

MYAKKA STATE FOREST
2023 LAND MANAGEMENT PLAN

EXHIBITS

Exhibit A

Ten-Year Management Accomplishment Summary

Myakka State Forest
10-Year Accomplishments

Site Preparation	Chop Single Pass	No.	371
	Chop Tandem	No.	185
	Burning	Acres	140

Planting	South Florida Slash, Containerized	No.	198,000
		Acres	286

Seedling survival checks	Planting Checks	Acres	409
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Timber Sales	Cruising	Acres	0
	Harvest	Acres	73
		Tons	574

Timber Inventory	Inventory Update	Acres	7,567
	New Inventory	Acres	0
	Plots	Acres	381

Invasive Species Control	Melaleuca	Acres	804
	Brazilian Pepper	Acres	781
	Cogon Grass	Acres	400
	Air Potato	Acres	1
	Rosary pea	Acres	57
	Japanese Climbing Fern	Acres	24
	Lygodium	Acres	19
	Para Grass	Acres	13
	Tropical Soda Apple	Acres	3
	Jave Plum	Acres	3
	Torpedo grass	Acres	4
	Australian Pine	Acres	2
	Caesar Weed	Acres	0

Fire	Wildfire	No.	5
		Acres	27
	Prescribed Burning	No.	0
		Acres	13,438

Recreation	Day Use Estimated Forest Visitors	No.	228,421
	Overnight Primitive Camping	No.	35,687

	Annual Entrance Pass	No.	194
	State Forest Use Permit	No.	9

Roadwork	Roads Constructed	Miles	1
	Roads Graded	Miles	136
	Roads Rebuilt	Miles	8

Boundary Maintenance	Maintenance/Marking	Miles	107
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I&E Activities	Programs/Tours	No.	51
	Radio/TV Articles	No.	29
	Education/Research	No.	10

Other Activities	Archaeological Sites Monitored	No.	4
	Hogs Removed	No.	1,135
	Apiary Permits (sites)	No.	12
	BSA Eagle Project	No.	6

Exhibit B

Boundary and Road Map



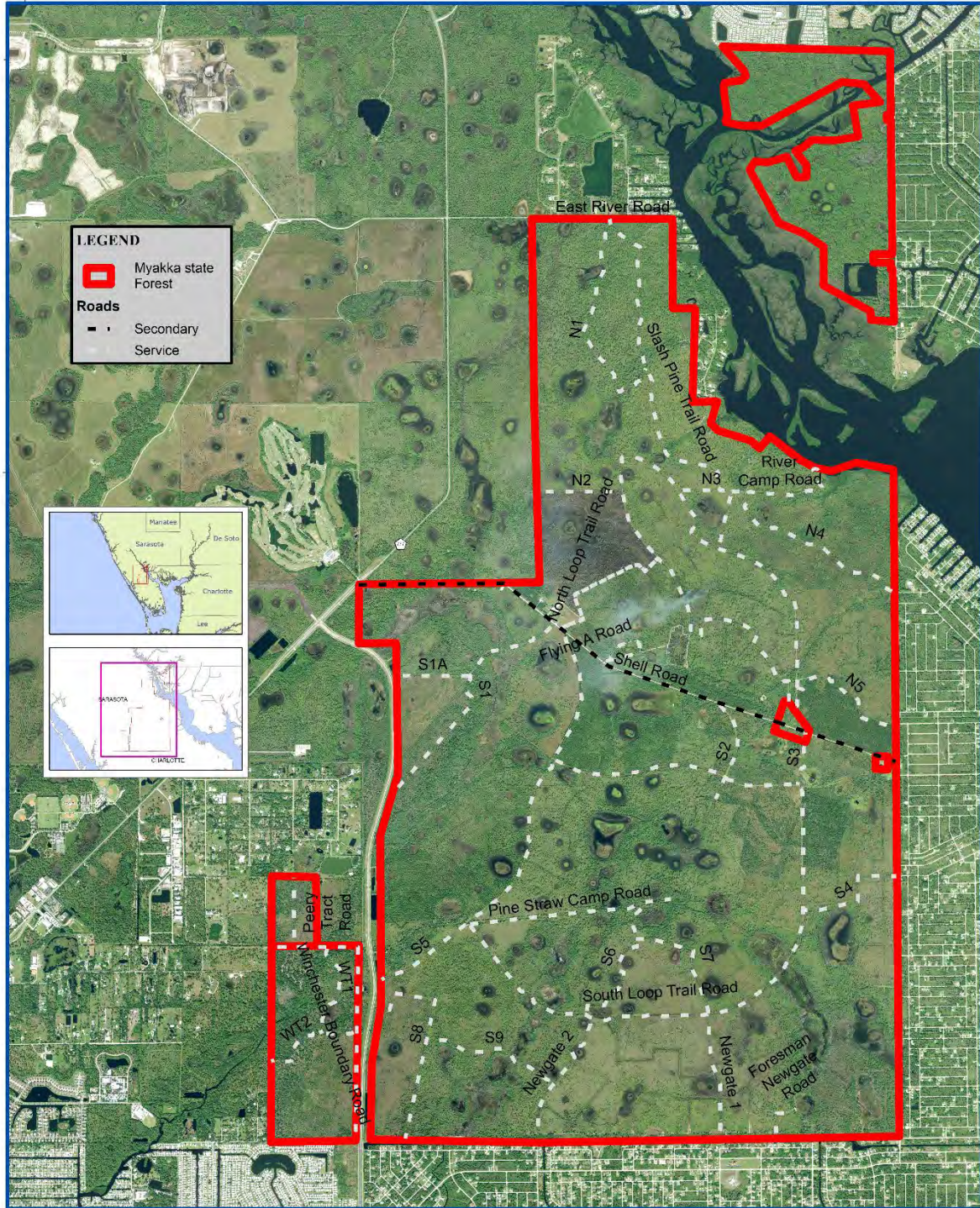
Florida Forest Service

Myakka State Forest Boundary & Road Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
62° 0' 0" W

DISCLAIMER:
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Permitted Area (shown) is courtesy of
the Florida National Forest Inventory
System, State of Florida, 2015
From the US Army Corps of Engineers



Map Month/Year: December 2020

Exhibit C

Optimal Management Boundary Map



Florida Forest Service

Myakka State Forest

Optimal Management Boundary Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
82° 15' 00" W

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Managed Area Boundaries courtesy of
the Florida Natural Areas Inventory
Aerials: USGS National Wetlands Inventory
From the US Army Corps of Engineers

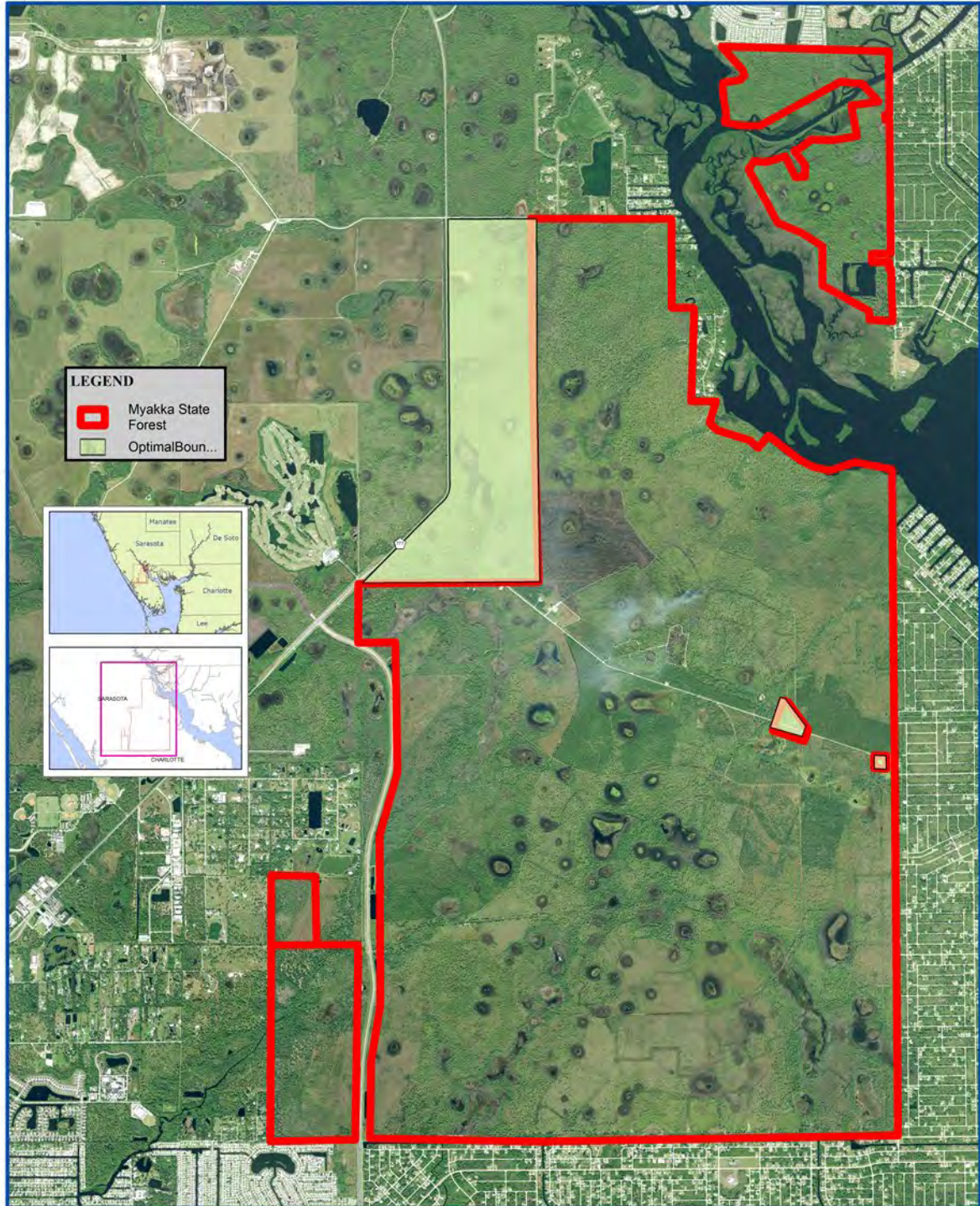


Exhibit D

Facilities, Recreation, and Improvements Map



Florida Forest Service

Myakka State Forest

Facilities, Recreation, and Improvements Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
82°00'00"

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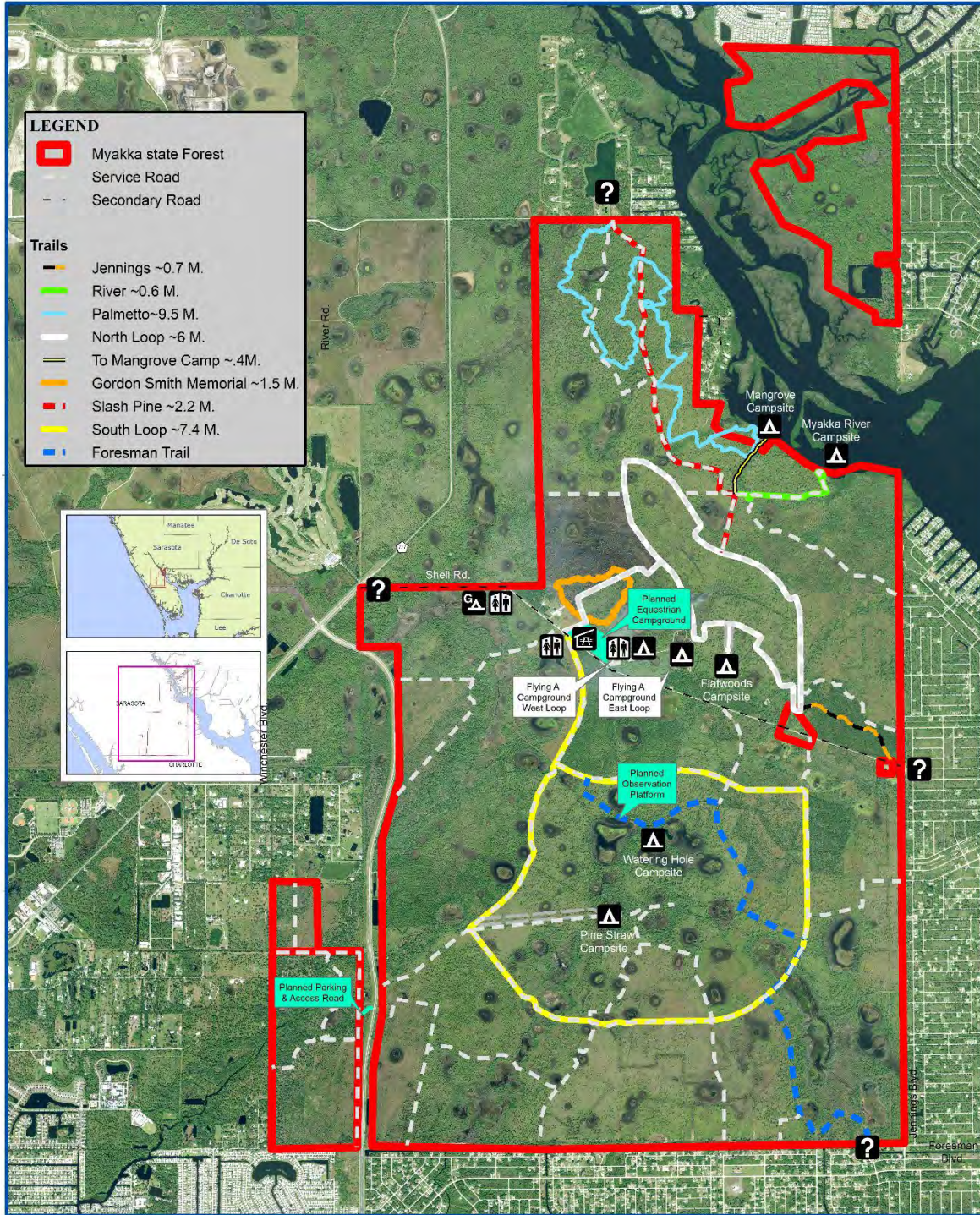


Exhibit E

Tract and Acreage Map



Florida Forest Service

Myakka State Forest

Tract Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
52° 0' 0" W

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Managed Area boundaries are courtesy of the US Army Corps of Engineers. Boundary data derived from USGS data. From the US Army Corps of Engineers.

LEGEND

- Myakka state Forest
- Service Road



Myakkahatchee Tract
512 Acres

Myakka Tract
7,324 Acres

Winchester Tracts
396 Acres



Map Month/Year: May 2021

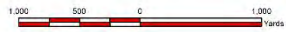


Exhibit F

Proximity to Significant Managed Lands



Proximity to Significant Managed Lands Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

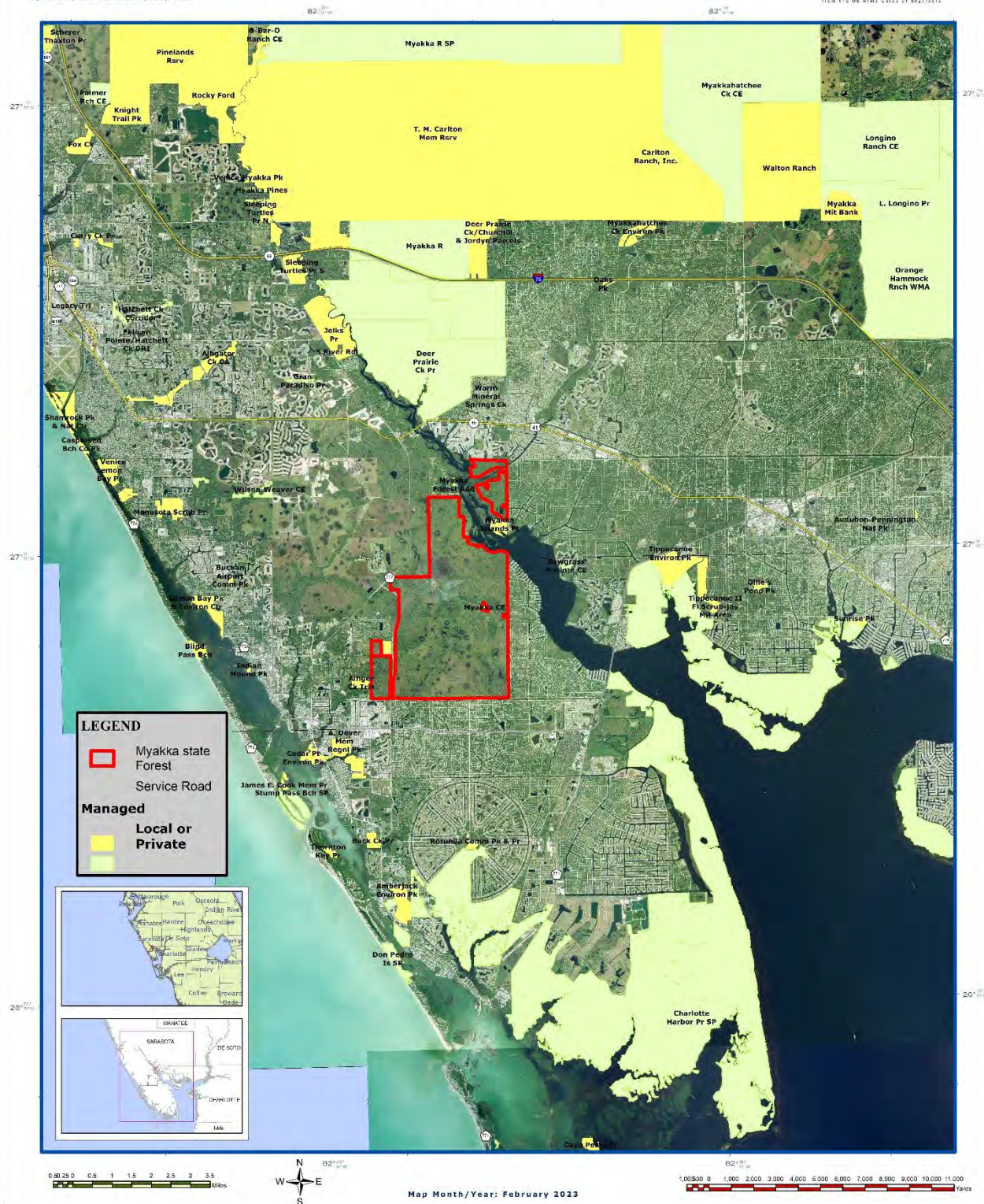
[illegible]

Exhibit G

Department of State Report on Archeological Sites
and Historical Sites



This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at CompliancePermits@dos.MyFlorida.com for project review information.

August 11, 2020

Patti Anderson
Land Management Planner
Florida Forest Service
Florida Department of Agriculture and Consumer Services
(850) 681-5889
Patricia.Anderson@FDACS.gov

In response to your inquiry of August 11, 2020 the Florida Master Site File lists four archeological sites recorded in the designated boundary for Myakka State Forest in Sarasota County

When interpreting the results of our search, please consider the following information:

- This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.
- Because vandalism and looting are common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.
- While many of our records document historically significant resources, the documentation of a resource at the Florida Master Site File does not necessarily mean the resource is historically significant.
- Federal, state and local laws require formal environmental review for most projects. This search **DOES NOT** constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333.

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

Eman M. Vovsi, Ph.D.
Florida Master Site File
Eman.Vovsi@DOS.MyFlorida.com



Cultural Resource Roster

SiteID	Type	Site Name	Address	Additional Info	SHPO Eval	NR Status
SO06958	AR	Water's Edge Lithic Scatter	North Port			
SO06959	AR	La Casa Clam Midden	North Port			
SO06960	AR	Four Eyes Midden	North Port			
SO06961	AR	Old Slough Herty Cup Scatter	North Port			

Exhibit H

Management Procedures for Archaeological and Historical Sites and Properties on State Owned or Controlled Lands

Management Procedures for Archaeological and Historical Sites and Properties on State-Owned or Controlled Properties
(revised June 2021)

These procedures apply to state agencies, local governments, and non-profits that manage state-owned properties.

A. Historic Property Definition

Historic properties include archaeological sites and historic structures as well as other types of resources. Chapter 267, Florida Statutes states: “*‘Historic property’ or ‘historic resource’ means any prehistoric district, site, building, object, or other real or personal property of historical, architectural, or archaeological value, and folklife resources. These properties or resources may include, but are not limited to, monuments, memorials, Indian habitations, ceremonial sites, abandoned settlements, sunken or abandoned ships, engineering works, treasure trove, artifacts, or other objects with intrinsic historical or archaeological value, or any part thereof, relating to the history, government, and culture of the state.*”

B. Agency Responsibilities

Per Chapter 267, F.S. and state policy related to historic properties, state agencies of the executive branch must provide the Division of Historical Resources (Division) the opportunity to comment on any undertakings with the potential to affect historic properties that are listed, or eligible for listing, in the National Register of Historic Places, whether these undertakings directly involve the state agency, i.e., land management responsibilities, or the state agency has indirect jurisdiction, i.e. permitting authority, grants, etc. No state funds should be expended on the undertaking until the Division has the opportunity to review and comment on the undertaking. (267.061(2)(a))

State agencies must consult with the Division when, as a result of state action or assistance, a historic property will be demolished or substantially altered in a way that will adversely affect the property. State agencies must take timely steps to consider feasible and prudent alternatives to the adverse effect. If no feasible or prudent alternatives exist, the state agency must take timely steps to avoid or mitigate the adverse effect. (267.061(2)(b))

State agencies must consult with Division to establish a program to locate, inventory and evaluate all historic properties under ownership or controlled by the agency. (267.061(2)(c))

State agencies are responsible for preserving historic properties under their control. State agencies are directed to use historic properties available to the agency when that use is consistent with the historic property and the agency’s mission. State agencies are also directed to pursue preservation of historic properties to support their continued use. (267.061(2)(d))

C. Statutory Authority

The full text of Chapter 267, F.S. and additional information related to the treatment of historic properties is available at:

<https://dos.myflorida.com/historical/preservation/compliance-and-review/regulations-guidelines/>

D. Management Implementation

Although the Division sits on the Acquisition and Restoration Council and approves land management plans, these plans are conceptual and do not include detailed project information. Specific information for individual projects must be submitted to the Division for review and comment.

Managers of state lands must coordinate any land clearing or ground disturbing activities with the Division to allow for review and comment on the proposed project. The Division's recommendations may include, but are not limited to: approval of the project as submitted, recommendation for a cultural resource assessment survey by a qualified professional archaeologist, and modifications to the proposed project to avoid or mitigate potential adverse effects.

Projects such as additions or alterations to historic structures as well as new construction must also be submitted to the Division for review. Projects involving structures fifty years of age or older must be submitted to the Division for a significance determination. In rare cases, structures under fifty years of age may be deemed historically significant.

Adverse effects to historic properties must be avoided when possible, and if avoidance is not possible, additional consultation with the Division is necessary to develop a mitigation plan. Furthermore, managers of state property should make preparations for locating and evaluating historic properties, both archaeological sites and historic structures.

E. Archaeological Resource Management (ARM) Training

The ARM Training Course introduces state land managers to the nature of archaeological resources, Florida archaeology, and the role of the Division in managing state-owned archaeological resources. Participants gain a better understanding of the requirements of state and federal laws with regard to protecting and managing archaeological sites on state managed lands. Participants also receive a certificate recognizing their ability to conduct limited monitoring activities in accordance with the Division's Review Procedure, thereby reducing the time and money spent to comply with state regulations. Additional information regarding the ARM Training Course is available at:

<https://dos.myflorida.com/historical/archaeology/education/arm-training-courses/>

F. Matrix for Ground Disturbance on State Lands

The matrix is a tool designed to help streamline the Division's Review Procedure. The matrix allows state land managers to make decisions about balancing ground disturbance and stewardship of historic resources. The matrix establishes types of undertakings that are either minor or major disturbances and then guides the land manager to consult the Division, conduct ARM-trained project monitoring, or proceed with the project. Additional information regarding the matrix is available at:

<https://dos.myflorida.com/historical/archaeology/education/dhr-matrix-for-ground-disturbance-on-state-lands/>

G. Human Remains Treatment

Chapter 872, *Florida Statutes* makes it illegal to willfully and knowingly disturb human remains. In the event human remains are discovered, cease all activity in the area that may disturb the remains. Leave the bones and nearby items in place. Immediately notify law enforcement or the local district medical examiner of the discovery and follow the provisions of Chapter 872, FS. Additional information regarding the treatment of human remains and cemeteries is available at:

<https://dos.myflorida.com/historical/archaeology/human-remains/>
<https://dos.myflorida.com/historical/archaeology/human-remains/abandoned-cemeteries/what-are-the-applicable-laws-and-regulations/>

H. Division of Historical Resources Review Procedure

Projects on state owned or controlled properties may submit projects to the Division for review using the streamlined State Lands Consultation Form. The form provides instructions to submit projects for review and outlines the necessary information for the Division to complete the review process. The State Lands Consultation Form and additional information about the Division's review process is available at:

<https://dos.myflorida.com/historical/preservation/compliance-and-review/state-lands-review/>

* * *

Questions relating to the treatment of archaeological and historic resources on state lands should be directed to:

Compliance and Review Section
Bureau of Historic Preservation
Division of Historical Resources
R. A. Gray Building
500 South Bronough Street
Tallahassee, FL 32399-0250

StateLandsCompliance@dos.myflorida.com

Phone: (850) 245-6333
Toll Free: (800) 847-7278
Fax: (850) 245-6435

Exhibit I

Soil Survey Map and Descriptions



Florida Forest Service

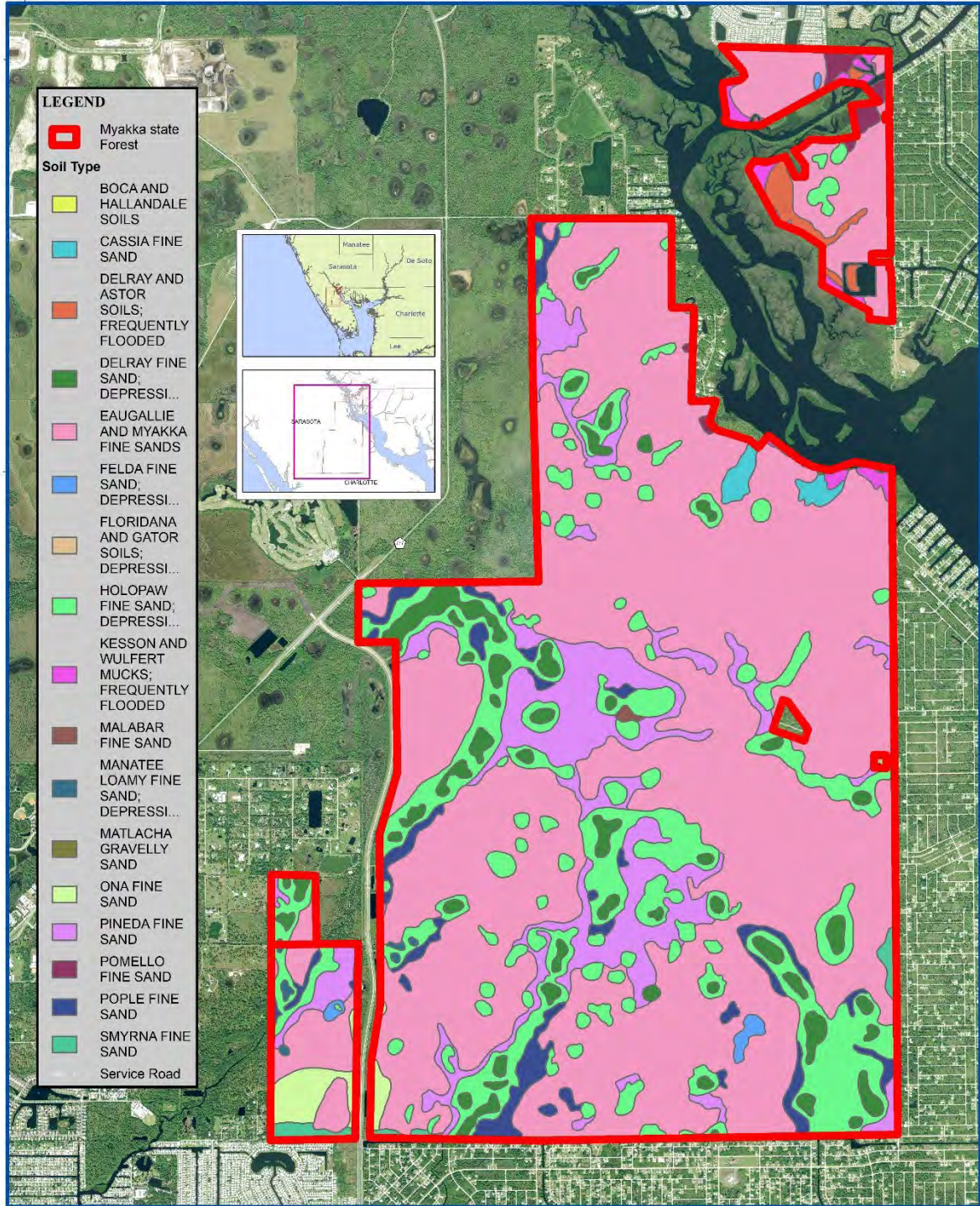
Myakka State Forest

Soil Maps and Descriptions

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
82° 17' 00" W
27° 17' 00" N

DISCLAIMER:
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Revised Area collected as courtesy of
the Florida National Forest Inventory
Project, State of Florida, 2010
From the US Army Corps of Engineers



0.5 0.25 0
Miles



Map Month/Year: December 2020

1,000 500 0 1,000
Yards

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Charlotte County, Florida

Map Unit: 7—Matlacha gravelly fine sand-Urban land complex, 0 to 2 percent slopes

Component: Matlacha (48%)

The Matlacha component makes up 48 percent of the map unit. Slopes are 0 to 2 percent. This component is on fills, marine terraces on coastal plains. The parent material consists of sandy mine spoil or earthy fill over sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (42%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: St. Augustine (5%)

Generated brief soil descriptions are created for major soil components. The St. Augustine soil is a minor component.

Component: Caloosa (5%)

Generated brief soil descriptions are created for major soil components. The Caloosa soil is a minor component.

Map Unit: 11—Myakka fine sand, 0 to 2 percent slopes

Component: Myakka (85%)

The Myakka component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Basinger (5%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Wabasso (4%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Cassia (3%)

Generated brief soil descriptions are created for major soil components. The Cassia soil is a minor component.

Component: Immokalee (2%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: Satellite (1%)

Generated brief soil descriptions are created for major soil components. The Satellite soil is a minor component.

Map Unit: 24—Kesson fine sand, tidal, 0 to 1 percent slopes

Component: Kesson, tidal (88%)

The Kesson, tidal component makes up 88 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is very frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 8w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent. The soil has a moderately saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 25 within 30 inches of the soil surface.

Component: Wulfert, tidal (6%)

Generated brief soil descriptions are created for major soil components. The Wulfert, tidal soil is a minor component.

Component: Captiva, tidal (6%)

Generated brief soil descriptions are created for major soil components. The Captiva, tidal soil is a minor component.

Map Unit: 28—Immokalee sand, 0 to 2 percent slopes

Component: Immokalee (85%)

The Immokalee component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Valkaria (5%)

Generated brief soil descriptions are created for major soil components. The Valkaria soil is a minor component.

Component: Oldsmar (4%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Pomello (3%)

Generated brief soil descriptions are created for major soil components. The Pomello soil is a minor component.

Component: Satellite (2%)

Generated brief soil descriptions are created for major soil components. The Satellite soil is a minor component.

Component: Felda (1%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Map Unit: 36—Immokalee sand-Urban land complex, 0 to 2 percent slopes

Component: Immokalee (43%)

The Immokalee component makes up 43 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (35%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Basinger (5%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Oldsmar (4%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Pomello (4%)

Generated brief soil descriptions are created for major soil components. The Pomello soil is a minor component.

Component: Satellite (2%)

Generated brief soil descriptions are created for major soil components. The Satellite soil is a minor component.

Component: Immokalee (2%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: Felda (2%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Component: Hallandale (2%)

Generated brief soil descriptions are created for major soil components. The Hallandale soil is a minor component.

Component: Margate (1%)

Generated brief soil descriptions are created for major soil components. The Margate soil is a minor component.

Map Unit: 67—Smyrna fine sand-Urban land complex, 0 to 2 percent slopes

Component: Smyrna (45%)

The Smyrna component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (38%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: EauGallie (5%)

Generated brief soil descriptions are created for major soil components. The EauGallie soil is a minor component.

Component: Basinger (4%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Immokalee (4%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: Placid (2%)

Generated brief soil descriptions are created for major soil components. The Placid soil is a minor component.

Component: Smyrna (2%)

Generated brief soil descriptions are created for major soil components. The Smyrna soil is a minor component.

Map Unit: 99—Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Map Unit: 107—EauGallie sand-Urban land complex, 0 to 2 percent slopes

Component: EauGallie (45%)

The EauGallie component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (40%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Malabar (4%)

Generated brief soil descriptions are created for major soil components. The Malabar soil is a minor component.

Component: Myakka (3%)

Generated brief soil descriptions are created for major soil components. The Myakka soil is a minor component.

Component: Oldsmar (3%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Wabasso (3%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: EauGallie (2%)

Generated brief soil descriptions are created for major soil components. The EauGallie soil is a minor component.

Map Unit: 123—Myakka fine sand-Urban land complex, 0 to 2 percent slopes

Component: Myakka (45%)

The Myakka component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (38%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Basinger (5%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Wabasso (4%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Cassia (3%)

Generated brief soil descriptions are created for major soil components. The Cassia soil is a minor component.

Component: Immokalee (2%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: Myakka (2%)

Generated brief soil descriptions are created for major soil components. The Myakka soil is a minor component.

Component: Satellite (1%)

Generated brief soil descriptions are created for major soil components. The Satellite soil is a minor component.

Sarasota County, Florida

Map Unit: 3—Boca and Hallandale soils, 0 to 2 percent slopes

Component: Boca (45%)

The Boca component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 8 to 53 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Hallandale (35%)

The Hallandale component makes up 35 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy marine deposits over limestone. Depth to a root restrictive layer, bedrock, lithic, is 4 to 30 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Rock outcrop (5%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Component: Felda (5%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Component: Pompano (5%)

Generated brief soil descriptions are created for major soil components. The Pompano soil is a minor component.

Component: Pineda (5%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Map Unit: 7—Cassia fine sand, 0 to 2 percent slopes

Component: Cassia (80%)

The Cassia component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Myakka (7%)

Generated brief soil descriptions are created for major soil components. The Myakka soil is a minor component.

Component: Pomello (6%)

Generated brief soil descriptions are created for major soil components. The Pomello soil is a minor component.

Component: Satellite (4%)

Generated brief soil descriptions are created for major soil components. The Satellite soil is a minor component.

Component: Jonathan (3%)

Generated brief soil descriptions are created for major soil components. The Jonathan soil is a minor component.

Map Unit: 8—Delray fine sand, frequently ponded, 0 to 1 percent slopes

Component: Delray (85%)

The Delray component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pompano (7%)

Generated brief soil descriptions are created for major soil components. The Pompano soil is a minor component.

Component: Placid (5%)

Generated brief soil descriptions are created for major soil components. The Placid soil is a minor component.

Component: Gator (3%)

Generated brief soil descriptions are created for major soil components. The Gator soil is a minor component.

Map Unit: 9—Delray and Astor soils, 0 to 2 percent slopes, frequently flooded

Component: Delray, flooded (45%)

The Delray, flooded component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Astor, flooded (35%)

The Astor, flooded component makes up 35 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 3 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 10 percent. Nonirrigated land capability classification is 6w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Floridana, flooded (10%)

Generated brief soil descriptions are created for major soil components. The Floridana, flooded soil is a minor component.

Component: Felda, flooded (10%)

Generated brief soil descriptions are created for major soil components. The Felda, flooded soil is a minor component.

Map Unit: 10—EauGallie and Myakka fine sands, 0 to 2 percent slopes

Component: EauGallie (45%)

The EauGallie component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Myakka (40%)

The Myakka component makes up 40 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Ona (4%)

Generated brief soil descriptions are created for major soil components. The Ona soil is a minor component.

Component: Basinger (4%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Cassia (4%)

Generated brief soil descriptions are created for major soil components. The Cassia soil is a minor component.

Component: Wabasso (3%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Map Unit: 12—Felda fine sand, frequently ponded, 0 to 1 percent slopes

Component: Felda (85%)

The Felda component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. This component is in the R155XY011FL Slough ecological site. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Floridana (5%)

Generated brief soil descriptions are created for major soil components. The Floridana soil is a minor component.

Component: Basinger (3%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Winder (2%)

Generated brief soil descriptions are created for major soil components. The Winder soil is a minor component.

Component: Eaton (2%)

Generated brief soil descriptions are created for major soil components. The Eaton soil is a minor component.

Component: Kaliga (1%)

Generated brief soil descriptions are created for major soil components. The Kaliga soil is a minor component.

Component: Sanibel (1%)

Generated brief soil descriptions are created for major soil components. The Sanibel soil is a minor component.

Component: Myakka (1%)

Generated brief soil descriptions are created for major soil components. The Myakka soil is a minor component.

Map Unit: 15—Floridana and Gator soils, frequently ponded, 0 to 1 percent slopes

Component: Floridana (75%)

The Floridana component makes up 75 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 11 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Gator (25%)

The Gator component makes up 25 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of herbaceous organic material over sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Map Unit: 22—Holopaw fine sand, frequently ponded, 0 to 1 percent slopes

Component: Holopaw (85%)

The Holopaw component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Basinger (6%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Riviera (4%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Component: Floridana (3%)

Generated brief soil descriptions are created for major soil components. The Floridana soil is a minor component.

Component: Manatee (2%)

Generated brief soil descriptions are created for major soil components. The Manatee soil is a minor component.

Map Unit: 24—Kesson and Wulfert mucks, tidal, 0 to 1 percent slopes

Component: Kesson, tidal (50%)

The Kesson, tidal component makes up 50 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes on marine terraces on coastal plains. The parent material consists of thin herbaceous organic material over sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is very frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 8w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent. The soil has a moderately saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 25 within 30 inches of the soil surface.

Component: Wulfert, tidal (40%)

The Wulfert, tidal component makes up 40 percent of the map unit. Slopes are 0 to 1 percent. This component is on tidal marshes on marine terraces on coastal plains. The parent material consists of herbaceous organic material over sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is very frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 75 percent. Nonirrigated land capability classification is 8. This soil meets hydric criteria. The soil has a moderately saline horizon within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 25 within 30 inches of the soil surface.

Component: Canaveral (5%)

Generated brief soil descriptions are created for major soil components. The Canaveral soil is a minor component.

Component: St. Augustine (5%)

Generated brief soil descriptions are created for major soil components. The St. Augustine soil is a minor component.

Map Unit: 25—Malabar fine sand, 0 to 2 percent slopes

Component: Malabar (85%)

The Malabar component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. This component is in the R155XY011FL Slough ecological site. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Valkaria (5%)

Generated brief soil descriptions are created for major soil components. The Valkaria soil is a minor component.

Component: Oldsmar (4%)

Generated brief soil descriptions are created for major soil components. The Oldsmar soil is a minor component.

Component: Pineda (4%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Component: Basinger (2%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Map Unit: 26—Manatee loamy fine sand, frequently ponded, 0 to 1 percent slopes

Component: Manatee (85%)

The Manatee component makes up 85 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Floridana (5%)

Generated brief soil descriptions are created for major soil components. The Floridana soil is a minor component.

Component: Parkwood, loamy fine sand (4%)

Generated brief soil descriptions are created for major soil components. The Parkwood, loamy fine sand soil is a minor component.

Component: Placid (3%)

Generated brief soil descriptions are created for major soil components. The Placid soil is a minor component.

Component: Winder (3%)

Generated brief soil descriptions are created for major soil components. The Winder soil is a minor component.

Map Unit: 30—Ona fine sand, 0 to 2 percent slopes

Component: Ona (85%)

The Ona component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Basinger (5%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Myakka (3%)

Generated brief soil descriptions are created for major soil components. The Myakka soil is a minor component.

Component: Immokalee (3%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: EauGallie (2%)

Generated brief soil descriptions are created for major soil components. The EauGallie soil is a minor component.

Component: Pomello (2%)

Generated brief soil descriptions are created for major soil components. The Pomello soil is a minor component.

Map Unit: 31—Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes

Component: Pineda (45%)

The Pineda component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Pineda, wet (40%)

The Pineda, wet component makes up 40 percent of the map unit. Slopes are 0 to 1 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 0 inches during July, August, September, October. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Felda (6%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Component: Wabasso (3%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Boca (2%)

Generated brief soil descriptions are created for major soil components. The Boca soil is a minor component.

Component: Valkaria (2%)

Generated brief soil descriptions are created for major soil components. The Valkaria soil is a minor component.

Component: Hallandale (2%)

Generated brief soil descriptions are created for major soil components. The Hallandale soil is a minor component.

Map Unit: 33—Pomello fine sand, 0 to 2 percent slopes

Component: Pomello (85%)

The Pomello component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. This component is in the R155XY001FL Sand Pine Scrub ecological site. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Duette (5%)

Generated brief soil descriptions are created for major soil components. The Duette soil is a minor component.

Component: Immokalee (5%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: Jonathan (3%)

Generated brief soil descriptions are created for major soil components. The Jonathan soil is a minor component.

Component: Tavares (2%)

Generated brief soil descriptions are created for major soil components. The Tavares soil is a minor component.

Map Unit: 36—Pople fine sand, wet, 0 to 2 percent slopes

Component: Pople (85%)

The Pople component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during July, August, September, October. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 2 percent. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Wabasso (5%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: EauGallie (5%)

Generated brief soil descriptions are created for major soil components. The EauGallie soil is a minor component.

Component: Bradenton (5%)

Generated brief soil descriptions are created for major soil components. The Bradenton soil is a minor component.

Map Unit: 38—Smyrna fine sand, 0 to 2 percent slopes

Component: Smyrna (85%)

The Smyrna component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: EauGallie (5%)

Generated brief soil descriptions are created for major soil components. The EauGallie soil is a minor component.

Component: Basinger (4%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Pomello (2%)

Generated brief soil descriptions are created for major soil components. The Pomello soil is a minor component.

Component: Placid (2%)

Generated brief soil descriptions are created for major soil components. The Placid soil is a minor component.

Component: Immokalee (2%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Map Unit: 55—EauGallie-Myakka fine sands-Urban land complex, 0 to 2 percent slopes

Component: EauGallie (31%)

The EauGallie component makes up 31 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Myakka (28%)

The Myakka component makes up 28 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (26%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Cassia (4%)

Generated brief soil descriptions are created for major soil components. The Cassia soil is a minor component.

Component: Basinger (4%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Ona (4%)

Generated brief soil descriptions are created for major soil components. The Ona soil is a minor component.

Component: EauGallie (3%)

Generated brief soil descriptions are created for major soil components. The EauGallie soil is a minor component.

Map Unit: 63—Holopaw fine sand, ponded-Urban land complex, 0 to 1 percent slopes

Component: Holopaw (43%)

The Holopaw component makes up 43 percent of the map unit. Slopes are 0 to 1 percent. This component is on depressions on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is very poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is frequently ponded. A seasonal zone of water saturation is at 3 inches during January, June, July, August, September, October, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (40%)

Generated brief soil descriptions are created for major soil components. The Urban land soil is a minor component.

Component: Basinger (6%)

Generated brief soil descriptions are created for major soil components. The Basinger soil is a minor component.

Component: Riviera (4%)

Generated brief soil descriptions are created for major soil components. The Riviera soil is a minor component.

Component: Floridana (3%)

Generated brief soil descriptions are created for major soil components. The Floridana soil is a minor component.

Component: Manatee (2%)

Generated brief soil descriptions are created for major soil components. The Manatee soil is a minor component.

Component: Holopaw (2%)

Generated brief soil descriptions are created for major soil components. The Holopaw soil is a minor component.

Map Unit: 69—Pineda fine sand-Urban land complex, 0 to 2 percent slopes

Component: Pineda (40%)

The Pineda component makes up 40 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (33%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Pineda, wet (10%)

Generated brief soil descriptions are created for major soil components. The Pineda, wet soil is a minor component.

Component: Felda (6%)

Generated brief soil descriptions are created for major soil components. The Felda soil is a minor component.

Component: Wabasso (3%)

Generated brief soil descriptions are created for major soil components. The Wabasso soil is a minor component.

Component: Boca (2%)

Generated brief soil descriptions are created for major soil components. The Boca soil is a minor component.

Component: Hallandale (2%)

Generated brief soil descriptions are created for major soil components. The Hallandale soil is a minor component.

Component: Valkaria (2%)

Generated brief soil descriptions are created for major soil components. The Valkaria soil is a minor component.

Component: Pineda (2%)

Generated brief soil descriptions are created for major soil components. The Pineda soil is a minor component.

Map Unit: 70—Pomello fine sand-Urban land complex, 0 to 2 percent slopes

Component: Pomello (45%)

The Pomello component makes up 45 percent of the map unit. Slopes are 0 to 2 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of sandy marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during June, July, August, September, October, November. Organic matter content in the surface horizon is about 1 percent. This component is in the R155XY001FL Sand Pine Scrub ecological site. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface. The soil has a maximum sodium adsorption ratio of 1 within 30 inches of the soil surface.

Component: Urban land (40%)

Generated brief soil descriptions are created for major soil components. The Urban land is a miscellaneous area.

Component: Immokalee (5%)

Generated brief soil descriptions are created for major soil components. The Immokalee soil is a minor component.

Component: Duette (5%)

Generated brief soil descriptions are created for major soil components. The Duette soil is a minor component.

Component: Jonathan (3%)

Generated brief soil descriptions are created for major soil components. The Jonathan soil is a minor component.

Component: Tavares (2%)

Generated brief soil descriptions are created for major soil components. The Tavares soil is a minor component.

Map Unit: 99—Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Data Source Information

Soil Survey Area: Charlotte County, Florida
Survey Area Data: Version 19, Jun 8, 2020

Soil Survey Area: Sarasota County, Florida
Survey Area Data: Version 18, Jun 9, 2020

Exhibit J

Department of Environmental Protection
Outstanding Florida Waters



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary

January 10, 2019

Ms. Patti Anderson
Florida Forest Service Land Management Plan Coordinator
Florida Department of Agriculture and Consumer Services
3125 Conner Boulevard, Suite 1-262, Mail Stop C-25
Tallahassee, FL 32399-1650

RE: Myakka State Forest

Dear Ms. Anderson:

Thank you for your inquiry regarding the surface water quality classification of waters on and near Myakka State Forest in Sarasota County. The surface waters of the Myakka River from north of the site near US 41, to Charlotte Harbor in Charlotte County are classified as Class II waters (Shellfish Propagation or Harvesting) according to subparagraphs 62-302.400(17)(b)58. and 8., Florida Administrative Code (F.A.C.). There are no other waters listed as exceptions to Class III in subparagraph 62-302.400(17)(b)58., F.A.C.; therefore, all of the remaining surface waters on or adjacent to the site are classified as Class III waters (Fish Consumption; Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife), which is the statewide default classification under subsection 62-302.400(15), F.A.C.

As requested, we also checked to see if there are any Outstanding Florida Waters (OFWs) near the state forest. In this area, the Myakka River has been designated as Outstanding Florida Waters (OFW) under subparagraph 62-302.700(9), F.A.C. More specifically, the waters upstream (northwest) of the Sarasota-Charlotte County line across the river (aka extension of Campbell Street or Jennings Blvd. across the water) are within the Myakka Florida Wild and Scenic River OFW under subparagraph 62-302.700(9)(j)2., F.A.C, and the portion downstream of the county line is part of the Myakka River OFW under subparagraph 62-302.700(9)(i)22., F.A.C. While there are several other parcels on, adjacent, or near the State Forest that are considered conservation lands at a Federal, State or Local level (according to the Florida Natural Areas Inventory Managed Areas data layer), these have not been designated as OFWs beyond what is described above.

If you have any questions or need additional information, please feel free to contact me at the letterhead address (mail station 6511), by phone at 850-245-8427, or via E-mail at Janet.Klemm@FloridaDEP.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Janet Klemm".

Janet Klemm
Environmental Specialist
DEP Water Quality Standards Program

Exhibit K

Water Resources Map



Myakka State Forest

Water Resources Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
82nd NAD

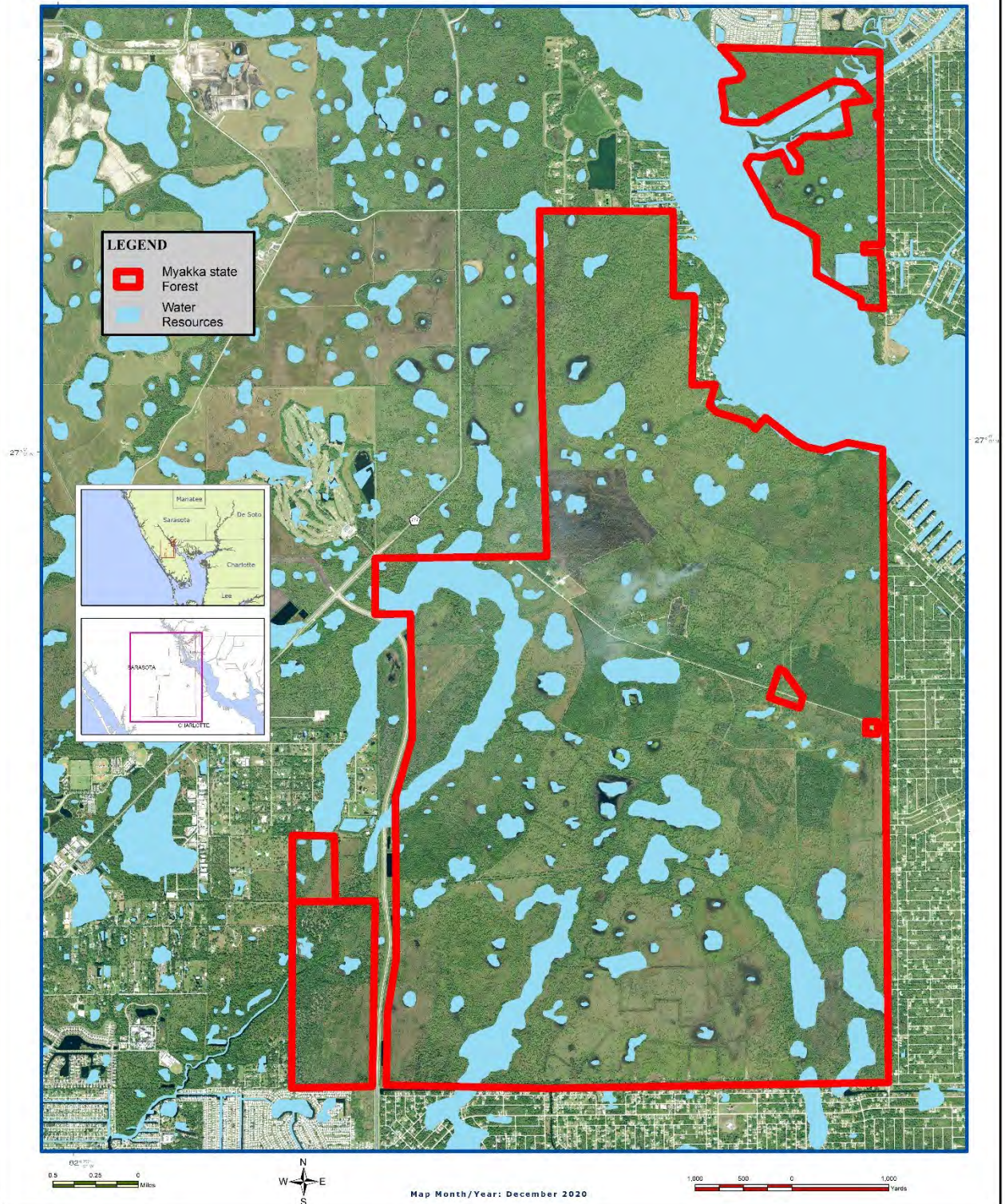
[illegible]

Exhibit L

Florida Natural Areas Inventory Managed Area Data Records



1010 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

August 19, 2020

Patti Anderson
Forest Service
Florida Department of Agriculture & Consumer Services
3125 Conner Boulevard, Suite I-258, Mail Stop C-25
Tallahassee, FL 32399-1650

Dear Ms. Anderson,

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). At your request we have produced the following report for your project area.

The purpose of this Standard Data Report is to provide objective scientific information on natural resources located in the vicinity of a site of interest, in order to inform those involved in project planning and evaluation. This Report makes no determination of the suitability of a proposed project for this location, or the potential impacts of the project on natural resources in the area.

Project: Myakka State Forest
Date Received: 8/14/2020
Location: Sarasota County

Based on the information available, this site appears to be located in a significant region of natural areas and habitat for several rare species.

Element Occurrences

A search of our maps and database indicates that we currently have several element occurrences mapped in the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

Federally Listed Species

Our data indicate federally listed species are present on or very near this site, specifically *Myiateria americana* and *Drymarchon couperi* (see enclosed map and tables for details). This statement should not be interpreted as a legal determination of presence or absence of federally listed species on a property.

The element occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, element occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

CLIP

The enclosed map shows natural resource conservation priorities based on the Critical Lands and Waters Identification Project. CLIP is based on many of the same natural resource data developed for the Florida Forever Conservation Needs Assessment, but provides an overall picture of conservation priorities across different resource categories, including biodiversity, landscapes, surface waters, and aggregated CLIP priorities (that combine the individual resource categories). CLIP is also based primarily on remote sensed data and is not intended to be the definitive authority on natural resources on a site.

For more information on CLIP, visit <http://www.fnai.org/clip.cfm>.

Florida Scrub-jay Survey – U.S. Fish and Wildlife Service

This survey was conducted by staff and associates of the Archbold Biological Station from 1992 to 1996. An attempt was made to record all scrub-jay (*Aphelocoma coerulescens*) groups, although most federal lands were not officially surveyed. Each map point represents one or more groups.

This data layer indicates that there are potential scrub-jay populations on or very near your site. For additional information:

Fitzpatrick, J.W., B. Pranty, and B. Stith, 1994, Florida scrub jay statewide map, 1992-1993, U. S. Fish and Wildlife Service Report, Cooperative Agreement no. 14-16-004-91-950.

Managed Areas

Portions of the site appear to be located within the Myakka State Forest, managed by the FL Dept. of Agriculture and Consumer Services, Florida Forest Service.

The Managed Areas data layer shows public and privately managed conservation lands throughout the state. Federal, state, local, and privately managed conservation lands are included.

Land Acquisition Projects

This site appears to be located within the Charlotte Harbor Estuary Florida Forever BOT Project, which is part of the State of Florida's Conservation and Recreation Lands land acquisition program. For more information on this Florida Forever Project, contact the Florida Department of Environmental Protection, Division of State Lands.

Florida Forever Board of Trustees (BOT) projects are proposed and acquired through the Florida Department of Environmental Protection, Division of State Lands. The state has no specific land management authority over these lands until they are purchased.

The Inventory always recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. **The maps contain sensitive environmental information, please do not distribute or publish without prior consent from FNAI.** FNAI data may not be resold for profit.

Thank you for your use of FNAI services. If I can be of further assistance, please contact me at (850) 224-8207 or at kbrinegar@fnai.fsu.edu.

Sincerely,

Kerri Brinegar

Kerri Brinegar
GIS / Data Services

Encl



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 661-8364 Fax
www.fnai.org

CLIP v4.0 Resource Priorities

Biodiversity Resource Category

Priority 1 - Highest

Priority 2

Priority 3

Priority 4

Priority 5

Landscape Resource Category

Priority 1 - Highest

Priority 2

Priority 3

Priority 4

Priority 5

Surface Water Resource Category

Priority 1 - Highest

Priority 2

Priority 3

Priority 4

Priority 5

Aggregated CLIP Priorities

Priority 1 - Highest

Priority 2

Priority 3

Priority 4

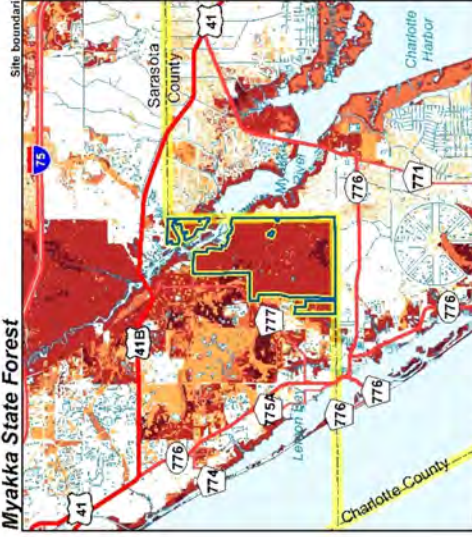
Priority 5

Site Boundary

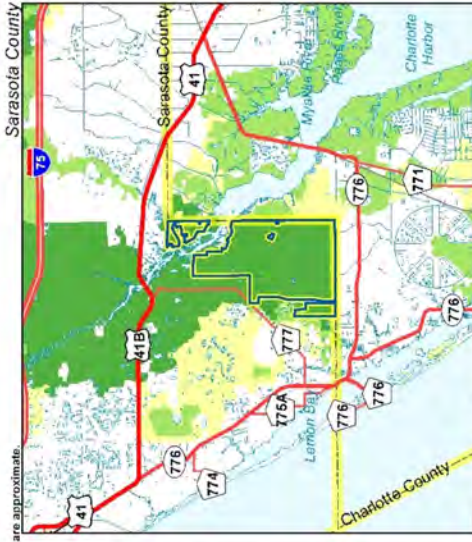
Map should not be interpreted without accompanying documents.

Critical Lands and Waters Identification Project
This map was prepared for the Florida Natural Areas Inventory, UF Center for
Landscape Conservation Planning, and FL Fish &
Wildlife Research Center. It was developed in
partnership with the Florida Department of
Natural Resources, the Florida Department of
Wildlife Management, the Florida Department of
Environmental Protection, and the US Fish & Wildlife Service.

Myakka State Forest



Site boundaries are approximate.



CLIP Biodiversity Resource Priorities



CLIP Landscape Resource Priorities



CLIP Surface Water Resource Priorities

CLIP Aggregated Resource Priorities



Map produced by KAB
8/19/2020

FNAI ELEMENT OCCURRENCE REPORT on or near
Myakka State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
ACROAURE*41	<i>Acrostichum aureum</i>	golden leather fern	G5	S3	N	T	2014-03-16	edges of black needle rush/Spartina sp. marsh	7-8 plants observed in 2 areas of marsh edge.
ANTIPRAT*43	<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST	1993-06-03	Large, relatively deep pond with maidencane (Panicum hemitomon).	1993: a pair of sandhill cranes seen wading and feeding in pond. Diver (PNDDIV01) reports they nested and raised one chick in the past year.
APHECOER*36	<i>Aphelocoma coerulescens</i>	Florida Scrub-Jay	G2?	S2	T	FT	1981-08-07	LOW DENSITY RESIDENTIAL AREA, SOME SLASH PINE SCRUB [=SCRUBBY FLATWOODS] REMAINS.	1981-08-07: 2 ADULT SCRUB JAYS, 2 JUVENILE SCRUB JAYS
BIRDROOK*46	Bird Rookery		G5	SNR	N	N	1978-07	COLONY SITE IS A SPOIL ISLAND IN RIVER SURROUNDED BY WATER. NESTING SUBSTRATE IS MANGROVES OVER WATER. AS OF 1978 MORE THAN .8 KM. FROM HUMAN DISTURBANCE.	GREAT BLUE HERON (15 NESTING PRS, 4/77; 5 NP IN 4/78; 1 NP IN 7/78), CATTLE EGRET (50 NP IN 7/78), GREAT EGRET (10 NP IN 4/77; 13 IN 4/78; 5 IN 7/78).
DEPRMARS*35	Depression marsh		G4	S4	N	N	1999	Temporary ponds form circular depressions scattered throughout flatwoods.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Two ponds connected by slightly higher area between them. Southernmost pond had dried center of bare mud with bodies of garfish scattered on it. Next higher zone was occupied by spikerush (<i>Eleocharis cellulosa</i>) which was flowering. Highest zone is dominated by beakrush (<i>Rhynchospora microcarpa</i>) with scattered clumps of sand cordgrass (<i>Spartina baken</i>). Some Brazilian pepper (<i>Schinus terebinthifolius</i>) on edges of ponds.



FNAI ELEMENT OCCURRENCE REPORT on or near Myakka State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
DEPRMARS*36	Depression marsh		G4	S4	N	N	1999	Grassy temporary pond, now mostly dried up.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Central portion is open water surrounded by a ring of spikerush (Eleocharis cellulosa) followed by a zone of sparse grass (possibly Amphicarpum muhlenbergianum). The highest zone is occupied by a sparse stand of shrubs including Myrica cerifera and Hypenicum fasciculatum. Also in this zone are scattered plants of water lily (Nymphaea odorata), Juncus megacephalus, a creeping species of Ludwigia with sulphur yellow flowers, and a small species of arrowhead (Sagittaria isoetiformis).
DEPRMARS*37	Depression marsh		G4	S4	N	N	1999	Shallow rounded depression surrounded by flatwoods	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Broad grassy border surrounding a small central depression filled with pickerelweed (Pontederia cordata). Grassy border composed of various grasses including but not limited to: Muhlenbergia capillaris, Andropogon spp., Syngonanthus flavidulus, Amphicarpum muhlenbergianum. Other species present are Hypenicum fasciculatum, Drosera capillaris, Xyris elliotii, and Sabatia grandiflora.
DEPRMARS*38	Depression marsh		G4	S4	N	N	1999	Large, relatively deep pond with maidencane	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Maidencane (Panicum hemitomon) in center with horned bladderwort (Utricularia cornuta) on edges.



FNAI ELEMENT OCCURRENCE REPORT on or near **Myakka State Forest**



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
DEPRMARS*39	Depression marsh		G4	S4	N	N	2004	Two interconnected rounded depressions in midst of flatwoods which hold water temporarily during rainy season. Stands of palm/oak hammock are found on their edges.	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Deeper central portions occupied by pickerel weed (Pontederia cordata). Blue hyssop (Bacopa caroliniana), sand cordgrass (Spartina bakeri), and horned bladderwort (Utricularia cornuta) occupy the edges. Wading birds (herons and egrets) were observed in the distance in larger northern pond.
DRYMCOUP*376	<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S2?	T	FT	1956	No general description given	MUSEUM SPECIMENS: DALTON, PRIOR TO 1942, CAS-SU-10150, AUFFENBERG, 1956, MC2 55521
EGRECAER*221	<i>Egretta caerulea</i>	Little Blue Heron	G5	S4	N	ST	1989-05-03	borrow pit "peninsula"	1989/05/03: D.E. Runde, GFC, observation. fixed wing flight, GREG & GBHE w/ large young "Total" = C (includes GREG, SNEG, GBHE, LBHE, TCHE, BRPE, DCCO).
EGRECAER*360	<i>Egretta caerulea</i>	Little Blue Heron	G5	S4	N	ST	1986-05-29	Tidal swamp	1986/05/29: B.A. Millsap, GFC, observation. CWA-Myakka River WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF
EGRETHUL*173	<i>Egretta thula</i>	Snowy Egret	G5	S3	N	N	1989-05-03	Freshwater river or stream	1989/05/03: D.E. Runde, GFC, fixed wing flight; Habitat= borrow pit "peninsula", GREG & GBHE w/ large young "Total" = C (includes GREG, SNEG, GBHE, LBHE, TCHE, BRPE, DCCO).
EGRETHUL*254	<i>Egretta thula</i>	Snowy Egret	G5	S3	N	N	1986-05-29	Basin marsh	1986/05/29: B.A. Millsap, GFC - 40 nests, CWA-Myakka River; Wading Bird Record from Millsap's Occur.DBF
EGRETRIC*164	<i>Egretta tricolor</i>	Tricolored Heron	G5	S4	N	ST	1989-05-03	Freshwater river or stream	1989/05/03: D.E. Runde, GFC, fixed wing flight; Habitat= borrow pit "peninsula", GREG & GBHE w/ large young "Total" = C (includes GREG, SNEG, GBHE, LBHE, TCHE, BRPE, DCCO).
EGRETRIC*240	<i>Egretta tricolor</i>	Tricolored Heron	G5	S4	N	ST	1989-05-02	Freshwater river or stream	1989/05/02: D.E. Runde, GFC, fixed wing flight; Habitat= mangrove isle "Total" = D (includes GREG, GBHE, TCHE, WOST).

FNAI ELEMENT OCCURRENCE REPORT on or near
Myakka State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
EGRETRI*241	<i>Egretta tricolor</i>	Tricolored Heron	G5	S4	N	ST	1986-05-29	Tidal swamp	1986/05/29: B.A. Millsap, GFC. CWA-Myakka River. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF
GLANTAMP*7	<i>Glandularia tampensis</i>	Tampa vervain	G2	S2	N	E	1957-06-28	ON A SANDY, GRASSY AREA CLOSE TO THE COAST.	FLOWERS PURPLE-PINK 1957-06-28.
GOPHPOLY*1447	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2011-10-31	Residential community that borders what may be a forested green space based on examination of 2014 Google Earth aerial photography.	Population of tortoises within a residential subdivision bordered by a forested natural area, with observations from 2007-2011.
GOPHPOLY*1477	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2005-04-19	Matrix of mesic flatwoods and scrub in Myakka River SF	2 active burrows and 1 inactive burrow
GOPHPOLY*1514	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	2005-04-18	Mesic flatwoods	2 active burrows and 1 inactive burrow
GOPHPOLY*822	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST	1993-06-03	Matrix of mesic flatwoods and scrub in Myakka River State Forest.	1993: adult seen (F93JOH03FLUS).
HALILEUC*230	<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N	2003	No general description given	2003: active. 2002-1999: not assessed/unknown. 1996, 1995: inactive. 1998, 1997: Unknown/not assessed(U03FWC01FLUS). 1980-1984: 1987-1988: active. 1986: gone. 1980-1982, 1988: fledged young. 1985, 1993: no data (PNDDIV01FLUS).
LYTHFLAG*5	<i>Lythrum flagellare</i>	lowland loosestrife	G2	S2	N	E	2019-04-22	Growing in in the maintained wetland R/Ws in residential area with Centella asiatica, Hypericum mutilum, Phyla nodiflora, Carex longii, Diodia virginiana, Eryngium baldwinii, Hydrocotyle umbellata, Ptilimnium capillaceum, Bacopa monnieri.	Growing in abundance in flower. Growing in in the maintained wetland R/Ws in residential area with Centella asiatica, Hypericum mutilum, Phyla nodiflora, Carex longii, Diodia virginiana, Eryngium baldwinii, Hydrocotyle umbellata, Ptilimnium capillaceum, Bacopa monnieri.
MESIFLAT*81	Mesic flatwoods		G4	S4	N	N	1999	Scattered slash pines in a monotonous plain of low saw palmettos with scattered tarflowers blooming.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Occasional slash pine (Pinus elliotii) dotted within a matrix of low saw palmetto (Serenoa repens) with scattered tarflower (Befaria racemosa).



FNAI ELEMENT OCCURRENCE REPORT on or near Myakka State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
MESIPLAT*82	Mesic flatwoods		G4	S4	N	N	1999	Slash pine/palmetto flatwoods.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Fairly dense slash pine (Pinus elliotii) canopy with understory of saw palmetto (Serenoa repens) evenly interspersed with grassy openings with Aristida gyrans, Rhynchospora fascicularis, Bulbostylis sp., Syngonanthus flavidulus, dwarfed Myrica cerifera, and Hypericum reductum.
MESIPLAT*83	Mesic flatwoods		G4	S4	N	N	1999	Recently burned pine/palmetto flatwoods near old homestead.	1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Fairly dense slash pine (Pinus elliotii) canopy with understory of saw palmetto (Serenoa repens) interspersed with grassy openings. Other species present include milkweed (Asclepias feayi), pawpaw (Asimina reticulata), coontie (Zamia pumila), St. John's wort (Hypericum reductum), and gallberry (Ilex glabra).
MESIHAM*8	Mesic hammock		G3	S3?	N	N	1999	Small stand of palm/oak hammock between two interconnected temporary ponds.	2010: Prior to the 2010 natural community reclassification effort this EO had been known as Prairie hammock EO number 8 (see U10FNA01FLUS for updated community descriptions). 1999: Update to last obs date was based on interpretation of aerial photography (previous value was 1993-06-03) (U05FNA02FLUS). Canopy of cabbage palm (Sabal palmetto) and live oak (Quercus virginiana). Understory primarily of saw palmetto (Serenoa repens) and fern (possibly Blechnum serrulatum). Other shrubs include wax myrtle (Myrica cerifera) and beautyberry (Callicarpa americana). Persimmon (Diospyros virginiana) is frequent in both under-and overstory.

FNAI ELEMENT OCCURRENCE REPORT on or near
Myakka State Forest



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
MYCTAMR*151	<i>Mycteria americana</i>	Wood Stork	G4	S2	T	FT	2010	Freshwater river or stream (U97GFC02FLUS).	Long-lived colony, active for 15 years; species present intermittently from 1983 through 2010, with a maximum of 520 nests in 1993 (U11TSA01FLUS). Spreadsheet in U11TSA01FLUS gives number of nests by year.
NYCTNYCT*95	<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	G5	S3	N	N	1986-05-29	Tidal swamp	1986-05-29: B.A. Millsap, GFC, observation. 1 nest. CWA-Myakka River. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF
PANDHALI*132	<i>Pandion haliaetus</i>	Osprey	G5	S3S4	N	N	2005-04-19	2005-04-19: nest in a large pine within scrubby flatwoods adjacent to Myakka River estuary (PNDHIP01flus).	2005-04-19: Hipes observed a nest with one chick (U05FNA06FLUS).
PEUCAEST*85	<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N	2005-04-19	2005-04-19: Extensive areas of mesic flatwoods (U05FNA06FLUS).	2005-04-19: 3 males singing in extensive flatwoods (U05FNA06FLUS).
PITUMLA*59	<i>Pituophis melanoleucus</i>	Pine Snake	G4	S3	N	ST	ZZ	No general description given	SPEC. (UM-109109), COLLECTOR N/A, DATE N/A.
PLATAJA*65	<i>Platalea ajaja</i>	Roseate Spoonbill	G5	S2	N	ST	1986-05-29	Tidal swamp	1986-05-29: B.A. Millsap, GFC, observed 1 nest. CWA-Myakka River. WADING BIRD RECORD FROM MILLSAP'S OCCUR.DBF.
STERDOUG*15	<i>Sterna dougalli</i>	Roseate Tern	G4	S1	T	FT	1992 – 1993	No general description given	B. Perry observed Roseate and Royal terns feeding around island May-July. Data from FY 1992-93 Coastal Wildlife Questionnaire, Delorme page 97, site # 5.
THALMAX*57	<i>Thalasseus maximus</i>	Royal Tern	G5	S3	N	N	1992 – 1993	No general description given	B. Perry - RSTE, ROTE observed feeding around island May-July. Data from FY 1992-93 Coastal Wildlife Questionnaire, Delorme page 97, site # 5.
TYPOFULV*4	<i>Typocerus fulvocinctus</i>	Yellow-banded Typocerus Long-horned Beetle	G2G3	S2S3	N	N	1994 pre	1994-Pre: occurs in pine flatwoods (B94DEY01FLUS).	1994-Pre: This species occurs in pine flatwoods (B94DEY01FLUS).



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Florida Natural Areas Inventory

Aggregated Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Documented					
<i>Acrostichum aureum</i>	golden leather fern	G5	S3	N	T
Depression marsh		G4	S4	N	N
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N
Mesic flatwoods		G4	S4	N	N
Mesic hammock		G3	S3?	N	N
<i>Pandion haliaetus</i>	Osprey	G5	S3S4	N	N
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
Likely					
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	T	FT
<i>Mycteria americana</i>	Wood Stork	G4	S2	T	FT
<i>Sterna dougallii</i>	Roseate Tern		S1	T	FT
<i>Thalasseus maximus</i>	Royal Tern	G5	S3	N	N
<i>Trichechus manatus</i>	West Indian Manatee	G2	S2	T	FT
Potential					
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	G3T2T3	S2?	T	FT
<i>Aphelocoma coerulescens</i>	Florida Scrub-Jay	G2?	S2	T	FT
<i>Ardea herodias occidentalis</i>	Great White Heron	G5T2	S2	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	ST
Bird Rookery		G5	SNR	N	N
<i>Calopogon multiflorus</i>	many-flowered grass-pink	G2G3	S2S3	N	T
<i>Centrosema arenicola</i>	sand butterfly pea	G2Q	S2	N	E
<i>Chamaesyce cumulicola</i>	sand-dune spurge	G2	S2	N	E
<i>Chrysopsis floridana</i>	Florida goldenaster	G3	S3	E	E
<i>Coleataenia abscissa</i>	cutthroatgrass		S3	N	E
<i>Deeringothamnus pulchellus</i>	beautiful pawpaw	G1	S1	E	E
<i>Egretta caerulea</i>	Little Blue Heron	G5	S4	N	ST
<i>Egretta thula</i>	Snowy Egret		S3	N	N
<i>Egretta tricolor</i>	Tricolored Heron		S4	N	ST
<i>Eretmochelys imbricata</i>	Hawksbill Sea Turtle	G3	S1	E	FE
<i>Eumops floridanus</i>	Florida bonneted bat	G1	S1	E	FE
<i>Lechea cernua</i>	nodding pinweed	G3	S3	N	T
<i>Lechea divaricata</i>	pine pinweed	G2	S2	N	E
<i>Linum carteri</i> var. <i>smallii</i>	Small's flax	G2T2	S2	N	E
<i>Lithobates capito</i>	Gopher Frog	G3	S3	N	N
<i>Matelea floridana</i>	Florida spiny-pod	G2	S2	N	E
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Nemastylis floridana</i>	celestial lily	G2	S2	N	E
<i>Nolina atopocarpa</i>	Florida beargrass	G3	S3	N	T
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron	G5	S3	N	N
<i>Platalea ajaja</i>	Roseate Spoonbill		S2	N	ST
<i>Pteroglossaspis ecristata</i>	giant orchid	G2G3	S2	N	T
<i>Rallus longirostris scottii</i>	Florida Clapper Rail	G5T3?	S3?	N	N
<i>Schizachyrium niveum</i>	scrub bluestem	G1G2	S1S2	N	E
<i>Sciurus niger niger</i>	Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Setophaga discolor paludicola</i>	Florida Prairie Warbler	G5T3	S3	N	N
<i>Typocerus fulvocinctus</i>	Yellow-banded Typocerus Long-horn	G2G3	S2S3	N	N

Definitions: Documented - Rare species and natural communities documented on or near this site.

Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.

Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.

Potential - This site lies within the known or predicted range of the species listed.



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Florida Natural Areas Inventory

Managed Area Element Summary

Myakka State Forest



SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status
PLANTS					
<i>Acrostichum aureum</i>	golden leather fern	G5	S3	N	T
REPTILES					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	C	ST
BIRDS					
<i>Antigone canadensis pratensis</i>	Florida Sandhill Crane	G5T2	S2	N	ST
<i>Haliaeetus leucocephalus</i>	Bald Eagle	G5	S3	N	N
<i>Pandion haliaetus</i>	Osprey	G5	S3S4	N	N
<i>Peucaea aestivalis</i>	Bachman's Sparrow	G3	S3	N	N

Note: Summary includes all documented and likely species occurrence records currently in the FNAI database.



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Florida Natural Areas Inventory

Managed Area Element Summary

Myakka State Forest



SCIENTIFIC NAME	COMMON NAME	Global rank	State rank	Federal status	State status
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Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

- G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- G4 = Apparently secure globally (may be rare in parts of range).
- G5 = Demonstrably secure globally.
- GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
- GX = Believed to be extinct throughout range.
- GXC = Extirpated from the wild but still known from captivity or cultivation.
- G#? = Tentative rank (e.g., G2?).
- G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
- G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
- G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
- G#T#Q = Same as above, but validity as subspecies or variety is questioned.
- GU = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
- GNA = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- GNR = Element not yet ranked (temporary).
- GNRTNR = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

- S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- S2 = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- S4 = Apparently secure in Florida (may be rare in parts of range).
- S5 = Demonstrably secure in Florida.
- SH = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
- SX = Believed to be extirpated throughout Florida.
- SU = Unrankable; due to a lack of information no rank or range can be assigned.
- SNA = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- SNR = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Note: Summary includes all documented and likely species occurrence records currently in the FNAI database.



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Florida Natural Areas Inventory

Managed Area Element Summary

Myakka State Forest



Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
LE = Endangered: species in danger of extinction throughout all or a significant portion of its range.
LE, LT = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
LE, PDL = Species currently listed endangered but has been proposed for delisting.
LE, PT = Species currently listed endangered but has been proposed for listing as threatened.
LE, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
LT = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
F(XN) = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future. (ST* for *Ursus americanus floridanus* (Florida black bear) indicates that this status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. ST* for *Neovison vison* pop.1 (Southern mink, South Florida population) indicates that this status applies to the Everglades population only.)
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* indicates that a species has SSC status only in selected portions of its range in Florida. SSC* for *Pandion haliaetus* (Osprey) indicates that this status applies in Monroe county only.)
N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: <http://www.doacs.state.fl.us/pi/>.

LE = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant



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Managed Area Element Summary
Myakka State Forest



to the U.S. Endangered Species Act

LT = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.

N = Not currently listed, nor currently being considered for listing.

Elements and Element Occurrences

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

Element Ranking and Legal Status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

- G1** = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- G2** = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- G3** = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- G4** = Apparently secure globally (may be rare in parts of range).
- G5** = Demonstrably secure globally.
- GH** = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
- GX** = Believed to be extinct throughout range.
- GXC** = Extirpated from the wild but still known from captivity or cultivation.
- G#?** = Tentative rank (e.g., G2?).
- G#G#** = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
- G#T#** = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
- G#Q** = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
- G#T#Q** = Same as above, but validity as subspecies or variety is questioned.
- GU** = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
- GNA** = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- GNR** = Element not yet ranked (temporary).
- GNRTNR** = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

- S1** = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
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- S4** = Apparently secure in Florida (may be rare in parts of range).
- S5** = Demonstrably secure in Florida.
- SH** = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
- SX** = Believed to be extirpated throughout Florida.
- SU** = Unrankable; due to a lack of information no rank or range can be assigned.
- SNA** = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- SNR** = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.

E = Endangered: species in danger of extinction throughout all or a significant portion of its range.

E, T = Species currently listed endangered in a portion of its range but only listed as threatened in other areas

E, PDL = Species currently listed endangered but has been proposed for delisting.

E, PT = Species currently listed endangered but has been proposed for listing as threatened.

E, XN = Species currently listed endangered but tracked population is a non-essential experimental population.

T = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.

PE = Species proposed for listing as endangered

PS = Partial status: some but not all of the species' infraspecific taxa have federal

PT = Species proposed for listing as threatened

SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.

SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service

FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service

FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service

FXN = Federal listed as an experimental population in Florida

FT(S/A) = Federal Threatened due to similarity of appearance

ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.

SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for *Pandion haliaetus* (Osprey) indicates that this status applies in Monroe county only.)

N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: <http://www.doacs.state.fl.us/pi/>.

E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.

T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.

N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

A = Excellent estimated viability
A? = Possibly excellent estimated viability
AB = Excellent or good estimated viability
AC = Excellent, good, or fair estimated viability
B = Good estimated viability
B? = Possibly good estimated viability
BC = Good or fair estimated viability
BD = Good, fair, or poor estimated viability
C = Fair estimated viability
C? = Possibly fair estimated viability
CD = Fair or poor estimated viability
D = Poor estimated viability
D? = Possibly poor estimated viability
E = Verified extant (viability not assessed)
F = Failed to find
H = Historical
NR = Not ranked, a placeholder when an EO is not (yet) ranked.
U = Unrankable
X = Extirpated

*For additional detail on the above ranks see: <http://www.natureserve.org/explorer/eorankguide.htm>

FNAI also uses the following EO ranks:

H? = Possibly historical
F? = Possibly failed to find
X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).

Exhibit M

Florida Fish and Wildlife Conservation Commission Listed Species Occurrence Records



**Florida Fish
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Commission**

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Panama City

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Vice Chairman
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01/08/2019

Patti Anderson
Land Planning Coordinator
Florida Forest Service
3125 Conner Boulevard
Tallahassee, FL
32399

Dear Patti Anderson:

This letter is in response to your request for listed species occurrence records and Strategic Habitat Conservation Areas (SHCA's), on the following properties: Little-Big Econ, Charles H. Bronson, Holopaw, Pine log, Carl Duval Moore, Watson Island, Tiger Bay, and Myakka. Records from The Florida Fish and Wildlife Conservation Commission's database indicate that listed species occurrence data and critical habitats are located within the project areas. The Florida Fish and Wildlife Conservation Commission's database indicates that SHCA's for short-tailed hawk occur on Carl Duval Moore. SHCA's for Cooper's hawk, swallow-tailed kite, and short-tailed hawk occur in Charles H. Bronson. SHCA's for Cooper's hawk and Florida black bear were found on Pine Log, and SHCA's for Cooper's hawk and Florida black bear occur on Tiger Bay. Enclosed are 8.5 x 11 maps showing prioritized SHCA's, priority wetlands, landcover, species richness, and species locations for all projects. Additional species records were found on, or within a 1-mile distance of, the properties will be included in a spreadsheet; these species records are maintained by FNAI and cannot be distributed through FWC.

This letter and attachments should not be considered as a review or an assessment of the impact upon threatened or endangered species of the project site. It provides FWC's most current data regarding the location of listed species and their associated habitats.

Our SHCA recommendations are intended to be used as a guide. Land development and ownership in Florida is ever-changing and priority areas identified as SHCA might already have been significantly altered due to development or acquired into public ownership. Onsite surveys, literature reviews, and coordination with FWC biologists remain essential steps in documenting the presence or absence of rare and imperiled species and habitats within the project area.

Our fish and wildlife location data represents only those occurrences recorded by FWC staff and other affiliated researchers. It is important to understand that our database does not necessarily contain records of all listed species that may occur in a given area. Also, data on certain species, such as gopher tortoises, are not entered into our database on a site-specific basis.

Therefore, one should not assume that an absence of occurrences in our database indicates that species of significance do not occur in the area.

The Florida Natural Areas Inventory (FNAI) maintains a separate database of listed plant and wildlife species, please contact FNAI directly for specific information on the location of element occurrences within the project area.

Because FNAI is funded to provide information to public agencies only, you may be required to pay a fee for this information. County-wide listed species information can be located at their website (<http://www.fnai.org>).

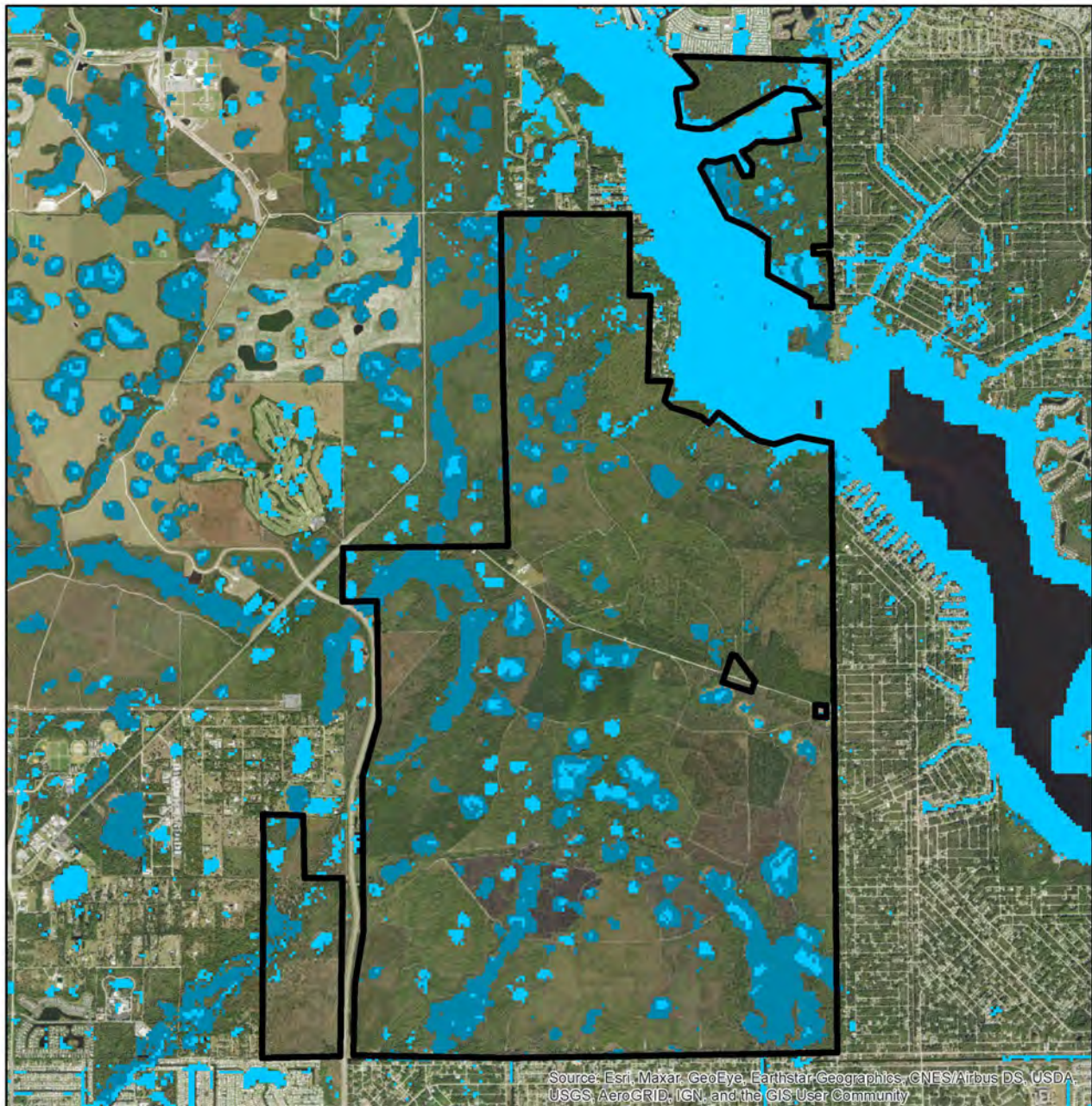
Please credit the Florida Fish and Wildlife Conservation Commission in any publication or presentation of these data. If you have any questions or further requests, please contact me at (850) 488-0588 or gisrequests@myfwc.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Salinas', with a stylized flourish at the end.

Eva Salinas
Research Assistant

ES
2019_6326
Enclosures



Priority Wetlands

- 1-3 Species, Wetlands habitat
- 4-6 Species, Wetlands habitat
- 7-9 Species, Wetlands habitat
- 10-11 Species, Wetlands habitat



Myakka State Forest

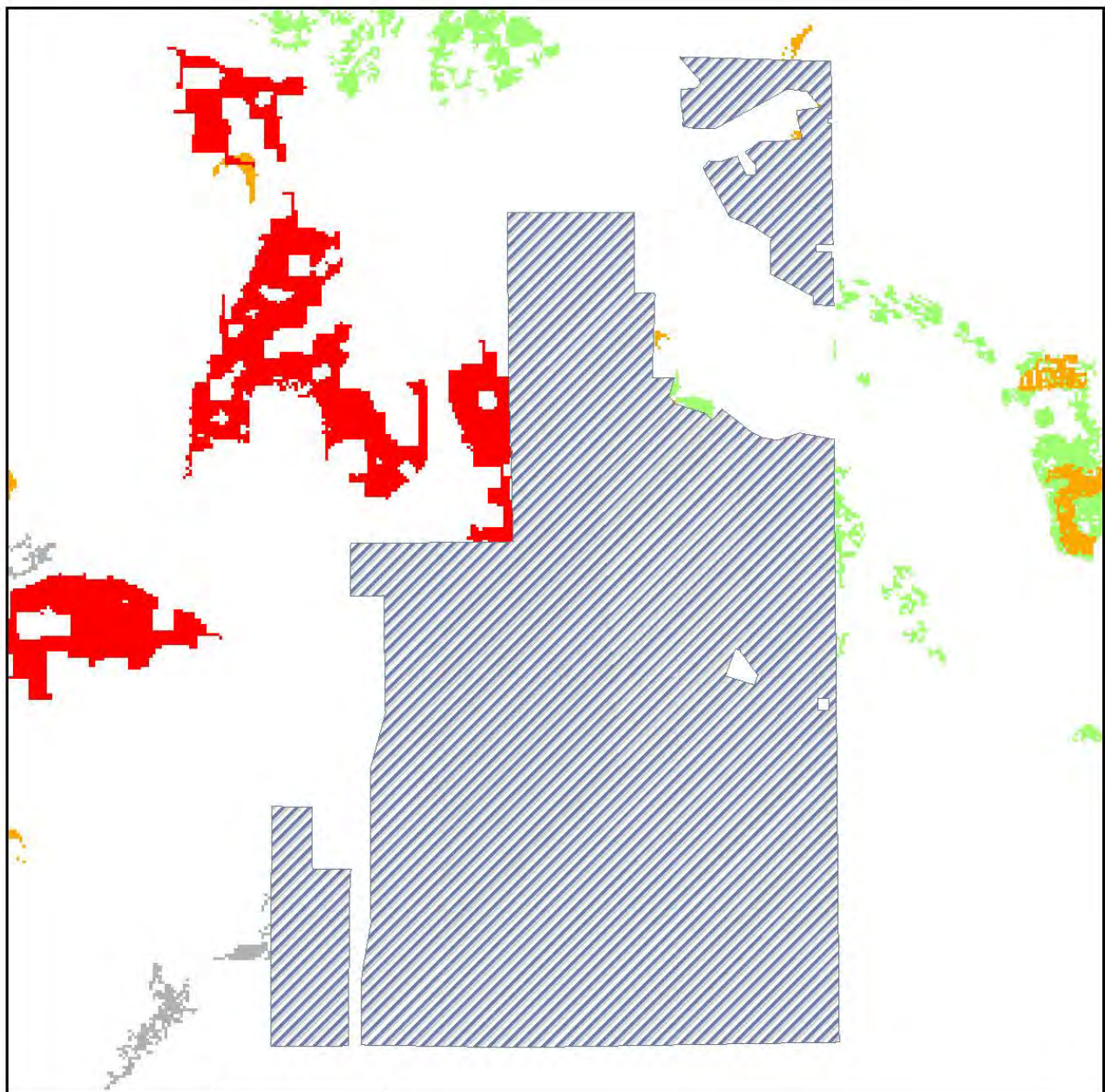
This raster dataset identifies Florida wetlands important to wetland-dependent vertebrates listed by the State of Florida as endangered, threatened, or species of special concern. The dataset also ranks the relative importance of wetland areas based on species richness of the selected vertebrate species.



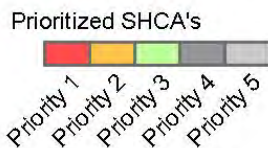
Florida Fish and Wildlife
Conservation Commission
MyFWC.com

Miles
0 0.45 0.9 1.35 1.8

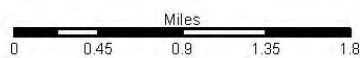
FWC ID: 2019_6326 January 7th, 2019



Myakka



The prioritized SHCA map identifies 5 classes of SHCA based upon Heritage ranking criteria developed by The Nature Conservancy, the Natural Heritage Program Network, and the Florida Natural Areas Inventory. There are 2 possible ranks used to prioritize a species' SHCA: 1) the global rank based on a species worldwide status, and 2) the state rank based upon the species status in Florida. The state and global ranks are based upon many factors such as known occurrence locations, estimated abundance, range, amount of habitat currently protected, perceived levels of threats towards the species, and ecological fragility.



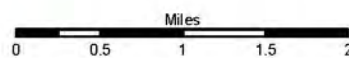
Florida Fish and Wildlife
Conservation Commission
MyFWC.com





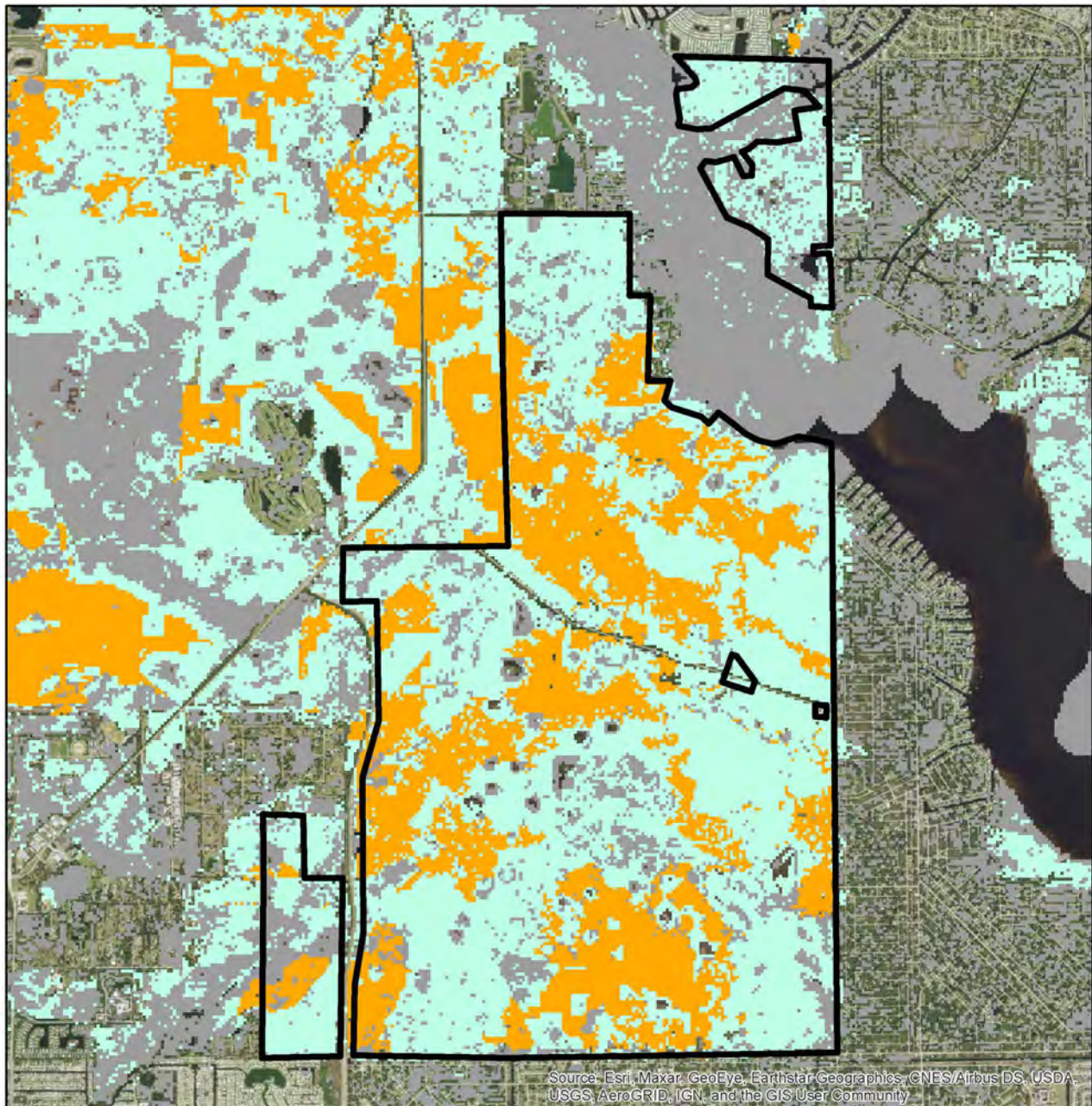
Myakka

- | | |
|---------------------------------|--------------------------|
| ● Scrub-jay | ■ Shore Birds Nests 2002 |
| ● Shorebirds | ▲ Bear Calls |
| ● Wading Bird Rookeries 1999 | ▲ Bear Capture |
| ■ Eagles Nests | + Wildlife Observations |
| ■ Florida Wood Stork Nests -FWC | |



Florida Fish and Wildlife
Conservation Commission
MyFWC.com

FWC ID: 2019_6326 January 8th, 2019



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Species Richness

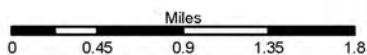


Myakka State Forest

This dataset represents the richness of potential habitat for selected focal species in Florida. Potential habitat includes areas that have been occupied by the species and areas where occupancy is unknown based on available occurrence records. We combined the potential habitats generated for Florida into a single grid layer indicating diversity. Pixel cell value indicates the total number of species potential habitat identified at the specific location.



Florida Fish and Wildlife
Conservation Commission
MyFWC.com



FWC ID: 2019_6326 January 7th, 2019

Exhibit N

Fire History

Myakka State Forest Burn Acres by Fiscal Year

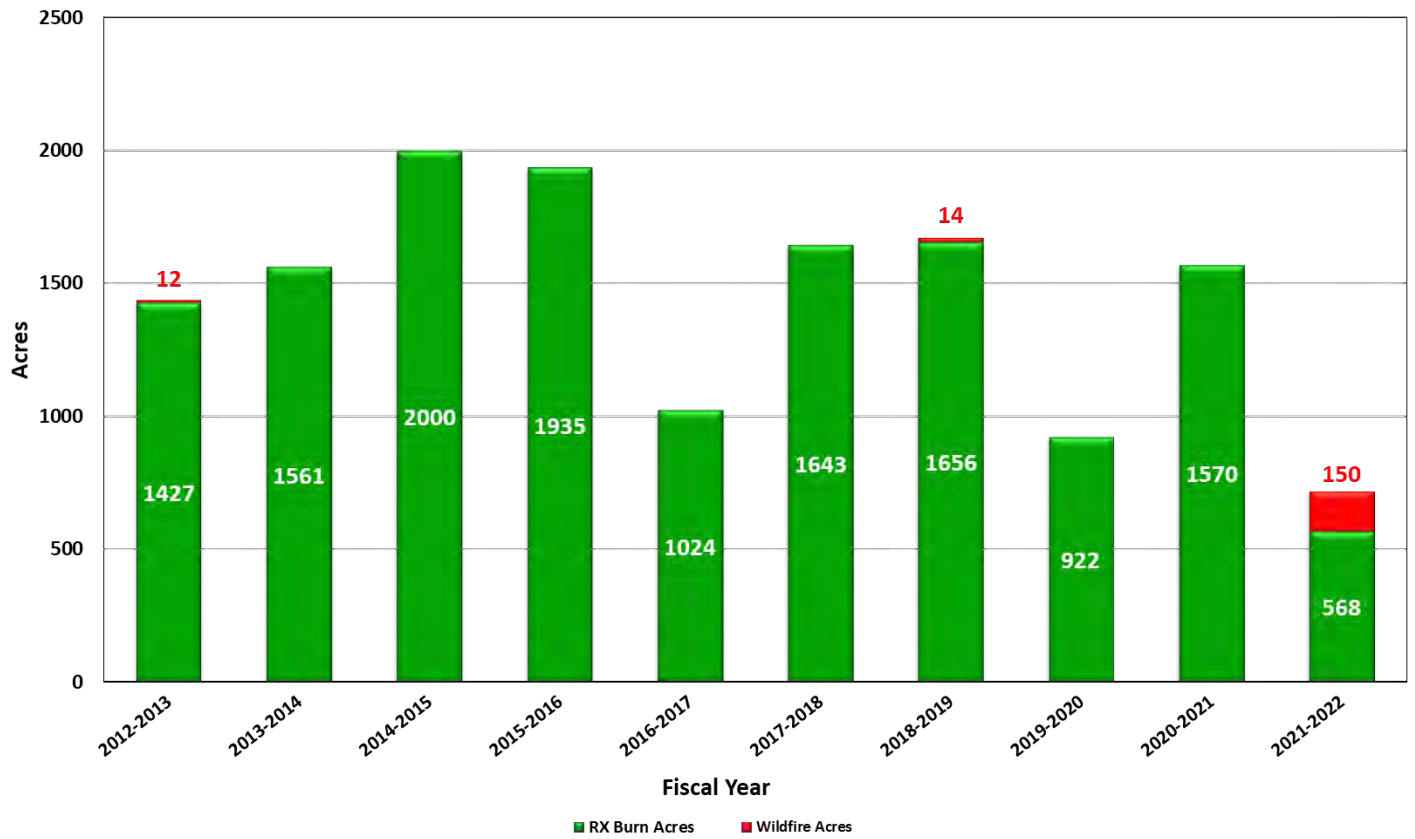


Exhibit O

Non-Native Invasive Species Map



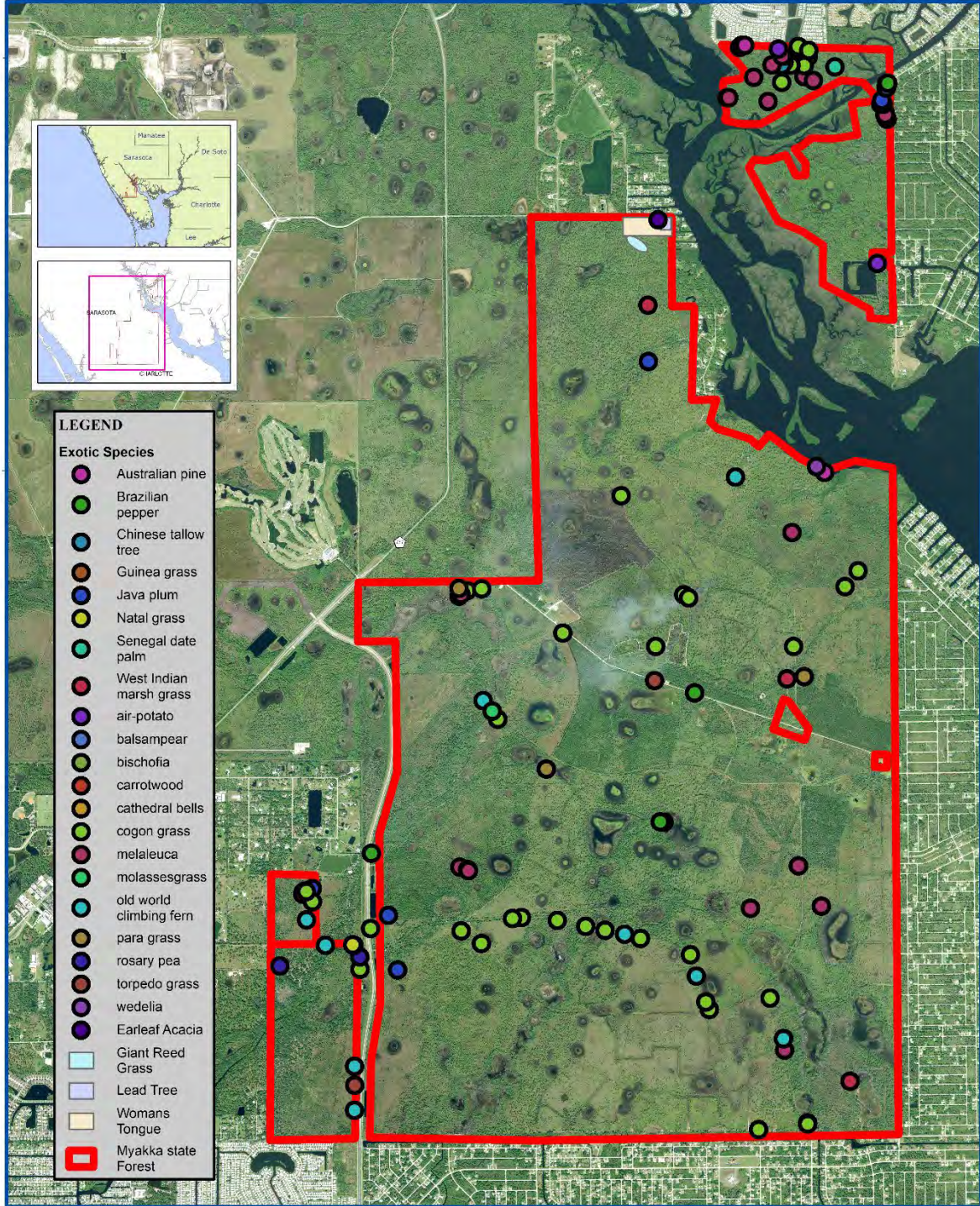
Florida Forest Service

Myakka State Forest

Non-Native Invasive Species Map (FNAI) Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
62° 0' 0" W

DISCLAIMER:
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LEGEND

Exotic Species

- Australian pine
- Brazilian pepper
- Chinese tallow tree
- Guinea grass
- Java plum
- Natal grass
- Senegal date palm
- West Indian marsh grass
- air-potato
- balsampear
- bischofia
- carrotwood
- cathedral bells
- cogon grass
- melaleuca
- molassesgrass
- old world climbing fern
- para grass
- rosary pea
- torpedo grass
- wedelia
- Earleaf Acacia
- Giant Reed Grass
- Lead Tree
- Womans Tongue
- Myakka state Forest

0.5 0.25 0
miles



Map Month/Year: August 2022

1,200 500 0 1,200
yards

Exhibit P

Current Natural Communities Map



Florida Forest Service

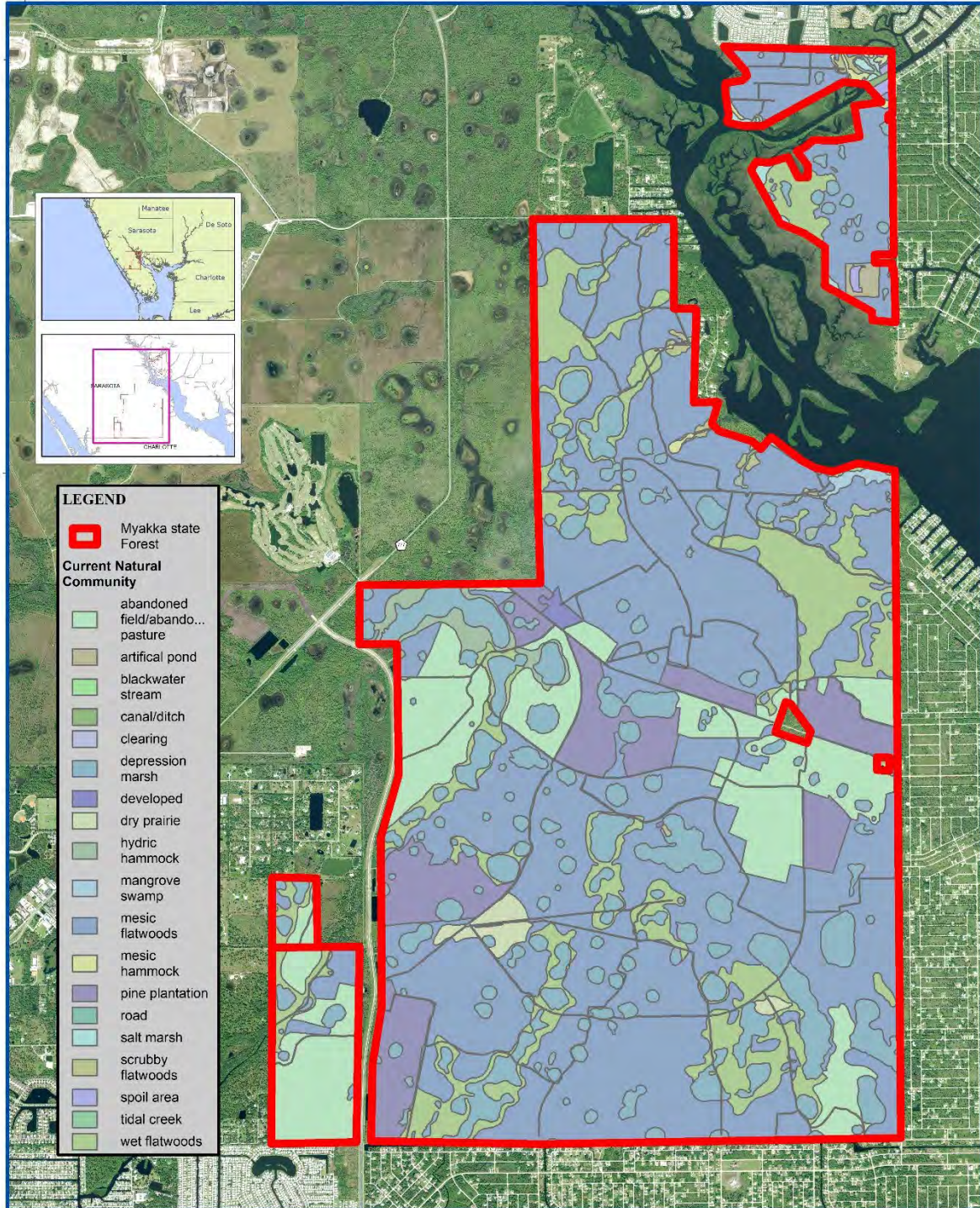
Myakka State Forest

Current FNAI Natural Communities and Cover Type

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
82° 17' 00" W
27° 10' 00" N

DISCLAIMER:
This map was prepared by the Florida Forest Service
and is intended for informational purposes only. It
does not constitute a warranty of any kind, and
the Florida Forest Service does not assume any
liability for any errors or omissions. The Florida
Forest Service is not responsible for any damage
to property or persons resulting from the use of
this map. The Florida Forest Service is not
responsible for any damage to property or persons
resulting from the use of this map.

Revised Area covered as courtesy of
the Florida Natural Areas Inventory
Florida State University
From the US Army Corps of Engineers



0.5 0.25 0
Miles



Map Month/Year: December 2020

1,000 500 0 1,000
Yards

Exhibit Q

Historic Natural Communities Map



Florida Forest Service

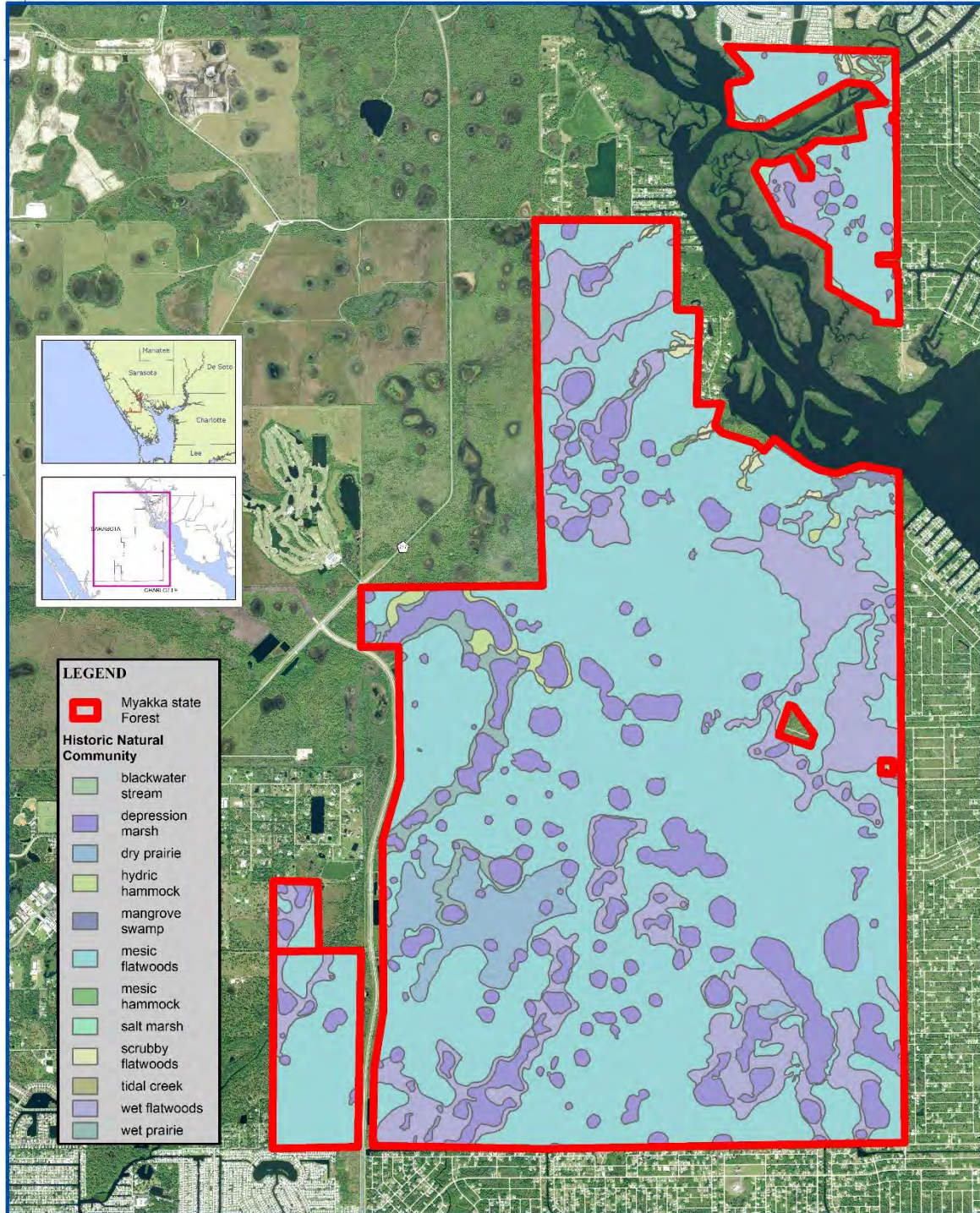
Myakka State Forest

Historic FNAI Natural Communities and Cover Type

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum
82° 17' 00" W
27° 17' 00" N

DISCLAIMER:
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Map Data:
Map Data was collected as part of the Florida Natural Areas Inventory (FNAI) project. The data was collected by the Florida Forest Service and the US Army Corps of Engineers. The data was collected between 1990 and 2000. The data was collected from the US Army Corps of Engineers.



LEGEND

- Myakka state Forest
- Historic Natural Community**
 - blackwater stream
 - depression marsh
 - dry prairie
 - hydric hammock
 - mangrove swamp
 - mesic flatwoods
 - mesic hammock
 - salt marsh
 - scrubby flatwoods
 - tidal creek
 - wet flatwoods
 - wet prairie

0.5 0.25 0
Miles



Map Month/Year: December 2020

1,000 500 0 1,000
Yards

Exhibit R

Management Prospectus



Charlotte Harbor Estuary

Charlotte, Lee, Sarasota

Substantially Complete

Project-at-a-Glance

<i>Placed on List</i>	<i>1972</i>
<i>Project Area</i>	<i>45,704</i>
<i>Acres Acquired</i>	<i>39,402</i>
<i>at a Cost of</i>	<i>\$35,040,125</i>
<i>Acres Remaining</i>	<i>6,301</i>

Purpose for State Acquisition

The Charlotte Harbor Estuary was formed by combining the boundaries of three projects: the Myakka Estuary, the Cape Haze/Charlotte Harbor project, and the Charlotte Harbor project.

The Myakka Estuary project portion of Charlotte Harbor Estuary protects the largest natural area left around northern Charlotte Harbor, conserving flatwoods, scrub, and salt marshes that support bald eagles, sandhill cranes, scrub jays, and manatees. The project will also help protect an important fishery and provide residents of, and visitors to, the rapidly growing Charlotte Harbor area with opportunities for hiking, camping, and other recreational pursuits.

The Charlotte Harbor Estuary is one of the largest and most productive estuaries in Florida, supports an important recreational and commercial fishery, but is rapidly being surrounded by residential developments that could harm this important resource. Conserving flatwoods and prairies behind the mangrove swamps and salt marshes along Charlotte and Placida Harbors will help the Cape Haze/Charlotte Harbor project protect the water quality of the estuary, protect habitat for the Florida manatee and other rare wildlife, and provide residents of and visitors to the area with opportunities for boating, fishing, and other recreational pursuits.

Manager(s)

The Division of Recreation and Parks (DRP) of the Florida Department of Environmental Protection (DEP), will manage most of the project. The DRP will manage that portion of the project west of SR 775. Florida Forest Service/FFS, Department of Agriculture and Consumer Services will manage the western portion of the Myakka Estuary portion of the project, with the DRP managing the east side.



General Description

The project includes the ecotone of flatwoods and dry prairies, and the estuarine tidal marshes and mangrove swamps along Charlotte Harbor and Placida Harbor. Less than 10 percent of the area is disturbed. The area provides habitat for rare animals—the bald eagle, scrub jay, indigo snake, and gopher tortoise—and influences important manatee habitat offshore.

The project protects the water quality of the Charlotte Harbor estuary, designated as a series of Outstanding Florida Waters, and its recreational and commercial fisheries. The Coral Creek Mound is a possibly significant archaeological site; no other sites are known from the area. The area is vulnerable to development, invasive exotic plants, and damage by off-road vehicles. There are 12,000 platted lots in the project vested from most development restrictions, so endangerment is extremely high. This project provides an essential addition to lands previously acquired through the Environmentally Endangered Lands (EEL) program. Most of the lands are wetlands, including mangrove, salt marsh, and salt flats, but there are some mesic flatwoods. The project area offers habitat for several rare species, and directly influences the water quality of Charlotte Harbor. There are two shell midden archaeological sites known from the project. Regulations notwithstanding, the area is threatened by dredging and filling from residential development.

The nearly intact uplands of the Myakka Estuary are primarily mesic flatwoods, like those in the Charlotte Harbor Flatwoods project, 15 miles to the south, but different in that they include scrub and the Florida scrub jay. The project provides habitat for nesting bald eagles and sandhill cranes and buffers the tidal marsh and waters of the Myakka River and Sam Knight Creek. Manatees use the adjacent waters heavily all year. The Myakka River estuary and the coastal wetlands associated with this project will support valuable commercial and recreational fisheries. The Florida Site File records five archaeological sites in the project. The project is surrounded by development and its uplands will inevitably be developed if not purchased.

FNAI Element Occurrence Summary 2019

<u>FNAI Element</u>	<u>Score</u>
Manatee	G2/S2
Florida Scrub-Jay	G27/S2
Gopher Tortoise	G3/S3
Florida Black Bear	G5T4/S4
<i>aboriginal prickly apple</i>	G1/S1
<i>beautiful pawpaw</i>	G1/S1
<i>lowland loosestrife</i>	G2/S2
Florida Sandhill Crane	G5T2/S2
Southern Mink, Southern Florida Pop	G5T2Q/S2
<i>iguana hackberry</i>	G5/S1
Wood Stork	G4/S2
Bachman's Sparrow	G3/S3

21 rare species are associated with the project

Source: Florida Natural Areas Inventory (FNAI, January 2020)

Public Use

This project qualifies as a forest and buffer preserve. Wetlands will limit outdoor recreation to such activities as fishing, canoeing, picnicking, hiking, and natural-resource education. The Myakka Estuary area has potential for such public uses as hiking, picnicking, camping, and nature appreciation.

Acquisition Planning

In 1980, the Charlotte Harbor project was added to the Conservation and Recreation Lands (CARL) Priority list. The project, which was started in 1972 under the EEL (Environmentally Endangered Lands) program, consisted of approximately 17,854 acres of which 15,582 acres had been acquired under EEL. The remaining 2,272 acres had a taxable value of \$1,931,820. Essential tracts included Atlantic Gulf Communities (acquired in 1995) and Mariner Properties (unwilling seller but for wetlands).

In September 1986, the Land Acquisition Selection Committee (LASC) approved adding 840 acres (Alligator Creek) to the project. Sponsored by Charlotte County, the addition had four landowners (Starnes, City of Punta Gorda, Lowe, and Punta Gorda Isles) that owned a majority of the addition). In June 1988, the LASC approved the modification of the project design that retained 16-17 parcels from the original project (2215 acres) and added 10 parcels in nine ownerships (3141 acres) for a total of 5,356 acres with a taxable value of \$2,302,000. To date, 17,141 acres have been acquired at a cost of \$8,070,838.

On November 20, 1992, the Land Acquisition Advisory Council (LAAC) approved adding three parcels, totaling 188 acres with an estimated tax value of \$66,086, to the project boundary. The Southwest

Florida Aquatic Preserve (60 acres), and the Trust for Public Lands (TPL), (128 acres) sponsored the addition.

On March 9, 1994, the LAAC approved the addition of 892 acres located in Lee County to the project boundary. The landowners, Burnt Store Company, Inc, sponsored the amendment with an estimated taxable value of \$2,119,000.

On July 14, 1995, the LAAC approved a 750-acre addition with a taxable value of \$953,918. The Southwest Florida Water Management District (SWFWMD) sponsored the addition.

On October 15, 1998, the LAAC designated additional acreage of Cape Haze/Charlotte Harbor as essential—approximately 174 acres consisting of the Rotonda Properties out-parcels, and the Cole and Lemon Bay Partners parcels. The Council also designated an additional 1,390 acres of the Myakka Estuary as essential. Previously, essential parcels had included all acreage acquired up to January 26, 1995, and the Cayo Pelau, Lowe, Ansin, and Freeland ownerships. The essential acreage also includes approximately 100 acres adjacent to the Amberjack Scrub site, an FCT project that has been acquired.

On December 9, 1999, the LAMAC transferred this project to the Substantially Complete group.

On April 6, 2001, the Acquisition and Restoration Council (ARC) combined the Cape Haze/Charlotte Harbor project with the Charlotte Harbor project. The total project acreage became 32,909. To date, 28,133 acres have been acquired at a cost of \$29,337,199. The updated acreage and cost include EEL, CARL, and Donations.

On December 5, 2001, the ARC combined the Cape Haze/Charlotte Harbor project with the Myakka Estuary project and renamed the project Charlotte Harbor Estuary. The total project acreage became 46,709 acres. To date, 32,736 acres have been acquired at a cost of \$35,461,055. The updated acreage and cost include EEL, CARL, and Donations.

On June 12, 2009, ARC approved a 79-acre addition owned by Burnt Store Land Group, LLC.

On February 19, 2010, ARC approved removal of 13 sites with 466 individual parcels totaling 2,260 acres containing residential/commercial structures or infrastructure.

On December 9, 2011, ARC placed this project in the Substantially Complete category.

On October 16, 2015, ARC voted to add the 5-acre (GIS) Lemon Bay Midden parcel (\$48,322 tax assessed value) to the project to protect an archeological site the site of a historic Indian encampment and very large pre-Columbian midden. The site straddles two adjacent waterfront parcels with more than 800 feet of frontage on Lemon Bay Aquatic Preserve.

In calendar year 2017, a total of .27 acres in this project were acquired using Florida Forever program funding.

On June 14, 2019, the ARC approved an addition of 8 acres (GIS) known as the Don Pedro parcel to the Charlotte Harbor Estuary. The proposal in Charlotte county and had a 2019 tax assessed value of \$825,590. This amendment will add to the main portion of Don Pedro Island State Park and would be managed as part of the park if acquired. It will provide additional habitat for wading birds and gopher tortoise and enhance the protection of the Lemon Bay Aquatic Preserve. The land within the approved boundary was designated essential. It would be managed by the Division of Recreation and Parks if acquired.

Coordination

SWFWMD was an acquisition partner in the purchase of the Rotonda ownership (Cape Haze). The TPL has been an intermediary in the state's acquisition of two large tracts within the Charlotte Harbor project.

In 1995, the SWFWMD negotiated the purchase (CARL program reimbursed half) of the Atlantic Gulf Communities Corporation's ownership land within the Charlotte Harbor (704 acres) and Myakka Estuary (9,264 acres) projects.

Management Policy Statement

The primary goals of management of the Charlotte Estuary project are to conserve and protect significant habitat for native species or endangered and threatened species; to conserve, protect, manage, or restore important ecosystems, landscapes, and forests, in order to enhance or protect significant surface water, coastal, recreational, timber, fish, or wildlife resources which local or state regulatory programs cannot adequately protect; to provide areas, including recreational trails, for natural-resource-based recreation; and to preserve significant archaeological or historical sites.

Achieving this objective will help to protect the water quality of Charlotte Harbor, its important nursery areas for fish and shellfish, its important recreational and commercial fisheries, and its manatee habitat. It will also provide the public with an additional area for natural resource-based recreation.

The project should be managed under the single-use language change made October 1999. Managers should control access to the project; limit public motor vehicles to one or a few main roads; thoroughly inventory resources; restore hydrological disturbances; burn the fire-dependent pine flatwoods in a pattern mimicking natural lightning-season fires, using natural firebreaks or existing roads for control; strictly limit timbering in old-growth stands; and monitor management activities to ensure that they are preserving resources.

Management Prospectus

Qualifications for state designation

The project provides essential additions to lands previously acquired through the EEL program of the 1970's and the Save Our Coast (SOC) Program of the 1980's. Most of the lands are wetlands, including mangrove, salt marsh, and salt flats, with occasional uplands including pine flatwoods, and oak/sabal palm hammocks. The forest resources around the Myakka River estuary have the diversity and size to make a state forest. These lands will aid in the protection or buffering of state waters, primarily the Cape Haze, and Charlotte Harbor / Gasparilla Sound Aquatic Preserves, as well as improve the protection and recreational value of the existing state-owned lands. They will also provide a land base for public access to the Don Pedro Island State Park. These lands therefore qualify as an addition to the existing Charlotte Harbor State Buffer Preserve and the Don Pedro Island State Park.

Manager

The DRP will manage these lands as an addition to the state park system. FFS proposes to manage 12,800 acres north and west of Highway 776. The Florida Coastal Office would manage the Lemon Bay Midden added in 2015 as part of the Aquatic Preserve.

Conditions affecting intensity of management

The project is surrounded by rapidly developing areas. Development in the area may alter the flow of water and nutrients by dredging, filling, and shoreline armoring. Urbanization of surrounding lands is also increasing, thereby justifying the need for an increased patrol and law enforcement presence.

Initially the project lands will be "high need," requiring management to control exotic plants and animals and reducing illegal activities, such as poaching and trash dumping. Thereafter, routine management activities will be at the "moderate need" level. Lands to be used, and developed, as a land base to provide access to Don Pedro Island State Park will be "high need" areas. West of the Myakka River there are no known major disturbances and the level of management is expected to be typical for that of a state forest.

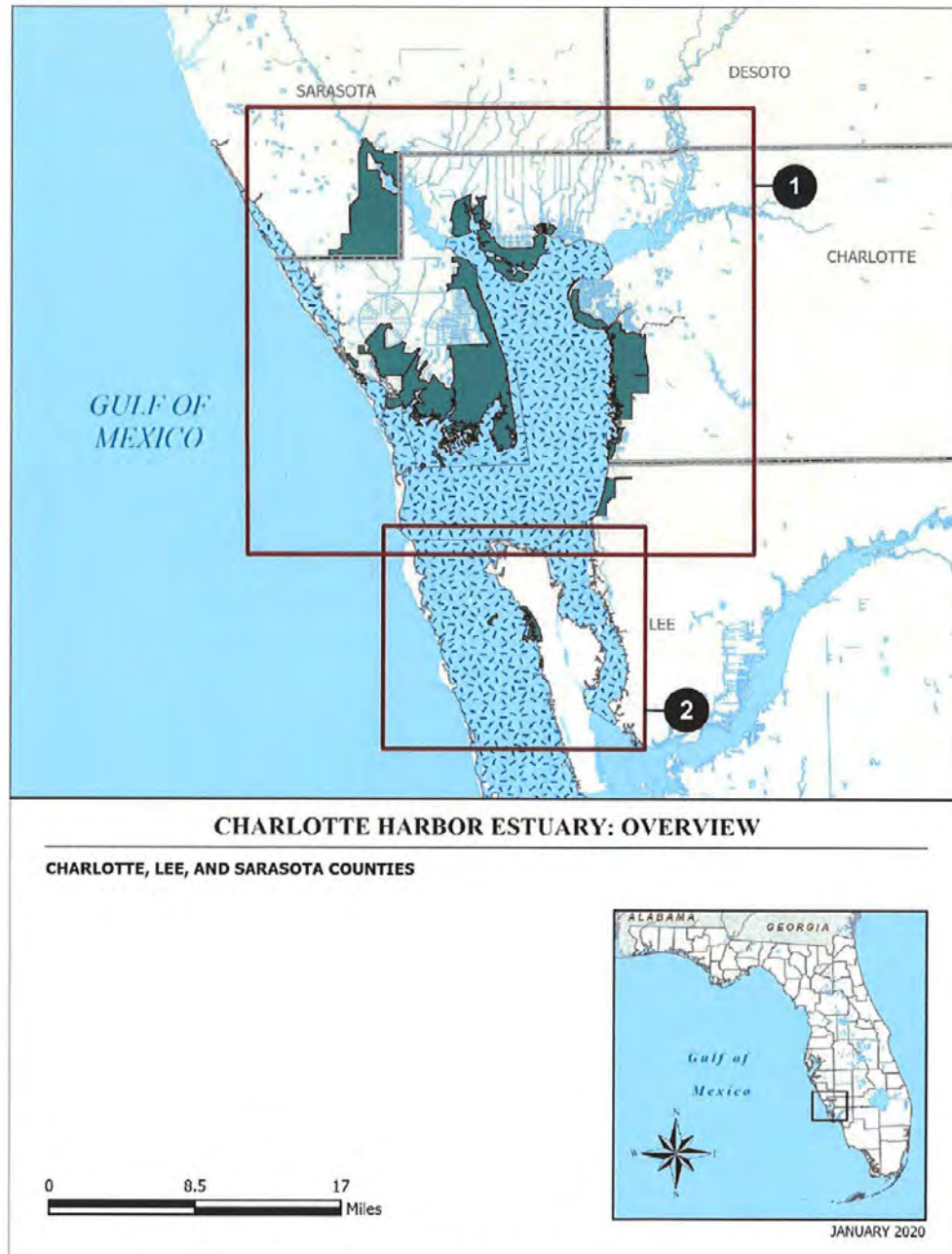
Timetable for implementing management and provisions for security and protection of infrastructure

Within the first year of appropriate funding, management activities will concentrate on; property security, including fencing, posting, and patrols; public access, staff access for management activities such as prescribed fire and restoration projects, trash removal; and exotic plant and animal eradication. The DRP will provide appropriate resource based public access while protecting critical resources. The site will be biologically inventoried, and a management plan will be written within one year. Long range goals will be established by the management plan and will provide for ecological restoration and habitat maintenance. Prescribed and natural fires will be used to maintain the appropriate communities and associated wildlife populations. The resource inventory will be used to identify appropriate uses for the property, including management activities and public use. Areas disturbed by man and exotic plants will

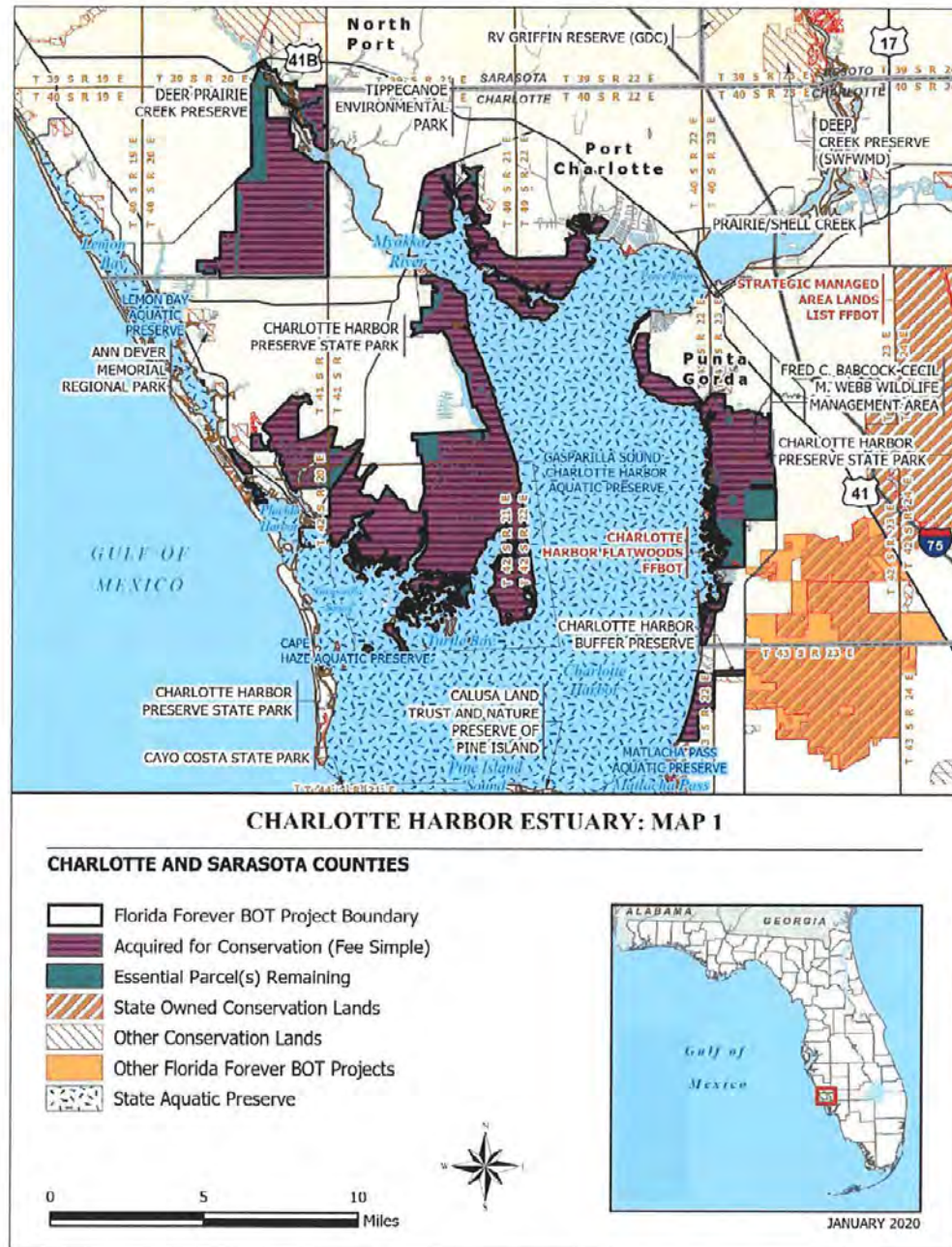
be restored to an “as natural as possible” condition. Infrastructure will be kept to a minimum and include only a sufficient amount of structures to provide for management facilities, public access, and resource interpretation. After the core of the Myakka River forests are acquired, the FFS and DRP will provide public access for low-intensity, non-facilities-related outdoor recreation. The FFS’s long-range plan is generally to restore disturbed areas to their original conditions, as far as possible, as well as protecting threatened and endangered species. An all-season burning program will use, whenever possible, existing roads, black lines, foam lines, and natural breaks to contain fires. Timber management will mostly involve improvement thinning and regeneration harvests.

Revenue-generating potential

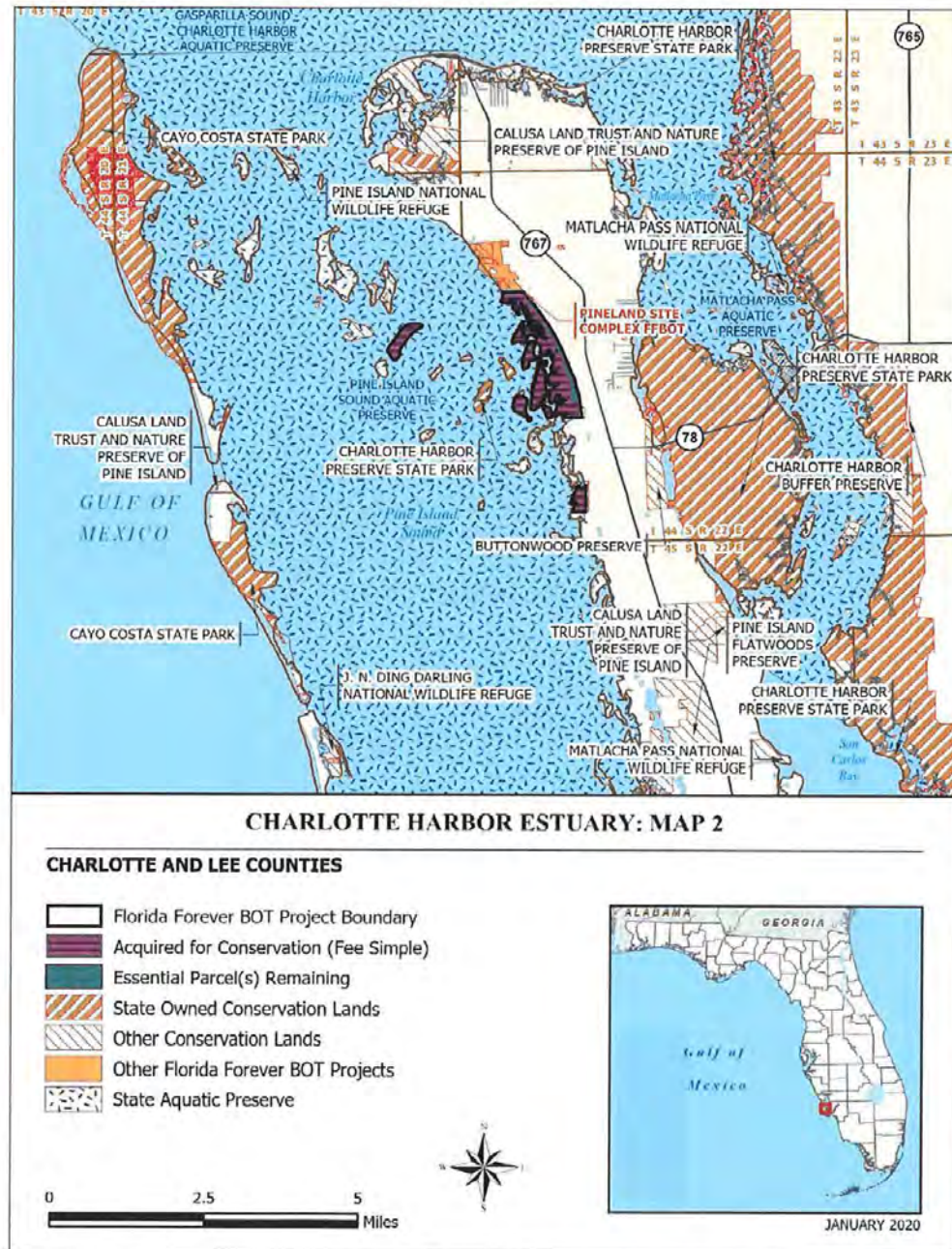
The forest land in the Myakka River estuary portion of the project has potential for a variable source of revenue from timber sales, but the revenue-generating potential for this project is expected to be low to moderate. The part of the project east of the river will provide indirect financial benefit to the state including enhanced water quality, fisheries, and public recreation opportunities. Limited revenue may be available through small timber sales to initially thin some stands and through some entrance and user permit fees in the future. Elsewhere, the project will benefit the state indirectly by enhancing water quality, fisheries and public recreation activities, and preserving natural and historical resources. Future user fees may also contribute limited revenue.



Project Map 34: Source → Florida Natural Areas Inventory (FNAI, January 2020)



Project Map 35: Source → Florida Natural Areas Inventory (FNAI, January 2020)



Project Map 36: Source → Florida Natural Areas Inventory (FNAI, January 2020)

Exhibit S

Land Management Reviews (2013 and 2018)

Name of Site: Myakka State Forest

County: Sarasota

Managed by: Department of Agriculture and Consumer Services
Florida Forest Service

Acres: 8,592.79 Acres

Review Date: 01/17-18/13

Management Plan Approval Date: 01/17/08



Review Team Determination

Managed in accordance with
acquisition purpose? Yes = 8, No = 0



Management practices, including public access,
in compliance with the management plan? Yes = 8, No = 0



Categories	Management Plan Review	Field Review
Natural Communities	1.00	3.83
Listed Species	0.72	3.88
Natural Resource Survey	0.91	3.69
Cultural Resources	0.94	3.50
Prescribed Fire	0.88	4.42
Restoration	0.98	4.18
Exotic Species	0.96	3.96
Hydrology	0.98	4.13
Groundwater Monitoring	0.92	3.40
Surface Water Monitoring	0.92	3.40
Resource Protection	0.97	4.09
Adjacent Property Concerns	0.88	3.39
Public Access & Education	0.97	4.06
Management Resources	N/A	3.88
Managed Area Uses	1.00	N/A
Buildings, Equipment,		

Consensus Commendations to the Managing Agency

The following commendations resulted from discussion and vote of the review team members.

1. The team commends the FFS staff on how well the site is being managed, and improved overall, with the limited staffing and funding available to date. (VOTE: 8+, 0-)



2. The team commends the FFS staff for their efforts to increase the frequency of burning and improve habitat conditions in the flatwoods and depression marshes. (VOTE: 8+, 0-)



3. The team commends the FFS staff for increasing the amount of invasive exotic plant treatment which has significantly reduced the impact of exotic plants from previous high levels. (VOTE: 8+, 0-)



4. The team commends the FFS for their approach to establishing and managing a program of primitive campsites and a small multisite primitive camping zone that offers an aesthetically pleasing and desirable camping experience. (VOTE: 8+, 0-)



5. The team commends the FFS for past, and planned, work with SWFWMD to restore depression marsh systems to remove ditches, invasive exotics, and restore the natural hydrology. (VOTE: 8+, 0-)



Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The management plan must include responses to the recommendations identified below.

1. The team recommends that FFS fund additional OPS positions, and especially additional hours for the staff assistant position. (VOTE: 8+, 0-)



Managing Agency Response: The Florida Forest Service will continue to seek increased funding and positions, as needed, to maintain and improve the current resource management of the Myakka State Forest.

Field Review Checklist Findings

The following items received high scores on the review team checklist, indicating the management actions in the field exceeded expectations.

- Natural Communities, specifically mesic flatwoods/wet flatwoods, depression marsh/wet prairie, scrub/scrubby flatwoods and mesic hammock.
- Listed Species, specifically animal inventory, gopher tortoise, scrub jay and bald eagle.
- Natural Resources Survey, specifically listed species or habitat monitoring, fire effects monitoring, other habitat management effects monitoring and invasive species survey/monitoring.
- Cultural Resources, specifically protection and preservation.
- Resource Management, Prescribed Fire, specifically area being burned (no. acres), frequency and quality.

- Restoration of Ruderal Areas, specifically pastures, ditches/depression marsh and exotics/depression marsh.
- Forest Management, specifically, timber inventory, timber harvesting, reforestation/afforestation and site preparation.
- Non-Native, Invasive & Problem Species, specifically prevention and control of plants, animals and pests/pathogens.
- Hydrologic/Geologic Function, specifically roads/culverts, ditches, hydro-period alteration, water level alteration, dams, reservoirs or other impoundments.
- Resource Protection, specifically boundary survey, gates/fencing, signage and law enforcement presence.
- Adjacent Property Concerns, specifically expanding development.
- Public Access & Education, specifically roads, parking and boat access.
- Environmental Education & Outreach, specifically wildlife, invasive species, habitat management activities and interpretive facilities and signs, recreational opportunities and management of visitor impacts.
- Management Resources, specifically waste disposal, sanitary facilities and buildings.

Items Requiring Improvement Actions in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than .5 score on average.). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan must include responses to the checklist items identified below:

There were no low scores.

Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 2.5 score on average). Please note that overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan must include responses to the checklist items identified below:

1. The review team average score indicates a need for acknowledgement of management resources, specifically funding. Please provide documentation in the management plan.

Managing Agency Response: The Florida Forest Service will continue to seek increased funding and positions, as needed, to maintain and improve the current resource management of the Myakka State Forest.

Forestry Forest Service Manager and Key Staff Present:

- Ed Flowers, FFS Forester
- Duane Weis
- Rick Christman
- Tom Williams

2018 Land Management Review Team Report for Myakka State Forest

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1. Introduction

Section 259.036, F.S. requires a periodic on-site review of conservation and recreation lands titled in the name of the Board of Trustees to determine (1) whether the lands are being managed for the purposes for which they were acquired and (2) whether they are being managed in accordance with their land management plan adopted pursuant to s. 259.032, F.S. In case where the managed areas exceed 1,000 acres in size, such a review must be scheduled at least every five years. In conducting this review, a statutorily constructed review team "shall evaluate the extent to which the existing management plan provides sufficient protection to threatened or endangered species, unique or important natural or physical features, geological or hydrological functions or archaeological features. The review shall also evaluate the extent to which the land is being managed for the purposes for which it was acquired and the degree to which actual management practices, including public access, are in compliance with the adopted management plan."

The land management review teams are coordinated by the Division of State Lands and consist of representatives from the Division of Recreation and Parks (DEP), the Florida Forest Service (DACS), the Fish and Wildlife Conservation Commission, the local government in which the property is located, the DEP District in which the parcel is located, the local soil and water conservation district or jurisdictional water management district, a conservation organization member, and a local private land manager.

Each Land Management Review Report is divided into three sections. Section 1 provides the details of the property being reviewed as well as the overall results of the report. Section 2 provides details of the Field Review, in which the Review Team inspects the results of management actions on the site. Section 3 provides details of the Land Management Plan Review, in which the team determines the extent to which the Management Plan provides for and documents adequate natural and recreational resource protection.

Finally, each report may also contain an Appendix that lists individual team member comments. This is a compilation of feedback, concerns or other thoughts raised by individual team members, but not necessarily indicative of the final consensus reached by the Land Management Review Team.

1.1. Property Reviewed in this Report

Name of Site: Myakka State Forest

Managed by: Department of Agriculture and Consumer Services Florida Forest Service

Acres: 8,592.79

County: Sarasota

Purpose(s) for Acquisition: to protect and restore the natural and cultural values of the property and provide the greatest benefit to the citizens of the state.

Acquisition Program(s): P2000/CARL

Original Acquisition Date: 10/13/95

Area Reviewed: Entire Property

Last Management Plan Approval Date: 12/10/10

Review Date: 1/12/18

Agency Manager and Key Staff Present:

- Clint Wardlow, Manager
- Duane Weis, FFS
- Eric Strickland, FFS
- Richard Christman, FFS

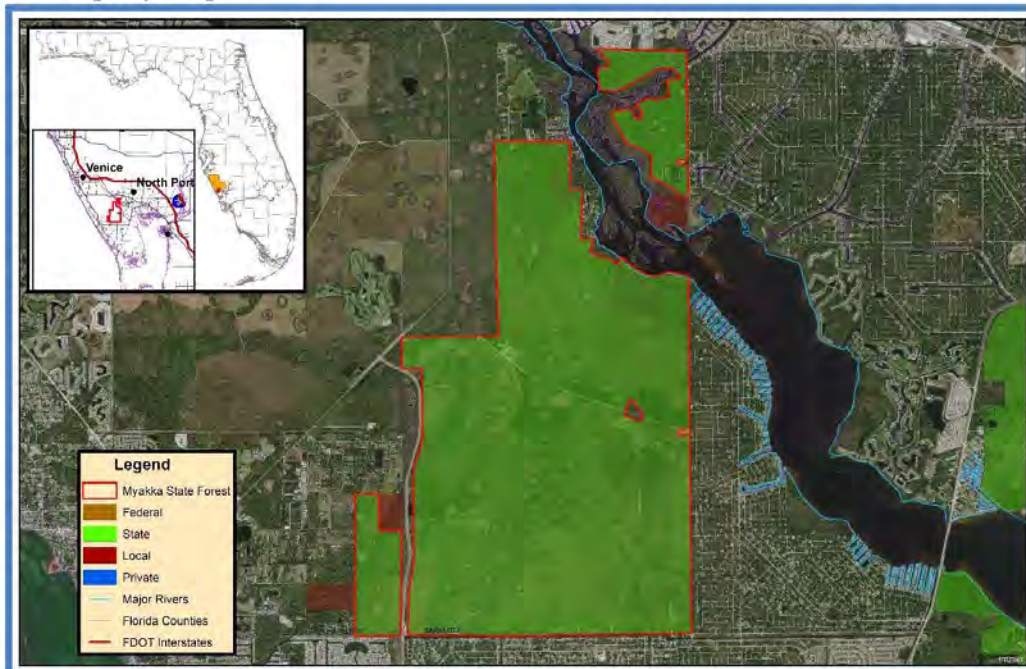
Review Team Members Present (voting)

- Alan Squires, Conservation Org.
- Chris Meyer, Local Government
- Duane Rawls, Private Land Manager
- Derrick Hudson, DEP District
- Bill Korn, FFS
- Chris Oliver, DRP District
- Jennifer Myers, FWC
- Water Management District, None

Other Non-Team Members Present (attending)

- James Parker, DEP/DSL
- Jane Wallace, Observer, FNPS
- Keith Singleton, DEP/DSL

1.2 Property Map



1.3. Overview of Land Management Review Results

Is the property managed for purposes that are compatible with conservation, preservation, or recreation?

Yes = 7, No = 0

Are the management practices, including public access, in compliance with the management plan?

Yes = 7, No = 0

Table 1 shows the average scores received for each applicable category of review. *Field Review* scores refer to the adequacy of management actions in the field, while *Management Plan Review* scores refer to adequacy of discussion of these topics in the management plan. Scores range from 1 to 5 with 5 signifying excellence. For a more detailed key to the scores, please see *Appendix A*.

Table 1: Results at a glance.

Major Land Management Categories	Field Review	Management Plan Review
Natural Communities / Forest Management	4.42	4.25
Prescribed Fire / Habitat Restoration	4.46	4.26
Hydrology	3.50	3.74
Imperiled Species	3.23	2.65
Exotic / Invasive Species	3.68	3.35
Cultural Resources	4.14	3.57
Public Access / Education / Law Enforcement	4.26	3.92
Infrastructure / Equipment / Staffing	3.81	N/A
Color Code (See Appendix A for detail)		
Excellent	Above Average	Below Average
		Poor

1.3.1 Consensus Commendations for the Managing Agency

The following commendations resulted from discussion and vote of the review team members:

1. The team commends the Florida Forest Service (FFS) for an excellent, ongoing prescribed burning program at this forest which has averaged nearly 90 percent of their annual burning goals. (7+, 0-)
2. The team commends the FFS for their strong relationship with the Southwest Florida Water Management District that has resulted in several significant wetland restoration projects that have benefited depression marsh communities. (7+, 0-)
3. The team commends the FFS for their past efforts to seek FWC funding to support an effective invasive plant treatment program, specifically as it relates to control of melaleuca and cogon grass. (7+, 0-)

1.3.2. Consensus Recommendations to the Managing Agency

The following recommendations resulted from a discussion and vote of review team members. The next management plan update should include information about how these recommendations have been addressed:

1. The team recommends the FFS coordinate with FWC to identify the role of Myakka State Forest for imperiled wildlife species and identify actions needed to ensure the state forest fulfills its role in supporting imperiled wildlife. (7+, 0-)

Managing Agency Response:

FFS field staff will coordinate with state ecologist and FWC to identify the role of Myakka State Forest for imperiled wildlife species.

2. The team recommends the FFS incorporate more growing season prescribed fire into the burn program at Myakka State Forest. (7+, 0-)

Managing Agency Response:

FFS will continue to look for opportunities to conduct prescribed burns during the growing season where applicable.

3. The team recommends the FFS coordinate with FWC to assess treatment protocol and potential funding for control of para grass and torpedo grass. (7+, 0-)

Managing Agency Response:

FFS will continue to utilize a variety of funding sources to aggressively treat invasive species including implementing a treatment protocol for para grass and torpedo grass.

2. Field Review Details

2.1 Field Review Checklist Findings

The following items received high scores on the review team checklist, which indicates that management actions exceeded expectations.

1. Natural communities, specifically mesic flatwoods/wet flatwoods, depression marsh/wet prairie, scrub/scrubby flatwoods, mesic hammock, tidal creek/salt marsh
2. Natural resources survey/monitoring specifically fire effects monitoring, invasive species survey/monitoring.
3. Cultural resources, specifically cultural resource survey, and protection and preservation
4. Resource management (prescribed fire), specifically area being burned, frequency and quality.
5. Restoration, specifically Ditches/depression marsh, exotics/depression marsh
6. Forest Management, specifically timber inventory/assessment, timber harvesting, reforestation/afforestation, site preparation
7. Non-native, invasive, and problem species, specifically prevention and control of plants.
8. Hydrologic/Geologic function hydro-alteration, specifically roads/culverts, ditches, and hydro-period alteration.
9. Resource protection, specifically gates and fencing, signage and law enforcement presence.
10. Public access, specifically roads, parking, boat access,
11. Environmental education and outreach, specifically wildlife, interpretive facilities and signs, recreational opportunities, management of visitor impacts
12. Management resources, specifically waste disposal, buildings, equipment

2.2. Items Requiring Improvement Actions in the Field

The following items received low scores on the review team checklist, which indicates that management actions noted during the Field Review were not considered sufficient (less than 3.0 score on average). Please note that

overall good scores do not preclude specific recommendations by the review team requiring remediation. The management plan update should include information on how these items have been addressed:

1. **Listed species: Protection & Preservation, specifically scrub jay received below average scores. The review team is asked to evaluate, based on their perspective, whether management actions are sufficient for protection and preservation of the species**

Managing Agency Response:

FWS field staff will coordinate with state ecologist and FWC to determine the appropriate management approach for scrub jays on the Winchester Tract.

2. **Natural Resources Survey, specifically listed species or their habitat monitoring and other nongame species or their habitat monitoring, received below average scores. The review team is asked to evaluate, based on information provided by the managing agency, whether survey and monitoring of the resources or their habitats are sufficient.**

Managing Agency Response:

FWS will coordinate with state ecologist and FWC to develop an appropriate monitoring plan.

2.3. Field Review Checklist and Scores

Field Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Mesic Flatwoods/Wet Flatwoods	I.A.1	4	4	4	4	4	4	4		4.00
Depression Marsh/Wet Prairie	I.A.2	5	4	5	3	5	5	5		4.57
Scrub/Scrubby Flatwoods	I.A.3	5	3	x	4	5	5	5		4.50
Mesic Hammock	I.A.4	4	4	5	4	5	5	5		4.57
Tidal Creek/Salt Marsh	I.A.5	4	4		3	5	5	4		4.17
Natural Communities Average Score										4.36
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1		4		4	3	3	3		3.40
Scrub Jay	I.B.1.b	3	4	2	2	3	3	3		2.86
Bald Eagle	I.B.1.c	4	4	4	2		3	4		3.50
Plants	I.B.2	3	4	4	2	2	4	3		3.14
Listed Species Average Score										3.23
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	2	4	2	3	1	3	2		2.43
Other non-game species or their habitat monitoring	I.C.3	2	4	3	3	2	3	3		2.86
Fire effects monitoring	I.C.4	4	5	5	3	3	5	4		4.14

Other habitat management effects monitoring	I.C.5	4	5	3	3	3	4	4		3.71
Invasive species survey / monitoring	I.C.6	4	5	3	3	4	5	4		4.00
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	5	4	4	4	5	3		4.29
Protection and preservation	II.B	5	5	4	3	4	x	3		4.00
Cultural Resources Average Score										4.14
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	5	5	5	5	5	5	5		5.00
Frequency	III.A.2	5	4	5	5	4	5	5		4.71
Quality	III.A.3	4	5	5	5	5	5	5		4.86
Resource Management, Prescribed Fire Average Score										4.86
Restoration (III.B)										
Pastures	III.B.2	3	4	4	3	4	5	3		3.71
Ditches/Depression Marsh	III.B.3	3	4	5		4	5	5		4.33
Exotics/Depression Marsh	III.B.4	3	4	4	4	4	5	5		4.14
Restoration Average Score										4.06
Forest Management (III.C)										
Timber Inventory / Assessment	III.C.1	5	5	5	4	4	5	5		4.71
Timber Harvesting	III.C.2	5	5	4	3	4	x	5		4.33
Reforestation/Afforestation	III.C.3	5	5	5	4	4	5	5		4.71
Site Preparation	III.C.4	5	4	4	3	4	5	4		4.14
Forest Management Average Score										4.48
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention - plants	III.D.1. a	4	4	4		4	5	3		4.00
prevention - animals	III.D.1. b	3	4	4		3	4	3		3.50
prevention - pests/pathogens	III.D.1.c	2	4	x		3	5	3		2.40
Control										
control - plants	III.D.2. a	3	4	4	4	4	5	4		4.00
control - animals	III.D.2. b	4	5	4	3	4	4	3		3.86
control - pest/pathogens	III.D.2.c	2	5	x	3	3	4	3		3.33
Non-Native, Invasive & Problem Species Average Score										3.68
Hydrologic/Geologic function Hydro-Alteration (III.E.1)										
Roads/culverts	III.E.1. a	5	4	5	4	4	5	4		4.43
Ditches	III.E.1. b	5	5	4	4	4	5	4		4.43
Hydro-period Alteration	III.E.1.c	5	4	4	4	4	4	5		4.29
Hydrologic/Geologic function, Hydro-Alteration Average Score										4.38
Ground Water Monitoring (III.E.2)										
Ground water quality	III.E.2. a	x	x	x	x	3	x	3		3.00
Ground water quantity	III.E.2. b	x	x	x	x	3	x	3		3.00
Ground Water Monitoring Average Score										3.00
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3. a	x	x	x	3	3	x	3		3.00

Surface water quantity	III.F.3. b	x	x	4	3	3	x	3		3.25
Surface Water Monitoring Average Score										3.13
Resource Protection (III.F)										
Boundary survey	III.F.1	4	5	3	3	4	4	4		3.86
Gates & fencing	III.F.2	5	5	4	2	4	5	5		4.29
Signage	III.F.3	5	5	5	3	4	5	5		4.57
Law enforcement presence	III.F.4	4	4	5	4	5	5	5		4.57
Resource Protection Average Score										4.32
Adjacent Property Concerns (III.G)										
Land Use										
Expanding development	III.G.1. a	4	4	3	3	2	x	4		3.33
Inholdings/additions	III.G.2	4	5	4	3	2	4	4		3.71
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1. a	5	5	5	4	4	5	5		4.71
Parking	IV.1. b	5	5	4	4	4	5	5		4.57
Boat Access	IV.1.c	5	3	4	3	4	5	5		4.14
Environmental Education & Outreach										
Wildlife	IV.2. a	4	5	4	4	4	4	3		4.00
Invasive Species	IV.2. b	4	4	3	4	4	4	3		3.71
Habitat Management Activities	IV.2.c	4	4	4	4	4	4	3		3.86
Interpretive facilities and signs	IV.3	4	5	4	4	3	4	4		4.00
Recreational Opportunities	IV.4	4	5	5	4	4	4	5		4.43
Management of Visitor Impacts	IV.5	3	5	4	4	4	5	5		4.29
Public Access & Education Average Score										4.19
Management Resources (V.1, V.2, V.3, V.4)										
Maintenance										
Waste disposal	V.1.a	4	4	4	3	5	5			4.17
Sanitary facilities	V.1.b	4	4	4	3	4	4			3.83
Infrastructure										
Buildings	V.2.a	5	5	4	3	4	5			4.33
Equipment	V.2.b	5	5	4	3	4	4			4.17
Staff	V.3	5	4	2	3	2	3			3.17
Funding	V.4	4	4	2	3	3	3			3.17
Management Resources Average Score										3.81
Color Code:		Excellent	Above Average	Below Average	Poor	See Appendix A for detail				
			Missing Vote	Insufficient Information						

3. Land Management Plan Review Details

3.1 Items Requiring Improvements in the Management Plan

The following items received low scores on the review team checklist, which indicates that the text noted in the Management Plan Review does not sufficiently address this issue (less than 3.0 score on average.). Please note

that overall good scores do not preclude specific recommendations by the review team requiring remediation. The next management plan update should address the checklist items identified below:

1. **Listed Species protection and preservation, specifically scrub jay, bald eagle, plants received a below average score. This is an indication that the management plan does not sufficiently address these listed species.**

Managing Agency Response:

FES will better address listed species protection and preservation in the new management plan

2. **Non-native, Invasive & Problem Species, specifically control of pest/pathogens, received below average scores. This is an indication that the management plan does not sufficiently address control of invasive species.**

Managing Agency Response:

FES will evaluate the management plan guidance regarding control of pest/pathogens and consider improvements understanding that the Myakka State Forest land management plan is not an operational plan

3.2 Management Plan Review Checklist and Scores

Plan Review Item	Reference #	Anonymous Team Members								Average
		1	2	3	4	5	6	7	8	
Natural Communities (I.A)										
Mesic Flatwoods/Wet Flatwoods	I.A.1	4	4	4	4	4	5	5		4.29
Depression Marsh/Wet Prairie	I.A.2	4	4	5	4	4	5	5		4.43
Scrub/Scrubby Flatwoods	I.A.3	4	4		4	4	4	5		4.17
Mesic Hammock	I.A.4	4	4	5	4	4	5	5		4.43
Tidal Creek/Salt Marsh	I.A.5	4	5	4	4	4	4	4		4.14
Natural Communities Average Score										4.29
Listed species: Protection & Preservation (I.B)										
Animals	I.B.1		5	3	3	2	2	3		3.00
Scrub Jay	I.B.1.b	3	4	2	2	2	2	2		2.43
Bald Eagle	I.B.1.c	3	4		2	1	2	3		2.50
Plants	I.B.2	3		3	2	2	4	2		2.67
Listed Species Average Score										2.65
Natural Resources Survey/Management Resources (I.C)										
Listed species or their habitat monitoring	I.C.2	4	4	2	3	2	4	3		3.14
Other non-game species or their habitat monitoring	I.C.3	4	4	3	3	2	4	3		3.29
Fire effects monitoring	I.C.4	4	4	4	3	3	4	3		3.57

Other habitat management effects monitoring	I.C.5	4	4	3	3	3	4	3		3.43
Invasive species survey / monitoring	I.C.6	4	4	3	3	3	4	2		3.29
Cultural Resources (Archeological & Historic sites) (II.A, II.B)										
Cultural Res. Survey	II.A	5	4	4	4	3	5	1		3.71
Protection and preservation	II.B	5	4	4	3	3	4	1		3.43
Cultural Resources Average Score										3.57
Resource Management, Prescribed Fire (III.A)										
Area Being Burned (no. acres)	III.A.1	5	5	5	5	4	5	4		4.71
Frequency	III.A.2	5	4	5	5	4	5	4		4.57
Quality	III.A.3	5	5	4	5	4	5	4		4.57
Resource Management, Prescribed Fire Average Score										4.62
Restoration (III.B)										
Pastures	III.B.2	4	4	4	3	4	4	3		3.71
Ditches/Depression Marsh	III.B.3	4	4	5	4	4	4	3		4.00
Exotics/Depression Marsh	III.B.4	4	4			4	5	3		4.00
Restoration Average Score										3.90
Forest Management (III.C)										
Timber Inventory / Assessment	III.C.1	5	5	5	4	4	5	4		4.57
Timber Harvesting	III.C.2	4	4	4	3	4	4	4		3.86
Reforestation/Afforestation	III.C.3	4	5	4	4	4	5	4		4.29
Site Preparation	III.C.4	5	4	4	3	4	5	4		4.14
Forest Management Average Score										4.21
Non-Native, Invasive & Problem Species (III.D)										
Prevention										
prevention – plants	III.D.1. a	4	4	3	3	4	5	3		3.71
prevention – animals	III.D.1. b	4	4	3	3	3	4	3		3.43
prevention – pests/pathogens	III.D.1.c	2	4		3	3	4	2		3.00
Control										
control – plants	III.D.2. a	4	4	3	3	4	4	2		3.43
control – animals	III.D.2. b	4	5	3	3	4	4	3		3.71
control - pest/pathogens	III.D.2.c	2	4		3	3	3	2		2.83
Non-Native, Invasive & Problem Species Average Score										3.35
Hydrologic/Geologic function, Hydro-Alteration (III.E.1)										
Roads/culverts	III.E.1. a	4	4	4	4	4	4	4		4.00
Ditches	III.E.1. b	4	5	4	4	4	5	4		4.29
Hydro-period Alteration	III.E.1.c	4	4	4	4	4	4	4		4.00
Hydrologic/Geologic function, Hydro-Alteration Average Score										4.10
Ground Water Monitoring (III.E.2)										
Ground water quality	III.E.2. a		5		3	3	4	3		3.60
Ground water quantity	III.E.2. b		5		3	3	4	3		3.60
Ground Water Monitoring Average Score										3.60
Surface Water Monitoring (III.E.3)										
Surface water quality	III.E.3. a		4		3	3	4	3		3.40

Surface water quantity	III.E.3, b		5	4	3	3	4	3		3.67
Surface Water Monitoring Average Score										3.53
Resource Protection (III.F)										
Boundary survey	III.F.1	4	5	3	3	3	5	4		3.86
Gates & fencing	III.F.2	4	5	4	3	3	5	4		4.00
Signage	III.F.3	4	5	4	3	3	5	4		4.00
Law enforcement presence	III.F.4	5	4	4	3	3	5	3		3.86
Resource Protection Average Score										3.93
Adjacent Property Concerns (III.G)										
Land Use										
Expanding development	III.G.1, a	4	4	3	3	3	4	3		3.43
Inholdings/additions	III.G.2	4	4	4	3	3	5			3.83
Discussion of Potential Surplus Land Determination	III.G.3	4	5		3	2	3	3		3.33
Surplus Lands Identified?	III.G.4	5				4	5	3		4.25
Public Access & Education (IV.1, IV.2, IV.3, IV.4, IV.5)										
Public Access										
Roads	IV.1, a	5	5	4	3	3	5	4		4.14
Parking	IV.1, b	5	5	4	4	3	5	4		4.29
Boat Access	IV.1, c	3	3	4	3	3	5	4		3.57
Environmental Education & Outreach										
Wildlife	IV.2, a	4	4	4	3	3	4	4		3.71
Invasive Species	IV.2, b	4	4	3	3	3	4	4		3.57
Habitat Management Activities	IV.2, c	4	4	4	3	3	4	4		3.71
Interpretive facilities and signs	IV.3	4	5	4	3	3	4	4		3.86
Recreational Opportunities	IV.4	4	5	4	3	4	5	5		4.29
Management of Visitor Impacts	IV.5	3	5	4	3	3	5	5		4.00
Public Access & Education Average Score										3.90
Managed Area Uses (VI.A, VI.B)										
Existing Uses										
Hiking	VI.A.1	4	5	5	5	4	5	5		4.71
Bicycling	VI.A.2	3	5	4	5	4	5	4		4.29
Equestrian Use	VI.A.3	3		4	4	4	5	4		4.00
Fishing	VI.A.4	3	4	4	3	4	5	5		4.00
Apiaries	VI.A.5	2	4	2	5	4	5	4		3.71
Hunting	VI.A.6	2	4	2	4	4	5	4		3.57
Primitive Camping	VI.A.7	3	5	4	5	4	5	5		4.43
Geocaching	VI.A.8	4	5	4	3	4	5	4		4.14
Boating	VI.A.9	2	4	3	4	4	4	4		3.57
Kayak/Canoeing	VI.A.10	4		4	4	4	4	5		4.17
Proposed Uses										
Cattle Leasing (Winchester Tract)	VI.B.1	4	5	2		3	5	4		3.83

Color Code:

Excellent

Above Average

Below Average

Poor

Missing Vote

Insufficient Information

See Appendix A for detail

Appendix A: Scoring System Detail

Explanation of Consensus Commendations:

Often, the exceptional condition of some of the property's attributes impress review team members. In those instances, team members are encouraged to offer positive feedback to the managing agency in the form of a commendation. The teams develop commendations generally by standard consensus processes or by majority vote if they cannot obtain a true consensus.

Explanation of Consensus Recommendations:

Subsection 259.036(2), F.S., specifically states that the managing entity shall consider the findings and recommendations of the land management review. We ask team members to provide general recommendations for improving the management or public access and use of the property. The teams discuss these recommendations and develop consensus recommendations as described above. We provide these recommendations to the managing agency to consider when finalizing the required ten-year management plan update. We encourage the manager to respond directly to these recommendations and include their responses in the final report when received in a timely manner.

Explanation of Field Review Checklist and Scores, and Management Plan Review Checklist and Scores:

We provide team members with a checklist to fill out during the evaluation workshop phase of the Land Management Review. The checklist is the uniform tool used to evaluate both the management actions and condition of the managed area, and the sufficiency of the management plan elements. During the evaluation workshop, team members individually provide scores on each issue on the checklist, from their individual perspective. Team members also base their evaluations on information provided by the managing agency staff as well as other team member discussions. Staff averages these scores to evaluate the overall conditions on the ground, and how the management plan addresses the issues. Team members must score each management issue 1 to 5: 1 being the management practices are clearly insufficient, and 5 being that the management practices are excellent. Members may choose to abstain if they have inadequate expertise or information to make a cardinal numeric choice, as indicated by an "X" on the checklist scores, or they may not provide a vote for other unknown reasons, as indicated by a blank. If a majority of members failed to vote on any issue, that issue is determined to be irrelevant to management of that property or it was inadequately reviewed by the team to make an intelligent choice. In either case staff eliminated the issue from the report to the manager.

Average scores are interpreted as follows:

Scores 4.0 to 5.0 are *Excellent*

Scores 3.0 to 3.99 are *Above Average*

Scores 2.0 to 2.99 are *Below Average*

Scores 1.0 to 1.99 are considered *Poor*

Exhibit T

Compliance with Local Comprehensive Plan



March 9, 2023

Brian Camposano
Assistant Bureau Chief, Forest Management Bureau
Florida Forest Service
The Connor Building
3125 Conner Boulevard, 1-267
Tallahassee, FL 32399-1650

RE: Ten-Year Land Management Plan for the Myakka State Forest, Consistency with the Sarasota County Comprehensive Plan

Dear Mr. Camposano,

Thank you for the request for a comprehensive plan consistency analysis for the draft Ten-Year Land Management Plan for the Myakka State Forest. The State Forest consists of approximately 8,593 acres and is located in southern Sarasota County, primarily within the City of North Port.

A review of the Goals, Objectives, and Policies in the Comprehensive Plan, finds that this 10-Year Land Management Plan is consistent with and is supported by policy language in several different chapters as is indicated below:

ENVIRONMENT CHAPTER:

ENV OBJ 1.1- Ecological Communities and Habitats

Identify, manage, and protect ecological communities, and native habitats.

ENV Policy 1.1.1: Review all development proposals for Consistency with the "Principles for Evaluating Development Proposals in Native Habitats."

**Note that Staff did review the draft 10-Year Land Management Plan with the "Principles for Evaluating Development Proposals in Native Habitats" section of the Comprehensive Plan and has found it to be consistent with these guidelines.*

ENV OBJ 1.2 – Protection of Resources

Protect environmental resources during land use changes and establishment of urban services.

ENV Policy 1.2.1: Land uses and land and water development shall be consistent with and governed by the Environmental Values and Functions of Sarasota County's native habitats in accordance with the Management Guidelines set forth in the "Principles for Evaluating Development Proposals in Native Habitats."

Staff finds that the 10-Year Land Management Plan for the Myakka State Forest is consistent with, and would not conflict with the Goals, Objectives, and Policies of the Sarasota County Comprehensive Plan or its implementation.

Sarasota County appreciates the opportunity to comment on this project. If you have any questions, please feel free to contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Osterhoudt for me". The signature is written in a cursive, flowing style.

Matthew Osterhoudt, Director
Planning and Development Services Department

Exhibit U

State Forest Management Plan Advisory Group Summary

Management Plan Advisory Group Public Hearing
Myakka State Forest
10-Year Land Management Plan

February 2, 2023

10:30 A.M.

Meeting Minutes

MPAG Members Present:

- | | |
|------------------------------|---|
| • Duane Weis | Deputy Chief of Field Operations, Region IV, Florida Forest Service (FFS) |
| • Hunter Folmar | Florida Fish and Wildlife Conservation Commission (FWC; for Cason Pope) |
| • Todd Underhill | Sarasota County Soil & Water District |
| • Kathy Worley | Conservancy of Southwest Florida |
| • Jeremy Waters | Local Property Manager |
| • Commissioner Ron Cutsinger | Sarasota County Commissioner – District 5 |

MPAG Members Not Present:

- | | |
|----------------|--|
| • Cason Pope | Florida Fish and Wildlife Conservation Commission |
| • Chris Reed | Land Manager, Southwest Florida Water Management District (SWFWMD) |
| • Susanne Park | Local Property Manager |

FFS Staff:

- | | |
|-------------------|---|
| • Alan Davis | Land Planning Coordinator |
| • Brian Camposano | Forest Management Assistant Bureau Chief |
| • Eric Strickland | Myakka River District Forestry Resource Administrator |
| • Patrick Mahoney | Myakka River District Mitigation Specialist |

Guests:

- None

Public Meeting Start Time: 10:40 A.M. (Delayed 10 minutes)

- Land Planning Coordinator, Alan Davis opened the meeting by introducing himself and explained the purpose and statutory framework for the Myakka State Forest 10-Year Land Management Plan process. He explained that the Plan is not an annual work plan or detailed operational plan but provides general and conceptual guidance for management of Myakka State Forest (MSF) for the next 10-year period.
- Mr. Davis confirmed compliance with the Florida Sunshine Law advising MPAG members to not discuss the draft outside of the public meetings. He stated that the meetings are open to the public, recorded, and minutes taken.
- Mr. Davis stated both MPAG meetings are open to the public and proper notice was given. The meetings were advertised to the public in the Sarasota Herald Tribune on January 23, 2023; Florida Administrative Register, FFS webpage, as well as posted at the kiosks on MSF. The meetings were announced at the Sarasota County Board of County Commissioners meeting on January 10, 2023. He noted that the draft plan goes through various approvals before and after the MPAG meetings but that the FFS Director is granted final authority on changes to the draft plan. He described the day's two meetings: The first meeting is informational and provides opportunity for public comment; the 1:00 p.m. Workshop meeting provides opportunity for the MPAG members to discuss the public

input and to share their personal comments on the draft plan. The public is welcome to attend the Workshop, but participation is limited to MPAG members.

- Mr. Davis introduced Brian Camposano who explained the technical logistics and how to use the webinar tools to share comments.
- Mr. Davis then requested MPAG Member introductions and attendance was noted.
- Mr. Davis asked the advisory group to elect an MPAG chairperson. Duane Weis was elected to serve as chairperson at the impending workshop.
- Mr. Underhill asked if there would be a field evaluation component. Mr. Davis responded that it would not as the purpose of these meetings is to review the narrative of the plan and the exhibits.
- Mr. Davis reiterated the purpose of this meeting is to receive public input which would be discussed in the Workshop. He acknowledged the in-person location and asked the FFS administrators to apprise of any attendees. Patrick Mahoney stated that no attendees were present.
- Mr. Davis then introduced Forestry Resource Administrator Eric Strickland who presented the PowerPoint presentation of the 10-Year Plan.
- Mr. Davis then asked if there were any clarifying questions about the presentation.
- Mr. Underhill asked a question about how the invasive species acreages were calculated in the plan. Mr. Davis explained that this meeting was for the public to comment on the plan. But since there were no members of the public present, Mr. Davis asked if this would be OK to discuss at the second meeting for MPAG members. Mr. Underhill was agreeable to that plan.
- Mr. Davis asked again if there were any members of the public present at the in-person location. Mr. Mahoney responded there were none.
- Mr. Camposano then told Mr. Mahoney that he would likely have one MPAG member in-person at the afternoon meeting, Mr. Jeremy Waters, as he was unable to speak with us remotely during the first meeting.
- Mr. Davis then thanked everyone for participating and adjourned the public hearing portion of the meetings.

Public Meeting End Time: 11:09 A.M.

Management Plan Advisory Group Workshop Meeting

Myakka State Forest

10-Year Land Management Plan

February 2, 2023

1:00 P.M.

Meeting Minutes

MPAG Members Present:

- Duane Weis Deputy Chief of Field Operations, Region IV, Florida Forest Service (FFS)
- Hunter Folmar Florida Fish and Wildlife Conservation Commission (FWC; for Cason Pope)
- Todd Underhill Sarasota County Soil & Water District
- Kathy Worley Conservancy of Southwest Florida
- Jeremy Waters Local Property Manager
- Commissioner Ron Cutsinger Sarasota County Commissioner – District 5

MPAG Members Not Present:

- Cason Pope Florida Fish and Wildlife Conservation Commission
- Chris Reed Land Manager, Southwest Florida Water Management District (SWFWMD)
- Susanne Park Local Property Manager

FFS Staff:

- Alan Davis Land Planning Coordinator
- Brian Camposano Forest Management Assistant Bureau Chief
- Eric Strickland Myakka River District Forestry Resource Administrator
- Patrick Mahoney Myakka River District Mitigation Specialist

Guests:

- None

Workshop Meeting Start Time: 1:00 P.M.

- Land Planning Coordinator, Alan Davis introduced himself and opened the MSF MPAG Workshop by conducting an MPAG member sound check. He reminded the MPAG members of the Florida Sunshine law and that the purpose of the workshop is to review and discuss the draft and that any edits made to the draft would be presented to the FFS Director for approval. He noted that minutes will be emailed to the MPAG members and will be approved via negative response review. MPAG member appointment will terminate when the final draft is submitted to the Acquisition Restoration Council. He noted that the goal is place the draft plan on the June Acquisition and Restoration Council (ARC) for final approval. Forestry Resource Administrator Eric Strickland was available to make proposed changes to the draft during the page-by-page review.
- Mr. Davis stated that there were no comments from the public during the public hearing. Mr. Davis then asked if there were any members of the public at the in-person venue. No attendees were reported at the in-person venue.
- Mr. Davis stated that there were submitted comments that he would read before doing the page by page review. Comments were from the Southwest Florida Water Management District, since they were unable to attend. All three comments were complimentary in nature and will be appended to these minutes in the MSF plan.

- Mr. Davis asked if there were any questions or comments on the submitted comments by SWFWMD.
- Mr. Cutsinger had a question on pig removal. He asked for an update on hog hunts and what we do to control hogs. Mr. Weis responded that hunting hogs is allowed during all hunting seasons on MSF and seasons are managed by FWC. Mr. Weis also stated he could direct Mr. Cutsinger to more information on hunting seasons and hog control on MSF through the FWC website. Mr. Cutsinger also asked about deer hunting on the forest. Mr. Weis responded that deer hunting was not allowed due to the small resident population.
- Ms. Worley asked if dogs were allowed during hog hunting. Mr. Weis responded that there is no hunting with dogs allowed. Ms. Worley then agreed with one of the comments from SWFWMD on USDA hog control services. Mr. Camposano responded that FFS has looked into the USDA hog control program but have not been able to utilize their services to date, but will keep investigating. Mr. Camposano also stated that trapping is allowed by permit.
- Mr. Davis asked if there were any other questions or comments on the SWFWMD comments. Hearing none, Mr. Davis began the page by page review.
- Page 1 – Mr. Underhill had a question on the Archaeological/Historical portion of the Executive Summary, which state None Recorded. He pointed out that the plan stated there were 4 archaeological sites but the summary said none. Mr. Davis indicated we would fix the summary to include the 4 sites. Mr. Weis confirmed there were indeed 4 recorded sites.
- Page 1 – Mr. Cutsinger asked a question on the optimal management boundary. He wanted to know about any active efforts to acquire those parcels. Mr. Davis explained the acquisition process through Florida Forever and that the optimum management boundary is essentially a wish list. Private landowners must also be part of the Florida Forever program to sell property to the State. The FFS will reach out to property owners if we are made aware, but generally interested parties come to us with requests to buy their land and incorporate in the forest.
- Page 5 – Mr. Underhill asked a question on goals of the forest. Specifically he asked what our goals were in terms of forest species composition long term. Mr. Weis explained the forest was historically a mix of longleaf pine and south Florida slash pine and we try to mimic natural composition based on site characteristics. Mr. Underhill then asked about the proportion of longleaf pine on the property. Mr. Weis stated he believed about 20-30% of the forest was longleaf pine. Mr. Underhill stated that he thought it would be nice to see the volumes of tree species in future plans. Mr. Strickland stated that they are always looking for sites to re-establish longleaf pine. Mr. Camposano added that species volumes are dynamic and change throughout the 10 year period covered by this plan. He also stated that we can provide those numbers from our Forest Inventory and Sustainability System if there was additional curiosity.
- Ms. Worley made a comment that we should have a statement in the plan about being able to manage under adaptive and changing environmental conditions. Mr. Weis stated the purpose of the 10 year plan is to stay at a conceptual level. We have annual operating plans and mid-range 5-year plans which are updated annually. This allows for adaptive management more broadly under the 10 year plan. Mr. Camposano also mentioned that we can amend plans if any part of it becomes limiting during the 10 year period covered by the plan.
- Mr. Cutsinger had a question on recreation activities and public access. He wanted to know if we were planning to expand camping and other recreational activities. Mr. Weis mentioned that there were planned activities in the plan update which are expanding the recreational opportunities on the forest.
- Page 7 – Mr. Underhill asked about the non-native species management and control – specifically re-asking his question on calculating acreages of infestation. Mr. Camposano explained how the FFS calculated invasive acreage; basically the number of acres containing each specific species. Numbers are not additive on this list – meaning that if five species are found on any one acre, it will add one acre to each species on the list. Mr. Underhill asked a follow-up question on if there was a coyote issue on the forest. Mr. Weis stated that there was not really an issue with coyotes on the forest. Mr. Strickland confirmed this point of view. Mr. Underhill then made a comment on Goal 6 and stated his wishes for interpretive displays/signage about conservation practices for cultural and historical resource management. Mr. Camposano responded that he believed this would fit better under the recreation section of the plan, as it covers public education. He suggested putting a sentence in the recreation section later in the plan. Mr. Underhill then asked about apiary use. Mr. Weis explained that individuals are allowed to lease sites on the forest. Mr. Underhill stated he did not see that mentioned in the plan. Mr. Camposano indicated that under “revenue

producing activities” it is listed as an opportunity on the forest. He also mentioned we have to follow all the Best Management Practices for apiaries, and because of this, apiaries are by lease only to ensure those practices are followed.

- Ms. Worley asked a question on Goal 5 – non-native species control. Specifically if we had the funding sources available to keep up with treatments for plant and animal removal. Mr. Weis stated that MSF pursues every opportunity they can, which includes the FWC herbicide bank, FWC grants, and internal FFS funding. Mr. Camposano stated that there is legislatively appropriated funding that is designated for invasive treatments every year.
- Page 9 – Mr. Folmar asked us to add Orange Hammock WMA to the table. Mr. Weis agreed and it was added to the table.
- Page 11 – Ms. Worley asked about the revenue producing activities and suggested a plan change to add in that revenue producing activities would not adversely impact ecological integrity (as well as resource management). The group was in consensus and the suggested change was added.
- Page 12 – Mr. Folmar asked if we were currently allowing palmetto berry harvest or if it was just in the plan should we want to resume selling berries. Mr. Camposano stated that palmetto berry harvesting was not in place on any forest currently, but that we wanted to reserve the ability to be able to sell them again should conditions allow.
- Page 15 – Ms. Worley had a question on what we mean by “minimize” under Utility Corridors and Easements. Specifically what we mean by “minimize damage”. Mr. Camposano explained that we always will prefer disturbed habitat and to stay away from undisturbed areas or sensitive populations when faced with a linear easement request. He also explained we prefer to collocate utilities on the same corridor except where that corridor would become so large that maintaining a single large corridor is more detrimental than maintaining more than one corridor of smaller scales.
- Page 17 – Ms. Worley asked about a statement under “Past Uses” that indicated there are still roads visible today from uses prior to state acquisition. Specifically if there were any hydrological issues due to these roads. Mr. Weis responded that most roads are at grade and are not highly improved and therefore do not negatively impact hydrology.
- Page 20 – Ms. Worley asked about the statement that said some freshwater wetlands were ditched to improve drainage. Mr. Weis responded that it was a statement about what was done in the past and that we are trying to restore sites with ditches as opposed to adding new ditches. Ms. Worley then asked if we had an established baseline for water quality and suggested that if we do not, that we get one. It will allow FFS to refuse water with excessive nutrients and not act as a stormwater retention pond. Mr. Davis stated that we add the OFW language to the plan straight from FDEP, but we will look into the baseline for water quality. Ms. Worley asked if we had any regular water quality testing. Mr. Davis responded that we rely on the WMDs for water quality testing as our cooperator.
- Page 25 – Ms. Worley asked if FWC did monitoring for any of our listed species or game species or even invasive species. Mr. Weis responded that he was not aware of any monitoring going on by FWC. He also stated Sarasota County used to monitor scrub jays. Mr. Weis also stated that FWC is very receptive any time we ask them for help on surveys. Mr. Camposano then added that FWC always monitors game species populations. Further, Florida Natural Areas Inventory (FNAI) surveyed the forest for natural communities, threatened and endangered species, and invasive species. He also mentioned that researchers will ask to do studies on the forest and that for any studies we approve, the researchers must provide a report upon completion – which furthers our knowledge.
- Page 27 – Mr. Underhill asked a question about the Gopher Tortoise Recipient Site Feasibility Assessment, which appears to lack information. Mr. Camposano explained the statute change this year and that he still needed to insert language into this plan. He went on to explain that MSF was not likely to be offered as a recipient site due to wet soils across most of the forest. However, that final determination will be made before the plan goes to ARC.
- Mr. Weis asked Mr. Strickland to correct the acronym in the gopher tortoise placeholder – as it indicated a different forest.
- Mr. Folmar asked if FNAI did a rare plant survey with their natural community mapping on the forest. Mr. Camposano mentioned that while they are not doing transects for rare plants, they provide locations for any rare and/or threatened or endangered species encountered during their mapping of the forest.

- Page 29 – Mr. Cutsinger asked about recreation opportunities on the forest. Specifically he asked about what activities were currently available versus activities proposed during this 10 year period. Mr. Davis indicated that what was listed on the bottom of page 29 is what activities and amenities are currently available on the forest. Mr. Cutsinger then asked if there was any data on forest usage (e.g., number of visitors). Mr. Weis indicated we do have that data and suggested to Mr. Cutsinger that he set up a forest tour with Mr. Strickland to better put things in perspective. Mr. Strickland commented on the various activities he sees regularly on the forest.
- Ms. Worley asked about the carrying capacity of the forest – specifically if we knew that number or conducted a study to inform that number. Mr. Camposano stated that we do not have a study on the number of people the forest can hold at any one time. However, he also indicated that every time we add new recreational infrastructure to the forest, we look at how much traffic that may bring to the forest, as well as whether there will be positive, negative, or neutral impacts to resources. Mr. Camposano also briefly explained the FFS methods for tracking visitation and that the FFS does not believe we have met or exceeded the carrying capacity.
- Page 31 – Mr. Cutsinger asked about the RV camping on the forest and asked to expand on that. Mr. Weis explained that the RV camping area is being upgraded presently. The bathhouse site is almost complete in terms of site work, and the bathroom itself is currently being procured. The current 10 sites are planned to be upgraded to full facility after the bathhouse is complete.
- Mr. Underhill suggested adding cultural and historical education to the environmental education section. The group agreed and language was added to both the heading and the text following to combine environmental education along with cultural and historical education.
- Ms. Worley asked what we meant by a central septic dump station in the campground. Mr. Weis explained that the dump stations are parts of RV campgrounds. He further clarified that this is only a holding tank that must be pumped regularly and does not have an actual drain field.
- Page 36 – Mr. Underhill had a question why cattle grazing was listed under sustainable forestry and silviculture and if there was a prospect to do this on MSF. Mr. Weis explained that it has been considered but that there are not really any suitable sites on the forest and as we have planted pines in more pastures, available space for cattle grazing becomes less and less. Mr. Camposano added that cattle grazing is sometimes used during a timber stand's life cycle as there are times when the stand is not yet old enough to sell timber and allowing cattle grazing provides a revenue source and helps control the competing vegetation.
- Page 38 – Ms. Worley asked about the process to allow the mosquito control district to spray/treat on the forest. And Mr. Cutsinger also asked for clarification on requesting for treatment during times of high levels of mosquitos. Mr. Camposano explained the process for the mosquito control district to submit a treatment plan for approval by FDACS. He made a point to mention that aerial adulticiding is not a standard practice but would be permissible under executive order for a public health emergency.
- Page 40 – Ms. Worley asked about the statement at the top of page 40 defining restoration by soil type and suggested that basing on hydrology might be better. Mr. Camposano responded that this refers primarily to the pine species for reforestation. However, holistically, the FFS manages toward the species composition of the identified natural community.
- Page 44 – Mr. Cutsinger asked if there was a local Friends group for MSF to assist on invasive control. Mr. Weis responded that there were no forest specific Friends groups except the statewide Friends group. FFS otherwise deals with invasives through staffing, contracting, herbicide bank, grant, and internal funding. There are no formal groups that remove invasives on MSF, but volunteers would be permitted to help remove invasives should the desire arise.
- Mr. Davis asked if there were any questions or comments on the exhibits. Mr. Folmar asked to add Orange Hammock WMA to Exhibit F to be consistent with the plan.
- Ms. Worley asked for an explanation of the chart in Exhibit S (2018 LMR Results), specifically on page 4. Mr. Camposano explained how the LMR team anonymously ranks each item on the LMR checklist. At Ms. Worley's request, Mr. Camposano further explained the below-average ranking for the scrub jay on MSF and how the FFS has worked to address the concerns from the LMR.

- Mr. Davis then asked each MPAG member to comment on the draft plan. All present MPAG members commented positively.
- Mr. Davis thanked everyone for their time and participation and adjourned the meeting.

Workshop Meeting End Time: 2:54 P.M.

MYAKKA STATE FOREST Ten-Year Land Management Plan

Plan Review comments from Southwest Florida Water Management District (SWFWMD), February 1, 2023

Prescribed Fire: The Myakka State Forest's (MSF) fire management practices, such as firebreaks and firelines has been a consistent and positive aspect of the Florida Forest Service's (FFS) fire management program and application on the property. The applied fire return intervals for various observed vegetative communities is constant and shows relatively positive ecological results. This is a positive aspect of the property.

Non-Native Invasive Species Control: Overall the direction of and application of invasive plant management practices appear to be effective. Along the entire Myakka River system within Sarasota County, Brazilian pepper (*Schinus terebinthifolius*) is a consistent problem. FFS management staff has done a good job in this species control. Continual effort to maintain vegetative control of this species is increasing has increase urban activities upstream benefit this species prorogation. It is suggested that the entire Brazilian pepper occurrence areas be surveyed and treated every year.

Non-Native Invasive Species Control: Within the Plan, it is indicted that 1,029 feral hogs have been removed from the MSF. This has been accomplished through a mixed species control approach, using trapping and species harvesting during small game hunting. The only way to attempt to maintain a reasonable population occurrence on a property, due to the species' curvilinear reproductive characteristic, is apply a more aggressive feral hog control approach, using multiple harvest techniques. The FFS should give consideration to employing additional pig harvest methods provided by the USDA Wildlife Services. These services are currently being used in Sarasota county and on adjacent conservation lands and private agricultural properties at an economic and viable cost. The cost of feral hogs' natural system impairments and habitat ecological restoration greatly outweighs the cost of additional species harvest measures.

Exhibit V

MSF Summary Budget

	MYAKKA STATE FOREST MGT. ONLY 21-22 EXPENDITURES	Percentages Based on Total Dollar Amount of Expenditures	Assessed Needed Funding Based Upon LMUAC Resource Management
Resource Management	\$ 14,320	26.30%	\$ 42,507.17
Exotic Species Control	\$ 1,226	3.34%	\$ 5,400.07
Prescribed Burning	\$ 6,043	3.74%	\$ 6,043.36
Cultural Resources Management	\$ 49	0.13%	\$ 214.97
Timber Management	\$ 3,282	8.97%	\$ 14,603.09
Hydrological Management	\$ 258	0.70%	\$ 1,137.88
	\$ -		\$ -
OTHER RESOURCE MANAGEMENT	\$ 3,462	9.41%	\$ 15,207.80
Listed Species Management	\$ -		\$ -
Forest Pest and Disease	\$ -		\$ -
Plant Conservation Program	\$ -		\$ -
State Forest Research Projects	\$ -		\$ -
Boundary Surveys for State Forests	\$ -		\$ -
Other Activities Also Include:	\$ -		\$ -
Liaison Community Meetings / Boundary Line Maintenance / Forest Inventories and Various Other Activities / Wildfire Suppression on State Forests			\$ -
Administration	\$ 2,457	6.70%	\$ 10,826.00
Central Office Headquarters	\$ 2,457	6.70%	\$ 10,826.00
District/Regions	\$ -		\$ -
Units/Projects	\$ -		\$ -
	\$ -		\$ -
Support	\$ 12,441	33.91%	\$ 54,812.09
Land Management Planning	\$ 712	1.94%	\$ 3,135.63
Land Management Reviews	\$ 68	0.19%	\$ 300.63
Training/Staff Development	\$ 3,123	8.51%	\$ 13,759.59
Vehicle Purchase	\$ 147	0.40%	\$ 649.75
Vehicle Operations and Maintenance	\$ 6,234	16.99%	\$ 27,464.23
	\$ -		\$ -
OTHER SUPPORT	\$ 2,157	5.88%	\$ 9,602.25
State Forest Land Acquisition Support			\$ -
Other Support Activities Also Include:	\$ -		\$ -
Computer Maintenance / Radio Maintenance / Technical Support / Management of Apiary and Cattle Leases / State Forest Leases; Lease Amendments, Easements and Other Various Activities	\$ -		\$ -
			\$ -
Capital Improvements	\$ 7,555	20.59%	\$ 33,284.54
New Facility Construction	\$ 1,581	4.31%	\$ 6,984.65
Facility Maintenance	\$ 5,974	16.28%	\$ 26,319.89
			\$ -
Visitor Services/Recreation	\$ 4,586	12.50%	\$ 20,203.80
Information/Education	\$ 966	2.63%	\$ 4,257.34
Operations	\$ 3,619	9.87%	\$ 15,946.45
			\$ -
Law Enforcement	\$ -	0.00%	\$ -
Total	\$ 36,686.56	100.00%	\$161,630.38

Exhibit W

Arthropod Control Plan Sarasota County, Florida



Florida Department of Agriculture and Consumer Services
Division of Agricultural Environmental Services

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

NICOLE "NIKKI" FRIED
COMMISSIONER

Section 388.4111, F.S.
Telephone: (850) 617-7997

For use in documenting an Arthropod Control Plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein. Fill this form out if control work is necessary or planned.

Name of Designated Land:

Myakka State Forest

Is Control Work Necessary:

☒ Yes

☐ No

Location:

Sarasota County - 2000 S. River Rd, Englewood FL, 34223

Land Management Agency:

Florida Forest Service, Myakka River District

Are Arthropod Surveillance Activities Necessary?

☒ Yes

☐ No

If "Yes", please explain:

The area is highly productive for several species of mosquitoes, particularly *Aedes taeniorhynchus*, *Mansonia dyari*, *Mansonia titillans*, *Culex nigripalpus*, and *Psorophora columbiae*. The arthropod surveillance will be conducted on citizen property adjacent to Myakka State Forest.

Which Surveillance Techniques Are Proposed?

Please Check All That Apply:

☒ Landing Rate Counts

☒ Light Traps

☐ Sentinel Chickens

☒ Citizen Complaints

☐ Larval Dips

☐ Other

If "Other", please explain:

These surveillance techniques would be conducted on citizens property adjacent to the state forest.

Arthropod Species for Which Control is Proposed:

The area is highly productive for several species of mosquitoes, particularly *Aedes taeniorhynchus*, *Mansonia dyari*, *Mansonia titillans*, *Culex nigripalpus*, and *Psorophora columbiae*.

Proposed Larval Control:

None on state forest land.

Proposed larval monitoring procedure:

Are post treatment counts being obtained: Yes ☐ No

Biological Control of Larvae:

Might predacious fish be stocked: ☐ Yes * No

Other biological controls that might be used:

Material to be Used for Larvaciding Applications:

(Please Check All That Apply:)

☐ Bti

☐ Bs

☐ Methoprene

☐ Non-Petroleum Surface Film

☐ Other, please specify:

Please specify the following for each larvacide:

Chemical or Common name: (Trade names:)

☐ Ground ☐ Aerial

Rate of application:

Method of application:

Proposed Adult Mosquito Control:

Aerial adulticiding ☒ Yes ☐ No

Ground adulticiding ☐ Yes ☒ No

Please specify the following for each adulticide: **N/A**

Chemical name: 10% Sumithrin and 10% Piperonyl Butoxide

Common name: **Anvil 10X10**

Rate of application: **0.62 fl. oz/ acre**

Method of application: **Fixed wing aerial application, ULV fan**

Please specify the following for each adulticide: **N/A**

Chemical: Naled

Common name: **Dibrom**

Rate of application: **0.6 fl. oz/ acre**

Method of application: **Fixed wing aerial application, ULV fan. Applications will only occur after sunset.**

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Should a Mosquito-Borne Illness Advisory or Alert be issued by the Department of Health, aerial applications of the previously listed adulticides could be conducted. However, no expansion of adulticide applications will be made without first consulting with the relevant Land Management personnel.

Proposed Notification Procedure for Control Activities:

Any Control Activity on the State forest property will require approval from the relevant Land Management personnel. The Land Management personnel will respond to mosquito management request within 2 days due to the emergency nature of the request. Land manager contact information Eric Strickland, (941)-213-6983, Eric.Strickland@fdacs.gov or his referred contact.

Records:

Are records being kept in accordance with Chapter 388, F.S.:

* Yes ☐ No

Records Location:

Sarasota County Mosquito Control District, 5531 Pinkney Ave, Sarasota, FL 34233

How long are records maintained:

Minimum of 5 years

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?

NONE

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed:

NO

Include proposed operational schedules for water fluctuations:

N/A

List any periodic restrictions, as applicable, for example peak fish spawning times.

N/A

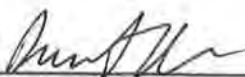
Proposed Modification of Aquatic Vegetation:

N/A

Land Manager Comments:

Arthropod Control Agency Comments:

This area of Sarasota county is a challenging area for mosquito management. It has some of the highest populations of mosquitoes in the county and a small area of private land where citizens reside between the Myakka river and Myakka State Forest. We do monitor the mosquito population and larvicide the private residence land to manage the mosquito population, but during the summer months larvicides alone can't manage the mosquito population and risk of mosquito viruses to humans. We would put a preference on use of Anvil for this area, a synthetic pyrethroid which mimics pyrethrums found in chrysanthemum flowers, should a Mosquito-Borne Illness Advisory or Alert be issued by the Department of Health. We would then use Dibrom only for an occasional rotation of pesticides to make sure we don't develop resistance to the prefer pesticide or if the mosquitoes at that location are found to be resistant to Anvil.

 9/23/2021
Signature of Lands Manager or Representative Date

 9-23-21
Signature of Mosquito Control Director / Manager Date

Exhibit X

Barrow Pit Restoration Project



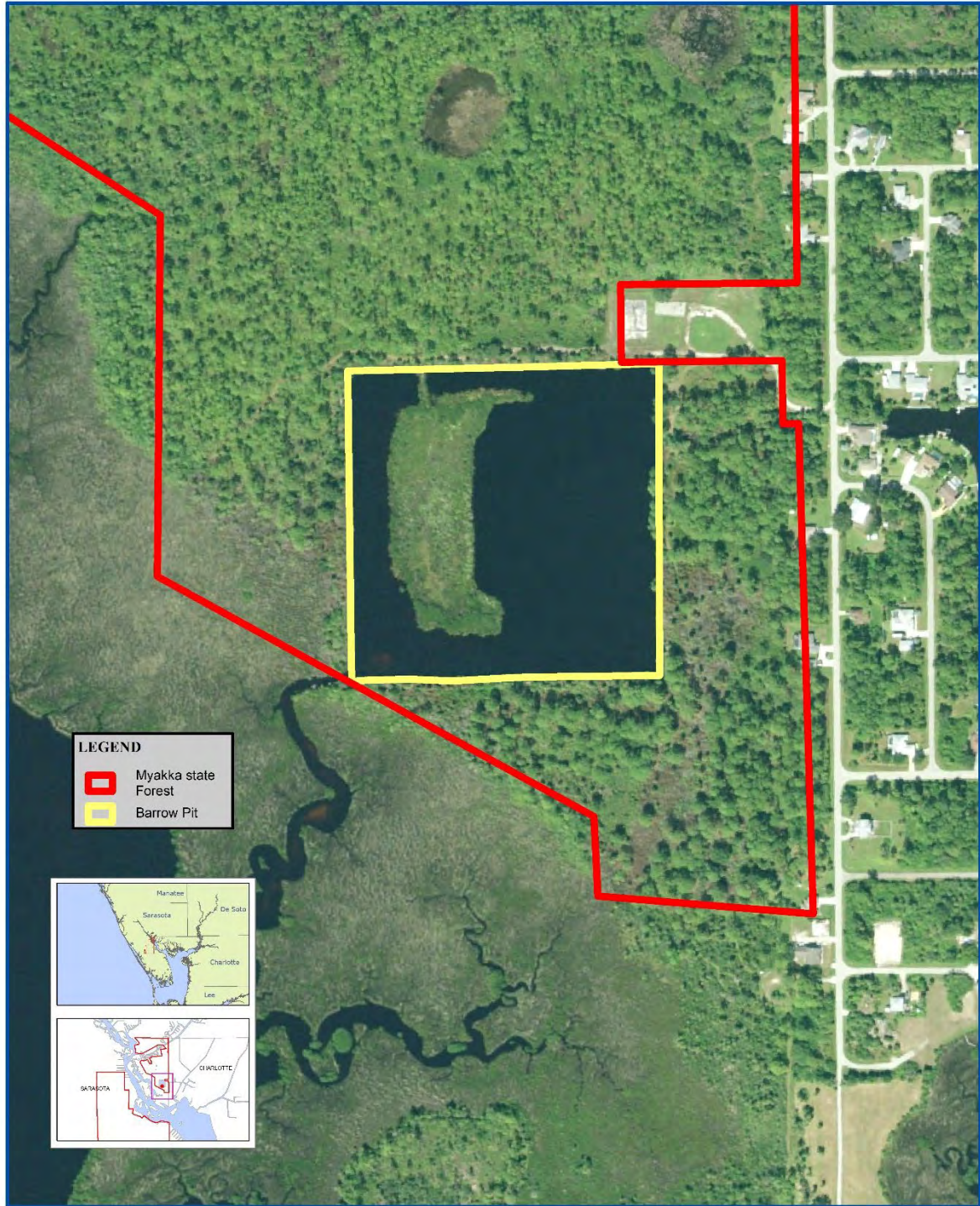
Florida Forest Service

Myakka State Forest

Barrow Pit Restoration Project Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

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LEGEND



Myakka state
Forest



Barrow Pit



0 0.05 0.1
Miles



Map Month/Year: December 2020

0 125 250
Yards

Exhibit Y

Hydrologic Restoration Project

ENVIRONMENTAL ASSESSMENT

FOR

MYAKKA STATE FOREST WATER QUALITY AND BANK STABILIZATION PROJECT

Sarasota and Charlotte Counties, Florida



July 2017

1.0 INTRODUCTION

This REPORT is to assist the Southwest Florida Water Management District (DISTRICT) with the design, plans preparation and permitting of the Myakka State Forest Water Quality and Bank Stabilization (PROJECT) at the southeastern corner of DISTRICT'S Myakka State Forest property. The PROJECT consists of water quality and flood improvements on the north side of Foresman Boulevard, installation of a low water crossing on a trail road to protect and preserve an existing natural wetland, [surface water outfall improvements for the existing wetland upstream of the trail](#) and approximately 650 linear feet of stream/flow-way restoration, to prevent sedimentation into Newgate and Lafitte Waterways, which flows into Oyster Creek and to Lemon Bay.

The PROJECT will result in an environmental net benefit and will focus on recovering the functions of water storage and conveyance in an impacted stream and drainage swale, and recapturing the benefits of water quality and wildlife habitat formerly provided by the impacted system in its undisturbed state.

The property is currently managed as a recreational facility by the Department of Agriculture and Consumer Services Division of Forestry. The PROJECT is located in Section 36, Township 40 South, Range 20 East, Sarasota County, Florida. **Figure 1-1**



Figure 1-1

2.0 PRELIMINARY DATA COLLECTION

2.1 EXISTING AND HISTORICAL AERIALS

Historical aerial photographs were reviewed as part of the Scope to develop a history of the previous land uses and vegetative communities within the PROJECT and to identify any areas of potential restoration. Historic aerial photographs were obtained from the FDOT Aerial Photograph Look Up System (APLUS) for the years 1969, 1975, 1985, 1995, 2005, and 2014, which are provided in Appendix A.

2.1.1 1969 Aerial Photograph

Jennings Blvd. and a portion of Foresman Blvd. are visible to the east of the PROJECT. The location of the Sarasota/Charlotte County line appears to be delineated by a ditch or trail. The land appears predominately in its natural vegetative communities, freshwater marshes interconnected in a broad flat flow-ways fringed by hydric and upland forests.



2.1.2 1975 Aerial Photograph

Foresman Blvd. appears newly constructed within the PROJECT. The canal that parallels the Sarasota/Charlotte County line appears newly constructed. The trail extends north from Foresome Blvd is visible. Areas of disturbance are visible extending from the trail into the wetlands to either side. Broad areas of clearing also extend from Foresman and from the trail. The remainder of the project are appears undisturbed and undeveloped.

2.1.3 1985 Aerial Photograph

Little change appears from the 1975 photograph. Increased vegetation along the canal and previously disturbed areas. A residence is visible at the western end of Foresman Blvd. The remainder of the project are appears undisturbed and undeveloped.

2.1.4 1995 Aerial Photograph

Little change appears from the 1985 photograph. Increased vegetation along the canal and previously disturbed areas. A second residence is visible on Foresman Blvd. The remainder of the project are appears undisturbed and undeveloped.

2.1.5 2005 Aerial Photograph

Little change appears from the 1995 photograph. A third residence is visible on Foresman Blvd. A fence is visible along the Myakka State Forest boundaries. The remainder of the project are appears undisturbed and undeveloped.

2.1.6 2015 Aerial Photograph

The drainage "cut" is visible extending from the wetland northeast of the trail thru the wetland southwest.

2.2 LAND USE

Land use was reviewed for the project and areas adjacent to the project. Residential, low-density land is located east and south of the project. Within the project area, the predominate land use/land cover is wet prairie and pine flatwoods. **Figure 2-1** depicts the 2011 SWFWMD land use and land cover classifications within the proposed project's footprint. **Figure 2-2** depicts the 2014 NWI wetland classifications within the proposed project's footprint.

PFO4/SS3Ad-Freshwater Forested/Shrub Wetland

Palustrine, Forested, Needle-leaved evergreen/Scrub-shrub, Broad-leaved evergreen, Temporarily flooded, Partially drained/ditched Wetland

PEM1/SS1Cd-Freshwater Emergent/Shrub Wetland

Palustrine, Emergent, Persistent/Scrub-shrub, Broad-leaved deciduous, Seasonally flooded, Partially ditched/drainage Wetland

PEM1Ad-Freshwater Emergent Wetland

Palustrine, Emergent, Persistent/Scrub-shrub, Broad-leaved deciduous, Temporarily flooded, Partially ditched/drainage Wetland

PSS1Cd-Freshwater Emergent/Shrub Wetland

Palustrine, Scrub-shrub, Broad-leaved deciduous, Seasonally flooded, Partially ditched/drainage Wetland

2.3 LISTED SPECIES

The Endangered Species Act (ESA) of 1973, as amended, federally protects endangered and threatened species throughout their range, and the ecosystems they rely on for survival. The U.S. Fish and Wildlife Service (USFWS) determines which species are in need of federal protection under the ESA. The Florida Fish and Wildlife Conservation Commission (FWC) maintains the state list of animals designated as Federally-designated Endangered or Threatened, State-designated Threatened or State-designated Species of Special Concern, in accordance with Rules 68A-27.003, and 68A27.005, respectively, Florida Administrative Code (FAC). The State lists of plants, which are designated Endangered, Threatened, and Commercially Exploited, are administered and maintained by the Florida Department of Agriculture and Consumer Services (DOACS) via Chapter 5B-40, FAC.

The project area was evaluated for potential occurrences of federal- and state-listed protected plant and animal species. The evaluation included literature review database searches, and field assessments of the project area to identify the potential occurrences of protected species and/or presence of federal-designated critical habitat.

Field evaluation of the project area was conducted by project biologist on July 6, 2017.

Based on the evaluation of the collected data and field reviews, the federal- and state-listed species discussed below were observed as having the potential to occur within or adjacent to the project area.

Federal Protected

4110 Pine Flatwoods



The pine flatwoods class is dominated by slash pine. The common flatwoods understory species include saw palmetto, wax myrtle, gallberry and a wide variety of herbs and brush.

6430 Wet Prairie



The wet prairie classification is composed predominately of grassy vegetation on hydric soils and is usually distinguished from marshes by having less water and shorter herbage. These communities will be predominated by one or more of the following species; sawgrass, maidencane, cordgrass, spike rushes, beach rushes, St. Johns wort, spiderlily, swampily, yellow-eyed grass and whitetop sedge.

The **eastern indigo snake** (*Drymarchon corais couperi*) is listed as threatened by the USFWS. No eastern indigo snakes were observed during field surveys. However, because areas of suitable habitat for this species occur adjacent to the project area, eastern indigo snake presence in the project area is possible. The owner will commit to implementing the USFWS Standard Protection Measures for the Eastern Indigo Snake.

The **wood stork** (*Mycteria americana*) is listed as endangered by the USFWS. The project area is located within the core foraging area (CFA) of five wood stork colonies. No wood storks were observed during field reviews the project area. Wetland impacts will be mitigated on-site.

State Protected

The **gopher tortoise** (*Gopherus polyphemus*) is listed as threatened by the FWC. Several gopher tortoise burrows were observed during the field review, suitable habitat is limited to the areas of spoil located along the northern edge of the canal and Foresman Blvd.

The **bald eagle** (*Haliaeetus leucocephalus*) is listed as threatened by the FWC. No nests were observed within the project area. A documented nest is located approximately 2.5 miles north of the project.

The **Florida sandhill crane** (*Grus Canadensis pratensis*) is listed as threatened by the FWC. No nests were observed within the project area, however, suitable habitat for nesting and foraging is present within the project area.

The **limpkin** (*Aramus guarauna*), **little blue heron** (*Egretta caerulea*), **reddish egret** (*Egretta rufescens*), **snowy egret** (*Egretta thula*), **tricolored heron** (*Egretta tricolor*), **white ibis** (*Eudocimus albus*), and **roseate spoonbill** (*Platalea ajaja*) are listed as species of special concern by the FWC. No nests were observed within the project area, however, suitable habitat for nesting and foraging is present within the project area.

The **Florida scrub-jay** (*Aphelocoma coerulescens*), **black skimmer** (*Rynchops niger*), **brown pelican** (*Pelecanus occidentalis*), **burrowing owl** (*Athene cunicularia*), and **American oystercatcher** (*Haematopus palliatus*) are listed as species of special concern by the FWC. These species was not observed during field reviews and their preferred nesting habitat is not present within the project area.

3.0 PERMITTING

The Southwest Florida Water Management District (SWFWMD) and U.S. Army Corps of Engineers (USACE) regulate works or other activities in, on or over wetlands and/or other surface waters within the project study area and will issue permits for this project. Other agencies, including the U.S. Fish and Wildlife Service (USFWS), the Florida Department of Environmental Protection (FDEP), and the Florida Fish and Wildlife Conservation Commission (FWC) review and comment on wetland permitting and potential affects to listed wildlife species.

AIM will prepare permit applications and pursue approval for the proposed restoration improvements. An AIM scientist will assist in preparing certain specific permit applications for the proposed restoration PROJECT. AIM will prepare the required application forms and supporting documents to submit the following anticipated regulatory permit applications:

- Florida Department of Environmental Protection (FDEP) Environmental Resource Permit for Restoration
- U.S. Army Corps of Engineer (USACE) Nationwide 27 Permit
- Sarasota County approval for restoration work as an exemption for maintenance activity
- Charlotte County approval for restoration work as an exemption for maintenance activity

CONSULTANT will also perform Request for Additional Information (RAI) coordination, and prepare responses to the above regulatory agencies regarding items submitted in the Applications. An AIM scientist will assist in RAI coordination and prepare responses regarding items submitted in the applications with FDEP, USACE, and other commenting agencies.

3.1 EVALUATION OF DESIGN

TBD

3.2 WETLAND IMPACTS/MITIGATION

TBD

4.0 CONCLUSIONS, COMMITMENTS, AND RECOMMENDATIONS

TBD



2005



2014



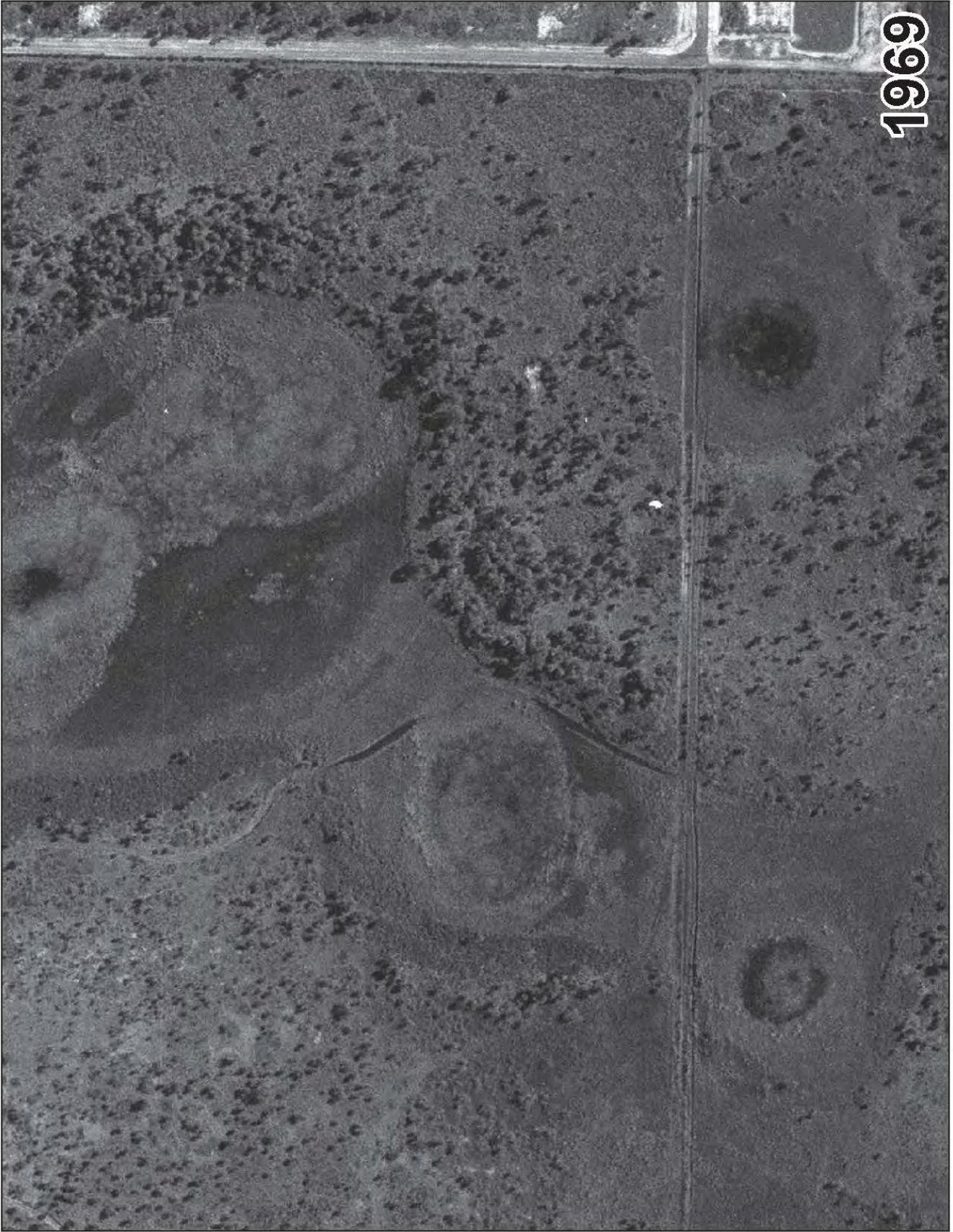
1995



1985



1975



1969



Photograph 1



Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6



Photograph 7



Photograph 8



Photograph 9



Photograph 10



Photograph 11



Photograph 12



Photograph 13



Photograph 14



Photograph 15



Photograph 16



Photograph 17



Photograph 18



Photograph 19



Photograph 20



Photograph 21



Photograph 22



Photograph 23



Photograph 24



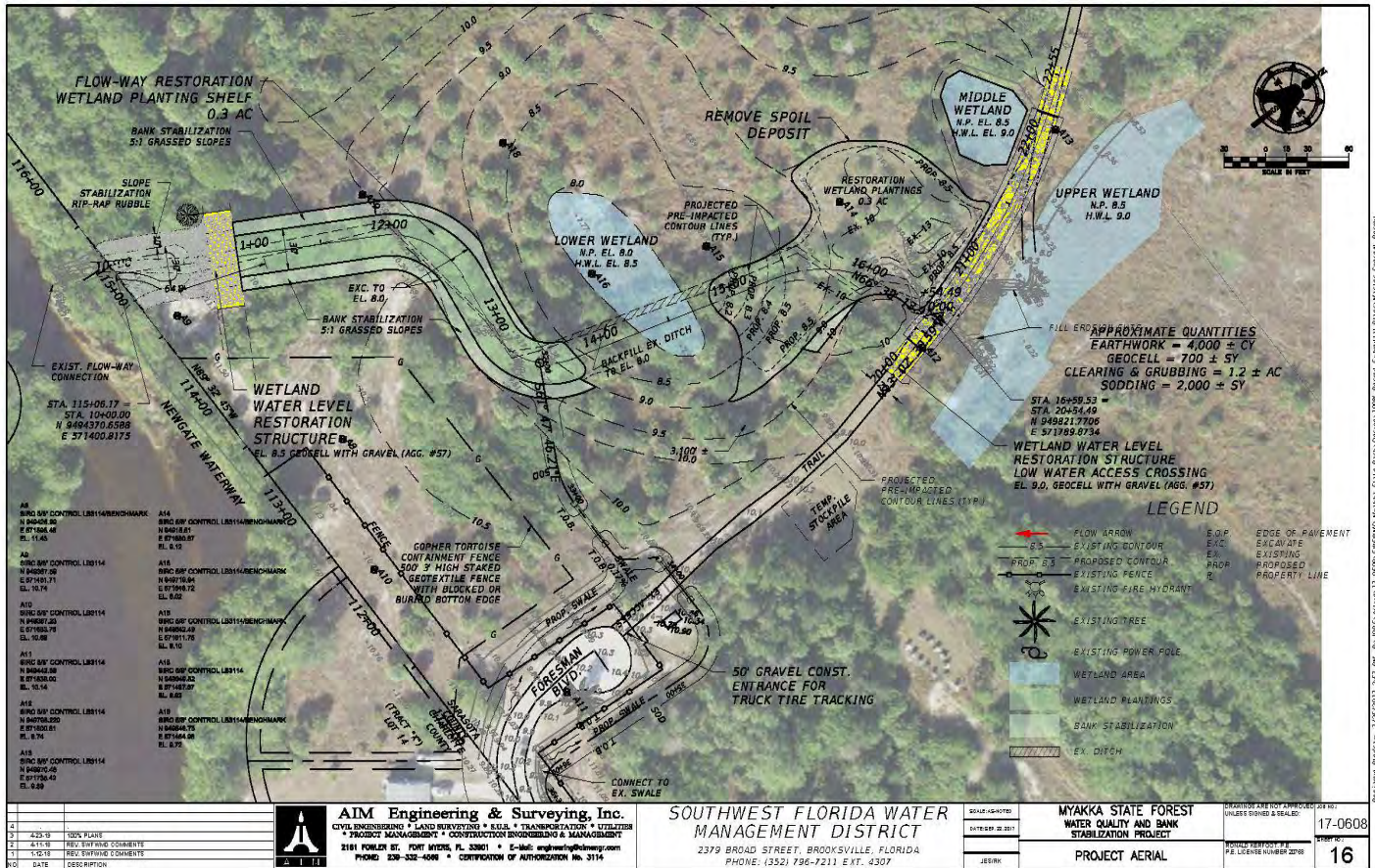


Exhibit Z

Myakka River Critical Wildlife Area Map



Florida Forest Service

Myakka State Forest

Myakka River Critical Wildlife Management Area Map

Coordinate System: Florida Albers
High Accuracy Reference Network (HARN) Datum

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0 0.05 0.1
Miles



Map Month/Year: January 2021

100 50 0 100 200 300 400
Yards