangrove Scrub-Glasswort	6	Red Mangrove (*Rizophora mangle*) scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		
CMrD	414050	Red Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of Red Mangrove (*Rizophora mangle*) scrub.		
CMX	415000	Mixed Mangrove Scrub	3	Mix of mangrove species with no particular species of dominance.	Found along coastal Florida.	
CMXG	415010	Mixed Mangrove Scrub-Graminoid	5	Mixed mangrove scrub in a matrix composed predominately of graminoids.		

CMXGc	415011	Mixed Mangrove Scrub-Sawgrass	6	Mixed mangrove scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMXGd	415012	Mixed Mangrove Scrub-Saltgrass	6	Mixed mangrove scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		
CMXGe	415013	Mixed Mangrove Scrub-Spikerush	6	Mixed mangrove scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMXGf	415014	Mixed Mangrove Scrub-Fimbry	6	Mixed mangrove scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMXGj	415015	Mixed Mangrove Scrub-Black Rush	6	Mixed mangrove scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		

CMXGm	415016	Mixed Mangrove Scrub-Keysgrass	6	Mixed mangrove scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMXGs	415017	Mixed Mangrove Scrub-Cordgrass	6	Mixed mangrove scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMXGp	415018	Mixed Mangrove Scrub-Dropseed	6	Mixed mangrove scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMXGt	415019	Mixed Mangrove Scrub-Cattail	6	Mixed mangrove scrub in a matrix composed predominately of Cattail (*Typha* spp.).		
CMXH	415020	Mixed Mangrove Scrub-Herbaceous	5	Mixed mangrove scrub in a matrix composed predominately of herbaceous vegetation.		

CMXO	415030	Mixed Mangrove Scrub-Open Marsh	5	Mixed mangrove scrub in a matrix composed predominately of Open Marsh or Open Salt Marsh. Mangroves can occur in both salt and freshwater dominated marshes.		
CMXS	415040	Mixed Mangrove Scrub-Succulent	5	Mixed mangrove scrub in a matrix composed predominately of succulents.		
CMXSb	415041	Mixed Mangrove Scrub-Saltwort	6	Mixed mangrove scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMXSs	415042	Mixed Mangrove Scrub-Glasswort	6	Mixed mangrove scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		
CMXD	415050	Mixed Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of Mixed Mangrove scrub.		

CMXac	415100	Black Mangrove-Buttonwood Scrub	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or Buttonwood (*Conocarpus erectus*) dominant mix.		
CMXacG	415110	Black Mangrove-Buttonwood Scrub-Graminoid	5	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of graminoids.		
CMXacGc	415111	Black Mangrove-Buttonwood Scrub-Sawgrass	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMXacGd	415112	Black Mangrove-Buttonwood Scrub-Saltgrass	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		
CMXacGe	415113	Black Mangrove-Buttonwood Scrub-Spikerush	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		

CMXacGf	415114	Black Mangrove-Buttonwood Scrub-Fimbry	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMXacGj	415115	Black Mangrove-Buttonwood Scrub-Black Rush	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMXacGm	415116	Black Mangrove-Buttonwood Scrub-Keysgrass	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMXacGs	415117	Black Mangrove-Buttonwood Scrub-Cordgrass	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMXacGp	415118	Black Mangrove-Buttonwood Scrub-Dropseed	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		

CMXacH	415120	Black Mangrove-Buttonwood Scrub-Herbaceous	5	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of herbaceous vegetation.		
CMXacO	415130	Black Mangrove-Buttonwood Scrub-Open Marsh	5	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Open Salt Marsh.		
CMXacS	415140	Black Mangrove-Buttonwood Scrub-Succulent	5	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of succulents.		
CMXacSb	415141	Black Mangrove-Buttonwood Scrub-Saltwort	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMXacSs	415142	Black Mangrove-Buttonwood Scrub-Glasswort	6	Black Mangrove-Buttonwood Scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		

CMXacD	415150	Black Mangrove-Buttonwood Scrub-Dominant	5	Greater than 50% areal coverage of Black Mangrove-Buttonwood Scrub.		
CMXal	415200	Black Mangrove-White Mangrove Scrub	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or White Mangrove (*Laguncularia racemosa*) dominant mix.		
CMXalG	415210	Black Mangrove-White Mangrove Scrub-Graminoid	5	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of graminoids.		
CMXalGc	415211	Black Mangrove-White Mangrove Scrub-Sawgrass	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMXalGd	415212	Black Mangrove-White Mangrove Scrub-Saltgrass	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		

CMXalGe	415213	Black Mangrove-White Mangrove Scrub-Spikerush	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMXalGf	415214	Black Mangrove-White Mangrove Scrub-Fimbry	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMXalGj	415215	Black Mangrove-White Mangrove Scrub-Black Rush	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMXalGm	415216	Black Mangrove-White Mangrove Scrub-Keysgrass	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMXalGs	415217	Black Mangrove-White Mangrove Scrub-Cordgrass	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		

CMXalGp	415218	Black Mangrove-White Mangrove Scrub-Dropseed	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMXalH	415220	Black Mangrove-White Mangrove Scrub-Herbaceous	5	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of herbaceous vegetation.		
CMXalO	415230	Black Mangrove-White Mangrove Scrub-Open Marsh	5	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Open Salt Marsh.		
CMXalS	415240	Black Mangrove-White Mangrove Scrub-Succulent	5	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of succulents.		
CMXalSb	415241	Black Mangrove-White Mangrove Scrub-Saltwort	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		

CMXalSs	415242	Black Mangrove-White Mangrove Scrub-Glasswort	6	Black Mangrove-White Mangrove Scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		
CMXalD	415250	Black Mangrove-White Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of Black Mangrove-White Mangrove Scrub.		
CMXar	415300	Black Mangrove-Red Mangrove Scrub	4	Co-dominant mix (60/40% split) of either Black Mangrove (*Avicennia germinans*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		
CMXarG	415310	Black Mangrove-Red Mangrove Scrub-Graminoid	5	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of graminoids.		
CMXarGc	415311	Black Mangrove-Red Mangrove Scrub-Sawgrass	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		

CMXarGd	415312	Black Mangrove-Red Mangrove Scrub-Saltgrass	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		
CMXarGe	415313	Black Mangrove-Red Mangrove Scrub-Spikerush	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMXarGf	415314	Black Mangrove-Red Mangrove Scrub-Fimbry	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMXarGj	415315	Black Mangrove-Red Mangrove Scrub-Black Rush	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMXarGm	415316	Black Mangrove-Red Mangrove Scrub-Keysgrass	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		

CMXarGs	415317	Black Mangrove-Red Mangrove Scrub-Cordgrass	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMXarGp	415318	Black Mangrove-Red Mangrove Scrub-Dropseed	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMXarH	415320	Black Mangrove-Red Mangrove Scrub-Herbaceous	5	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of herbaceous vegetation.		
CMXarO	415330	Black Mangrove-Red Mangrove Scrub-Open Marsh	5	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Open Salt Marsh.		
CMXarS	415340	Black Mangrove-Red Mangrove Scrub-Succulent	5	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of succulents.		

CMXarSb	415341	Black Mangrove-Red Mangrove Scrub-Saltwort	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMXarSs	415342	Black Mangrove-Red Mangrove Scrub-Glasswort	6	Black Mangrove-Red Mangrove Scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		
CMXarD	415350	Black Mangrove-Red Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of Black Mangrove-Red Mangrove Scrub.		
CMXcl	415400	Buttonwood-White Mangrove Scrub	4	Co-dominant mix (60/40% split) of either Buttonwood (*Conocarpus erectus*) or White Mangrove (*Laguncularia racemosa*) dominant mix.		
CMXclG	415410	Buttonwood-White Mangrove Scrub-Graminoid	5	Buttonwood-White Mangrove Scrub in a matrix composed predominately of graminoids.		

CMXclGc	415411	Buttonwood-White Mangrove Scrub-Sawgrass	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMXclGd	415412	Buttonwood-White Mangrove Scrub-Saltgrass	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		
CMXclGe	415413	Buttonwood-White Mangrove Scrub-Spikerush	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMXclGf	415414	Buttonwood-White Mangrove Scrub-Fimbry	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMXclGj	415415	Buttonwood-White Mangrove Scrub-Black Rush	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		

CMXclGm	415416	Buttonwood-White Mangrove Scrub-Keysgrass	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMXclGs	415417	Buttonwood-White Mangrove Scrub-Cordgrass	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMXclGp	415418	Buttonwood-White Mangrove Scrub-Dropseed	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMXclH	415420	Buttonwood-White Mangrove Scrub-Herbaceous	5	Buttonwood-White Mangrove Scrub in a matrix composed predominately of herbaceous vegetation.		
CMXclO	415430	Buttonwood-White Mangrove Scrub-Open Marsh	5	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Open Salt Marsh.		

CMXclS	415440	Buttonwood-White Mangrove Scrub-Succulent	5	Buttonwood-White Mangrove Scrub in a matrix composed predominately of succulents.		
CMXclSb	415441	Buttonwood-White Mangrove Scrub-Saltwort	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMXclSs	415442	Buttonwood-White Mangrove Scrub-Glasswort	6	Buttonwood-White Mangrove Scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		
CMXclD	415450	Buttonwood-White Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of Buttonwood-White Mangrove Scrub.		
CMXcr	415500	Buttonwood-Red Mangrove Scrub	4	Co-dominant mix (60/40% split) of either Buttonwood (*Conocarpus erectus*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		

CMXcrG	415510	Buttonwood-Red Mangrove Scrub-Graminoid	5	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of graminoids.		
CMXcrGc	415511	Buttonwood-Red Mangrove Scrub-Sawgrass	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMXcrGd	415512	Buttonwood-Red Mangrove Scrub-Saltgrass	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		
CMXcrGe	415513	Buttonwood-Red Mangrove Scrub-Spikerush	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMXcrGf	415514	Buttonwood-Red Mangrove Scrub-Fimbry	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		

CMXcrGj	415515	Buttonwood-Red Mangrove Scrub-Black Rush	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMXcrGm	415516	Buttonwood-Red Mangrove Scrub-Keysgrass	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMXcrGs	415517	Buttonwood-Red Mangrove Scrub-Cordgrass	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		
CMXcrGp	415518	Buttonwood-Red Mangrove Scrub-Dropseed	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMXcrGt	415519	Buttonwood-Red Mangrove Scrub-Cattail	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Cattail (*Typha* spp.).		

CMXcrH	415520	Buttonwood-Red Mangrove Scrub-Herbaceous	5	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of herbaceous vegetation.		
CMXcrO	415530	Buttonwood-Red Mangrove Scrub-Open Marsh	5	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Open Marsh or Open Salt Marsh. Buttonwood and Red Mangrove can occur in both salt and freshwater dominated marshes.		
CMXcrS	415540	Buttonwood-Red Mangrove Scrub-Succulent	5	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of succulents.		
CMXcrSb	415541	Buttonwood-Red Mangrove Scrub-Saltwort	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		
CMXcrSs	415542	Buttonwood-Red Mangrove Scrub-Glasswort	6	Buttonwood-Red Mangrove Scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		

CMXcrD	415550	Buttonwood-Red Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of Buttonwood-Red Mangrove Scrub.		
CMXlr	415600	White Mangrove-Red Mangrove Scrub	4	Co-dominant mix (60/40% split) of either White Mangrove (*Laguncularia racemosa*) or Red Mangrove (*Rhizophora mangle*) dominant mix.		
CMXlrG	415610	White Mangrove-Red Mangrove Scrub-Graminoid	5	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of graminoids.		
CMXlrGc	415611	White Mangrove-Red Mangrove Scrub-Sawgrass	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CMXlrGd	415612	White Mangrove-Red Mangrove Scrub-Saltgrass	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Saltgrass (*Distichlis spicata*).		

CMXlrGe	415613	White Mangrove-Red Mangrove Scrub-Spikerush	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CMXlrGf	415614	White Mangrove-Red Mangrove Scrub-Fimbry	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Marsh Frimbrey (*Fimbristylis spadicea*).		
CMXlrGj	415615	White Mangrove-Red Mangrove Scrub-Black Rush	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Black Rush (*Juncus roemerianus*).		
CMXlrGm	415616	White Mangrove-Red Mangrove Scrub-Keysgrass	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Keysgrass (*Monanthocloe littoralis*).		
CMXlrGs	415617	White Mangrove-Red Mangrove Scrub-Cordgrass	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Cordgrass (*Spartina* spp.).		

CMXlrGp	415618	White Mangrove-Red Mangrove Scrub-Dropseed	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Seashore Dropseed (*Sporobulus virginicus*).		
CMXlrH	415620	White Mangrove-Red Mangrove Scrub-Herbaceous	5	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of herbaceous vegetation.		
CMXlrO	415630	White Mangrove-Red Mangrove Scrub-Open Marsh	5	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Open Salt Marsh.		
CMXlrS	415640	White Mangrove-Red Mangrove Scrub-Succulent	5	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of succulents.		
CMXlrSb	415641	White Mangrove-Red Mangrove Scrub-Saltwort	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Saltwort (*Batis maritima*).		

CMXlrSs	415642	White Mangrove-Red Mangrove Scrub-Glasswort	6	White Mangrove-Red Mangrove Scrub in a matrix composed predominately of Glasswort (*Salicornia* spp.).		
CMXlrD	415650	White Mangrove-Red Mangrove Scrub-Dominant	5	Greater than 50% areal coverage of White Mangrove-Red Mangrove Scrub.		
CS	420000	Swamp Scrub	2	Freshwater marsh communities with dwarf trees or low density (10% - 49%) shrubs. Canopy cover ranges from 10% to 50% but can be as much as 100% for some classes (e.g., Hardwood Swamp Scrub and Cypress Scrub).	Found throughout Florida. Some of these scrubs can be found in coastal areas along the transition zone between tidal and freshwater environments.	
CSE	420010	Swamp Scrub-Emergent	5	Swamp scrub in a matrix composed predominately of broadleaf emergent vegetation.		
CSG	420020	Swamp Scrub-Graminoid Marsh	5	Swamp scrub in a matrix composed predominately of Freshwater Graminoid Marsh.		

CSGc	420021	Swamp Scrub-Sawgrass	6	Swamp scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CSGe	420022	Swamp Scrub-Spikerush	6	Swamp scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CSGa	420023	Swamp Scrub-Panicgrass	6	Swamp scrub in a matrix composed predominately of Panicgrass (*Panicum* spp.).		
CSGt	420024	Swamp Scrub-Cattail	6	Swamp scrub in a matrix composed predominately of Cattail (*Typha* spp.).		
CSGP	420030	Swamp Scrub-Graminoid Prairie	5	Swamp scrub in a matrix composed predominately of Freshwater Graminoid Prairie.		

CSGPm	420031	Swamp Scrub-Muhly Grass	6	Swamp scrub in a matrix composed predominately of Muhly Grass (*Muhlenbergia capillaris var. filipes*).		
CSH	420040	Swamp Scrub-Herbaceous	5	Swamp scrub in a matrix composed predominately of herbaceous vegetation.		
CSO	420050	Swamp Scrub-Open Marsh	5	Swamp scrub in a matrix composed predominately of Open Marsh.		
CSD	420060	Swamp Scrub-Dominant	5	Greater than 50% areal coverage of Swamp scrub.		

CSW	421000	Hardwood Swamp Scrub	3	Mix of dwarf trees and/or shrubs such as Red Bay (*Persea borbonia*), Sweet Bay (*Magnolia virginiana*), Myrsine (*Myrsine floridana*), Buttonwood (*Conocarpus erectus*), Willow (*Salix caroliniana*), Wax Myrtle (*Myrica cerifera*), Dahoon Holly (*Ilex cassine*), and/or Cocoplum (*Chrysobalanus icaco*) in a matrix of grasses, herbs, and, at times, including various species of vines. Canopy density will range from 10% - 49%. Canopy heights can vary according to the composition of hardwoods.	Often associated with flooded out or otherwise disturbed tree islands.	
CSWE	421010	Hardwood Swamp Scrub-Emergent	5	Hardwood Swamp Scrub in a matrix composed predominately of broadleaf emergent vegetation.		
CSWG	421020	Hardwood Swamp Scrub-Graminoid Marsh	5	Hardwood Swamp Scrub in a matrix composed predominately of Freshwater Graminoid Marsh.		
CSWGc	421021	Hardwood Swamp Scrub-Sawgrass	6	Hardwood Swamp Scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		

CSWGe	421022	Hardwood Swamp Scrub-Spikerush	6	Hardwood Swamp Scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CSWGa	421023	Hardwood Swamp Scrub-Panicgrass	6	Hardwood Swamp Scrub in a matrix composed predominately of Panicgrass (*Panicum* spp.).		
CSWGt	421024	Hardwood Swamp Scrub-Cattail	6	Hardwood Swamp scrub in a matrix composed predominately of Cattail (*Typha* spp.).		
CSWGP	421030	Hardwood Swamp Scrub-Graminoid Prairie	5	Hardwood Swamp Scrub in a matrix composed predominately of Freshwater Graminoid Prairie.		
CSWGPm	421031	Hardwood Swamp Scrub-Muhly Grass	6	Hardwood Swamp scrub in a matrix composed predominately of Muhly Grass (*Muhlenbergia capillaris var. filipes*).		

CSWH	421040	Hardwood Swamp Scrub-Herbaceous	5	Hardwood Swamp Scrub in a matrix composed predominately of herbaceous vegetation.		
CSWO	421050	Hardwood Swamp Scrub-Open Marsh	5	Hardwood Swamp Scrub in a matrix composed predominately of Open Marsh.		
CSWD	421060	Hardwood Swamp Scrub-Dominant	5	Greater than 50% areal coverage of Hardwood Swamp Scrub.		
CSm	422000	Wax Myrtle Scrub	3	Wax Myrtle (*Myrica cerifera*) characterized by canopy densities from 10% - 49% in a matrix of graminoids and/or herbaceous vegetation.		
CSmE	422010	Wax Myrtle Scrub-Emergent	5	Wax Myrtle (Myrica cerifera) scrub in a matrix composed predominately of broadleaf emergent vegetation.		

CSmG	422020	Wax Myrtle Scrub-Graminoid Marsh	5	Wax Myrtle (*Myrica cerifera*) scrub in a matrix composed predominately of Freshwater Graminoid Marsh.		
CSmGc	422021	Wax Myrtle Scrub-Sawgrass	6	Wax Myrtle (*Myrica cerifera*) scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CSmGe	422022	Wax Myrtle Scrub-Spikerush	6	Wax Myrtle (*Myrica cerifera*) scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CSmGa	422023	Wax Myrtle Scrub-Panicgrass	6	Wax Myrtle (*Myrica cerifera*) scrub in a matrix composed predominately of Panicgrass (*Panicum* spp.).		
CSmGt	422024	Wax Myrtle Scrub-Cattail	6	Wax Myrtle (*Myrica cerifera*) scrub in a matrix composed predominately of Cattail (*Typha* spp.).		

CSmGP	422030	Wax Myrtle Scrub-Graminoid Prairie	5	Wax Myrtle (*Myrica cerifera*) scrub in a matrix composed predominately of Freshwater Graminoid Prairie.		
CSmGPm	422031	Wax Myrtle Scrub-Muhly Grass	6	Wax Myrtle (*Myrica cerifera*) scrub in a matrix composed predominately of Muhly Grass (*Muhlenbergia capillaris var. filipes*).		
CSmH	422040	Wax Myrtle Scrub-Herbaceous	5	Wax Myrtle (*Myrica cerifera*) scrub in a matrix composed predominately of herbaceous vegetation.		
CSmO	422050	Wax Myrtle Scrub-Open Marsh	5	Wax Myrtle (Myrica cerifera) scrub in a matrix composed predominately of Open Marsh.		
CSs	423000	Willow Scrub	3	Willow (*Salix caroliniana*) characterized by canopy densities from 10% - 49% in a matrix of graminoids and/or herbaceous vegetation.		

CSsE	423010	Willow Scrub-Emergent	5	Willow (*Salix caroliniana*) scrub in a matrix composed predominately of broadleaf emergent vegetation.		
CSsG	423020	Willow Scrub-Graminoid Marsh	5	Willow (*Salix caroliniana*) scrub in a matrix composed predominately of Freshwater Graminoid Marsh.		
CSsGc	423021	Willow Scrub-Sawgrass	6	Willow (*Salix caroliniana*) scrub in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CSsGe	423022	Willow Scrub-Spikerush	6	Willow (*Salix caroliniana*) scrub in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CSsGa	423023	Willow Scrub-Panicgrass	6	Willow (*Salix caroliniana*) scrub in a matrix composed predominately of Panicgrass (*Panicum* spp.).		

CSsGt	423024	Willow Scrub-Cattail	6	Willow (*Salix caroliniana*) scrub in a matrix composed predominately of Cattail (*Typha* spp.).		
CSsH	423030	Willow Scrub-Herbaceous	5	Willow (*Salix caroliniana*) scrub in a matrix composed predominately of herbaceous vegetation.		
CSsO	423040	Willow Scrub-Open Marsh	5	Willow (Salix caroliniana) scrub in a matrix composed predominately of Open Marsh.		
CSt	424000	Cypress Scrub	3	Dwarf Pond Cypress (*Taxodium ascendens*) and/or dwarf Bald Cypress (*T. distichum*) trees with canopy heights generally below five meters. Canopy densities are generally from 10% - 49% but can be as high as 100%.		
CStE	424010	Cypress Scrub-Emergent	5	Dwarf Cypress (Taxodium spp.) in a matrix composed predominately of broadleaf emergent vegetation.		

CStG	424020	Cypress Scrub-Graminoid Marsh	5	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of Freshwater Graminoid Marsh.		
CStGc	424021	Cypress Scrub-Sawgrass	6	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of Sawgrass (*Cladium jamaicense*).		
CStGe	424022	Cypress Scrub-Spikerush	6	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of Spikerush (*Eleocharis* spp.).		
CStGa	424023	Cypress Scrub-Panicgrass	6	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of Panicgrass (*Panicum* spp.).		
CStGs	424024	Cypress Scrub-Gulfdune Paspalum	6	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of Gulfdune Paspalum (*Paspalum monostachyum*).		

CStGt	424026	Cypress Scrub-Cattail	6	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of Cattail (*Typha* spp.).		
CStGP	424030	Cypress Scrub-Graminoid Prairie	5	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of Freshwater Graminoid Prairie.		
CStGPm	424031	Cypress Scrub-Muhly Grass	6	Dwarf Cypress (*Taxodium* spp.) scrub in a matrix composed predominately of Muhly Grass (*Muhlenbergia capillaris var. filipes*).		
CStGPs	424032	Cypress Scrub-Little Bluestem	6	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of Little Bluestem (*Schizachyrium* scoparium).		
CStH	424040	Cypress Scrub-Herbaceous	5	Dwarf Cypress (*Taxodium* spp.) in a matrix composed predominately of herbaceous vegetation.		

CStO	424050	Cypress Scrub-Open Marsh	5	Dwarf Cypress (Taxodium spp.) in a matrix composed predominately of Open Marsh.		
CStD	424060	Cypress Scrub-Dominant	5	Greater than 50% areal coverage of Dwarf Cypress (*Taxodium* spp.).		
CU	430000	Upland Scrub	2	Upland graminoid and/or herbaceous dominant communities with dwarf trees and/or shrubs.	Found throughout Florida.	
CUG	430010	Upland Scrub-Graminoid Prairie	5	Upland scrub in a matrix of graminoids.		
CUH	430020	Upland Scrub-Herbaceous	5	Upland scrub in a matrix of herbaceous vegetation.		

CUW	431000	Upland Hardwood Scrub	3	Mix of dwarf trees and/or shrubs such as Live Oak (*Quercus virginiana*), Poisonwood (*Metopium toxiferum*), Red Bay (*Persea borbonia*), Sweet Bay (*Magnolia virginiana*), Myrsine (*Myrsine floridana*), Wax Myrtle (*Myrica cerifera*), Dahoon Holly (*Ilex cassine*), Buttonwood (*Conocarpus erectus*), Cocoplum (*Chrysobalanus icaco*), Varnish Leaf (*Dodonaea viscosa*), and/or Trema (*Trema* spp.) in a matrix of grasses, herbs, and, at times, including various species of vines. Canopy density will range from 10% - 49%. Canopy heights can vary according to the composition of hardwoods.	Often associated with burned out hammocks.	
CUWG	431010	Upland Hardwood Scrub-Graminoid Prairie	5	Upland Hardwood Scrub in a matrix of graminoids.		
CUWH	431020	Upland Hardwood Scrub-Herbaceous	5	Upland Hardwood Scrub in a matrix of herbaceous vegetation.		

M	500000	Marsh	1	Graminoid and/or herbaceous emergent or floating vegetation in shallow water that stands at or above the ground surface for much of the year.	Found throughout Florida.	
MS	510000	Salt Marsh	2	A marsh consisting of salt tolerant graminoid and/or herbaceous vegetation.	Found along coastal Florida.	
MSG	511000	Graminoid Salt Marsh	3	Graminoid dominated salt marsh.	Found along coastal Florida.	
MSGd	511100	Saltgrass	4	Saltgrass (*Distichlis spicata*) dominated salt marsh.	Found in salt marshes and flats, brackish habitats and wet marl near the coast; frequent to common, throughout coastal Florida.	
MSGj	511200	Black Rush	4	Black Rush (*Juncus roemerianus*) dominated salt marsh.	Commonly found in tidal marshes; typical of southwest BICY and southern mainland BISC.	

MSGm	511300	Keysgrass	4	Keysgrass (*Monanthocloe littoralis*) dominated salt marsh.	Found in salty shores, tidal flats and salt marshes; frequent, coastal south, central, and north Florida.	
MSGs	511400	Cordgrass	4	Sand Cordgrass (*Spartina bakeri*) and/or Gulf Cordgrass (*S. spartinae*) dominated salt marsh.	Commonly found in tidal marshes. However, *Spartina bakeri* can also be found in freshwater marshes.	
MSGp	511500	Dropseed	4	Dropseed (*Sporobolus* spp.) dominated salt marsh.	Common throughout coastal Florida.	
MSH	512000	Herbaceous Salt Marsh	3	Herbaceous dominated salt marsh.	Found along coastal Florida.	
MSO	513000	Open Salt Marsh	3	Open water dominated salt marsh often with a mix of sparse graminoids and/or herbaceous salt marsh vegetation, such as Black Rush (*Juncus roemerianus*) and/or Cordgrass (*Spartina* spp.).	Found along coastal Florida.	

MSS	514000	Succulent Salt Marsh	3	Succulent dominated salt marsh.	Found along coastal Florida.	
MSSb	514100	Saltwort	4	Saltwort (*Batis maritima*) dominated salt marsh	Found bordering salt ponds, marshes, salt flats and fringes of mangrove mud; common along Snake Bite in EVER.	
MSSs	514200	Glasswort	4	Glasswort (*Salicornia* spp.) dominated salt marsh.	Found in salt and brackish marshes and flats; throughout coastal regions of Florida; common along Snake Bite in EVER.	
MSSe	514300	Sea Purslane	4	Sea Purslane (*Sesuvium* spp.) dominated salt marsh.	Found on beaches, dunes, marshes and marsh banks, salt flats and meadows, mangrove fringes, and other wet open places; throughout coastal Florida.	
MF	520000	Freshwater Marsh	2	Freshwater graminoid and/or herbaceous marsh.	Found throughout Florida.	

MFB	521000	Broadleaf Emergent Marsh	3	Broadleaf emergent dominated freshwater marsh.	Found throughout Florida.	
MFBa	521100	Leather Fern	4	Golden Leather Fern (*Acrostichum aureum*) and/or Giant Leather Fern (*A. danaeifolium*) dominated marsh.	Found in freshwater, brackish, salt marshes, coastal hammocks, and mangrove swamps; Golden Leather Fern is found in southwestern coastal Florida from Manatee Co. south; Giant Leather Fern is widely distributed both coastally and inland in central and south Florida.	
MFBp	521200	Pickerelweed	4	Pickerelweed (*Pontederia cordata*) dominated marsh.	Frequent throughout Florida in marshes, streams, ditches, and shallow water of lakes and ponds.	
MFBs	521300	Arrowhead	4	Lanceleaf Arrowhead (*Sagittaria lancifolia*) and/or Broadleaf Arrowhead (*S. latifolia*) dominated marsh.	Found throughout Florida in marshes, ditches, swamps, and lake margins.	
MFBt	521400	Alligator Flag	4	Alligator Flag (*Thalia geniculata*) dominated marsh.	Found throughout south Florida in depression marshes, riverine marshes, open ponds in cypress sloughs, ditches, and canal margins with extended periods of deep inundation.	

MFG	522000	Graminoid Freshwater Marsh	3	Graminoid dominated freshwater marsh.	Found throughout Florida.	
MFGc	522100	Sawgrass	4	Sawgrass (*Cladium jamaicense*) dominated marsh.	Found in swamps, marshes, shores of lakes, and coastal marshes; dominant plant of the Greater Everglades system, including EVER and the WCAs.	
MFGcS	522110	Sawgrass-Short	5	Sawgrass (*Cladium jamaicense*) dominated marsh with average height less than 2.5 meters.		
MFGcT	522120	Sawgrass-Tall	5	Sawgrass (*Cladium jamaicense*) dominated marsh with average height greater than 2.5 meters.		
MFGe	522200	Spikerush	4	Coastal Spikerush (*Eleocharis cellulosa*), Slim Spikerush (*E. elongata*), and/or Knotted Spikerush (*E. interstincta*) dominated marsh.	Found in marshes, swamps, rivers, streams, lakes, ponds, ditches, canals, and floodplains; common throughout the Greater Everglades system, including ENP and the WCAs.	

MFGj	522300	Soft Rush	4	Soft Rush (*Juncus effusus*) dominated marsh.	Typically found in Central Florida and the Kissimmee River.	
MFGa	522400	Panicgrass	4	Maidencane (*Panicum hemitomon*) and/or Redtop Panicum (*P. rigidulum*) dominated marsh.	Generally located in shallow water of ponds, lakes, marshes, ditches, and canals; found sporadically throughout the Greater Everglades system.	
MFGh	522500	Common Reed	4	Common Reed (*Phragmites australis*) dominated marsh.	Found in all types of wet habitats and adjoining banks; found throughout Florida and more frequent in south Florida; commonly located along the canals of the WCAs.	
MFGs	522600	American Cupscale	4	American Cupscale (*Sacciolepis striata*) dominated marsh.	Found in mostly still water or along banks and shores of canals, marshes, lakes, floating islands, streams, ditches, rivers, glades, pastures, swamps, wet fields, ponds, low pinelands, and wet hammocks; common throughout Florida; occasionally found in disturbed areas along the canals and levees of the WCAs.	

MFGt	522700	Cattail	4	Southern Cattail (*Typha domingensis*) and/or Broadleaf Cattail (*T. latifolia*) dominated marsh.	Found throughout Florida; common throughout the greater Everglades in eutrophic soils.	
MFGtM	522710	Cattail Monotypic	5	Greater than or equal to 90% areal coverage of Cattail.		
MFGtD	522720	Cattail Dominant	5	50% to 89% areal coverage of Cattail.		
MFGtS	522730	Cattail Sparse	5	10% to 49% areal coverage of Cattail.		
MFGz	522800	Giant Cutgrass	4	Giant Cutgrass (*Zizaniopsis miliacea*) dominated marsh.		

MFGP	523000	Graminoid Freshwater Prairie	3	Short hydroperiod marsh characterized by a mix of graminoids that includes low-stature sawgrass (*Cladium jamaicense*), Muhly Grass (*Muhlenbergia capillaris var. filipes*), Little Bluestem (*Schizachyrium scoparium*), Gulfdune Paspalum (*Paspalum monostachyum*), Beakrush (*Rhynchospora* spp.), Black Sedge (S*choenus nigricans*), among others.		
MFGPc	523100	Sawgrass-Prairie	4	Sawgrass (*Cladium jamaicense*) dominated wet prairie (i.e., short hydroperiod marsh) with average height less than 1.5 meters.	Typical component of marl wet prairies.	Ross and others, 2006
MFGPcm	523200	Sawgrass-Muhly	4	Co-dominant mix of low stature Sawgrass (*Cladium jamaicense*) and Muhly Grass (*Muhlenbergia capillaris var. filipes*) dominated wet prairie (i.e., short hydroperiod marsh).	Typical component of marl wet prairies.	Ross and others, 2006
MFGPcps	523300	Sawgrass-Paspalum-Little Bluestem	4	Mix of low stature Sawgrass (*Cladium jamaicense*), Gulfdune Paspalum (*Paspalum monostachyum*), and Little Bluestem (*Schizachyrium scoparium*) dominated wet prairie (i.e., short hydroperiod marsh).	Typical component of marl wet prairies.	Ross and others, 2006
MFGPcr	523400	Sawgrass-Beakrush	4	Co-dominant mix of low stature Sawgrass (*Cladium jamaicense*) and Beakrush (*Rynchospora* spp.).	Typical component of marl prairies.	Ross and others, 2006

MFGPm	523500	Muhly Grass	4	Muhly Grass (*Muhlenbergia capillaris var. filipes*) dominated wet prairie (i.e., short hydroperiod marsh).	Found on sandy or rocky soils of ridges, flatwoods, low woods, swales, saline flats, beaches and dunes; frequent throughout Florida.	Ross and others, 2006
MFGPs	523600	Little Bluestem	4	Little Bluestem (*Schizachyrium scoparium*) dominated wet prairie (i.e., short hydroperiod marsh).	Found in open glades, wet prairies and along margins and open areas of limestone pine rocklands; restricted to south Florida from Miami southward to Big Pine Key, including the Everglades Keys.	Ross and others, 2006
MFGPh	523700	Black Sedge	4	Black Sedge (*Schoenus nigricans*) dominated wet prairie (i.e., short hydroperiod marsh).	Found in marshes, wet calcareous pinelands and prairies, and limestone outcrops; in south Florida from Pasco Co. to Broward Co. southward to the Keys.	Ross and others, 2006
MFF	524000	Floating Emergent Marsh	3	Floating emergent dominated freshwater marsh.	Found throughout Florida.	
MFFl	524100	Duckweed	4	Duckweed (*Lemna* spp.) dominated marsh.		

MFFn	524200	Spatterdock	4	Spatterdock (*Nuphar lutea subsp. advena*) dominated marsh.		
MFFy	524300	Waterlily	4	Waterlily (*Nymphaea odorata*) dominated marsh.	Common throughout Florida in ponds, lakes, canals, ditches, sloughs, and swamps.	
MFFs	524400	Water Spangles	4	Water Spangles (*Salvinia minima*) dominated marsh.		
MFH	525000	Herbaceous Freshwater Marsh	3	Herbaceous dominated freshwater marsh.	Found throughout Florida.	
MFHc	525100	Water Hemlock	4	Water Hemlock (*Cicuta mexicana*) dominated marsh.	Found throughout Florida along marshy shores, in floating mats of vegetation, swamps, springs, streams and ditches.	

MFHi	525200	Morning Glory	4	Morning Glory (*Ipomoea* spp.) dominated marsh.	Occasionally found in highly disturbed areas along canals and levees of the WCAs.	
MFHm	525300	Hempvine	4	Hempvine (*Mikania* spp.) dominated marsh.		
MFHp	525400	Smartweed	4	Smartweeds (*Polygonum* spp.) dominated marsh.	Found throughout Florida in swamps, marshes, flood plains, and moist hammocks.	
MFO	526000	Open Marsh	3	Open water dominated freshwater marsh often with a mix of sparse graminoids, herbaceous, and/or emergent freshwater vegetation, such as Spikerush (*Eleocharis* spp.), Panicgrass (*Panicum* spp.), low stature Sawgrass (*Cladium jamaicense*) , Cattail (*Typha* spp.), Arrowhead (*Sagittaria* spp.), Pickerelweed (*Pontederia cordata*), Waterlily (*Nymphaea* spp.), Green Arum (*Peltandra virginica*), Swamp-Lily (*Crinum americanum*), Spider-lilies (*Hymenocallis* spp.), among others.	Typical of slough or remnant slough areas found throughout the Everglades and WCAs.	

MFPO	527000	Open Prairie	3	Open ground, exposed rock, and/or open water dominated short hydroperiod marsh often with a mix of sparse graminoids and/or herbaceous vegetation, such as Muhly Grass (*Muhlenbergia capillaris var. filipes*), low stature Sawgrass (*Cladium jamaicense*), Gulfdune Paspalum (*Paspalum monostachyum*), Little Bluestem (*Schizachyrium scoparium*), among others.		
D	600000	Dune	1	Beach-dune associated graminoids and/or herbaceous vegetation.	Found along coastal Florida.	
DG	610000	Graminoid Dune	2	Graminoid dominated dune.	Found along coastal Florida.	
DGc	611000	Sandbur	3	Sandbur (*Cenchrus* spp.) dominated dune.	Found on open sandy soil and dunes.	

DGu	612000	Sea Oats	3	Sea Oats (*Uniola paniculata*) dominated dune.	Generally found in dunes elevated above the tide line.	
DH	620000	Herbaceous Dune	2	Herbaceous dominated dune.	Found along coastal Florida.	
DHi	621000	Railroad Vine	3	Railroad Vine (*Ipomoea pes-caprae*) dominated dune.	Generally found on shifting sand prior to colonization by other plants.	
DHv	622000	Seacoast Marshelder	3	Seacoast Marshelder (*Iva imbricata*) dominated dune.	Found on coastal dunes on both the Atlantic and Gulf Coasts of Florida, including the Keys.	
A	700000	Submerged Aquatic Vegetation	1	Vegetation that has evolved the ability to carry out their entire life cycle completely submerged in an aquatic environment.		

AM	710000	Marine Aquatic Vegetation	2	Place holder for future development of marine SAV classes.		
AMA	711000	Marine Algae	3	Place holder for future development of marine SAV classes.		
AMS	712000	Seagrass	3	Place holder for future development of marine SAV classes.		
AF	720000	Freshwater Aquatic Vegetation	2	Place holder for future development of freshwater SAV classes.		
E	800000	Exotic	1	Non-native and often invasive vegetation.		

Ea	801000	Shoebutton	2	*Ardisia elliptica*	Reported in Broward, Dade, Monroe, Palm Beach, and St. Lucie counties; found in hammocks, disturbed wetlands, tree islands, cypress understories, and mangrove areas.	
EaM	801100	Shoebutton Monotypic	3	Greater than or equal to 90% areal coverage of Shoebutton.		
EaD	801200	Shoebutton Dominant	3	50% to 89% areal coverage of Shoebutton.		
EaS	801300	Shoebutton Sparse	3	10% to 49% areal coverage of Shoebutton.		
EaT	802000	Treated Shoebutton	2	Treated *Ardisia elliptica*.		

EaMT	802100	Treated Shoebutton Monotypic	3	Greater than or equal to 90% areal coverage of treated Shoebutton.		
EaDT	802200	Treated Shoebutton Dominant	3	50% to 89% areal coverage of treated Shoebutton.		
EaST	802300	Treated Shoebutton Sparse	3	10% to 49% areal coverage of treated Shoebutton.		
Ec	803000	Australian Pine	2	River Sheoak (*Casuarina cunninghamiana*), Australian Pine (*C. equisetifolia*), and Suckering Australian Pine (*C. gauca*).	Occurs throughout south Florida, from Orlando south, on sandy shores, pinelands, filled wetlands, road shoulders, cleared land, and undeveloped lots.	
EcM	803100	Australian Pine Monotypic	3	Greater than or equal to 90% areal coverage of Australian Pine.		

EcD	803200	Australian Pine Dominant	3	50% to 89% areal coverage of Australian Pine.		
EcS	803300	Australian Pine Sparse	3	10% to 49% areal coverage of Australian Pine.		
EcT	804000	Treated Australian Pine	2	Treated River Sheoak (*Casuarina cunninghamiana*), Australian Pine (*C. equisetifolia*), and Suckering Australian Pine (*C. gauca*).		
EcMT	804100	Treated Australian Pine Monotypic	3	Greater than or equal to 90% areal coverage of treated Australian Pine.		
EcDT	804200	Treated Australian Pine Dominant	3	50% to 89% areal coverage of treated Australian Pine.		

EcST	804300	Treated Australian Pine Sparse	3	10% to 49% areal coverage of treated Australian Pine.		
Eo	805000	Wild Taro	2	*Colocasia esculenta*	Dense to scattered populations reported throughout Florida; found sporadically in highly disturbed areas along the canals and levees of the WCAs.	
EoM	805100	Wild Taro Monotypic	3	Greater than or equal to 90% areal coverage of Wild Taro.		
EoD	805200	Wild Taro Dominant	3	50% to 89% areal coverage of Wild Taro.		
EoS	805300	Wild Taro Sparse	3	10% to 49% areal coverage of Wild Taro.		

EoT	806000	Treated Wild Taro	2	Treated *Colocasia esculenta*.		
EoMT	806100	Treated Wild Taro Monotypic	3	Greater than or equal to 90% areal coverage of treated Wild Taro.		
EoDT	806200	Treated Wild Taro Dominant	3	50% to 89% areal coverage of treated Wild Taro.		
EoST	806300	Treated Wild Taro Sparse	3	10% to 49% areal coverage of treated Wild Taro.		

Eu	807000	Latherleaf	2	*Colubrina asiatica*	Found in coastal areas of Florida from Key West north to Hutchinson Island in St. Lucie County and in EVER, including Ten Thousand Islands northwest into Collier County; invades the coastal ridges just above the high tide line, in tropical hammocks, buttonwood and mangrove forests, tidal marshes, and disturbed coastal areas.	
EuM	807100	Latherleaf Monotypic	3	Greater than or equal to 90% areal coverage of Latherleaf.		
EuD	807200	Latherleaf Dominant	3	50% to 89% areal coverage of Latherleaf.		
EuS	807300	Latherleaf Sparse	3	10% to 49% areal coverage of Latherleaf.		

EuT	808000	Treated Latherleaf	2	Treated *Colubrina asiatica*.		
EuMT	808100	Treated Latherleaf Monotypic	3	Greater than or equal to 90% areal coverage of treated Latherleaf.		
EuDT	808200	Treated Latherleaf Dominant	3	50% to 89% areal coverage of treated Latherleaf.		
EuST	808300	Treated Latherleaf Sparse	3	10% to 49% areal coverage of treated Latherleaf.		
Ee	809000	Water Hyacinth	2	*Eichhornia crassipes*	Found throughout Florida; often found choking out canals or other calm bodies of water.	

EeM	809100	Water Hyacinth Monotypic	3	Greater than or equal to 90% areal coverage of Water Hyacinth.		
EeD	809200	Water Hyacinth Dominant	3	50% to 89% areal coverage of Water Hyacinth.		
EeS	809300	Water Hyacinth Sparse	3	10% to 49% areal coverage of Water Hyacinth.		
EeT	810000	Treated Water Hyacinth	2	Treated *Eichhornia crassipes.*		
EeMT	810100	Treated Water Hyacinth Monotypic	3	Greater than or equal to 90% areal coverage of treated Water Hyacinth.		

EeDT	810200	Treated Water Hyacinth Dominant	3	50% to 89% areal coverage of treated Water Hyacinth.		
EeST	810300	Treated Water Hyacinth Sparse	3	10% to 49% areal coverage of treated Water Hyacinth.		
EG	811000	Giant Grasses	2	Napier Grass (*Pennisetum purpureum*) and Silkreed *(Neyraudia reynaudiana*).	Silkreed is currently found in Collier, Monroe, Dade, Broward, Palm Beach, and Highland counties; Napier Grass is located in 29 Florida counties, most commonly in central and south Florida.	
EGM	811100	Giant Grasses Monotypic	3	Greater than or equal to 90% areal coverage of Giant Grasses.		
EGD	811200	Giant Grasses Dominant	3	50% to 89% areal coverage of Giant Grasses.		

EGS	811300	Giant Grasses Sparse	3	10% to 49% areal coverage of Giant Grasses.		
EGT	812000	Treated Giant Grasses	2	Treated Napier Grass (*Pennisetum purpureum*) and Silkreed *(Neyraudia reynaudiana*).		
EGMT	812100	Treated Giant Grasses Monotypic	3	Greater than or equal to 90% areal coverage of treated Giant Grasses.		
EGDT	812200	Treated Giant Grasses Dominant	3	50% to 89% areal coverage of treated Giant Grasses.		
EGST	812300	Treated Giant Grasses Sparse	3	10% to 49% areal coverage of treated Shoebutton.		

Ei	813000	Cogongrass	2	*Imperata cylindrica*	Reported in dry to moist areas, such as pinelands, in all parts of Florida; found within EVER.	
EiM	813100	Cogongrass Monotypic	3	Greater than or equal to 90% areal coverage of Cogongrass.		
EiD	813200	Cogongrass Dominant	3	50% to 89% areal coverage of Cogongrass.		
EiS	813300	Cogongrass Sparse	3	10% to 49% areal coverage of Cogongrass.		
EiT	814000	Treated Cogongrass	2	Treated *Imperata cylindrica*.		

EiMT	814100	Treated Cogongrass Monotypic	3	Greater than or equal to 90% areal coverage of treated Cogongrass.		
EiDT	814200	Treated Cogongrass Dominant	3	50% to 89% areal coverage of treated Cogongrass.		
EiST	814300	Treated Cogongrass Sparse	3	10% to 49% areal coverage of treated Cogongrass.		
Eip	815000	Water Spinach	2	*Ipomoea aquatica*	Occasionally found in highly disturbed areas along canals and levees of WCA2.	
EipM	815100	Water Spinach Monotypic	3	Greater than or equal to 90% areal coverage of Water Spinach.		

EipD	815200	Water Spinach Dominant	3	50% to 89% areal coverage of Water Spinach.		
EipS	815300	Water Spinach Sparse	3	10% to 49% areal coverage of Water Spinach.		
EipT	816000	Treated Water Spinach	2	Treated *Ipomoea aquatica*.		
EipMT	816100	Treated Water Spinach Monotypic	3	Greater than or equal to 90% areal coverage of treated Water Spinach.		
EipDT	816200	Treated Water Spinach Dominant	3	50% to 89% areal coverage of treated Water Spinach.		

EipST	816300	Treated Water Spinach Sparse	3	10% to 49% areal coverage of treated Water Spinach.		
EI	817000	Lygodium	2	Japanese Climbing Fern (*Lygodium japonicum*) and Old-world Climbing Fern (*L. microphyllum*).	Found in Broward, Collier, DeSoto, Hardee, Highlands, Lee, Martin, Palm Beach, Polk, and Sarasota counties; found throughout tree islands of Loxahatchee NWR.	
EIM	817100	Lygodium Monotypic	3	Greater than or equal to 90% areal coverage of Lygodium.		
EID	817200	Lygodium Dominant	3	50% to 89% areal coverage of Lygodium.		
EIS	817300	Lygodium Sparse	3	10% to 49% areal coverage of Lygodium.		

EIT	818000	Treated Lygodium	2	Treated Japanese Climbing Fern (*Lygodium japonicum*) and Old-world Climbing Fern (*L. microphyllum*).		
EIMT	818100	Treated Lygodium Monotypic	3	Greater than or equal to 90% areal coverage of treated Lygodium.		
EIDT	818200	Treated Lygodium Dominant	3	50% to 89% areal coverage of treated Lygodium.		
EIST	818300	Treated Lygodium Sparse	3	10% to 49% areal coverage of treated Lygodium.		
Em	819000	Melaleuca	2	*Melaleuca quinquenervia*	Reported in 16 counties in central and southern Florida; common on lands adjacent to the WCAs and EVER; also found throughout Loxahatchee NWR.	

EmM	819100	Melaleuca Monotypic	3	Greater than or equal to 90% areal coverage of Melaleuca.		
EmD	819200	Melaleuca Dominant	3	50% to 89% areal coverage of Melaleuca.		
EmS	819300	Melaleuca Sparse	3	10% to 49% areal coverage of Melaleuca.		
EmT	820000	Treated Melaleuca	2	Treated *Melaleuca quinquenervia*.		
EmMT	820100	Treated Melaleuca Monotypic	3	Greater than or equal to 90% areal coverage of treated Melaleuca.		

EmDT	820200	Treated Melaleuca Dominant	3	50% to 89% areal coverage of treated Melaleuca.		
EmST	820300	Treated Melaleuca Sparse	3	10% to 49% areal coverage of treated Melaleuca.		
Ep	821000	Torpedo Grass	2	*Panicum repens*	Occurs naturalized in 75% of Florida; generally found in areas of disturbed marsh along canals and ditches.	
EpM	821100	Torpedo Grass Monotypic	3	Greater than or equal to 90% areal coverage of Torpedo Grass.		
EpD	821200	Torpedo Grass Dominant	3	50% to 89% areal coverage of Torpedo Grass.		

EpS	821300	Torpedo Grass Sparse	3	10% to 49% areal coverage of Torpedo Grass.		
EpT	822000	Treated Torpedo Grass	2	Treated *Panicum repens*.		
EpMT	822100	Treated Torpedo Grass Monotypic	3	Greater than or equal to 90% areal coverage of treated Torpedo Grass.		
EpDT	822200	Treated Torpedo Grass Dominant	3	50% to 89% areal coverage of treated Torpedo Grass.		
EpST	822300	Treated Torpedo Grass Sparse	3	10% to 49% areal coverage of treated Torpedo Grass.		

Epi	823000	Water Lettuce	2	*Pistia stratiotes*	Found throughout peninsular Florida; generally found along the margins of canals or in other areas of mostly still, open water.	
EpiM	823100	Water Lettuce Monotypic	3	Greater than or equal to 90% areal coverage of Water Lettuce.		
EpiD	823200	Water Lettuce Dominant	3	50% to 89% areal coverage of Water Lettuce.		
EpiS	823300	Water Lettuce Sparse	3	10% to 49% areal coverage of Water Lettuce.		
EpiT	824000	Treated Water Lettuce	2	Treated *Pistia stratiotes*.		

EpiMT	824100	Treated Water Lettuce Monotypic	3	Greater than or equal to 90% areal coverage of treated Water Lettuce.		
EpiDT	824200	Treated Water Lettuce Dominant	3	50% to 89% areal coverage of treated Water Lettuce.		
EpiST	824300	Treated Water Lettuce Sparse	3	10% to 49% areal coverage of treated Water Lettuce.		
Eh	825000	Sugar Cane	2	*Saccharum officinarum*	Often found in recovering agricultural areas or in the margins of natural areas adjacent to agricultural fields.	
EhM	825100	Sugar Cane Monotypic	3	Greater than or equal to 90% areal coverage of Sugar Cane.		

EhD	825200	Sugar Cane Dominant	3	50% to 89% areal coverage of Sugar Cane.		
EhS	825300	Sugar Cane Sparse	3	10% to 49% areal coverage of Sugar Cane.		
EhT	826000	Treated Sugar Cane	2	Treated *Saccharum officinarum*.		
EhMT	826100	Treated Sugar Cane Monotypic	3	Greater than or equal to 90% areal coverage of treated Sugar Cane.		
EhDT	826200	Treated Sugar Cane Dominant	3	50% to 89% areal coverage of treated Sugar Cane.		

EhST	826300	Treated Sugar Cane Sparse	3	10% to 49% areal coverage of treated Sugar Cane.		
Es	827000	Brazilian Pepper	2	*Schinus terebinthifolius*	Found in Florida as far north as Levy and St. Johns counties and as far west as Santa Rosa County; commonly located in disturbed areas, along canals and levees, road shoulders, and on disturbed tree islands.	
EsM	827100	Brazilian Pepper Monotypic	3	Greater than or equal to 90% areal coverage of Brazilian Pepper.		
EsD	827200	Brazilian Pepper Dominant	3	50% to 89% areal coverage of Brazilian Pepper.		
EsS	827300	Brazilian Pepper Sparse	3	10% to 49% areal coverage of Brazilian Pepper.		

EsT	828000	Treated Brazilian Pepper	2	Treated *Schinus terebinthifolius*.		
EsMT	828100	Treated Brazilian Pepper Monotypic	3	Greater than or equal to 90% areal coverage of treated Brazilian Pepper.		
EsDT	828200	Treated Brazilian Pepper Dominant	3	50% to 89% areal coverage of treated Brazilian Pepper.		
EsST	828300	Treated Brazilian Pepper Sparse	3	10% to 49% areal coverage of treated Brazilian Pepper.		
En	829000	Tropical Soda Apple	2	*Solanum viarum*	Now a common weed in fields and groves, along roadsides, in pinelands, and hammock edges as far north as the panhandle of Florida.	

EnM	829100	Tropical Soda Apple Monotypic	3	Greater than or equal to 90% areal coverage of Tropical Soda Apple.		
EnD	829200	Tropical Soda Apple Dominant	3	50% to 89% areal coverage of Tropical Soda Apple.		
EnS	829300	Tropical Soda Apple Sparse	3	10% to 49% areal coverage of Tropical Soda Apple.		
EnT	830000	Treated Tropical Soda Apple	2	Treated *Solanum viarum*.		
EnMT	830100	Treated Tropical Soda Apple Monotypic	3	Greater than or equal to 90% areal coverage of treated Tropical Soda Apple.		

EnDT	830200	Treated Tropical Soda Apple Dominant	3	50% to 89% areal coverage of treated Tropical Soda Apple.		
EnST	830300	Treated Tropical Soda Apple Sparse	3	10% to 49% areal coverage of treated Tropical Soda Apple.		
Ey	831000	Java Plum	2	*Syzygium cumini*	Found mostly in wet pinelands, hammocks, and well drained uplands of south Florida, including Palm Beach, Collier, and Lee counties.	
EyM	831100	Java Plum Monotypic	3	Greater than or equal to 90% areal coverage of Java Plum.		
EyD	831200	Java Plum Dominant	3	50% to 89% areal coverage of Java Plum.		

EyS	831300	Java Plum Sparse	3	10% to 49% areal coverage of Java Plum.		
EyT	832000	Treated Java Plum	2	Treated *Syzygium cumini*.		
EyMT	832100	Treated Java Plum Monotypic	3	Greater than or equal to 90% areal coverage of treated Java Plum.		
EyDT	832200	Treated Java Plum Dominant	3	50% to 89% areal coverage of treated Java Plum.		
EyST	832300	Treated Java Plum Sparse	3	10% to 49% areal coverage of treated Java Plum.		

Et	833000	Seaside Mahoe	2	*Thespesia populynea*	Now a common constituent of low wave action beaches and mangroves of south Florida.	
EtM	833100	Seaside Mahoe Monotypic	3	Greater than or equal to 90% areal coverage of Seaside Mahoe.		
EtD	833200	Seaside Mahoe Dominant	3	50% to 89% areal coverage of Seaside Mahoe.		
EtS	833300	Seaside Mahoe Sparse	3	10% to 49% areal coverage of Seaside Mahoe.		
EtT	834000	Treated Seaside Mahoe	2	Treated *Thespesia populynea*.		

EtMT	834100	Treated Seaside Mahoe Monotypic	3	Greater than or equal to 90% areal coverage of treated Seaside Mahoe.		
EtDT	834200	Treated Seaside Mahoe Dominant	3	50% to 89% areal coverage of treated Seaside Mahoe.		
EtST	834300	Treated Seaside Mahoe Sparse	3	10% to 49% areal coverage of treated Seaside Mahoe.		
N	900000	Non-Vegetative	1	Non-vegetative areal coverage.		
BCH	901000	Beach	2	Sand covered ground adjacent to lakes, bays, oceans, or other large bodies of water.		

HI	902000	Human Impacted	2	Areas impacted by human disturbance.		
AG	902010	Agriculture	3	Agriculture areas such as nurseries, crops, grazing areas, and farms.		
AB	902120	Airboat Trail	3	Airboat trail.		
CA	902020	Canal	3	Water bodies specifically designed to direct water from one location to another.		
CO	902030	Commercial	3	Commercial areas such as malls, parking lots, and factories.		

FC	902050	Fish Camp	3	Camp site, generally with a building(s), and its associated disturbed area.		
HID	902130	Hole-in-the-Donut	3	Restoration and recovery of the Hole-in-the-Donut area to a marl prairie wetland vegetative community.		
LEV	902060	Levee	3	Elevated berm, generally with an access road, utilized to contain a body of water such as a lake or marsh		
ORV	902070	ORV Trail	3	Off-road vehicle trail.		
PS	902040	Pump Station	3	Structure used to move water through canals.		

QUA	902080	Quarry	3	Area used for mining rocks, minerals, or other natural resources.		
RES	902090	Residential	3	Residential areas such as subdivisions, lawns, and playgrounds.		
RD	902100	Road	3	Paved and unpaved roads other than levees.		
SP	902110	Spoil	3	Areas such as power lines and abandoned agricultural areas.		
MUD	903000	Mud	2	Moist or dry open ground.		

OW	904000	Open Water	2	Open water areas such as ponds, lakes, rivers, bays, and estuaries.		
O	905000	Other	2	Describes vegetation or non-vegetation cover other than some vegetation of particular interest. On a cattail map, for example, Other (**O**) would be used to indicate all vegetation and non-vegetation cover except for cattail, the vegetation of particular interest.		
REF	906000	Refugia	2	An alligator hole or refuge.		
SF	907000	Barren Salt Flat	2	Barren, generally hypersaline, flats exposed at low tide.		
UNK	908000	Unknown	2	Unknown vegetation or other land cover.		

n/a	1000	Modifiers	n/a	Additional attributed information.		
I	1001	Tree Island	n/a	To be used as a modifier to indicate the presence, greater than 10%, of tree island structure within a given cell. This label will be used in addition to the label for the actual community or species comprising the majority of the cell. For example, a cell containing 89% Open Marsh (MFO) and 11% Bayhead Forest (FSB) in the form of a tree island structure, pop-up or strand island, will be labeled as MFO,I. The bayhead component in the previous example can be replaced with willow, wax myrtle, cocoplum, and so forth and the “I” will still be still be necessary if the woody vegetation is in the form of a tree island.	Found throughout the Everglades.	
P	1002	Periphyton	n/a	To be used as a modifier to indicate the presence of floating and submergent periphyton species.		