

Reference Wetlands for High Functioning Wetlands

Brevard County Natural Resource Management



Developed by

B.K.I., Inc. and Ecospatial Analysts, Inc.

For

Brevard County

Natural Resource Management Office

September 30, 2013

Reference Wetlands for High Functioning Wetlands

Brevard County Natural Resource Management

The document describes and assesses wetland systems located throughout Brevard County. These reference wetlands were chosen to be representative of different types of high-quality wetlands within Brevard County.

The wetlands were assessed utilizing the Brevard County-Wetland Assessment Method. The method was developed to evaluate wetlands and identify if a wetland is considered high functioning.

The assessment includes data for each reference wetland. The data includes: location map, description of the wetland vegetation and hydrology, large-scale location map, functional assessment data, functional assessment scores, and aerial map of wetland.

The reference wetlands were developed to be used for comparison while completing assessment of a subject wetland. Utilizing the reference wetlands should result in more consistency in the assessment of wetlands.

Reference Wetlands for High Functioning Wetlands

Brevard County Natural Resource Management

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Cabbage Palm Hammock

River Lakes Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



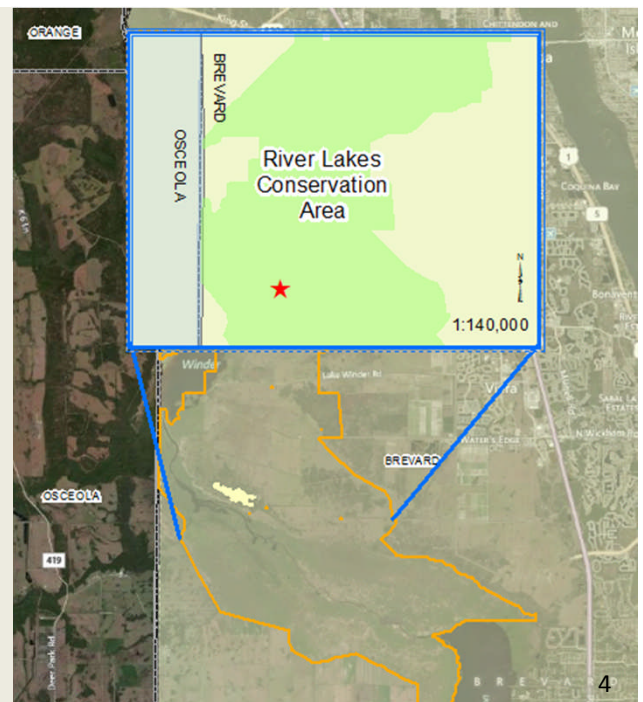
OVERVIEW

LOCATION

Brevard County
Latitude 28.2121665738 N, Longitude -80.8345821717E

COMMUNITY DESCRIPTION

Cabbage Palm Hammocks is a closed-canopy forest of hydrophytic trees occurring on frequently or permanently flooded hydric soils adjacent to stream and river channels and in depressions and oxbows within floodplains. Trees are often buttressed, and the understory and groundcover are sparse. The canopy is dominated by cabbage palms (*Sabal palmetto*) but may contain other trees such as laurel oak (*Quercus laurifolia*), live oak (*Q. virginiana*) or southern red cedar (*Juniperus virginiana* var. *silicicola*). Cabbage palm hammocks can often occur within a complex mixture of communities including alluvial forest, bottomland forest, and baygall.



Cabbage Palm Hammock

River Lakes Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

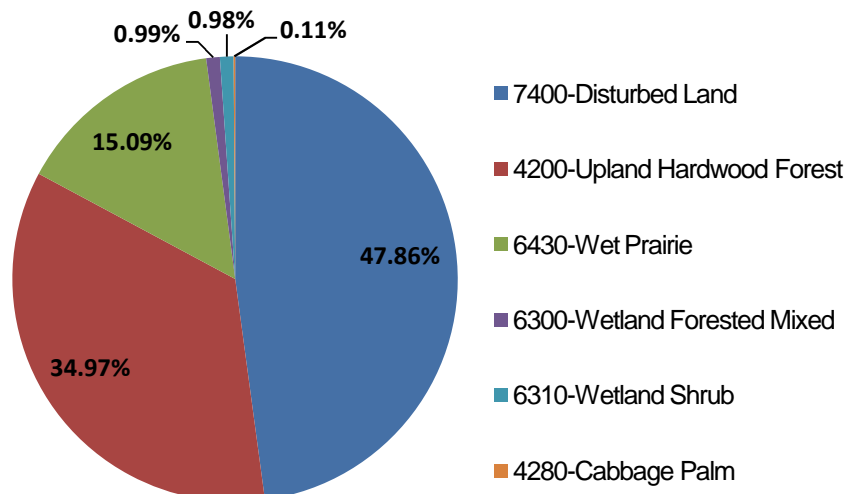
This produces a variable assemblage of canopy and subcanopy species, with less flood tolerant trees and shrubs found on small hummocks and ridges within the wetland. A groundcover of flood tolerant ferns and herbs are found in some cabbage palm hammocks, including lizard's tail (*Saururus cernuus*), false nettle (*Boehmeria cylindrica*), royal fern (*Osmunda regalis* var. *spectabilis*) and smartweed (*Polygonum* sp.). Eastern poison ivy (*Toxicodendron radicans*) is a frequent vine.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
7400-Disturbed Land	57.75	9.08	0.479	4.346
4200-Upland Hardwood Forest	42.20	10	0.350	3.497
6430-Wet Prairie	18.21	10	0.151	1.509
6300-Wetland Forested Mixed	1.20	10	0.010	0.099
6310-Wetland Shrub	1.18	10	0.010	0.098
4280-Cabbage Palm	0.13	10	0.001	0.011
TOTAL	120.67	59.08	1.00	9.56

Landcover Percent within 100 m buffer



Cabbage Palm Hammock River Lakes Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	5
Hydrologic Indicator Score	5
Water Environment Score	10

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	65	8
Exotic Vegetation	20	7
Vegetative Community Score		7.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 20%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

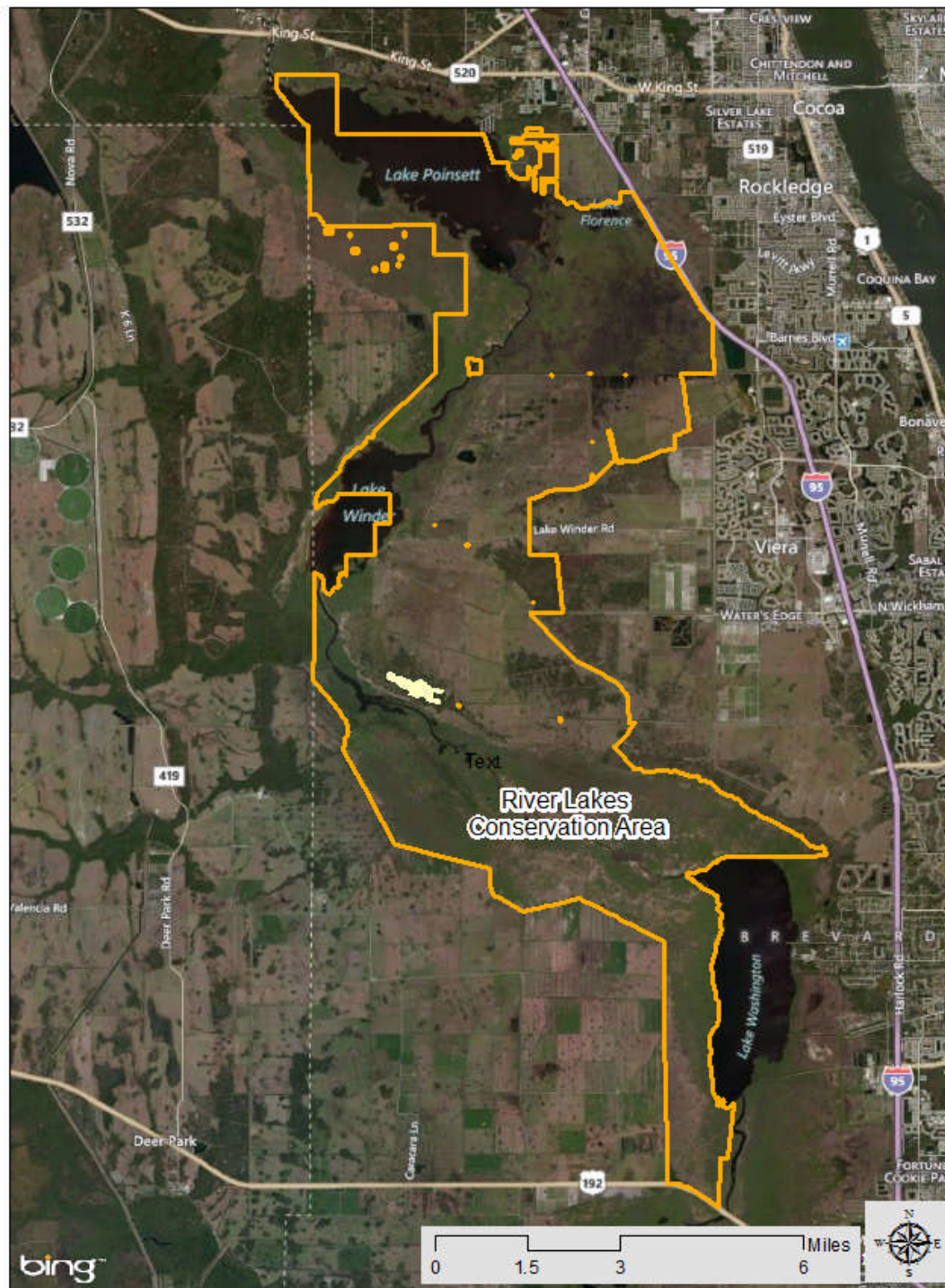
ASSESSMENT SCORE

$$\begin{array}{ccccccc} \text{(Landscape Location + Water Environment + Vegetative Community)} & / & 30 & = & & & \\ (9.56 & + & 10 & + & 7.5) & / & 30 = 0.902 \end{array}$$

Cabbage Palm Hammock

River Lakes Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



Location Map - Cabbage Palm Hammock
River Lakes Conservation Area
Brevard County, Florida

- 4280-Cabbage Palm
- River Lakes Conservation Area

Cabbage Palm Hammock

Indian River Lagoon Preserve State Park

Brevard County Natural Resource Management
Reference Wetland Community



OVERVIEW

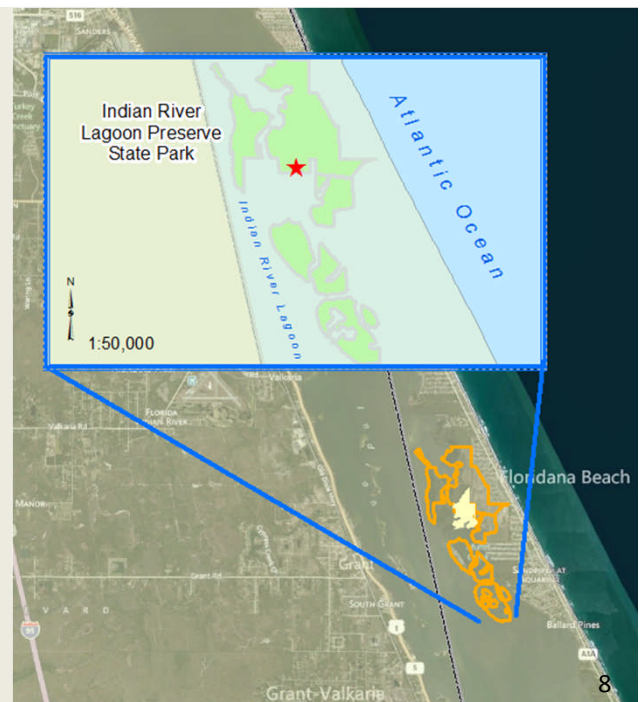
LOCATION

Brevard County

Latitude 27.9373607132 N, Longitude -80.5030258371E

COMMUNITY DESCRIPTION

Cabbage Palm Hammocks are a closed-canopy forest of hydrophytic trees occurring on frequently or permanently flooded hydric soils adjacent to stream and river channels and in depressions and oxbows within floodplains. Trees are often buttressed, and the understory and groundcover are sparse. The canopy is dominated by cabbage palms (*Sabal palmetto*) but may contain other trees such as laurel oak (*Quercus laurifolia*), live oak (*Q. virginiana*) or southern red cedar (*Juniperus virginiana* var. *silicicola*). Cabbage palm hammocks can often occur within a complex mixture of communities including alluvial forest, bottomland forest, and baygall.



Cabbage Palm Hammock

Indian River Lagoon Preserve State Park

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

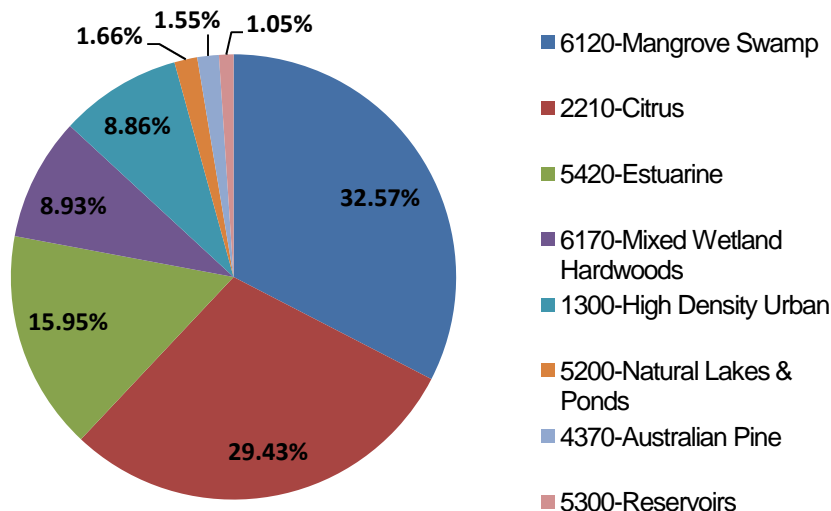
This produces a variable assemblage of canopy and subcanopy species, with less flood tolerant trees and shrubs found on small hummocks and ridges within the wetland. A groundcover of flood tolerant ferns and herbs are found in some cabbage palm hammocks, including lizard's tail (*Saururus cernuus*), false nettle (*Boehmeria cylindrica*), royal fern (*Osmunda regalis* var. *spectabilis*) and smartweed (*Polygonum* sp.). Eastern poison ivy (*Toxicodendron radicans*) is a frequent vine.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
6120-Mangrove Swamp	25.14	10	0.326	3.257
2210-Citrus	22.72	7.02	0.294	2.066
5420-Estuarine	12.31	10	0.159	1.595
6170-Mixed Wetland Hardwoods	6.89	10	0.089	0.893
1300-High Density Urban	6.84	0.91	0.089	0.081
5200-Natural Lakes & Ponds	1.28	10	0.017	0.166
4370-Australian Pine	1.20	8.87	0.016	0.137
5300-Reservoirs	0.81	10	0.011	0.105
TOTAL	77.20	66.80	1.00	8.30

Landcover Percent within 100 m buffer



Cabbage Palm Hammock

Indian River Lagoon Preserve State Park

Brevard County Natural Resource Management
Reference Wetland Community

FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	2.5
Hydrologic Indicator Score	5
Water Environment Score	7.5

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	70	9
Exotic Vegetation	25	5
Vegetative Community Score		7.0

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 25%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

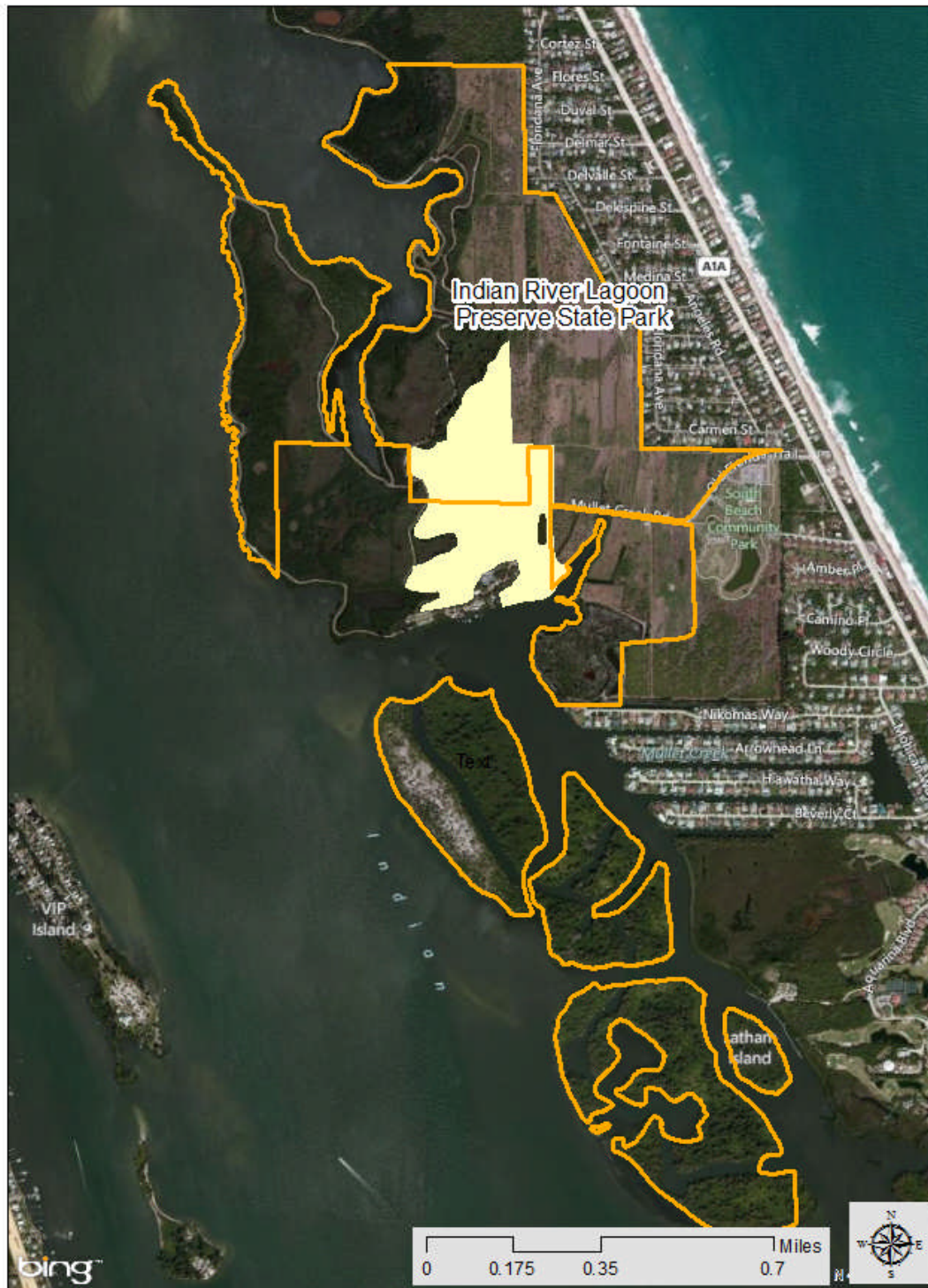
Brazilian pepper (Schinus terebinthifolius)

ASSESSMENT SCORE

$$\begin{array}{ccccccc} \text{(Landscape Location + Water Environment + Vegetative Community)} & / & 30 & = & & & \\ (8.3 & + & 7.5 & + & 7.0) & / & 30 = 0.760 \end{array}$$

Cabbage Palm Hammock

Brevard County Natural Resource Management Indian River Lagoon Preserve State Park



Location Map - Cabbage Palm Hammock
Indian River Lagoon Preserve State Park
Brevard County, Florida

- 4280-Cabbage Palm
- Indian River Lagoon Preserve State Park

Bay Swamp

Brevard County Natural Resource Management
Reference Wetland Community

St. Sebastian River Preserve State Park



OVERVIEW

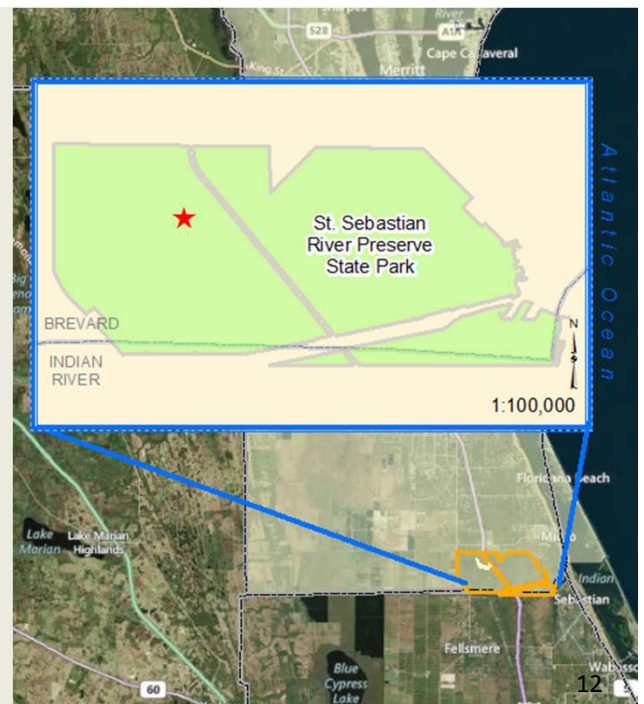
LOCATION

Brevard County

Latitude 27.8524621439 N, Longitude -80.5917447513E

COMMUNITY DESCRIPTION

Bay Swamps are an evergreen forested wetland of bay species situated at the base of a slope or in a depression. Loblolly bay (*Gordonia lasianthus*), sweetbay (*Magnolia virginiana*), or swamp bay (*Persea palustris*) form an open to dense tree canopy and are also dominant in the understory along with fetterbush (*Lyonia lucida*), large gallberry (*Ilex coriacea*), dahoon (*I. cassine*), myrtle dahoon (*I. cassine* var. *myrtifolia*), wax myrtle (*Myrica cerifera*), red maple (*Acer rubrum*), or Carolina willow (*Salix caroliniana*). Composition of the understory varies regionally. Slash pine (*Pinus elliottii*) or Loblolly pine (*P. taeda*) are often found in the canopy, as well as sweetgum (*Liquidambar styraciflua*).



COMMUNITY DESCRIPTION (cont)

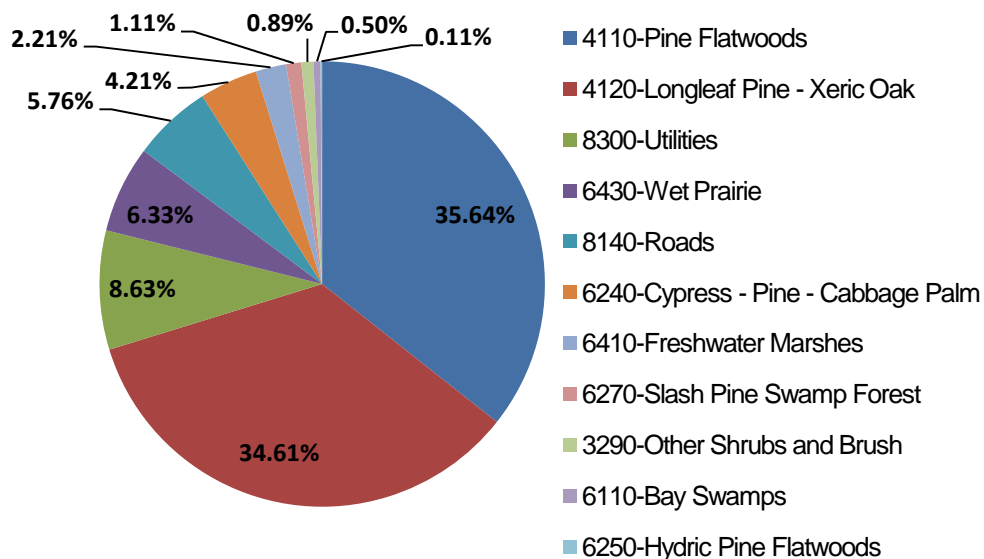
The canopy and understory do not generally form distinct strata but may appear as a dense, tall thicket. Vines, especially laurel greenbrier (*Smilax laurifolia*), coral greenbrier (*S. walteri*), and muscadine (*Vitis rotundifolia*), may be abundant and contribute to the often impenetrable nature of the understory. Herbs are absent or few, and typically consist of ferns such as cinnamon fern (*Osmunda cinnamomea*), netted chain fern (*Woodwardia areolata*), and Virginia chain fern (*W. virginica*).

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

FLUCFCS_legend	Sum of Acres	LSI_Value	Landcover Percent	Landscape Location Score (=LSI_Value* Landcover Percent)
4110-Pine Flatwoods	59.219895	10	0.356	3.564
4120-Longleaf Pine - Xeric Oak	57.516285	10	0.346	3.461
8300-Utilities	14.346212	2.43	0.086	0.210
6430-Wet Prairie	10.52398	10	0.063	0.633
8140-Roads	9.570417	1.91	0.058	0.110
6240-Cypress - Pine - Cabbage Palm	6.9938081	10	0.042	0.421
6410-Freshwater Marshes	3.6751105	10	0.022	0.221
6270-Slash Pine Swamp Forest	1.8418448	10	0.011	0.111
3290-Other Shrubs and Brush	1.4783683	10	0.009	0.089
6110-Bay Swamps	0.8297886	10	0.005	0.050
6250-Hydric Pine Flatwoods	0.1880281	10	0.001	0.011
TOTAL	166.18	94.34	1.00	8.88

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	4.95
Hydrologic Indicator Score	5
Water Environment Score	9.95

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	95	11
Exotic Vegetation	5	8
Vegetative Community Score		9.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics present in less than 5%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

ASSESSMENT SCORE

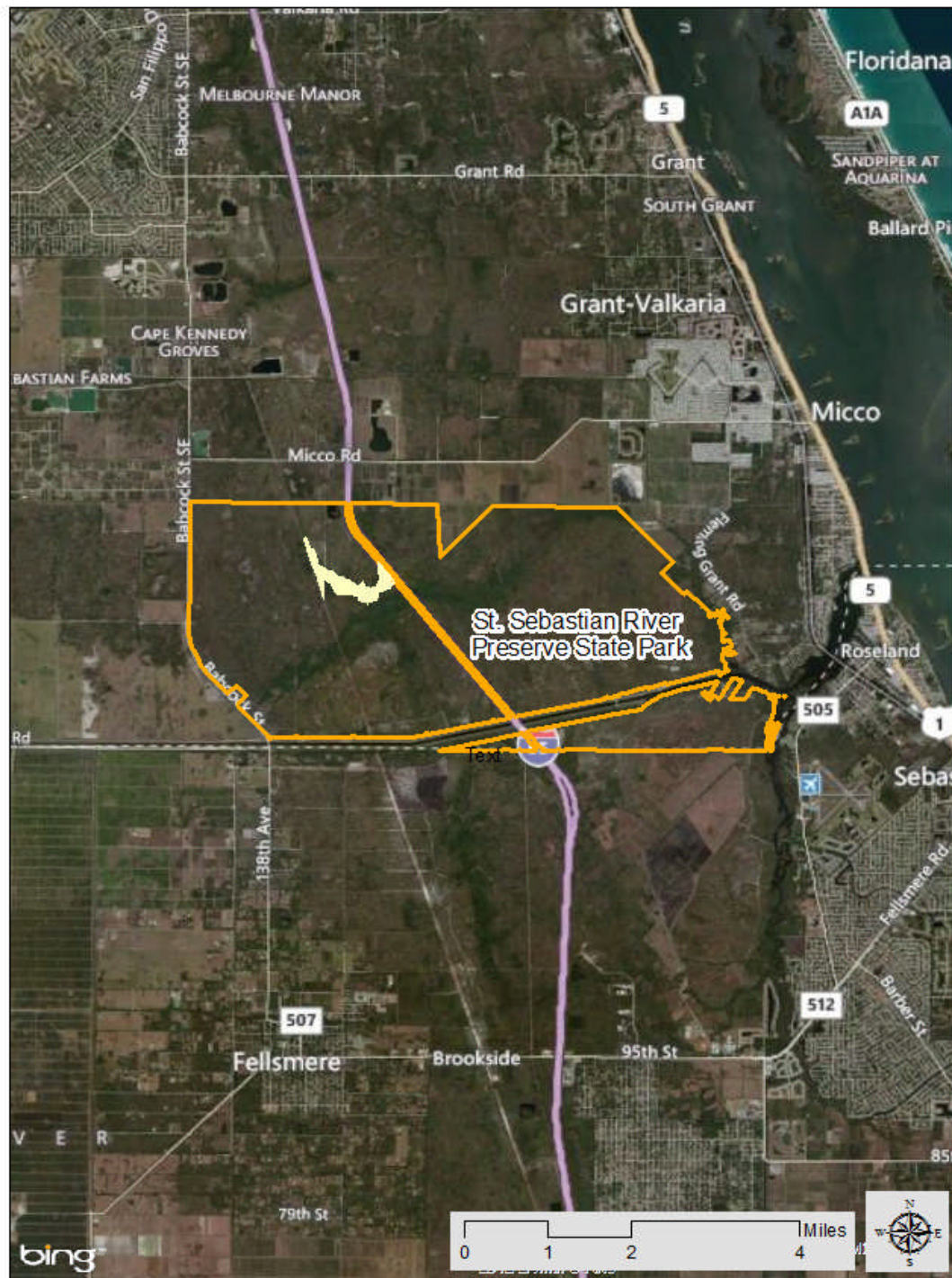
$$(\text{Landscape Location} + \text{Water Environment} + \text{Vegetative Community}) / 30 =$$

$$(8.88 + 9.95 + 9.5) / 30 = 0.943$$

Bay Swamp

St. Sebastian River Preserve State Park

Brevard County Natural Resource Management
Reference Wetland Community



Location Map - Bay Swamp
St. Sebastian River Preserve State Park
Brevard County, Florida

- 6110-Bay Swamps
- St. Sebastian River Preserve State Park

Mangrove Swamp

Thousand Island Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



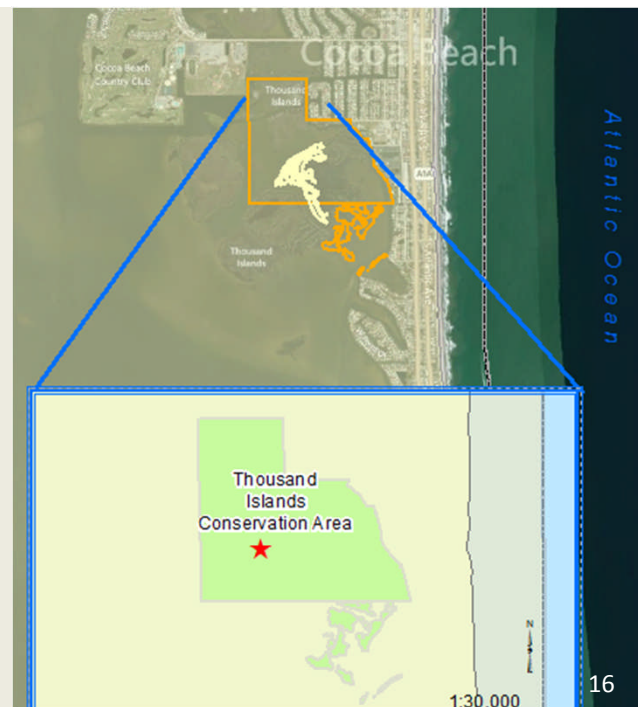
OVERVIEW

LOCATION

Brevard County
Latitude 28.3063049442 N, Longitude -80.6209608436E

COMMUNITY DESCRIPTION

Mangrove swamp is a dense forest occurring along relatively flat, low wave energy, marine and estuarine shorelines. The dominant plants of mangrove swamp are red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemosa*), and buttonwood (*Conocarpus erectus*). These four species can occur either in mixed stands or often in differentiated, monospecific zones that reflect varying degrees of tidal influence, levels of salinity, and types of substrate. Red mangrove often dominates the lowest (or deep-water) zone, followed by black mangrove in the



Mangrove Swamp

Thousand Island Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

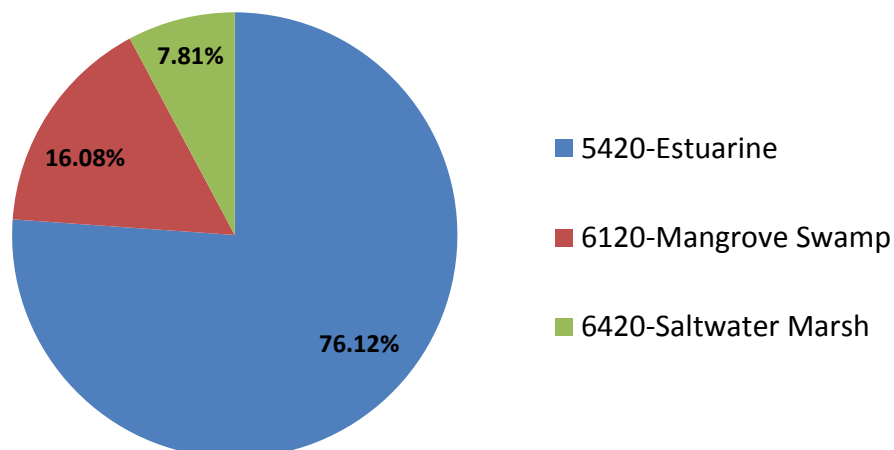
intermediate zone, and white mangrove and buttonwood in the highest, least tidally-influenced zone. Buttonwood often occupies an ecotone, or transition zone, to the adjacent upland community.

FUNCTIONAL WETLAND ASSESSMENT

- Landscape Location Score
Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
5420-Estuarine	58.28	10	0.761	7.612
6120-Mangrove Swamp	12.31	10	0.161	1.608
6420-Saltwater Marsh	5.98	10	0.078	0.781
TOTAL	76.57	30.00	1.00	10.00

Landcover Percent within 100 m buffer



Mangrove Swamp

Thousand Island Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	5
Hydrologic Indicator Score	5
Water Environment Score	10.0

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	100	12
Exotic Vegetation		8
Vegetative Community Score		10.0

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are not present

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

None

ASSESSMENT SCORE

$$(10.0 + 10.0 + 10.5) / 30 = 1.00$$

Mangrove Swamp

Thousand Island Conservation Area

Brevard County Natural Resource Management



**Location Map - Mangrove Swamps
Thousand Island Conservation Area
Brevard County, Florida**

- 6120-Mangrove Swamp
- Thousand Islands Conservation Area

Mangrove Swamp

Ulumay Wildlife Sanctuary

Brevard County Natural Resource Management
Reference Wetland Community



OVERVIEW

LOCATION

Brevard County
Latitude 28.3785424759 N, Longitude -80.6781411412E

COMMUNITY DESCRIPTION

Mangrove swamp is a dense forest occurring along relatively flat, low wave energy, marine and estuarine shorelines. The dominant plants of mangrove swamp are red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemosa*), and buttonwood (*Conocarpus erectus*). These four species can occur either in mixed stands or often in differentiated, monospecific zones that reflect varying degrees of tidal influence, levels of salinity, and types of substrate. Red mangrove often dominates the lowest (or deep-water) zone, followed by black mangrove in the



Mangrove Swamp

Ulumay Wildlife Sanctuary

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

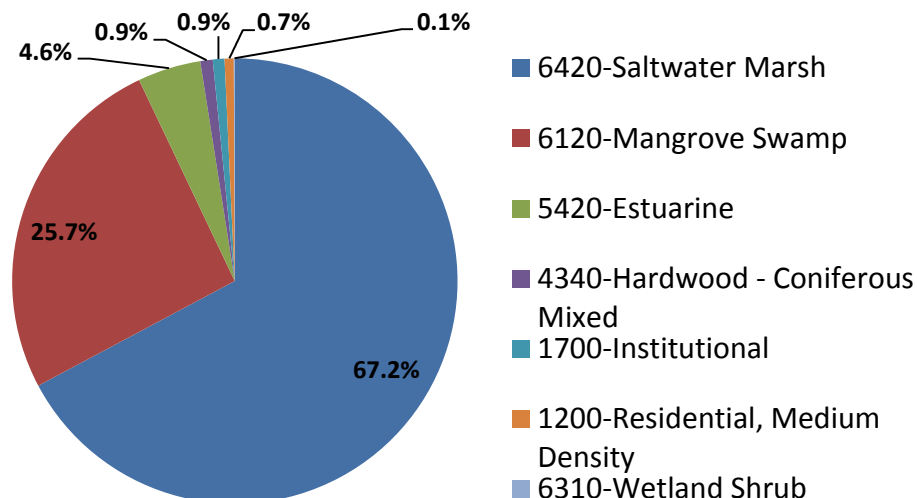
intermediate zone, and white mangrove and buttonwood in the highest, least tidally-influenced zone. Buttonwood often occupies an ecotone, or transition zone, to the adjacent upland community.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
6420-Saltwater Marsh	113.60	10.00	0.672	6.72
6120-Mangrove Swamp	43.50	10.00	0.257	2.57
5420-Estuarine	7.75	10.00	0.046	0.46
4340-Hardwood - Coniferous Mixed	1.51	10.00	0.009	0.09
1700-Institutional	1.44	2.14	0.009	0.02
1200-Residential, Medium Density	1.13	2.81	0.007	0.02
6310-Wetland Shrub	0.12	10.00	0.001	0.01
TOTAL	169.03	54.95	1.00	9.89

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	5
Hydrologic Indicator Score	5
Water Environment Score	10.0

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	95	11
Exotic Vegetation	5	8
Vegetative Community Score		9.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 15%.

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

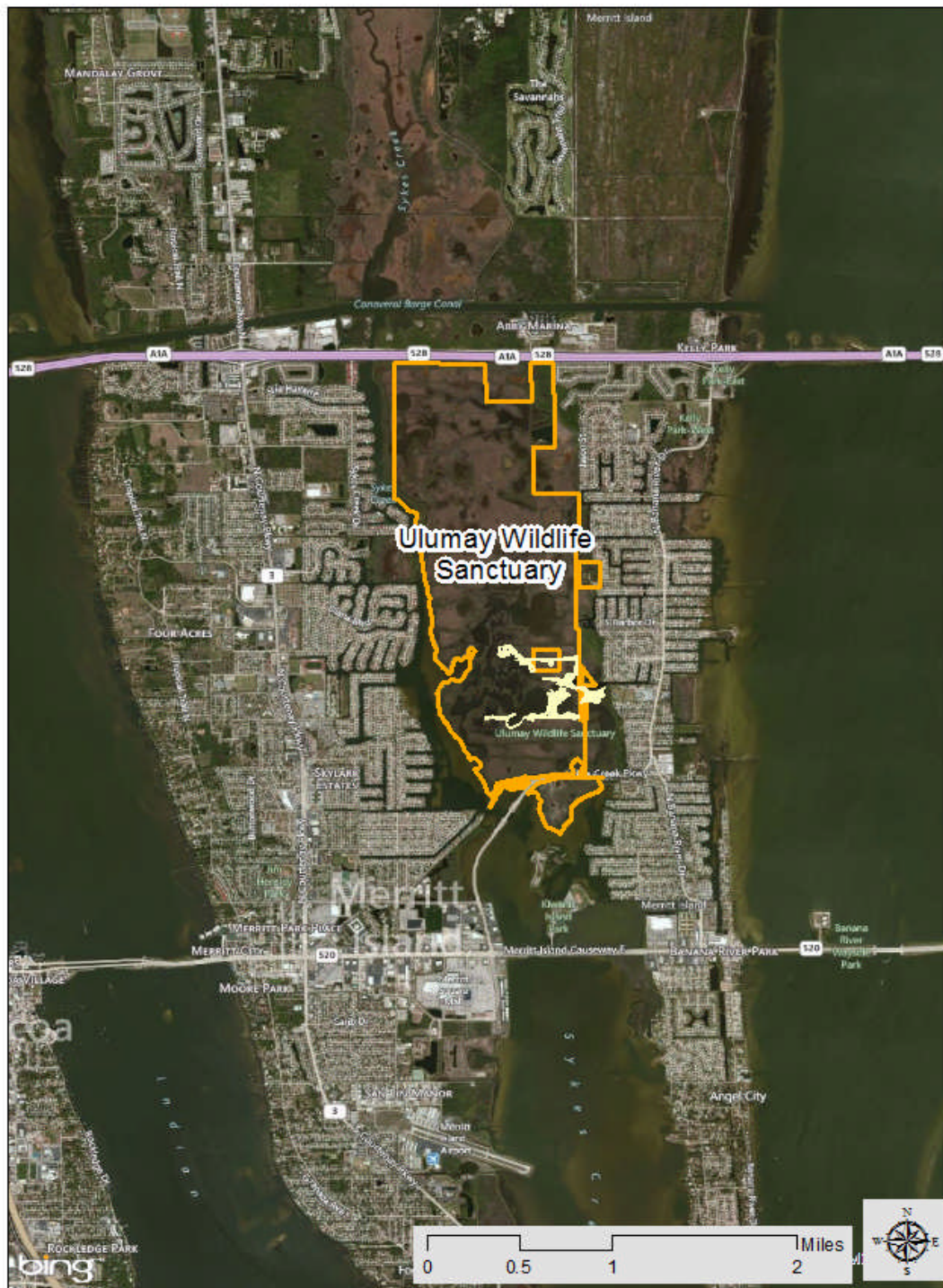
Brazilian pepper (Schinus terebinthifolius)

ASSESSMENT SCORE

$$(9.89 + 10.0 + 9.5) / 30 = 0.980$$

Mangrove Swamp Ulumay Wildlife Sanctuary

Brevard County Natural Resource Management
Reference Wetland Community



**Location Map - Mangrove Swamps
Ulumay Wildlife Sanctuary
Brevard County, Florida**

- 6120-Mangrove Swamp
- Ulumay Wildlife Sanctuary

Mangrove Swamp

Sebastian Inlet State Park

Brevard County Natural Resource Management
Reference Wetland Community



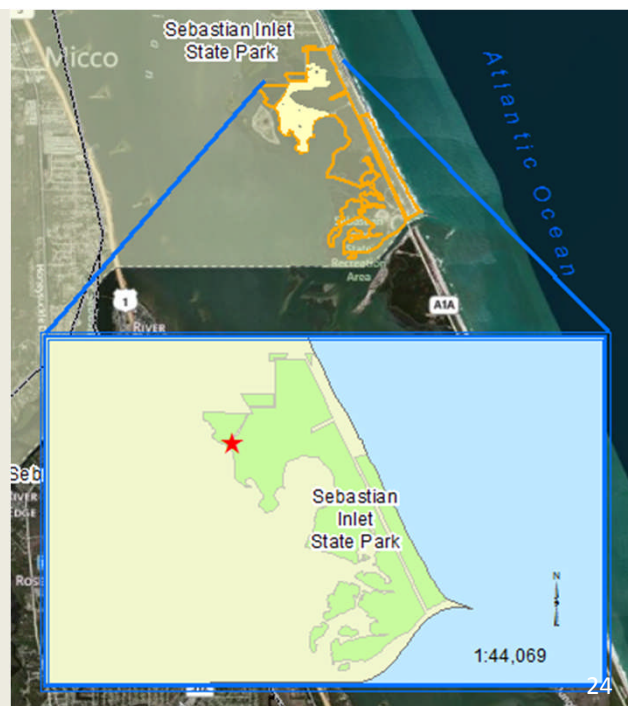
OVERVIEW

LOCATION

Brevard County
Latitude 27.8752898263 N, Longitude -80.4642015971E

COMMUNITY DESCRIPTION

Mangrove swamp is a dense forest occurring along relatively flat, low wave energy, marine and estuarine shorelines. The dominant plants of mangrove swamp are red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*), white mangrove (*Laguncularia racemosa*), and buttonwood (*Conocarpus erectus*). These four species can occur either in mixed stands or often in differentiated, monospecific zones that reflect varying degrees of tidal influence, levels of salinity, and types of substrate. Red mangrove often dominates the lowest (or deep-water) zone, followed by black mangrove in the



Mangrove Swamp

Sebastian Inlet State Park

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

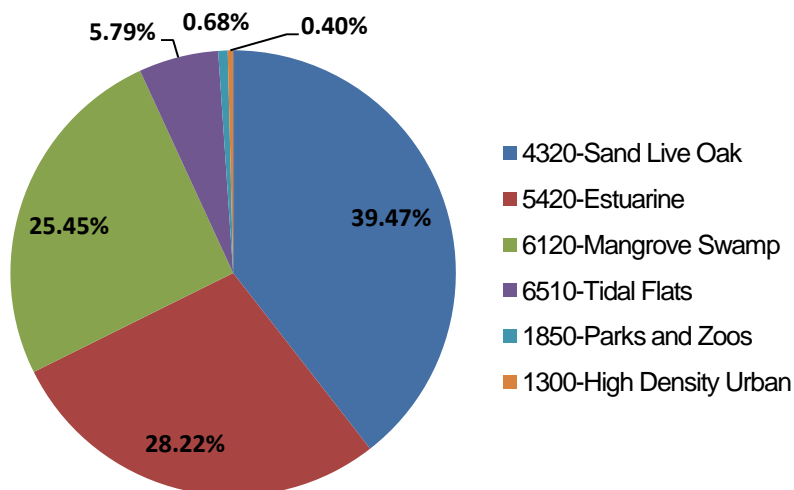
intermediate zone, and white mangrove and buttonwood in the highest, least tidally-influenced zone. Buttonwood often occupies an ecotone, or transition zone, to the adjacent upland community.

FUNCTIONAL WETLAND ASSESSMENT

- Landscape Location Score
- Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
4320-Sand Live Oak	49.38	10	0.395	3.947
5420-Estuarine	35.30	10	0.282	2.822
6120-Mangrove Swamp	31.84	10	0.254	2.545
6510-Tidal Flats	7.24	10	0.058	0.579
1850-Parks and Zoos	0.85	3.42	0.007	0.023
1300-High Density Urban	0.51	0.91	0.004	0.004
TOTAL	125.11	44.33	1.00	9.92

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	4.5
Hydrologic Indicator Score	5
Water Environment Score	9.5

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	85	10
Exotic Vegetation	15	7
Vegetative Community Score		8.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 15%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

ASSESSMENT SCORE

$$\begin{aligned}
 & (\text{Landscape Location} + \text{Water Environment} + \text{Vegetative Community}) / 30 = \\
 & (9.92 + 9.5 + 8.5) / 30 = 0.931
 \end{aligned}$$

Mangrove Swamp

Sebastian Inlet State Park

Brevard County Natural Resource Management
Reference Wetland Community



Location Map - Mangrove Swamps
Sebastian Inlet State Park
Brevard County, Florida

- 6120-Mangrove Swamp
- Sebastian Inlet State Park

Mixed Wetland Hardwoods

Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



OVERVIEW

LOCATION

Brevard County
Latitude 28.6875918253 N, Longitude -80.8868622564E

COMMUNITY DESCRIPTION

Mixed wetland hardwoods are composed of a large variety of hardwood species tolerant of hydric conditions yet exhibit an ill defined mixture of species. The evergreen hardwood and/or palm forest has a variable understory typically dominated by palms and ferns occurring on moist soils. While species composition varies, the community generally has a closed canopy of oaks and palms, an open understory, and a sparse to a moderate groundcover of grasses and ferns. The canopy is dominated by swamp laurel oak (*Quercus laurifolia*) and/or live oak (*Q. virginiana*) with varying amounts of cabbage palm (*Sabal palmetto*), American elm (*Ulmus americana*), sweetbay (*Magnolia virginiana*), red cedar (*Juniperus virginiana*), red maple (*Acer rubrum*) and sugarberry (*Celtis laevigata*). Not publically accessible.



Mixed Wetland Hardwoods

Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

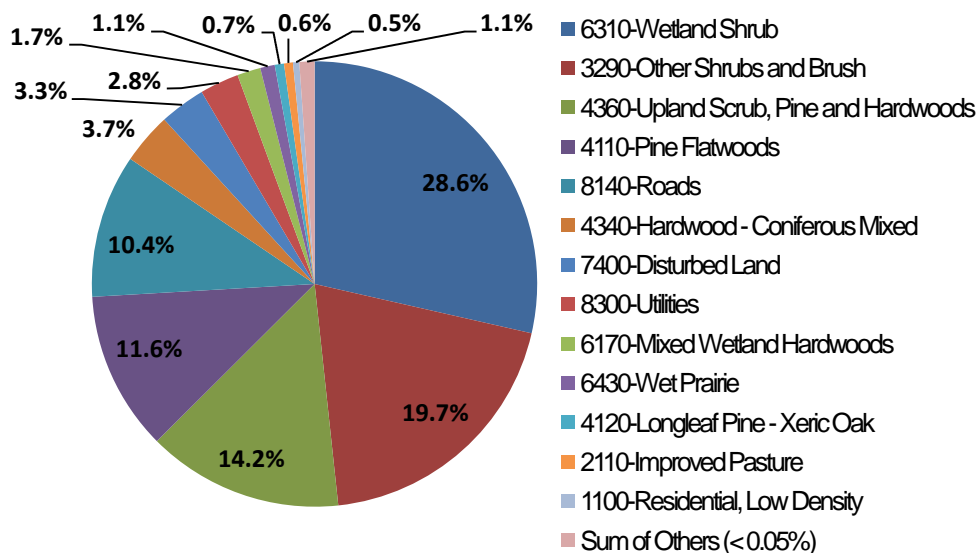
Cabbage palm is a common to dominant component of hydric hammock. Slash pine (*Pinus elliottii*) and Loblolly pine (*Pinus taeda*) may be frequent in some areas. In addition to saplings of canopy species, the understory may contain a number of small trees and shrubs. Various woody species that may be present including swamp dogwood (*Cornus foemina*), small-leaf viburnum (*Viburnum obovatum*), common persimmon (*Diospyros virginiana*), swamp bay (*Persea palustris*), wax myrtle (*Myrica cerifera*), dwarf palmetto (*Sabal minor*), American beautyberry (*Callicarpa americana*), and needle palm (*Rhaphidophyllum hystrix*). Vines may be frequent and diverse; common species are eastern poison ivy (*Toxicodendron radicans*), peppervine (*Ampelopsis arborea*), greenbriers (*Smilax* spp.), summer grape (*Vitis aestivalis*), and muscadine (*Vitis rotundifolia*).

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

FLUCFCS_legend	Sum of Acres	LSI_Value	Landcover Percent	Landscape Location Score (=LSI_Value* Landcover Percent)
6310-Wetland Shrub	150.18	10	0.285	2.85
3290-Other Shrubs and Brush	103.86	10	0.197	1.97
4360-Upland Scrub, Pine and Hardwoods	74.78	10	0.142	1.42
4110-Pine Flatwoods	60.83	10	0.116	1.16
8140-Roads	54.73	1.91	0.104	0.20
4340-Hardwood - Coniferous Mixed	19.55	10	0.037	0.37
7400-Disturbed Land	17.40	9.08	0.033	0.30
8300-Utilities	14.94	2.43	0.028	0.07
6170-Mixed Wetland Hardwoods	8.98	10	0.017	0.17
6430-Wet Prairie	5.59	10	0.011	0.11
4120-Longleaf Pine - Xeric Oak	3.53	10	0.007	0.07
2110-Improved Pasture	3.32	6.96	0.006	0.04
1100-Residential, Low Density	2.40	3.57	0.005	0.02
6410-Freshwater Marshes	2.02	10	0.004	0.04
6210-Cypress	1.08	10	0.002	0.02
6300-Wetland Forested Mixed	0.77	10	0.001	0.01
1820-Golf courses	0.77	3.42	0.001	0.00
2500-Specialty Farms	0.72	3.33	0.001	0.00
6440-Freshwater Marshes	0.51	10	0.001	0.01
TOTAL	525.96	150.70	1.00	8.84

Landcover Percent within 100 m buffer



Mixed Wetland Hardwoods

Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	4.505
Hydrologic Indicator Score	5
Water Environment Score	9.505

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	80	10
Exotic Vegetation	15	7
Vegetative Community Score		8.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics present in less than 15%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

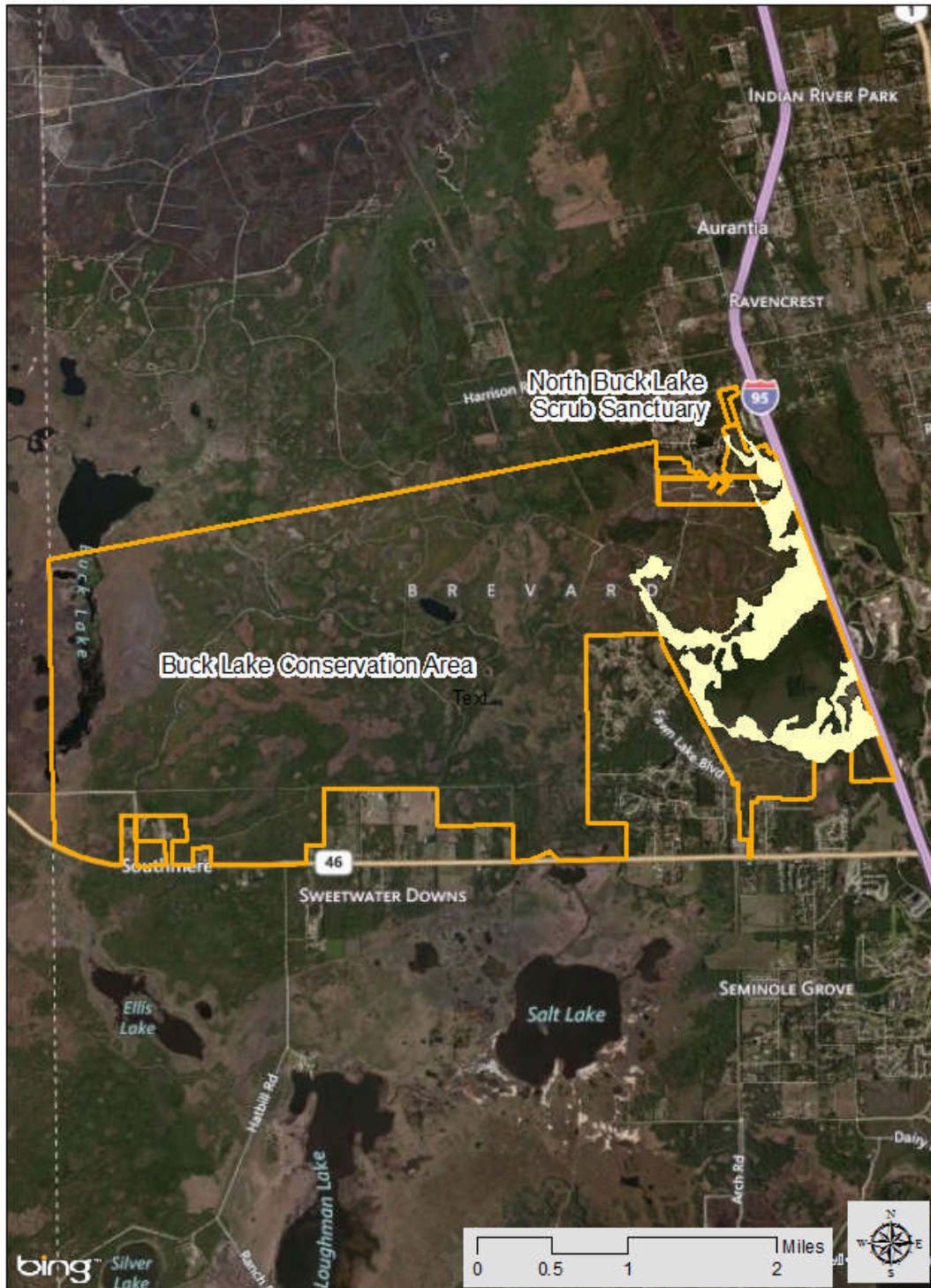
ASSESSMENT SCORE

$$\begin{array}{ccccccc} \text{(Landscape Location + Water Environment + Vegetative Community)/30 =} \\ (8.846 & + & 9.505 & + & 8.5) / 30 & = & 0.895 \end{array}$$

Mixed Wetland Hardwoods

Buck Lake Conservation Area

Brevard County Natural Resource Management



Location Map - Mixed Wetland Hardwoods
Buck Lake Conservation Area/
North Buck Lake Scrub Sanctuary
Brevard County, Florida

- 6170-Mixed Wetland Hardwoods
- North Buck Lake Scrub Sanctuary
- Buck Lake Conservation Area

Cypress Three Forks Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



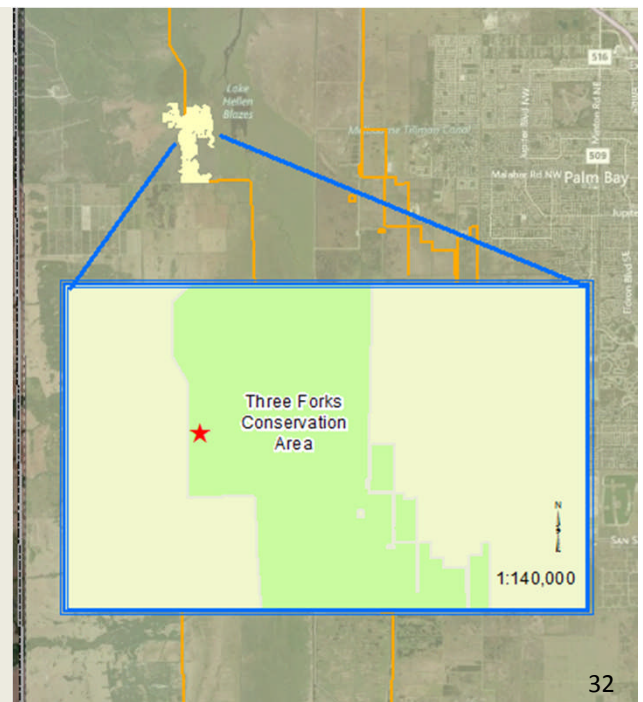
OVERVIEW

LOCATION

Brevard County
Latitude 28.0109407722 N, Longitude -80.8121163428E

COMMUNITY DESCRIPTION

Cypress is a basin wetland vegetated with hydrophytic trees and shrubs that can withstand an extended hydroperiod. Cypress wetlands are highly variable in size, shape, and species composition. While mixed species canopies are common, the dominant trees are pond cypress (*Taxodium ascendens*). Other typical canopy and subcanopy trees include slash pine (*Pinus elliottii*), red maple (*Acer rubrum*), dahoon (*Ilex cassine*), swamp bay (*Persea palustris*), sweetbay (*Magnolia virginiana*), loblolly bay (*Gordonia lasianthus*), laurel oak (*Quercus laurifolia*), sweetgum (*Liquidambar styraciflua*), water oak (*Quercus nigra*) and American elm (*Ulmus americana*).



Three Forks Conservation Area

Brevard County Natural Resource Management

Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

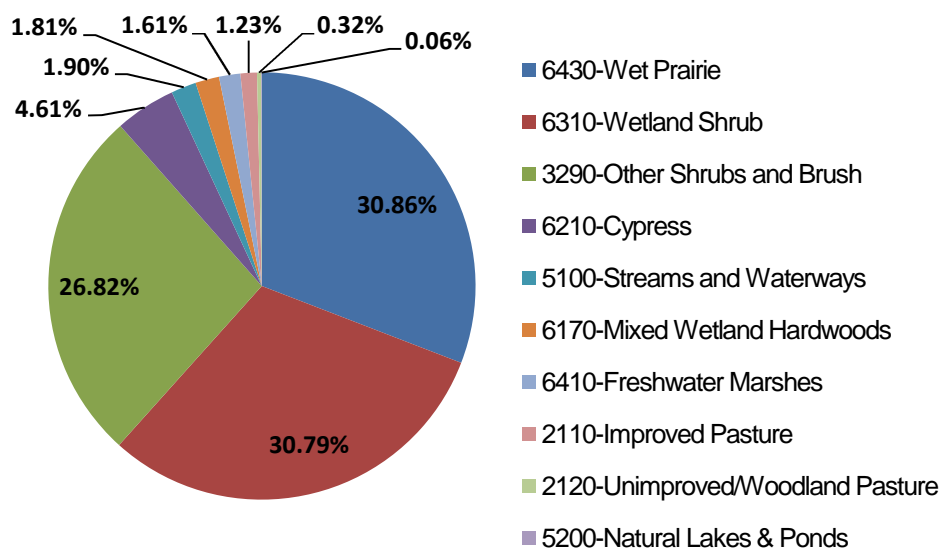
Depending on the hydrology and fire history, shrubs may be found throughout a cypress swamp or they may be concentrated around the perimeter. Common species include Carolina willow (*Salix caroliniana*), myrtle dahoon (*Ilex cassine* var. *myrtifolia*), fetterbush (*Lyonia lucida*), wax myrtle (*Myrica cerifera*) and common buttonbush (*Cephalanthus occidentalis*). The herbaceous layer is also variable and includes a wide array of species including maidencane (*Panicum hemitomon*), Virginia chain fern (*Woodwardia virginica*), arrowheads (*Sagittaria* spp.), lizard's tail (*Saururus cernuus*), false nettle (*Boehmeria cylindrica*), beaksedges (*Rhynchospora* spp.), bladderworts (*Utricularia* spp.), and royal fern (*Osmunda regalis* var. *spectabilis*).

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score
Landscape Scale Index (LSI)

FLUCFCS_legend	Sum of Acres	LSI_Value	Landcover Percent	Landscape Location Score (=LSI_Value* Landcover Percent)
6430-Wet Prairie	115.61	10	0.309	3.086
6310-Wetland Shrub	115.35	10	0.308	3.079
3290-Other Shrubs and Brush	100.47	10	0.268	2.682
6210-Cypress	17.28	10	0.046	0.461
5100-Streams and Waterways	7.12	10	0.019	0.190
6170-Mixed Wetland Hardwoods	6.78	10	0.018	0.181
6410-Freshwater Marshes	6.03	10	0.016	0.161
2110-Improved Pasture	4.62	6.96	0.012	0.086
2120-Unimproved/Woodland Pasture	1.19	8.03	0.003	0.025
5200-Natural Lakes & Ponds	0.21	10	0.001	0.006
TOTAL	374.65	94.99	1.00	9.96

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)➤ **Water Environment**

Water Environment	Score¹
Water Quality Treatment Score	4.88
Hydrologic Indicator Score	5
Water Environment Score	9.88

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ **Vegetative Community**

Vegetative Community	Percentage	Score²
Wetland Vegetation	85	10
Exotic Vegetation	15	7
Vegetative Community Score		8.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 15%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

Japanese Climbing Fern (Lygodium japonicum)

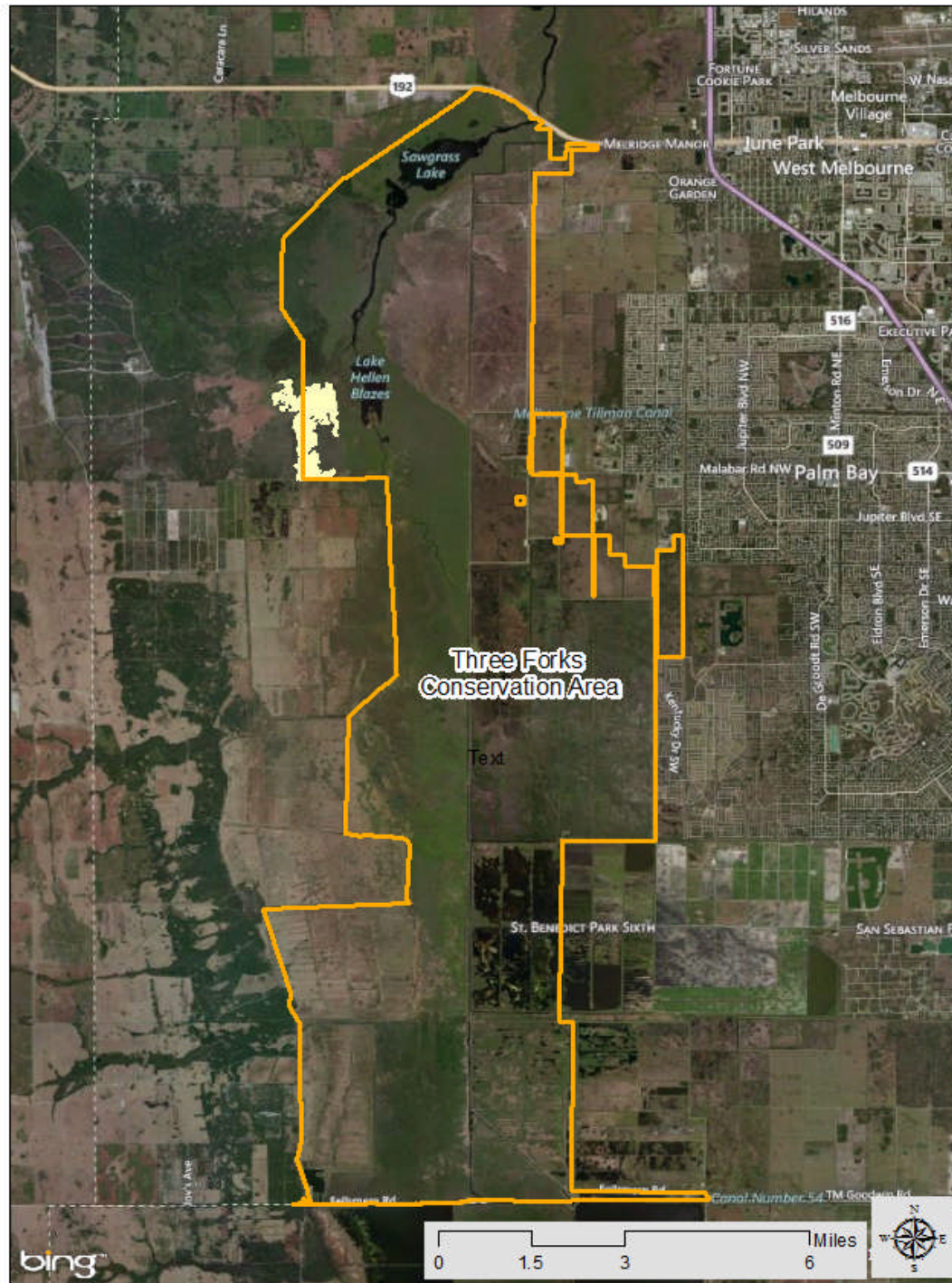
ASSESSMENT SCORE

(Landscape Location + Water Environment + Vegetative Community)/30 =

$$(9.96 + 9.88 + 8.5) / 30 = 0.945$$

Three Forks Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



**Location Map - Cypress
Three Forks Conservation Area
Brevard County, Florida**

- 6210-Cypress
- Three Forks Conservation Area

Hydric Pine Flatwoods

Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



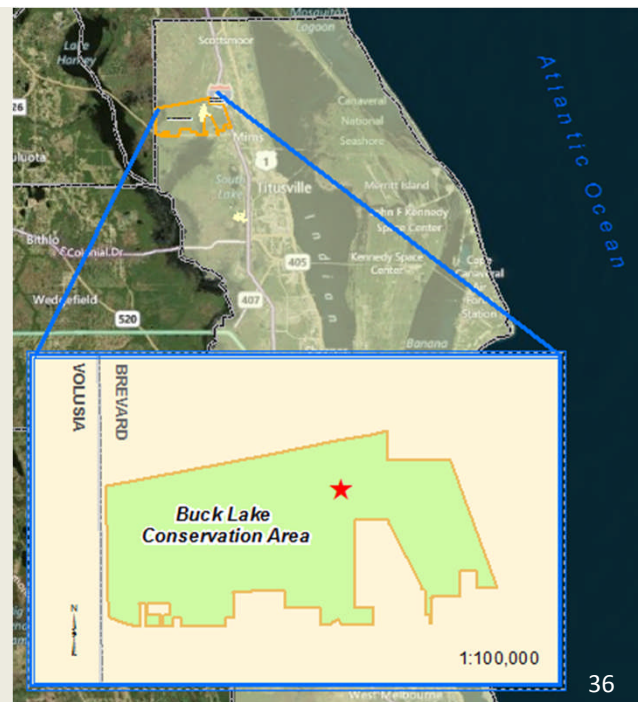
OVERVIEW

LOCATION

Brevard County
Latitude 28.6910319585 N, Longitude -80.9086244882E

COMMUNITY DESCRIPTION

Hydric pine flatwoods are pine forests with a sparse or absent midstory and a dense groundcover of hydrophytic grasses, herbs, and low shrubs. The pine canopy typically consists of one or a combination of longleaf pine (*Pinus palustris*), slash pine (*P. elliottii*), pond pine (*P. serotina*), or South Florida slash pine (*P. elliottii* var. *densa*). The subcanopy, if present, consists of scattered sweetbay (*Magnolia virginiana*), swamp bay (*Persea palustris*), loblolly bay (*Gordonia lasianthus*), pond cypress (*Taxodium ascendens*), dahoon (*Ilex cassine*), sabal palm (*Sabal palmetto*), or wax myrtle (*Myrica cerifera*). Not publically accesible.



Hydric Pine Flatwoods Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

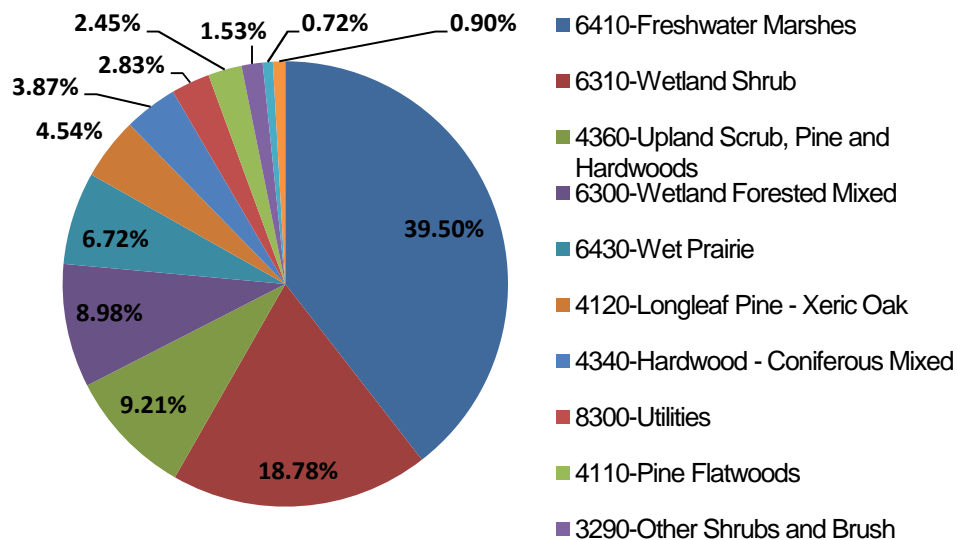
Shrubs include large gallberry (*Ilex coriacea*), fetterbush (*Lyonia lucida*), titi, black titi (*Cliftonia monophylla*), sweet pepperbush (*Clethra alnifolia*), red chokeberry (*Photinia pyrifolia*), and azaleas (*Rhododendron canescens*, *R. viscosum*). Saw palmetto (*Serenoa repens*) and gallberry (*I. glabra*), species also found in mesic flatwoods sites, may be present. Herbs include wiregrass (*Aristida stricta* var. *beyrichiana*), blue maidencane (*Amphicarpum muhlenbergianum*), or hydrophytic species such as toothache grass (*Ctenium aromaticum*), Curtiss' sandgrass (*Calamovilfa curtissii*), cutover muhly (*Muhlenbergia expansa*), coastalplain yellow-eyed grass (*Xyris ambigua*), Carolina redroot (*Lachnanthes caroliana*), and beaksedges (*Rhynchospora chapmanii*, *R. latifolia*, *R. compressa*).

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	Sum of Acres	LSI_Value	Landcover Percent	Landscape Location Score (=LSI_Value* Landcover Percent)
6410-Freshwater Marshes	89.98	10	0.395	3.950
6310-Wetland Shrub	42.77	10	0.188	1.878
4360-Upland Scrub, Pine and Hardwoods	20.98	10	0.092	0.921
6300-Wetland Forested Mixed	20.46	10	0.090	0.898
6430-Wet Prairie	15.32	10	0.067	0.672
4120-Longleaf Pine - Xeric Oak	10.34	10	0.045	0.454
4340-Hardwood - Coniferous Mixed	8.81	10	0.039	0.387
8300-Utilities	6.45	2.43	0.028	0.069
4110-Pine Flatwoods	5.58	10	0.024	0.245
3290-Other Shrubs and Brush	3.48	10	0.015	0.153
6440-Freshwater Marshes	1.65	10	0.007	0.072
Other Communities (<= 0.05%)	1.97	10	0.009	0.086
TOTAL	227.79	112.43	1.00	9.79

Landcover Percent within 100 m buffer



Hydric Pine Flatwoods Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	4.735
Hydrologic Indicator Score	5
Water Environment Score	9.735

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	95	11
Exotic Vegetation	0	8
Vegetative Community Score		9.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are not present

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

none

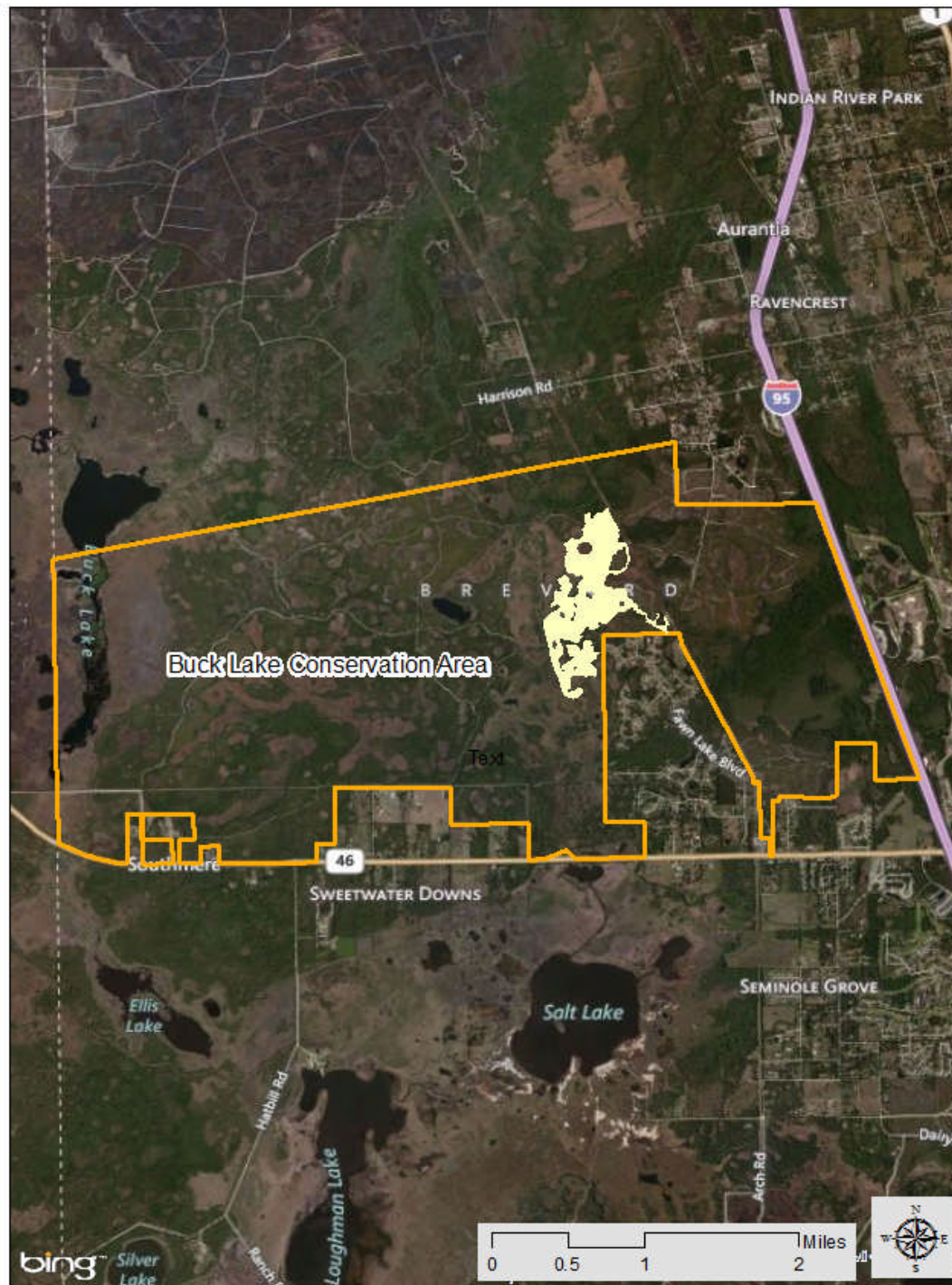
ASSESSMENT SCORE

$$\begin{array}{ccccccc} \text{(Landscape Location + Water Environment + Vegetative Community)} & / & 30 & = & & & \\ (9.79 & + & 9.735 & + & 9.5) & / & 30 = 0.967 \end{array}$$

Hydric Pine Flatwoods

Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



Location Map - Hydric Pine Flatwoods
Buck Lake Conservation Area
Brevard County, Florida

- 6250-Hydric Pine Flatwoods
- Buck Lake Conservation Area

Wetland Forest Mixed

Kings Park

Brevard County Natural Resource Management
Reference Wetland Community



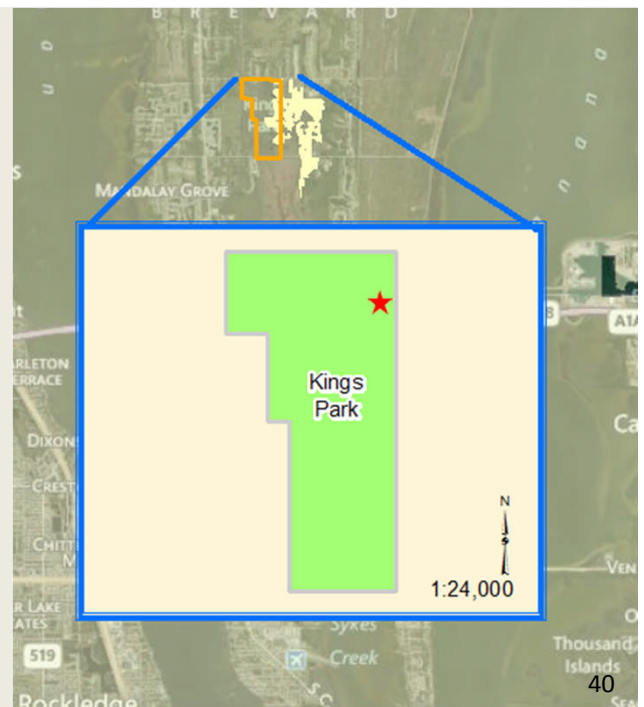
OVERVIEW

LOCATION

Brevard County
Latitude 28.4407538546 N, Longitude -80.6888681754E

COMMUNITY DESCRIPTION

Wetland Forest Mixed are composed of a large variety of conifer and hardwood species tolerant of hydric conditions yet neither hardwoods or conifers achieve a 66 percent dominance of the crown canopy composition. The evergreen hardwood or palm forest has a variable understory typically dominated by palms and ferns occurring on moist soils. While species composition varies, the community generally has a closed canopy of pines, oaks and palms, an open understory, and a sparse to a moderate groundcover of grasses and ferns. The canopy is dominated by slash pine (*Pinus elliotii*), laurel oak (*Quercus laurifolia*) and/or live oak (*Q. virginiana*) with varying amounts of



Wetland Forest Mixed Kings Park

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

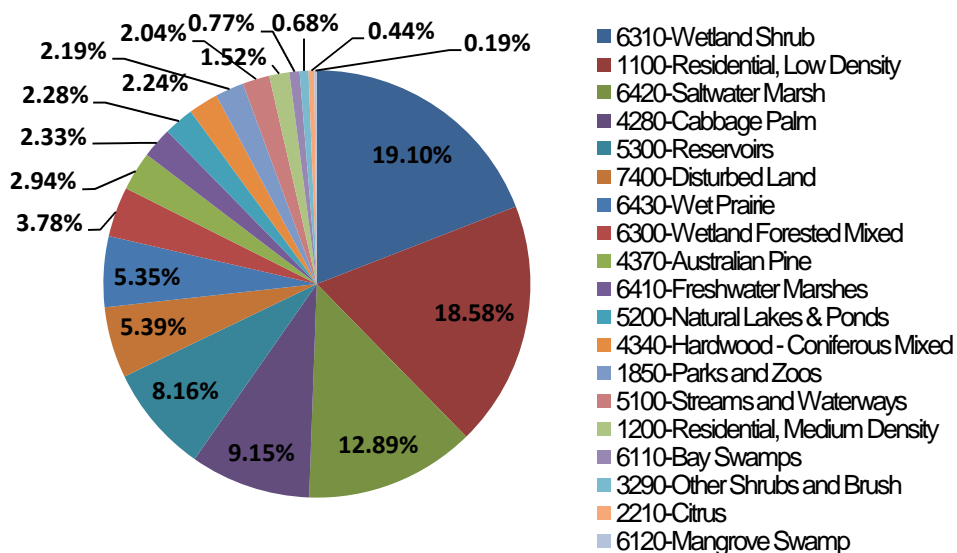
cabbage palm (*Sabal palmetto*), American elm (*Ulmus americana*), southern red cedar (*Juniperus virginiana*) and red maple (*Acer rubrum*). In addition to saplings of canopy species, the understory may contain a number of small trees and shrubs. Various woody species that may be present including small-leaf viburnum (*Viburnum obovatum*), swamp bay (*Persea palustris*), wax myrtle (*Myrica cerifera*) and dwarf palmetto (*Sabal minor*), American beautyberry (*Callicarpa americana*), and needle palm (*Rhapidophyllum hystrix*). Vines may be frequent and diverse; common species are eastern poison ivy (*Toxicodendron radicans*), peppervine (*Ampelopsis arborea*), greenbriers (*Smilax* spp.), summer grape (*Vitis aestivalis*), and muscadine (*Vitis rotundifolia*).

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

FLUCFCS_legend	Sum of Acres	LSI_Value	Landcover Percent	Landscape Location Score (=LSI_Value* Landcover Percent)
6310-Wetland Shrub	54.84	10	0.191	1.910
1100-Residential, Low Density	53.36	3.57	0.186	0.663
6420-Saltwater Marsh	37.02	10	0.129	1.289
4280-Cabbage Palm	26.26	10	0.091	0.915
5300-Reservoirs	23.44	10	0.082	0.816
7400-Disturbed Land	15.48	9.08	0.054	0.489
6430-Wet Prairie	15.37	10	0.054	0.535
6300-Wetland Forested Mixed	10.87	10	0.038	0.378
4370-Australian Pine	8.45	8.87	0.029	0.261
6410-Freshwater Marshes	6.68	10	0.023	0.233
5200-Natural Lakes & Ponds	6.56	10	0.023	0.228
4340-Hardwood - Coniferous Mixed	6.42	10	0.022	0.224
1850-Parks and Zoos	6.29	3.42	0.022	0.075
5100-Streams and Waterways	5.85	10	0.020	0.204
1200-Residential, Medium Density	4.35	2.81	0.015	0.043
6110-Bay Swamps	2.20	10	0.008	0.077
3290-Other Shrubs and Brush	1.95	10	0.007	0.068
2210-Citrus	1.25	7.02	0.004	0.031
6120-Mangrove Swamp	0.54	10	0.002	0.019
TOTAL	287.18	164.77	1.00	8.46

Landcover Percent within 100 m buffer



Wetland Forest Mixed Kings Park

Brevard County Natural Resource Management
Reference Wetland Community

FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	2.85
Hydrologic Indicator Score	3.3
Water Environment Score	6.15

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	75	9
Exotic Vegetation	20	7
Vegetative Community Score		8.0

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics present in less than 20%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

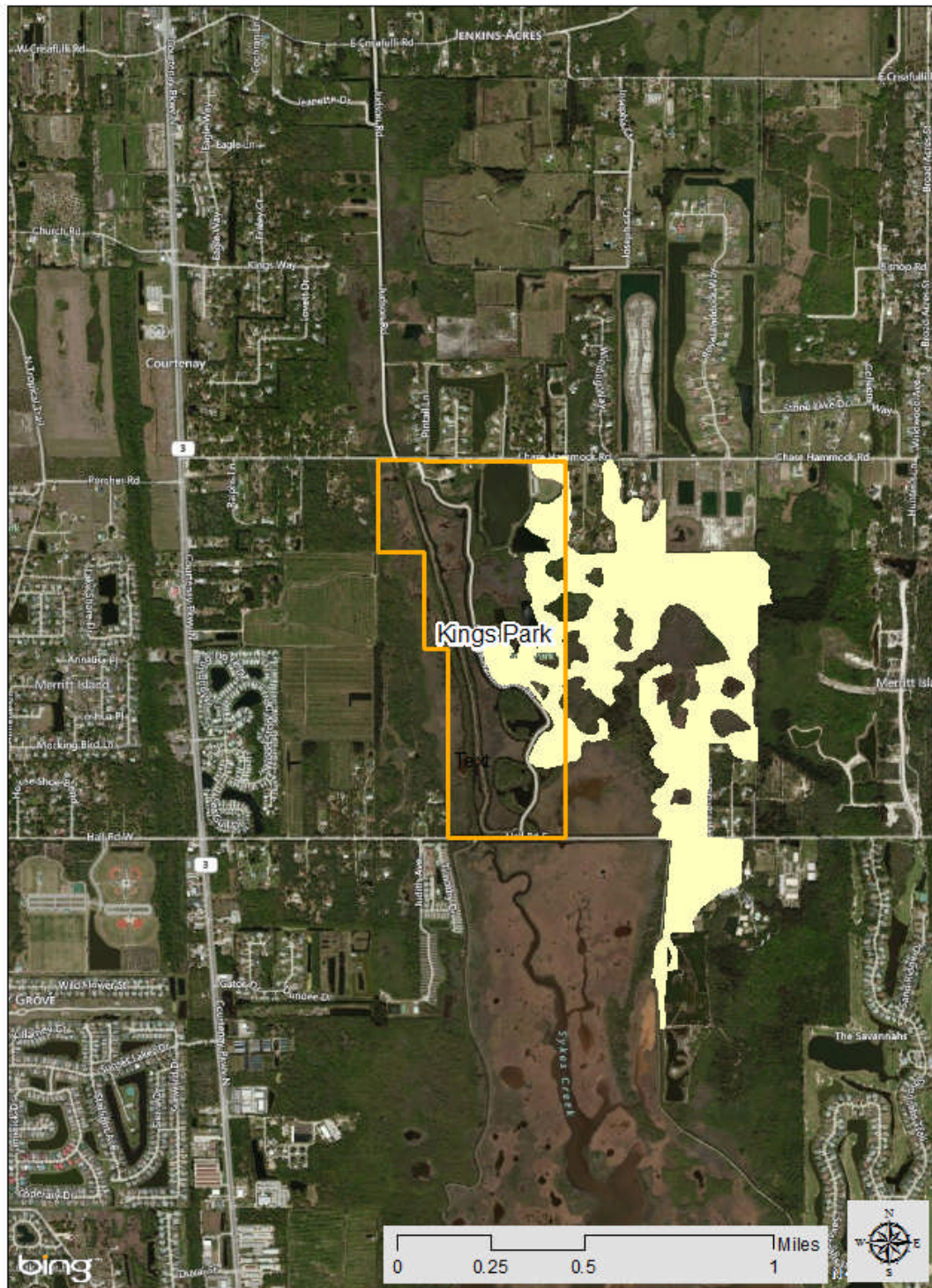
Brazilian pepper (Schinus terebinthifolius)

ASSESSMENT SCORE

$$\begin{array}{ccccccc} \text{(Landscape Location + Water Environment + Vegetative Community)} & / & 30 & = & & & \\ (8.46 & + & 6.15 & + & 8.0) & / & 30 = 0.754 \end{array}$$

Wetland Forest Mixed Kings Park

Brevard County Natural Resource Management



**Location Map - Wetland Forest Mixed
Kings Park
Brevard County, Florida**

6300-Wetland Forested Mixed
Kings Park

Wetland Scrub

River Lakes Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



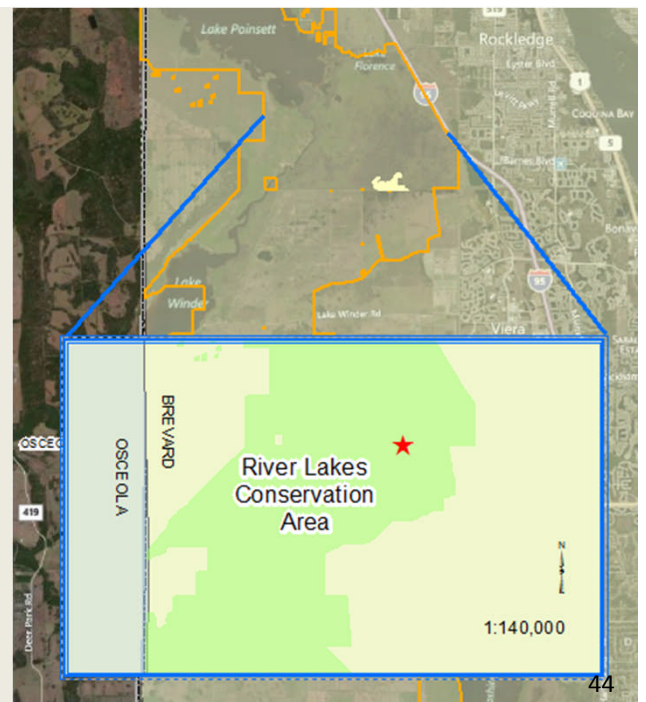
OVERVIEW

LOCATION

Brevard County
Latitude 28.2893606192 N, Longitude -80.7788960996E

COMMUNITY DESCRIPTION

Wetland Scrub is vegetated with hydrophytic trees and shrubs that can withstand an extended hydroperiod. Wetland Scrub systems are highly variable in size, shape, and species composition. AS a result of the hydrology and fire history, shrubs are common throughout. Common species include coastalplain willow (*Salix caroliniana*), small red maple (*Acer rubrum*), myrtle dahoon (*Ilex cassine* var. *myrtifolia*), fetterbush (*Lyonia lucida*), wax myrtle (*Myrica cerifera*) and common buttonbush (*Cephalanthus occidentalis*). The herbaceous layer is also variable and includes a wide array of species including maidencane



Wetland Scrub

River Lakes Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

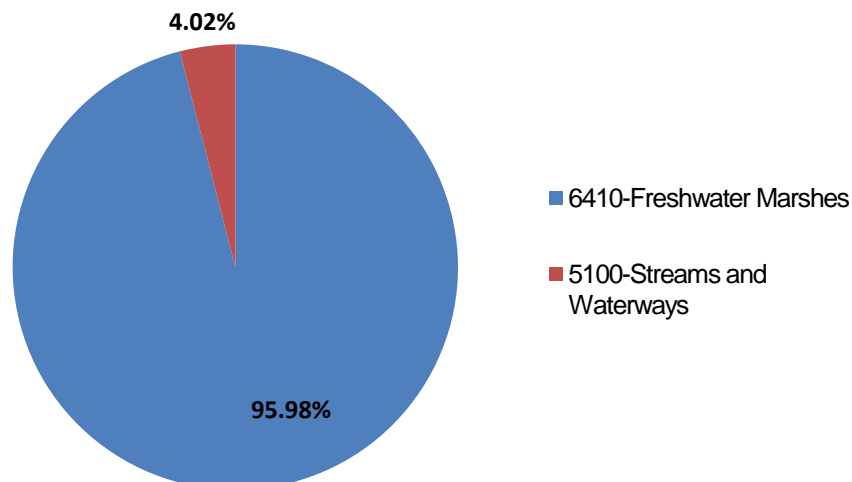
(*Panicum hemitomon*), Virginia chain fern (*Woodwardia virginica*), arrowheads (*Sagittaria* spp.), lizard's tail (*Saururus cernuus*), false nettle (*Boehmeria cylindrica*), beaksedges (*Rhynchospora* spp.), bladderworts (*Utricularia* spp.), and royal fern (*Osmunda regalis* var. *spectabilis*). Vines may be present, particularly coral greenbrier (*Smilax walteri*), laurel greenbrier (*Smilax laurifolia*), and eastern poison ivy (*Toxicodendron radicans*).

FUNCTIONAL WETLAND ASSESSMENT

- Landscape Location Score
- Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
6410-Freshwater Marshes	102.12	10	0.960	9.598
5100-Streams and Waterways	4.28	10	0.040	0.402
TOTAL	106.40	20.00	1.00	10.00

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	4.98
Hydrologic Indicator Score	5
Water Environment Score	9.98

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	70	9
Exotic Vegetation	30	4
Vegetative Community Score		6.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 30%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

Primrose Willow (Ludwigia peruviana)

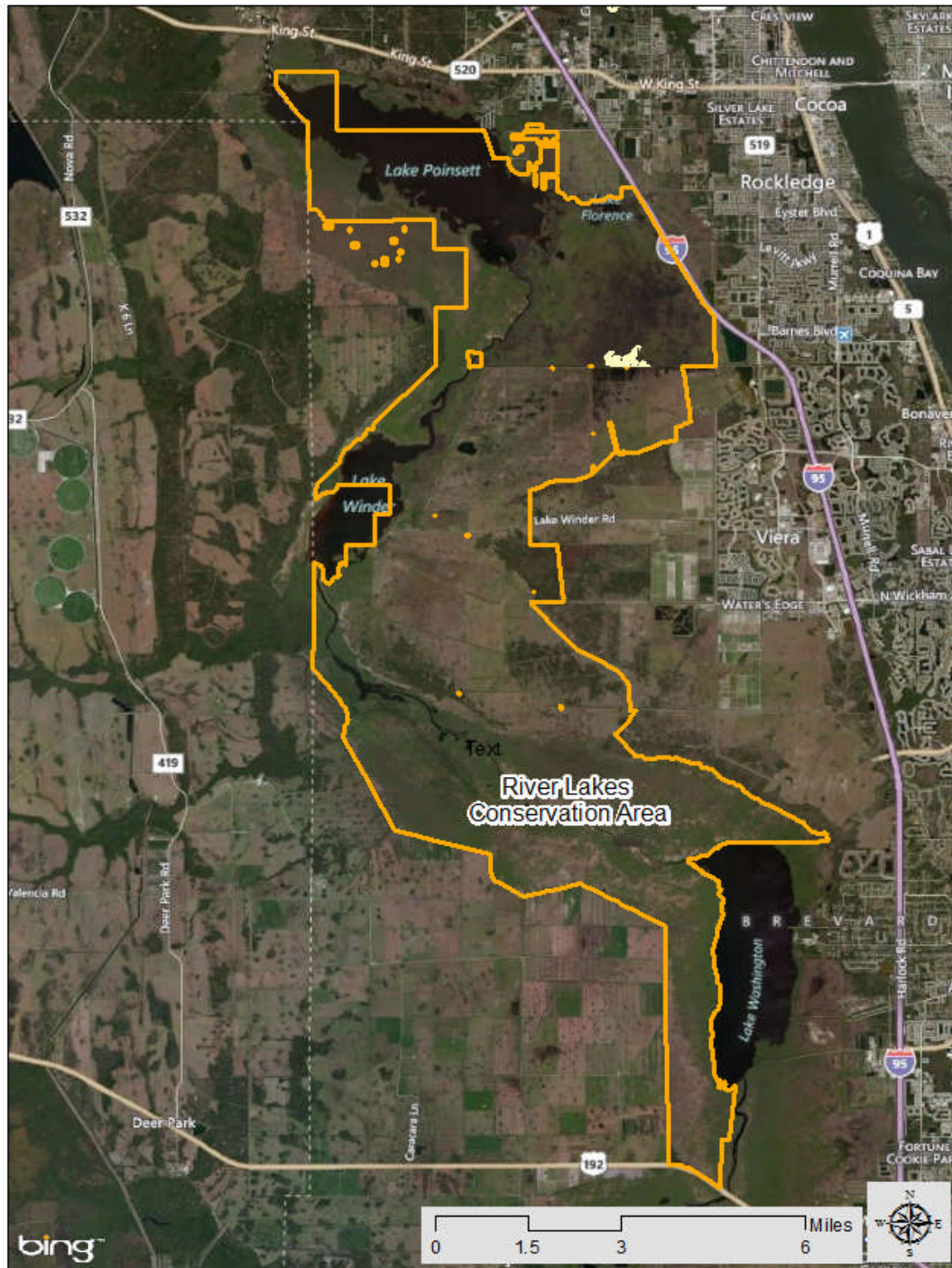
ASSESSMENT SCORE

$$(10 + 9.98 + 6.5) / 30 = 0.883$$

Wetland Scrub

River Lakes Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



**Location Map - Wetland Scrub
 River Lakes Conservation Area
 Brevard County, Florida**

- 6310-Wetland Shrub
- River Lakes Conservation Area

Wetland Scrub

Three Forks Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



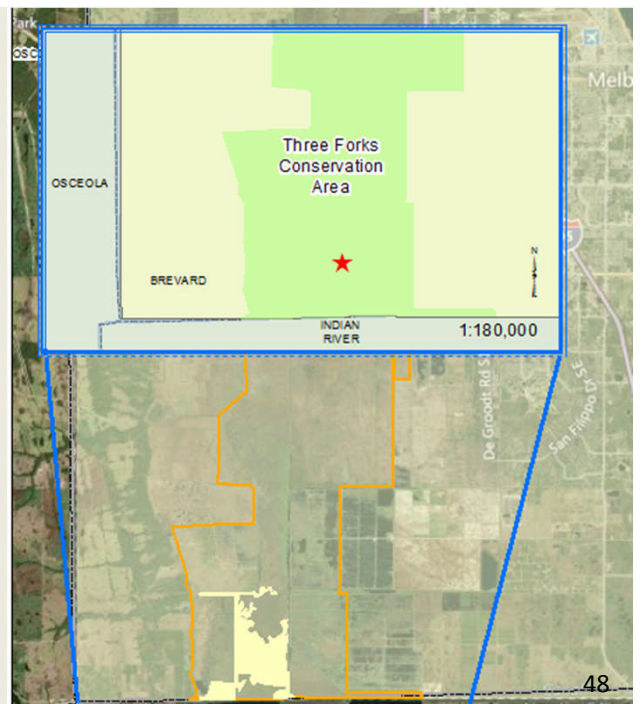
OVERVIEW

LOCATION

Brevard County
Latitude 27.8404694875 N, Longitude -80.7860135026E

COMMUNITY DESCRIPTION

Wetland Scrub is vegetated with hydrophytic trees and shrubs that can withstand an extended hydroperiod. Wetland Scrub systems are highly variable in size, shape, and species composition. AS a result of the hydrology and fire history, shrubs are common throughout. Common species include coastalplain willow (*Salix caroliniana*), small red maple (*Acer rubrum*), myrtle dahoon (*Ilex cassine* var. *myrtifolia*), fetterbush (*Lyonia lucida*), wax myrtle (*Myrica cerifera*) and common buttonbush (*Cephalanthus occidentalis*). The herbaceous layer is also variable and includes a wide array of species including maidencane



Wetland Scrub

Three Forks Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

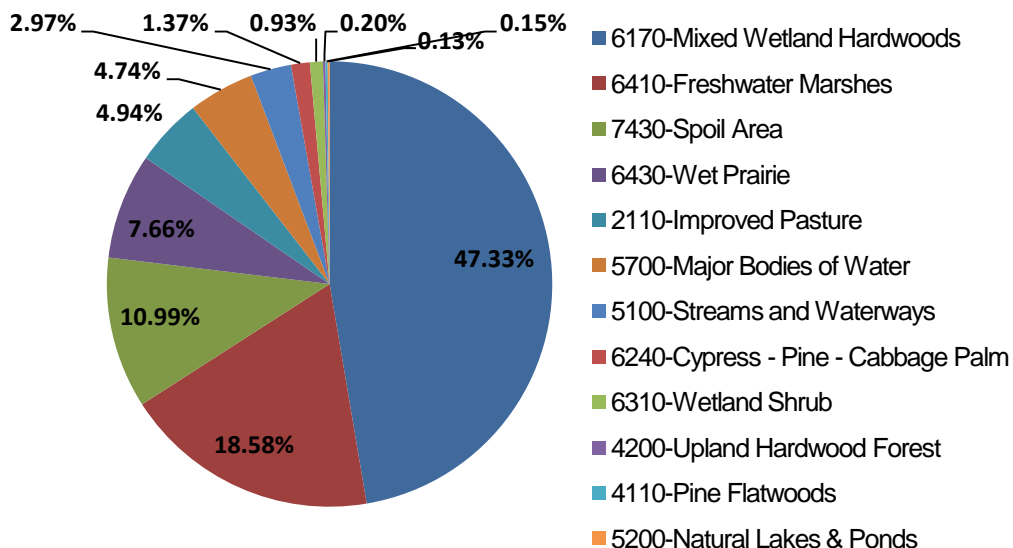
(*Panicum hemitomon*), Virginia chain fern (*Woodwardia virginica*), arrowheads (*Sagittaria* spp.), lizard's tail (*Saururus cernuus*), false nettle (*Boehmeria cylindrica*), beaksedges (*Rhynchospora* spp.), bladderworts (*Utricularia* spp.), and royal fern (*Osmunda regalis* var. *spectabilis*). Vines may be present, particularly coral greenbrier (*Smilax walteri*), laurel greenbrier (*Smilax laurifolia*), and eastern poison ivy (*Toxicodendron radicans*).

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

FLUCFCS_legend	Sum of Acres	LSI_Value	Landcover Percent	Landscape Location Score (=LSI_Value* Landcover Percent)
6170-Mixed Wetland Hardwoods	415.62	10	0.473	4.733
6410-Freshwater Marshes	163.17	10	0.186	1.858
7430-Spoil Area	96.54	9.08	0.110	0.998
6430-Wet Prairie	67.23	10	0.077	0.766
2110-Improved Pasture	43.35	6.96	0.049	0.344
5700-Major Bodies of Water	41.66	10	0.047	0.474
5100-Streams and Waterways	26.06	10	0.030	0.297
6240-Cypress - Pine - Cabbage Palm	12.07	10	0.014	0.137
6310-Wetland Shrub	8.14	10	0.009	0.093
4200-Upland Hardwood Forest	1.75	10	0.002	0.020
4110-Pine Flatwoods	1.33	10	0.002	0.015
5200-Natural Lakes & Ponds	1.14	10	0.001	0.013
TOTAL	878.06	116.04	1.00	9.75

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	3.99
Hydrologic Indicator Score	5
Water Environment Score	8.99

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	70	9
Exotic Vegetation	30	4
Vegetative Community Score		6.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 30%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

Primrose Willow (Ludwigia peruviana)

ASSESSMENT SCORE

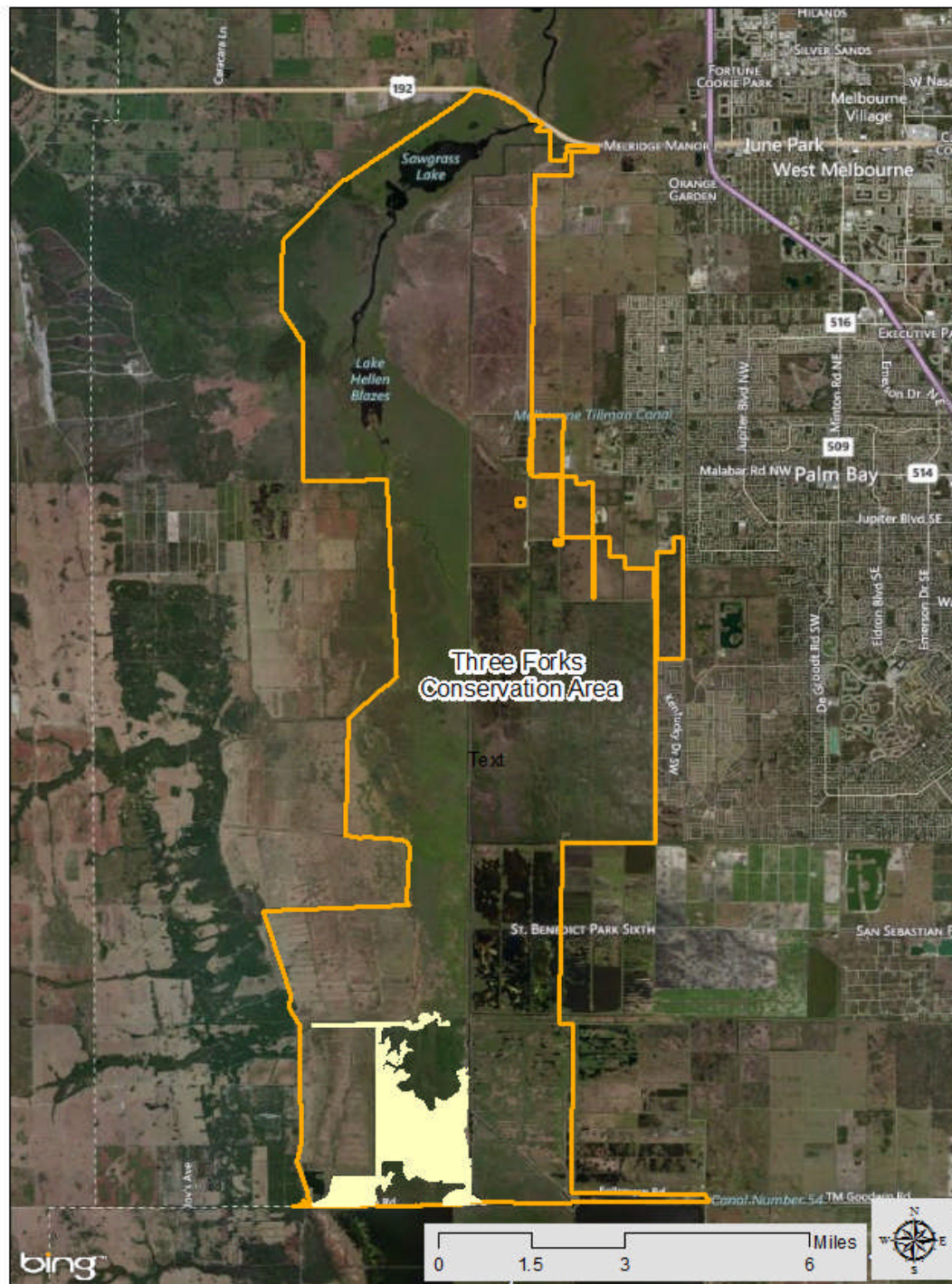
(Landscape Location + Water Environment + Vegetative Community)/30 =

$$(9.75 + 8.99 + 6.5) / 30 = 0.841$$

Wetland Scrub

Three Forks Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



Location Map - Wetland Scrub
Three Forks Conservation Area
Brevard County, Florida

- 6310-Wetland Shrub
- Three Forks Conservation Area

Freshwater Marsh

Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



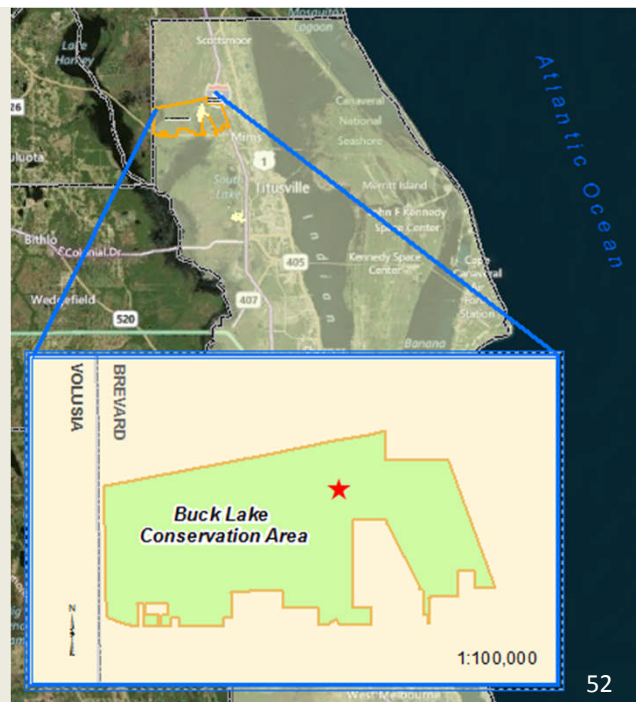
OVERVIEW

LOCATION

Brevard County
Latitude 28.6910319585 N, Longitude -80.9086244882E

COMMUNITY DESCRIPTION

Freshwater marshes are regularly inundated herbaceous wetlands that may occur in a variety of situations and may be within a fire-maintained matrix community. Species composition is heterogeneous both within and between marshes but can generally be divided into submersed, floating-leaved, emergent, and grassy zones from deepest to shallowest portions; shrub patches may be present within any of these zones. the emergent zone may have pickerelweed (*Pontederia cordata*), bulltongue arrowhead (*Sagittaria lancifolia*), southern cattail (*Typha domingensis*), sawgrass (*Cladium jamaicense*), and softstem bulrush (*Scirpus tabernaemontani*); the grassy zone is typically



Freshwater Marsh

Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

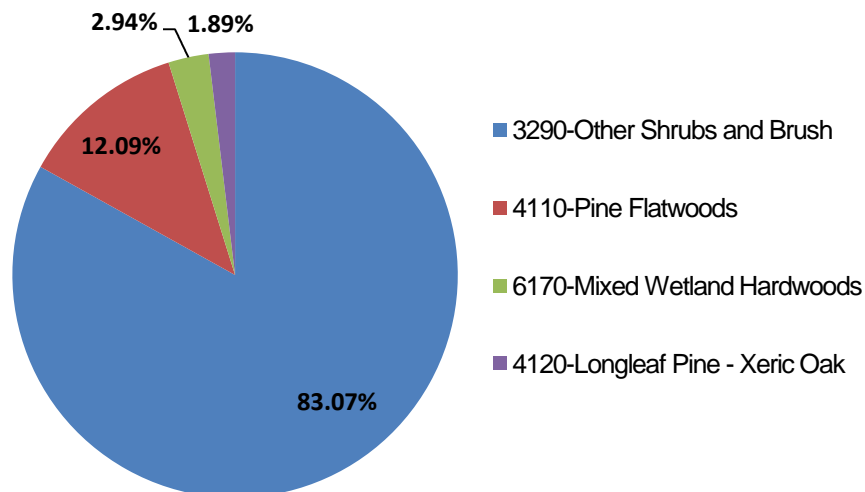
characterized by maidencane (*Panicum hemitomon*), smooth beggarticks (*Bidens laevis*), dotted smartweed (*Polygonum punctatum*), and sand cordgrass (*Spartina bakeri*), accompanied by a diverse mixture forbs such as sweetscent (*Pluchea odorata*), spadeleaf (*Centella asiatica*), and lemon bacopa (*Bacopa caroliniana*). Coastalplain willow (*Salix caroliniana*), common buttonbush (*Cephalanthus occidentalis*), elderberry (*Sambucus nigra* ssp. *canadensis*), and wax myrtle (*Myrica cerifera*) are common shrubby components. Not publically accessible.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
3290-Other Shrubs and Brush	20.318	10	0.831	8.307
4110-Pine Flatwoods	2.958	10	0.121	1.209
6170-Mixed Wetland Hardwoods	0.719	10	0.029	0.294
4120-Longleaf Pine - Xeric Oak	0.463	10	0.019	0.189
TOTAL	24.46	40.00	1.00	10.00

Landcover Percent within 100 m buffer



Freshwater Marsh

Buck Lake Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	5
Hydrologic Indicator Score	5
Water Environment Score	10

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	100	12
Exotic Vegetation	0	8
Vegetative Community Score		10

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are not present

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

None

ASSESSMENT SCORE

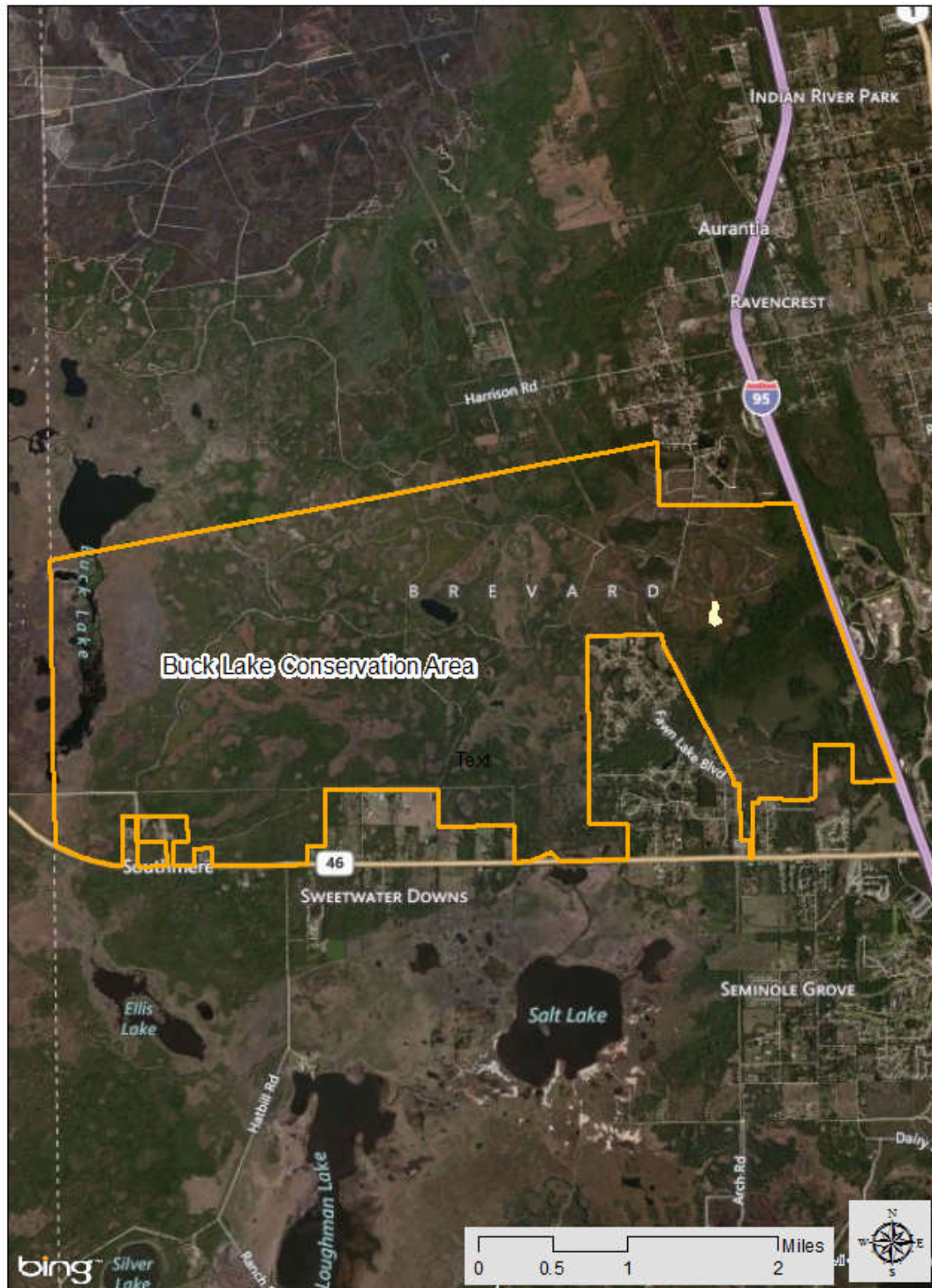
$$\frac{(\text{Landscape Location} + \text{Water Environment} + \text{Vegetative Community})}{30} =$$

$$\frac{(10 + 10 + 10)}{30} = 1.000$$

Freshwater Marsh

Buck Lake Conservation Area

Brevard County Natural Resource Management



Location Map - Freshwater Marsh
Buck Lake Conservation Area
Brevard County, Florida

- 6410-Freshwater Marshes
- Buck Lake Conservation Area

Freshwater Marsh

Brevard County Natural Resource Management
Reference Wetland Community

St. Sebastian River Preserve State Park



OVERVIEW

LOCATION

Brevard County

Latitude 27.8513090723 N, Longitude -80.558021893 E

COMMUNITY DESCRIPTION

Freshwater marshes are regularly inundated herbaceous wetlands that may occur in a variety of situations and may be within a fire-maintained matrix community. Species composition is heterogeneous both within and between marshes but can generally be divided into submersed, floating-leaved, emergent, and grassy zones from deepest to shallowest portions; shrub patches may be present within any of these zones. the emergent zone may have pickerelweed (*Pontederia cordata*), bulltongue arrowhead (*Sagittaria lancifolia*), southern cattail (*Typha domingensis*), sawgrass (*Cladium jamaicense*), and softstem bulrush (*Scirpus tabernaemontani*); the grassy zone is typically



Freshwater Marsh

St. Sebastian River Preserve State Park

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

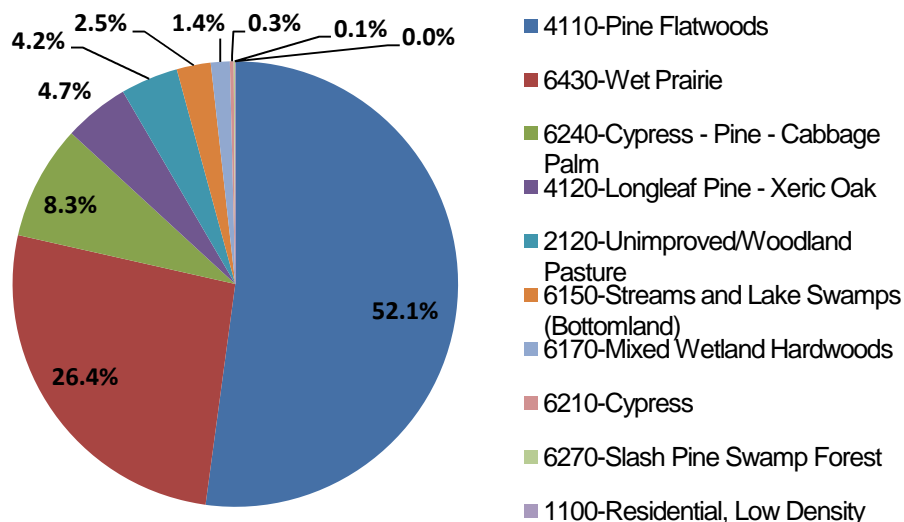
characterized by maidencane (*Panicum hemitomon*), smooth beggarticks (*Bidens laevis*), dotted smartweed (*Polygonum punctatum*), and sand cordgrass (*Spartina bakeri*), accompanied by a diverse mixture forbs such as sweetscent (*Pluchea odorata*), spadeleaf (*Centella asiatica*), and lemon bacopa (*Bacopa caroliniana*). Coastalplain willow (*Salix caroliniana*), common buttonbush (*Cephalanthus occidentalis*), elderberry (*Sambucus nigra* ssp. *canadensis*), and wax myrtle (*Myrica cerifera*) are common shrubby components.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
4110-Pine Flatwoods	199.28	10	0.521	5.213
6430-Wet Prairie	100.91	10	0.264	2.639
6240-Cypress - Pine - Cabbage Palm	31.83	10	0.083	0.832
4120-Longleaf Pine - Xeric Oak	18.11	10	0.047	0.474
2120-Unimproved/Woodland Pasture	15.96	8.03	0.042	0.335
6150-Streams and Lake Swamps (Bottomland)	9.50	10	0.025	0.248
6170-Mixed Wetland Hardwoods	5.25	10	0.014	0.137
6210-Cypress	1.06	10	0.003	0.028
6270-Slash Pine Swamp Forest	0.41	10	0.001	0.011
1100-Residential, Low Density	0.03	3.57	0.000	0.000
TOTAL	382.31	91.60	1.00	9.92

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	4.75
Hydrologic Indicator Score	5
Water Environment Score	9.75

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	95	11
Exotic Vegetation	5	8
Vegetative Community Score		9.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics present in less than 5%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

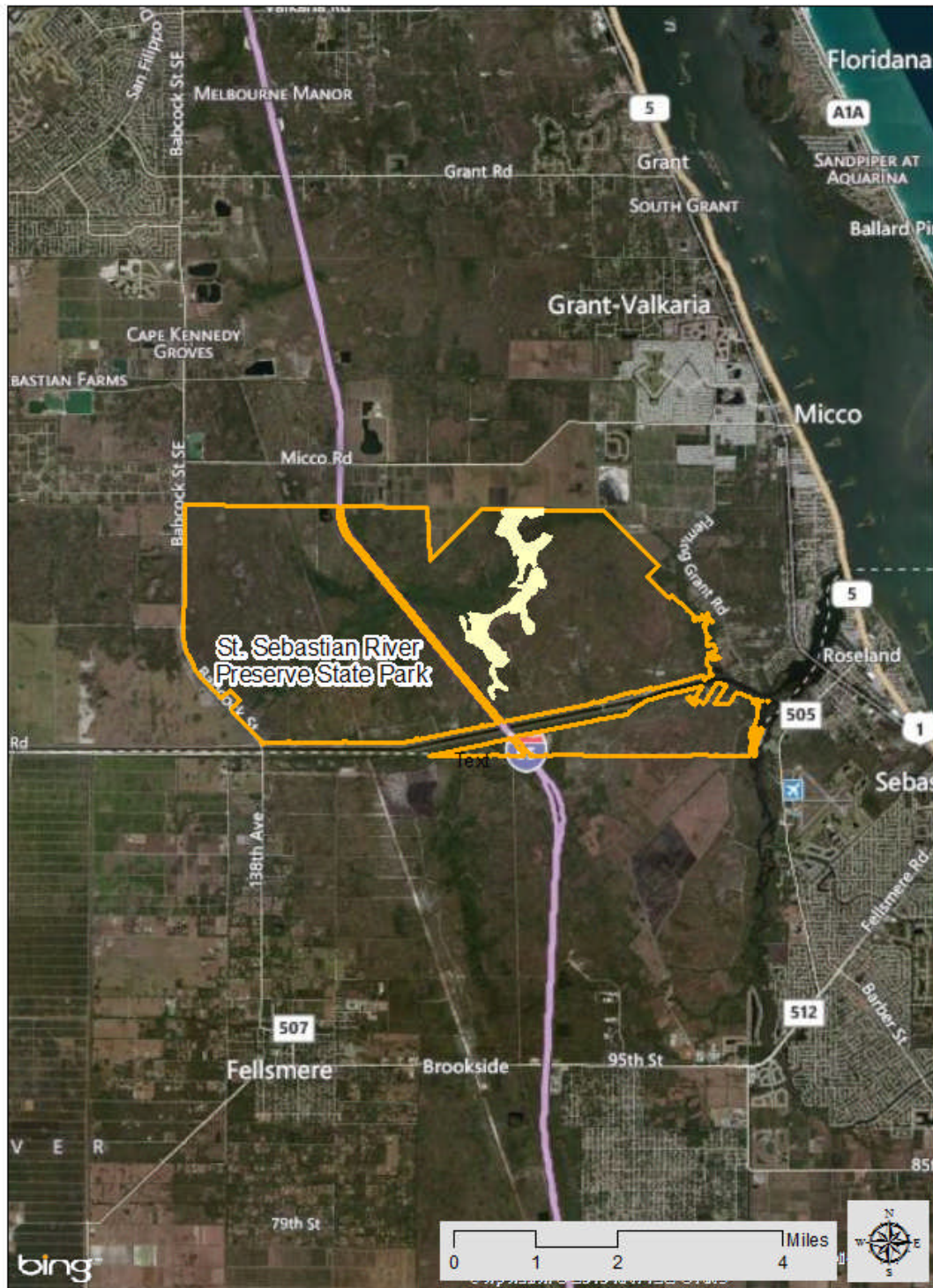
ASSESSMENT SCORE

$$\begin{aligned}
 &(\text{Landscape Location} + \text{Water Environment} + \text{Vegetative Community}) / 30 = \\
 &\quad (9.917 \quad + \quad 9.75 \quad + \quad 8.5) \quad / \quad 30 = 0.972
 \end{aligned}$$

Freshwater Marsh

Brevard County Natural Resource Management

St. Sebastian River Preserve State Park



Location Map - Freshwater Marsh
St. Sebastian River Preserve State Park
Brevard County, Florida

- 6410-Freshwater Marshes
- St. Sebastian River Preserve State Park

Saltwater Marsh

Merritt Island National Wildlife Refuge

Brevard County Natural Resource Management
Reference Wetland Community



OVERVIEW

LOCATION

Brevard County
Latitude 28.4542175366 N, Longitude -80.6691745545E

COMMUNITY DESCRIPTION

Salt marsh is a largely herbaceous community that occurs in the portion of the coastal zone affected by tides and seawater and protected from large waves, either by the broad, gently sloping topography of the shore, by a barrier island, or by location along a bay or estuary. The width of the intertidal zone depends on the slope of the shore and the tidal range. Salt marsh may have distinct zones of vegetation, each dominated by a single species of grass or rush. Saltmarsh cordgrass (*Spartina alterniflora*) dominates the seaward edge and borders of tidal creeks, areas most frequently inundated by the tides.



Saltwater Marsh

Merritt Island National Wildlife Refuge

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

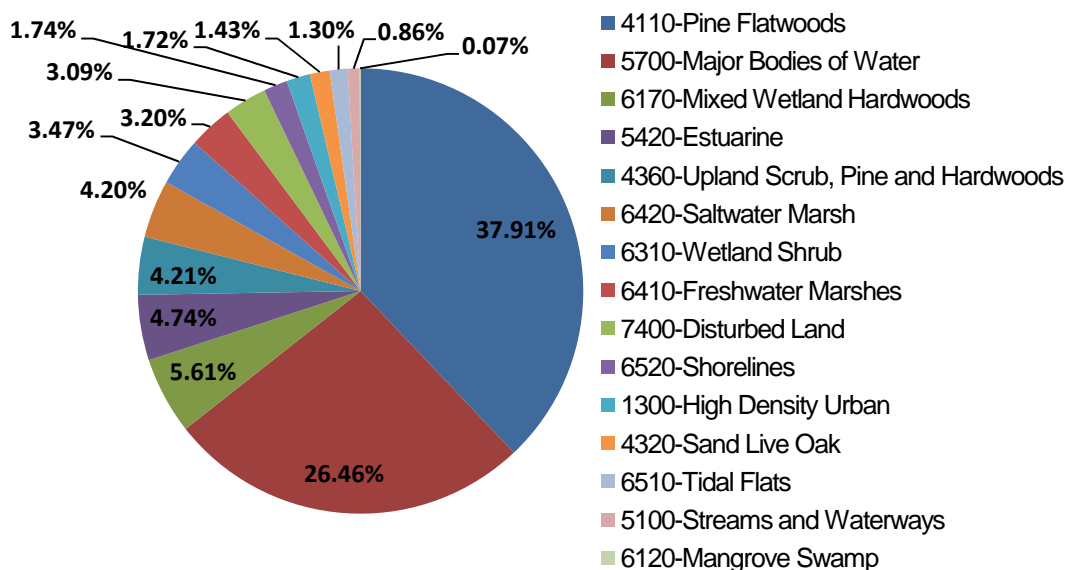
Needle rush (*Juncus roemerianus*) dominates higher, less frequently flooded areas. Other characteristic species include Carolina sea lavender (*Limonium carolinianum*), perennial saltmarsh aster (*Symphyotrichum tenuifolium*), wand loosestrife (*Lythrum lineare*), marsh fimbry (*Fimbristylis spadicea*), and shoreline seapurslane (*Sesuvium portulacastrum*). The landward edge of the marsh is influenced by freshwater influx from the uplands and may be colonized by a mixture of high marsh and inland species, including needle rush, sawgrass (*Cladium jamaicense*), saltmeadow cordgrass (*Spartina patens*), Gulf cordgrass (*Spartina spartinae*), and sand cordgrass (*Spartina bakeri*), among others.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

FLUCFCS_legend	Sum of Acres	LSI_Value	Landcover Percent	Landscape Location Score (=LSI_Value* Landcover Percent)
4110-Pine Flatwoods	290.88	10	0.379	3.791
5700-Major Bodies of Water	203.01	10	0.265	2.646
6170-Mixed Wetland Hardwoods	43.03	10	0.056	0.561
5420-Estuarine	36.36	10	0.047	0.474
4360-Upland Scrub, Pine and Hardwoods	32.26	10	0.042	0.421
6420-Saltwater Marsh	32.22	10	0.042	0.420
6310-Wetland Shrub	26.64	10	0.035	0.347
6410-Freshwater Marshes	24.56	10	0.032	0.320
7400-Disturbed Land	23.67	9.08	0.031	0.280
6520-Shorelines	13.33	10	0.017	0.174
1300-High Density Urban	13.22	0.91	0.017	0.016
4320-Sand Live Oak	10.95	10	0.014	0.143
6510-Tidal Flats	9.97	10	0.013	0.130
5100-Streams and Waterways	6.62	10	0.009	0.086
6120-Mangrove Swamp	0.51	10	0.001	0.007
TOTAL	767.24	139.99	1.00	9.81

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)➤ **Water Environment**

Water Environment	Score¹
Water Quality Treatment Score	4.9
Hydrologic Indicator Score	5
Water Environment Score	9.9

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ **Vegetative Community**

Vegetative Community	Percentage	Score²
Wetland Vegetation	95	11
Exotic Vegetation	5	8
Vegetative Community Score		9.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 5%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

ASSESSMENT SCORE

$$(\text{Landscape Location} + \text{Water Environment} + \text{Vegetative Community}) / 30 =$$

$$(9.81 + 9.9 + 9.5) / 30 = 0.974$$

Saltwater Marsh

Brevard County Natural Resource Management

Merritt Island National Wildlife Refuge



**Location Map - Saltwater Marshes
Merritt Island National Wildlife Refuge
Brevard County, Florida**

- 6420-Saltwater Marsh
- Merritt Island National Wildlife Refuge

Saltwater Marsh

Ulumay Wildlife Sanctuary

Brevard County Natural Resource Management
Reference Wetland Community



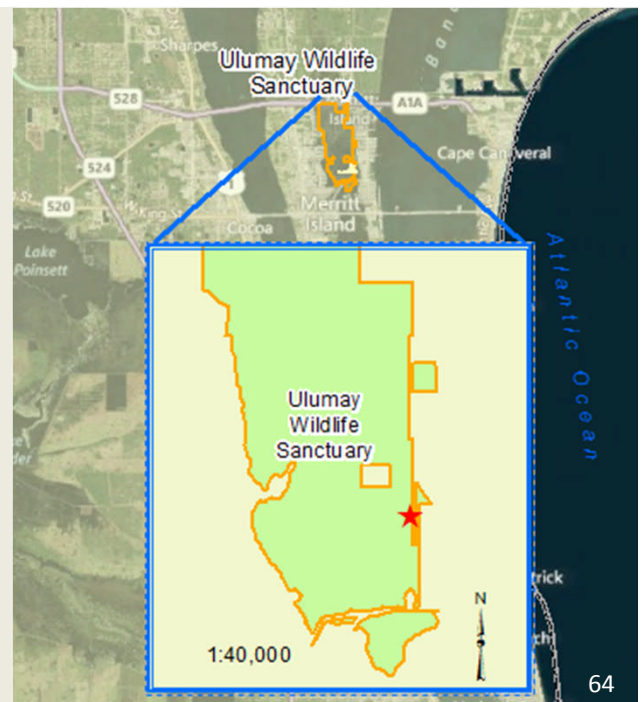
OVERVIEW

LOCATION

Brevard County
Latitude 28.3764001554 N, Longitude -80.6772860265E

COMMUNITY DESCRIPTION

Salt marsh is a largely herbaceous community that occurs in the portion of the coastal zone affected by tides and seawater and protected from large waves, either by the broad, gently sloping topography of the shore, by a barrier island, or by location along a bay or estuary. The width of the intertidal zone depends on the slope of the shore and the tidal range. Salt marsh may have distinct zones of vegetation, each dominated by a single species of grass or rush. Saltmarsh cordgrass (*Spartina alterniflora*) dominates the seaward edge and borders of tidal creeks, areas most frequently inundated by the tides.



Saltwater Marsh

Ulumay Wildlife Sanctuary

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

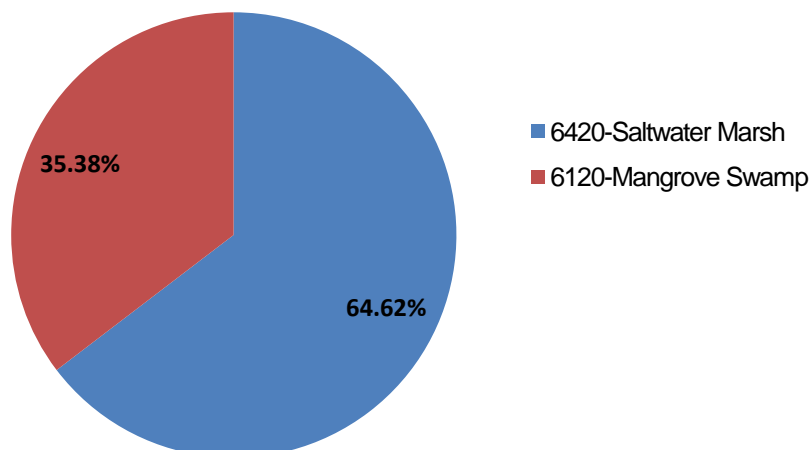
Needle rush (*Juncus roemerianus*) dominates higher, less frequently flooded areas. Other characteristic species include Carolina sea lavender (*Limonium carolinianum*), perennial saltmarsh aster (*Symphyotrichum tenuifolium*), wand loosestrife (*Lythrum lineare*), marsh fimbry (*Fimbristylis spadicea*), and shoreline seapurslane (*Sesuvium portulacastrum*). The landward edge of the marsh is influenced by freshwater influx from the uplands and may be colonized by a mixture of high marsh and inland species, including needle rush, sawgrass (*Cladium jamaicense*), saltmeadow cordgrass (*Spartina patens*), Gulf cordgrass (*Spartina spartinae*), and sand cordgrass (*Spartina bakeri*), among others.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
6420-Saltwater Marsh	45.48	10	0.646	6.462
6120-Mangrove Swamp	24.91	10	0.354	3.538
TOTAL	70.39	20.00	1.00	10.00

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)

➤ Water Environment

Water Environment	Score¹
Water Quality Treatment Score	5
Hydrologic Indicator Score	5
Water Environment Score	10

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ Vegetative Community

Vegetative Community	Percentage	Score²
Wetland Vegetation	85	10
Exotic Vegetation	15	7
Vegetative Community Score		8.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 15%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

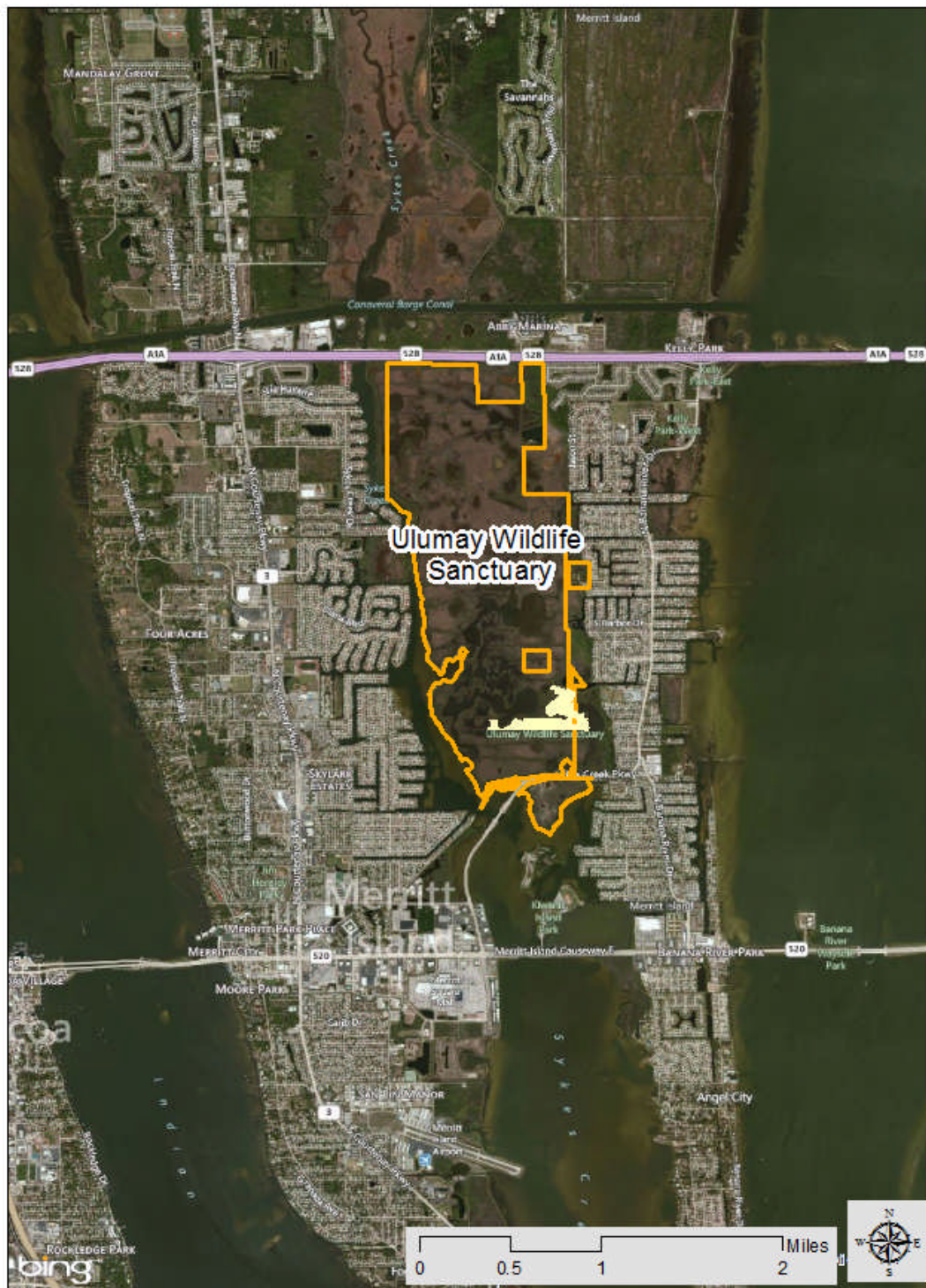
ASSESSMENT SCORE

$$\frac{(\text{Landscape Location} + \text{Water Environment} + \text{Vegetative Community})}{30} =$$

$$\frac{(10 + 10 + 8.5)}{30} = 0.950$$

Saltwater Marsh Ulumay Wildlife Sanctuary

Brevard County Natural Resource Management
Reference Wetland Community



**Location Map - Saltwater Marshes
Ulumay Wildlife Sanctuary
Brevard County, Florida**

- 6420-Saltwater Marsh
- Ulumay Wildlife Sanctuary

Saltwater Marsh

Thousand Island Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community



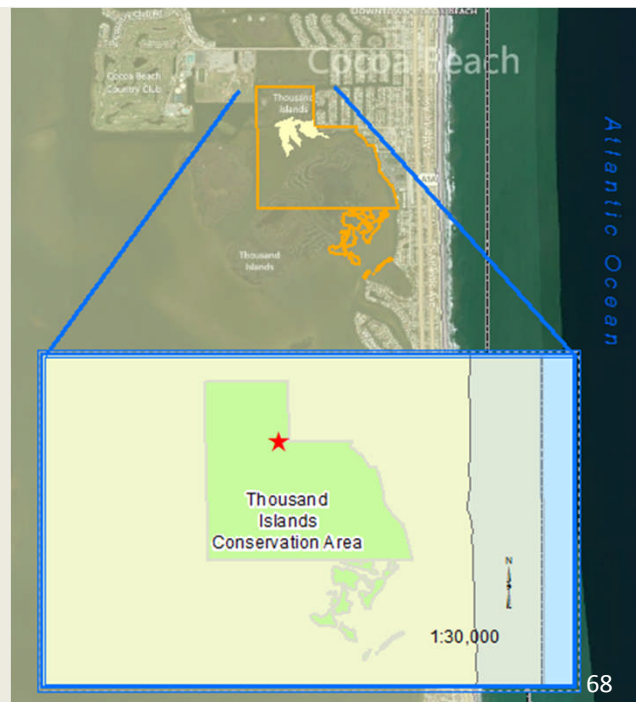
OVERVIEW

LOCATION

Brevard County
Latitude 28.3108118851 N, Longitude -80.6888681754E

COMMUNITY DESCRIPTION

Saltwater marsh is a largely herbaceous community that occurs in the portion of the coastal zone affected by tides and seawater and protected from large waves, either by the broad, gently sloping topography of the shore, by a barrier island, or by location along a bay or estuary. The width of the intertidal zone depends on the slope of the shore and the tidal range. Salt marsh may have distinct zones of vegetation, each dominated by a single species of grass or rush. Saltmarsh cordgrass (*Spartina alterniflora*) dominates the seaward edge and borders of tidal creeks, areas most frequently inundated by the tides.



Saltwater Marsh

Thousand Island Conservation Area

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

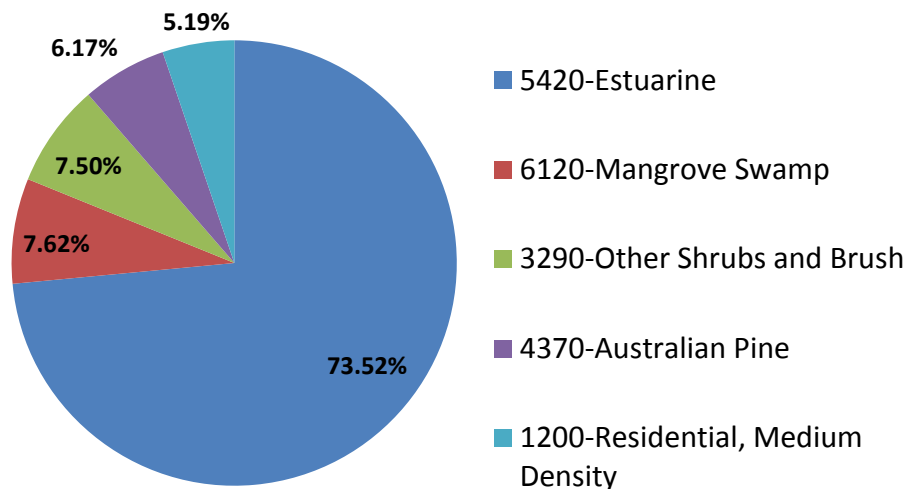
Needle rush (*Juncus roemerianus*) dominates higher, less frequently flooded areas. Other characteristic species include Carolina sea lavender (*Limonium carolinianum*), perennial saltmarsh aster (*Symphyotrichum tenuifolium*), wand loosestrife (*Lythrum lineare*), marsh fimbry (*Fimbristylis spadicea*), and shoreline seapurslane (*Sesuvium portulacastrum*). The landward edge of the marsh is influenced by freshwater influx from the uplands and may be colonized by a mixture of high marsh and inland species, including needle rush, sawgrass (*Cladium jamaicense*), saltmeadow cordgrass (*Spartina patens*), Gulf cordgrass (*Spartina spartinae*), and sand cordgrass (*Spartina bakeri*), among others.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
5420-Estuarine	38.26	10	0.735	7.352
6120-Mangrove Swamp	3.97	10	0.076	0.762
3290-Other Shrubs and Brush	3.90	10	0.075	0.750
4370-Australian Pine	3.21	8.87	0.062	0.547
1200-Residential, Medium Density	2.70	2.81	0.052	0.146
TOTAL	52.05	41.68	1.00	9.56

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)➤ **Water Environment**

Water Environment	Score¹
Water Quality Treatment Score	4.92
Hydrologic Indicator Score	3.3
Water Environment Score	8.22

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ **Vegetative Community**

Vegetative Community	Percentage	Score²
Wetland Vegetation	95	11
Exotic Vegetation	5	8
Vegetative Community Score		9.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 5%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

ASSESSMENT SCORE

$$(\text{Landscape Location} + \text{Water Environment} + \text{Vegetative Community}) / 30 =$$

$$(9.56 + 8.22 + 9.5) / 30 = 0.909$$

Brevard County Natural Resource Management
Reference Wetland Community



Thousand Islands Conservation Area

Wet Prairie

Brevard County Natural Resource Management
Reference Wetland Community

Merritt Island National Wildlife Refuge



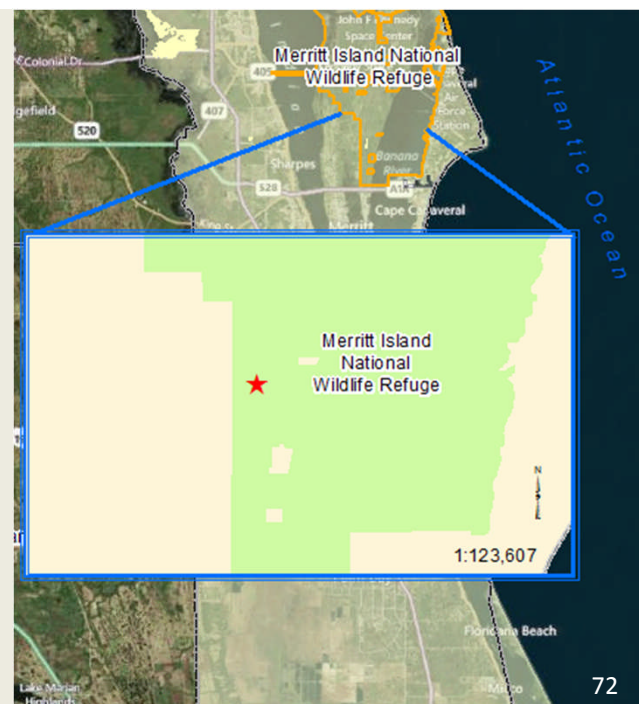
OVERVIEW

LOCATION

Brevard County
Latitude 28.4542175366 N, Longitude -80.6691745545E

COMMUNITY DESCRIPTION

Wet prairie is an herbaceous community found on continuously wet, but not inundated, soils on somewhat flat or gentle slopes between lower lying depression marshes, shrub bogs, or dome swamps and slightly higher wet or mesic flatwoods, or dry prairie. It is typically dominated by dense wiregrass (*Aristida stricta* var. *beyrichiana*) in the drier portions, along with foxtail club-moss (*Lycopodiella alopecuroides*), cutover muhly (*Muhlenbergia expansa*), yellow butterwort (*Pinguicula lutea*), and savannah meadowbeauty (*Rhexia alifanus*). In the wetter portions, wiregrass may occur with, or be replaced by, species in the sedge family, such as plumed



COMMUNITY DESCRIPTION (cont)

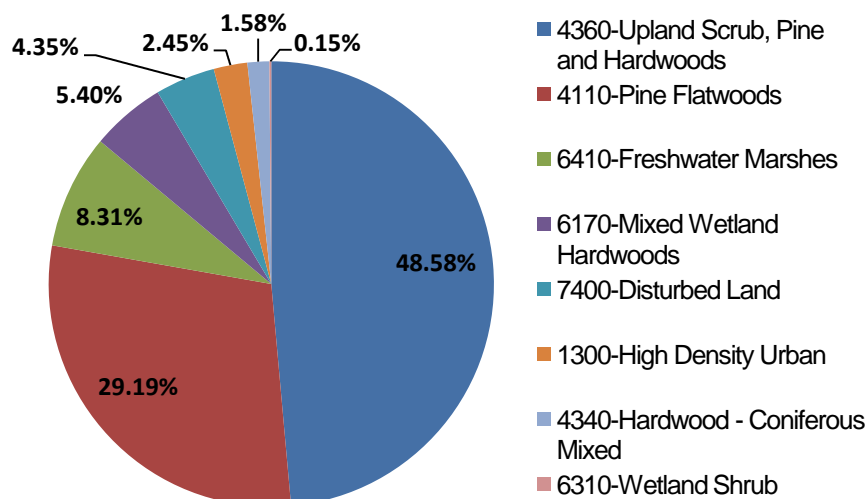
beaksedge (*Rhynchospora plumosa*), featherbristle beaksedge (*R. oligantha*), Baldwin's nutrush (*Scleria baldwinii*), or slenderfruit nutrush (*S. georgiana*), plus longleaved threeawn (*Aristida palustris*). Also common in wetter areas are carnivorous species, such as pitcher plants (*Sarracenia* spp.), sundews (*Drosera* spp.), butterworts (*Pinguicula* spp.), and bladderworts (*Utricularia* spp.). Other characteristic species in this community include toothache grass (*Ctenium aromaticum*), pineland rayless goldenrod (*Bigelowia nudata*), flattened pipewort (*Eriocaulon compressum*), water cowbane (*Oxypolis filifolia*), and coastalplain yellow-eyed grass (*Xyris ambigua*). Not publically accessible.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

<i>FLUCFCS_legend</i>	<i>Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
4360-Upland Scrub, Pine and Hardwoods	30.48	10	0.486	4.858
4110-Pine Flatwoods	18.31	10	0.292	2.919
6410-Freshwater Marshes	5.21	10	0.083	0.831
6170-Mixed Wetland Hardwoods	3.39	10	0.054	0.540
7400-Disturbed Land	2.73	9.08	0.043	0.395
1300-High Density Urban	1.53	0.91	0.024	0.022
4340-Hardwood - Coniferous Mixed	0.99	10	0.016	0.158
6310-Wetland Shrub	0.10	10	0.002	0.015
TOTAL	62.74	69.99	1.00	9.74

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)➤ **Water Environment**

Water Environment	Score¹
Water Quality Treatment Score	5
Hydrologic Indicator Score	5
Water Environment Score	10

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ **Vegetative Community**

Vegetative Community	Percentage	Score²
Wetland Vegetation	98	11
Exotic Vegetation	0	8
Vegetative Community Score		9.5

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are not present

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

none

ASSESSMENT SCORE

$$(\text{Landscape Location} + \text{Water Environment} + \text{Vegetative Community}) / 30 =$$

$$(9.74 + 10 + 9.5) / 30 = 0.975$$

Wet Prairie

Merritt Island National Wildlife Refuge

Brevard County Natural Resource Management
Reference Wetland Community



Location Map - Wet Prairies
Merritt Island National Wildlife Refuge
Brevard County, Florida

- 6430-Wet Prairie
- Merritt Island National Wildlife Refuge

Wet Prairie

St. Johns National Wildlife Refuge

Brevard County Natural Resource Management
Reference Wetland Community



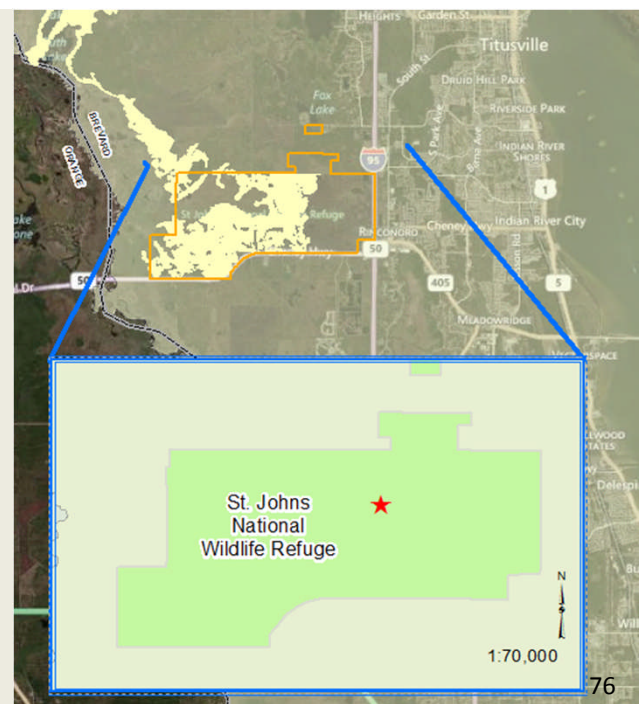
OVERVIEW

LOCATION

Brevard County
Latitude 28.5582465392 N, Longitude -80.8944214826E

COMMUNITY DESCRIPTION

Wet prairie is an herbaceous community found on continuously wet, but not inundated, soils on somewhat flat or gentle slopes between lower lying depression marshes, shrub bogs, or dome swamps and slightly higher wet or mesic flatwoods, or dry prairie. It is typically dominated by dense wiregrass (*Aristida stricta* var. *beyrichiana*) in the drier portions, along with foxtail club-moss (*Lycopodiella alopecuroides*), cutover muhly (*Muhlenbergia expansa*), yellow butterwort (*Pinguicula lutea*), and savannah meadowbeauty (*Rhexia alifanus*). In the wetter portions, wiregrass may occur with, or be replaced by, species in the sedge family, such as plumed



Wet Prairie

St. Johns National Wildlife Refuge

Brevard County Natural Resource Management
Reference Wetland Community

COMMUNITY DESCRIPTION (cont)

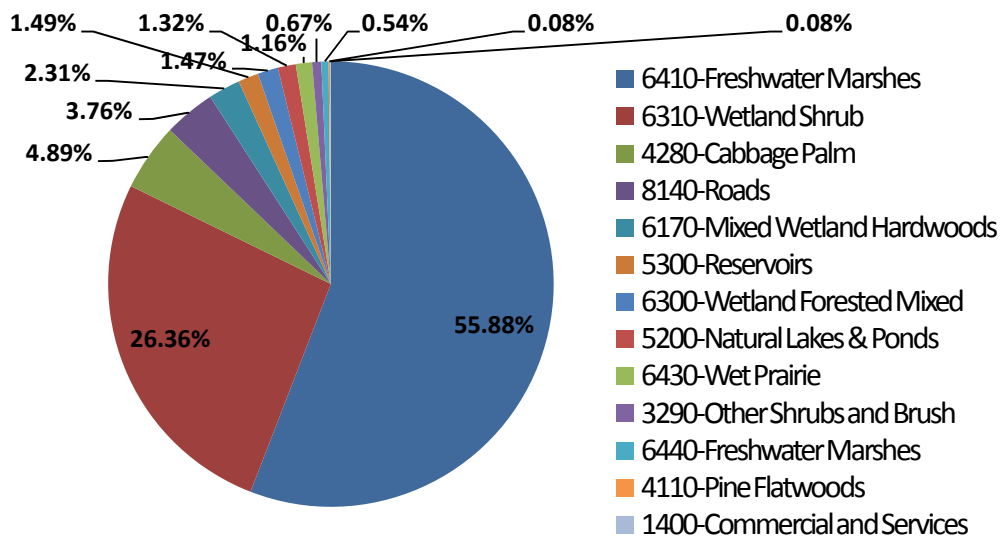
beaksedge (*Rhynchospora plumosa*), featherbristle beaksedge (*R. oligantha*), Baldwin's nutrush (*Scleria baldwinii*), or slenderfruit nutrush (*S. georgiana*), plus longleaved threeawn (*Aristida palustris*). Also common in wetter areas are carnivorous species, such as pitcher plants (*Sarracenia* spp.), sundews (*Drosera* spp.), butterworts (*Pinguicula* spp), and bladderworts (*Utricularia* spp.). Other characteristic species in this community include toothache grass (*Ctenium aromaticum*), pineland rayless goldenrod (*Bigelowia nudata*), flattened pipewort (*Eriocaulon compressum*), water cowbane (*Oxypolis filifolia*), and coastalplain yellow-eyed grass (*Xyris ambigua*). Not publically accessible.

FUNCTIONAL WETLAND ASSESSMENT

➤ Landscape Location Score Landscape Scale Index (LSI)

FLUCFCS_legend	Sum of Acres	LSI_Value	Landcover Percent	Landscape Location Score (=LSI_Value* Landcover Percent)
6410-Freshwater Marshes	597.91	10	0.559	5.588
6310-Wetland Shrub	282.06	10	0.264	2.636
4280-Cabbage Palm	52.34	10	0.049	0.489
8140-Roads	40.19	1.91	0.038	0.072
6170-Mixed Wetland Hardwoods	24.67	10	0.023	0.231
5300-Reservoirs	15.98	10	0.015	0.149
6300-Wetland Forested Mixed	15.77	10	0.015	0.147
5200-Natural Lakes & Ponds	14.08	10	0.013	0.132
6430-Wet Prairie	12.38	10	0.012	0.116
3290-Other Shrubs and Brush	7.15	10	0.007	0.067
6440-Freshwater Marshes	5.77	10	0.005	0.054
4110-Pine Flatwoods	0.85	10	0.001	0.008
1400-Commercial and Services	0.85	0.91	0.001	0.001
TOTAL	1070.00	112.82	1.00	9.69

Landcover Percent within 100 m buffer



FUNCTIONAL WETLAND ASSESSMENT (cont)➤ **Water Environment**

Water Environment	Score¹
Water Quality Treatment Score	4.63
Hydrologic Indicator Score	5
Water Environment Score	9.63

¹ The Water Environment Score is a sum of the Water Quality Treatment and the Hydrologic Indicator Score.

➤ **Vegetative Community**

Vegetative Community	Percentage	Score²
Wetland Vegetation	75	9
Exotic Vegetation	25	5
Vegetative Community Score		7.0

² The Vegetative Community Score is calculated as the average of the wetland vegetation and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) the percent of exotic vegetation is greater than the percent of wetland vegetation. If either of these two conditions exist the Vegetative Community Score equals zero (0).

Invasive exotics are present in less than 25%

Florida Exotic Pest Plant Council (FLEPPC) Category I Species

Brazilian pepper (Schinus terebinthifolius)

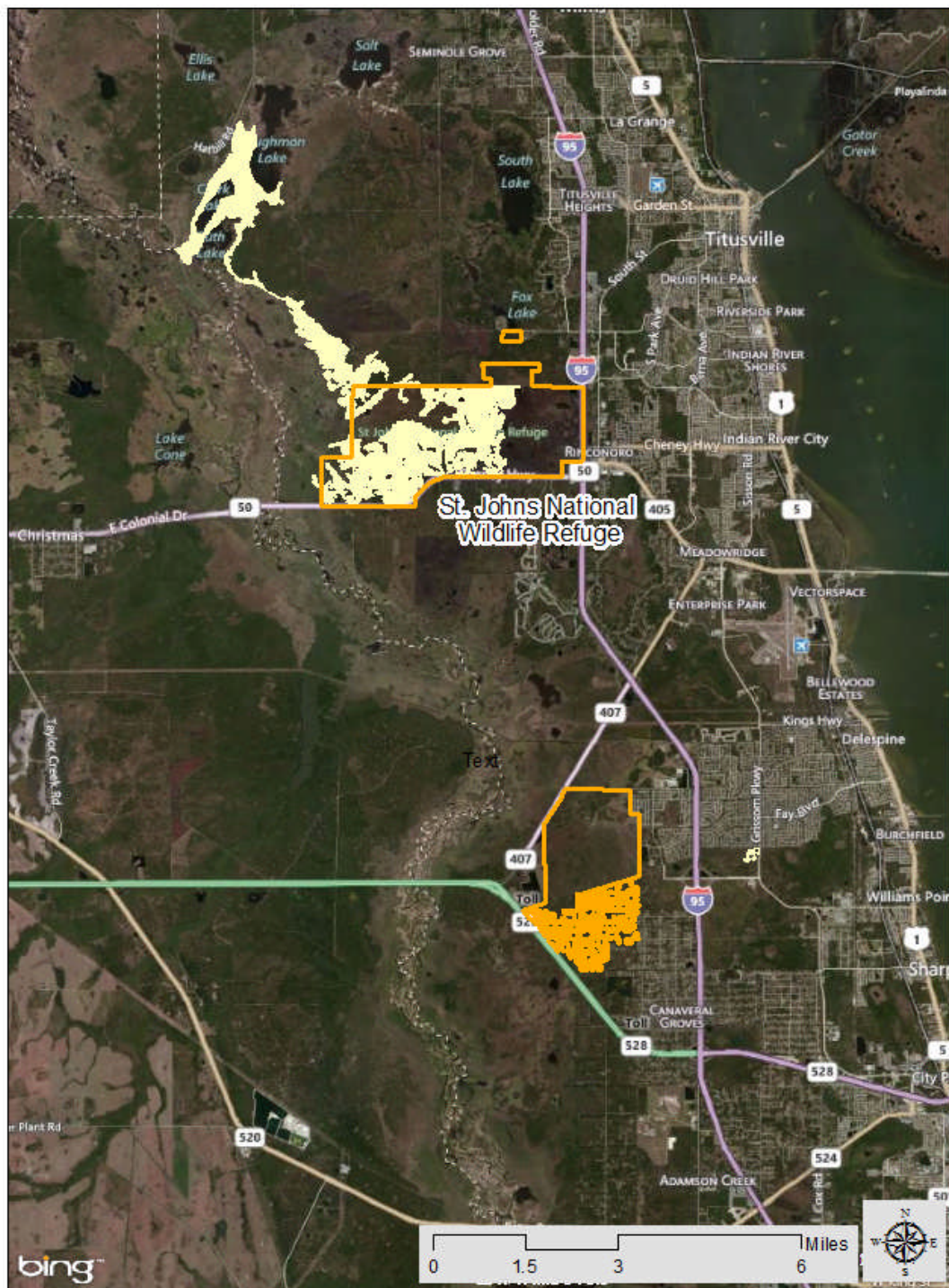
ASSESSMENT SCORE

$$\begin{array}{ccccccc}
 \text{(Landscape Location + Water Environment + Vegetative Community)} & / & 30 & = & & & \\
 (9.69 & + & 9.63 & + & 7.0) & / & 30 = 0.877
 \end{array}$$

Wet Prairie

St. Johns National Wildlife Refuge

Brevard County Natural Resource Management
Reference Wetland Community



Location Map - Wet Prairie
St. John's National Wildlife Refuge
Brevard County, Florida

- 6430-Wet Prairie
- St. Johns National Wildlife Refuge