

Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation
Land Conservation and Planning
Pineland Site Complex Florida Forever Project Analysis
December 2024



This document contains the Florida Fish and Wildlife Conservation Commission's (FWC) Geographic Information System (GIS) data analysis of the area yet to be acquired within the **Pineland Site Complex** Florida Forever project. This analysis was performed to provide FWC and others with important fish and wildlife resource information to be used in evaluating and ranking Florida Forever projects. The data selected for analysis are those considered by FWC to spatially reflect important fish and wildlife habitat and life history requirements.

In addition, FWC has completed a field review and associated assessment report for this project/proposal that is incorporated within the Acquisition and Restoration Council Florida Forever Project Evaluation Report. This report is available upon request.

GIS Data

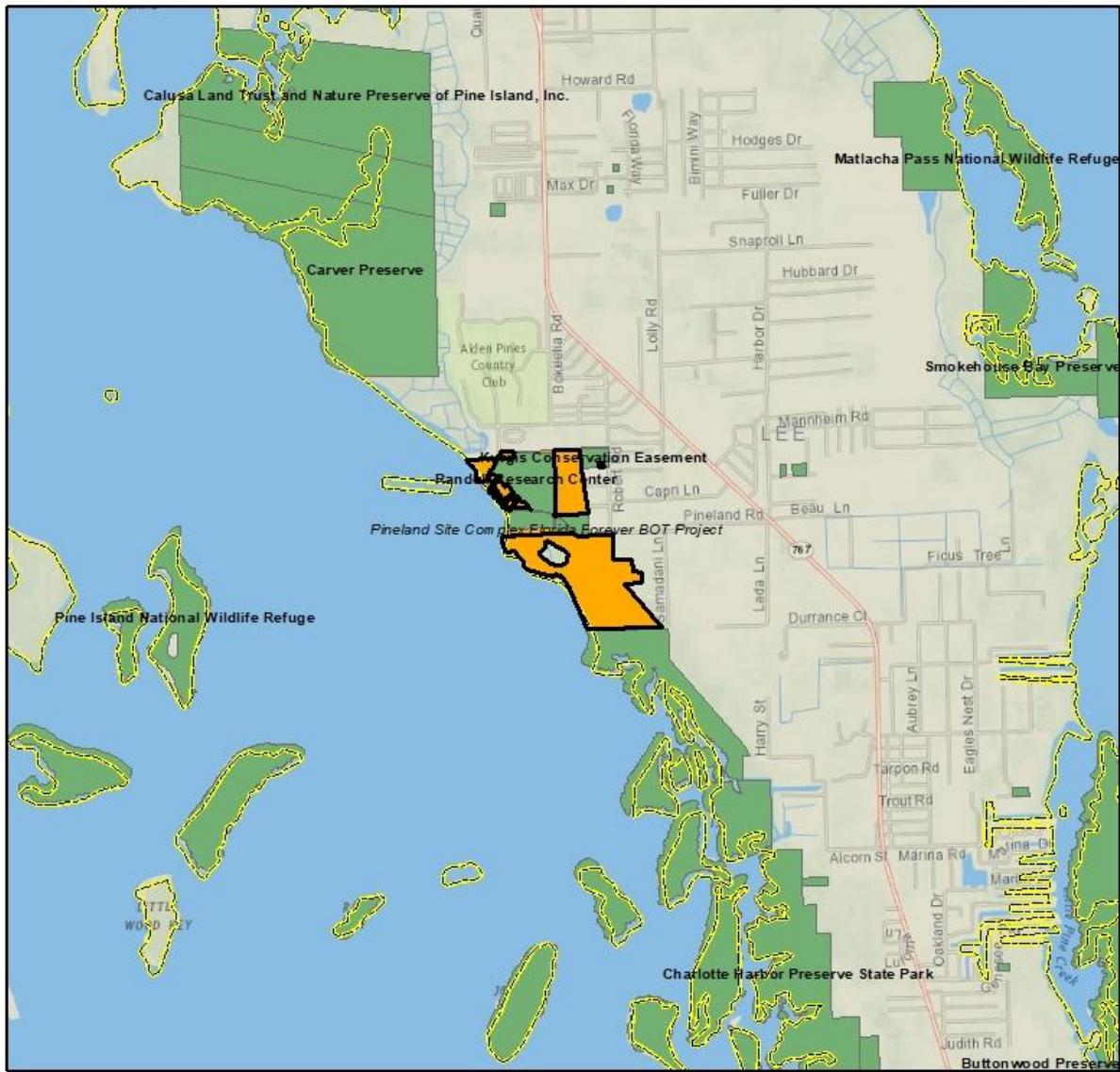
The FWC utilizes the Florida Cooperative Land Cover (CLC) GIS data layer for identification and mapping of land cover. The CLC is a cooperative effort between the FWC and the Florida Natural Areas Inventory (FNAI) to develop ecologically-based statewide land cover from existing sources and expert review of aerial photography. Land cover acreage estimates found in this document are based on GIS analysis of these data.

The FWC Florida Landscape Assessment Model (FLAM)¹ is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from a 0-10; a rank of 10 being of greatest value.

Important fish and wildlife resource GIS data were queried using Environmental Resource Analysis GIS computer software. These data include the following GIS layers:

- FWC-FNAI Florida Cooperative Land Cover
- FWC Strategic Habitat Conservation Areas – Priority and Species
- Critical Lands and Waters Identification Project (CLIP) – Priority 1 and 2 – Terrestrial and Water
- CLIP – Landscape, Biodiversity, and Floodplain Resources
- Panther Location
- Panther Mortality
- Florida Panther Priority Habitat (Primary, Secondary, and Dispersal)
- Black Bear Range
- Rare Fish Locations/ Imperiled Waters
- Southern Bald Eagle Nest
- FWC Imperiled Species Richness

- FNAI Element Occurrences
- FNAI Suitable Habitat that Supports Species Known to Occur in the Vicinity
- Florida Department of Environmental Protection Surface Water Classification
- U.S. Fish and Wildlife Service (USFWS) - National Wetlands Inventory
- USFWS Critical Habitat
- Florida Geological Survey Springs
- Outstanding Florida Waters
- Areas of Critical State Concern



**Pineland Site Complex
Florida Forever Project**
Lee County
136 Remaining Acres



0 0.5 1 1.5 2 Miles

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Vicinity Map

- Pineland Site Complex Boundary
- County Boundaries
- Conservation Lands
- Florida Forever Projects



Pineland Site Complex
Florida Forever Project
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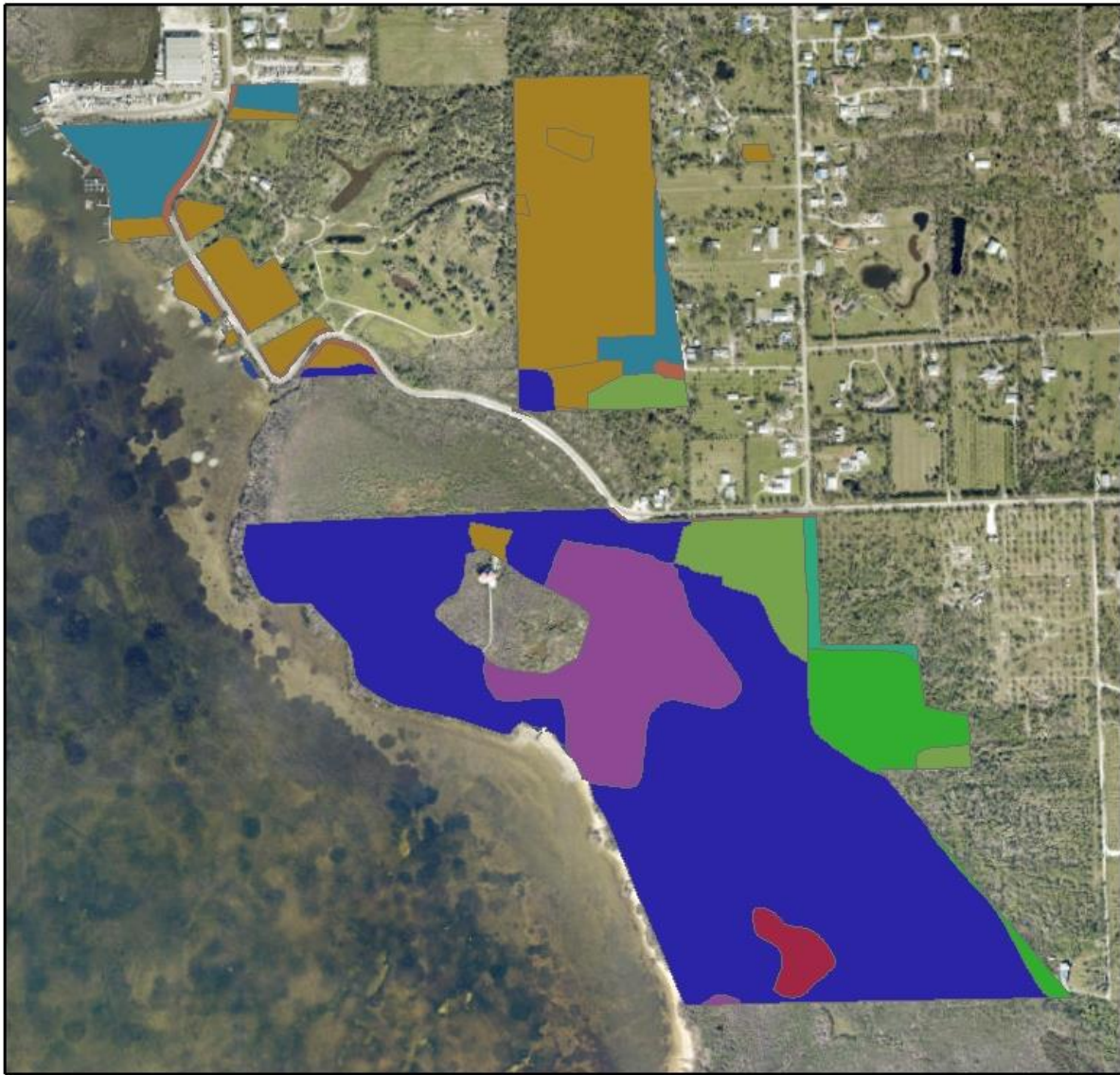


0 0.1 0.2 0.3 0.4 Miles

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Aerial Imagery

 Pineland Site Complex Boundary



Pineland Site Complex
Florida Forever Project
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 136 Remaining Acres

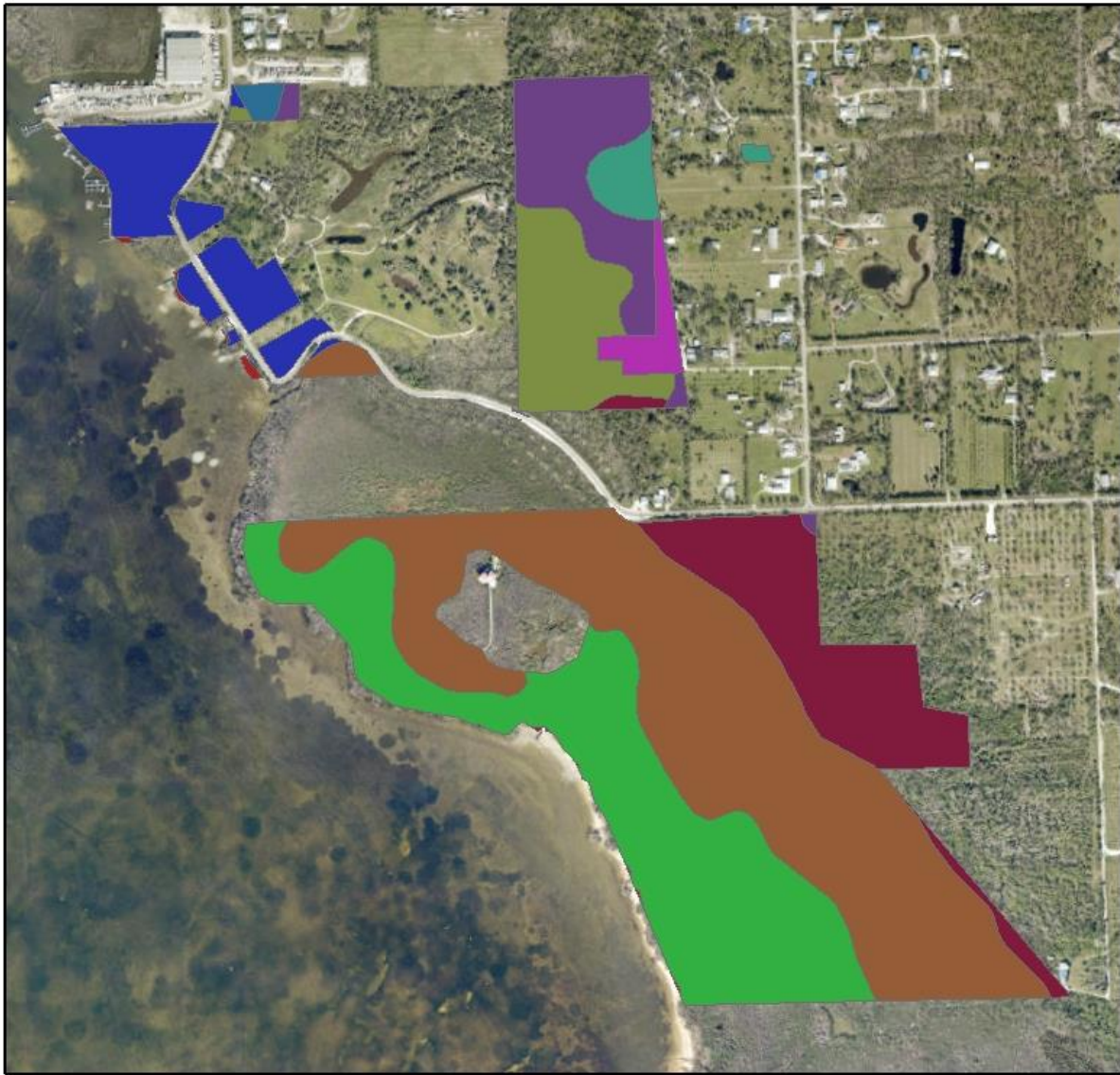


0 0.1 0.2 0.3 0.4 Miles

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Cooperative Land Cover

	Estuarine		Salt Marsh
	Exotic Plants		Shrub and Brushland
	High Intensity Urban		Tidal Flat
	Mangrove Swamp		Transportation
	Rural		Vineyard and Nurseries



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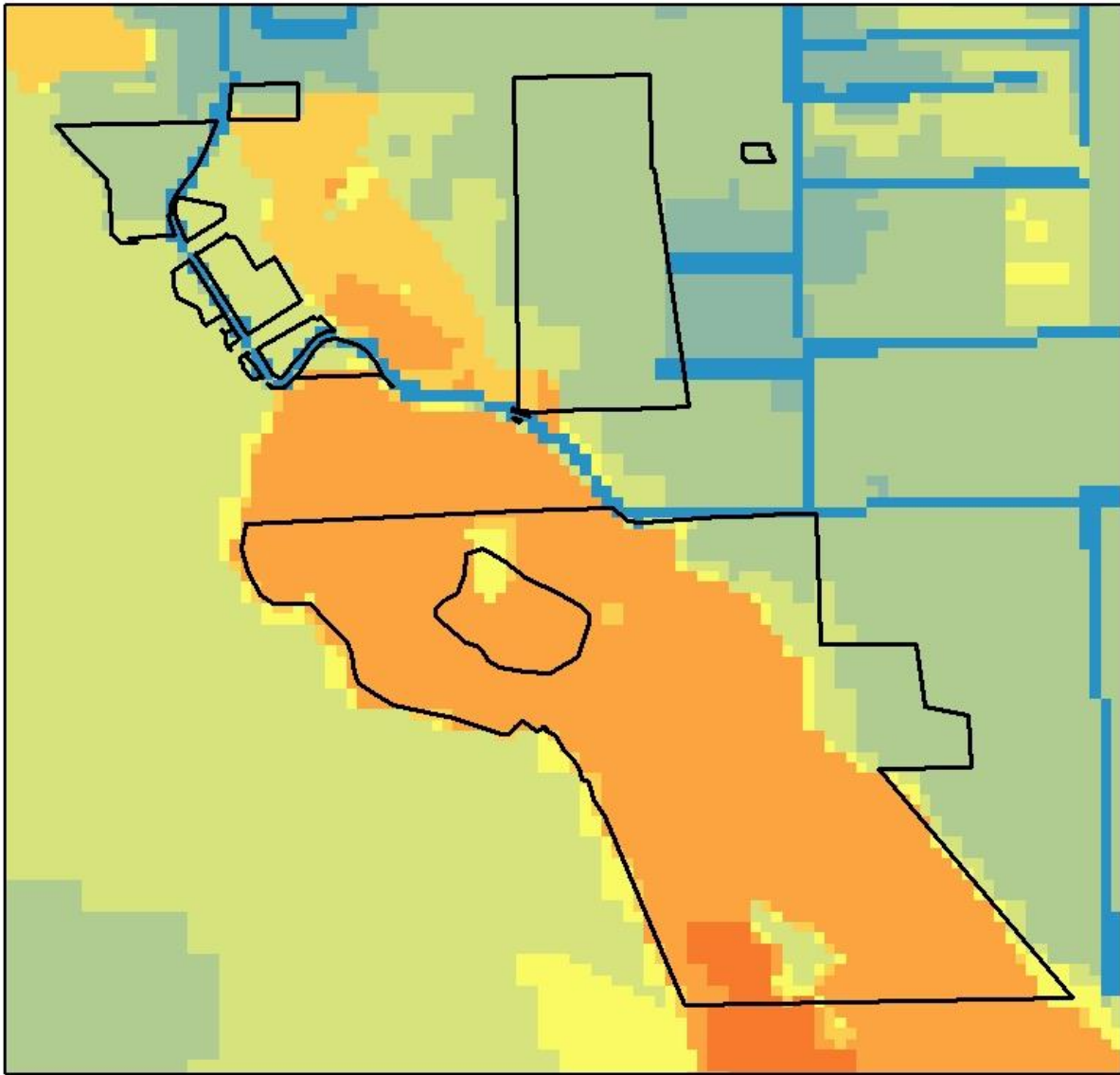


0 0.1 0.2 0.3 0.4 Miles

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Soil Types

 Immokalee sand	 Myakka fine sand-Urban land complex
 Immokalee sand-Urban land complex	 Peckish mucky fine sand
 Matlacha gravelly fine sand	 Pompano fine sand-Urban land complex
 Matlacha gravelly fine sand-Urban land complex	 Waters of the Gulf of Mexico
 Myakka fine sand	 Wulfert muck



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0 0.1 0.2 0.3 0.4 Miles

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Florida Landscape Assessment Model



FWC Florida Landscape Assessment Model 2023		
	Value	Acres
	0	1.3
	1	0.2
	2	5.0
	3	32.9
	4	10.6
	5	4.3
	6	1.5
	7	75.8
	8	4.7
	9	0.0
	10	0.0
Mean FLAM value =	5.5	

Comments:

¹ FWC has developed a GIS-based assessment tool that incorporates a wide variety of land cover and wildlife species data. These wildlife species include imperiled species and locally important species. Application of this model assists in the identification and conservation of important wildlife habitats. The FLAM ranks the Florida landscape based upon important natural resources and habitat needs of wildlife as a way to identify ecologically significant lands in the state, and to assess the potential impacts of land development projects on wildlife populations. The FLAM is provided as part of the FWC's continuing technical assistance to various local, regional, state, and federal agencies, and entities interested in wildlife needs and conservation in order to: (1) determine ways to avoid or minimize project impacts by evaluating alternative placements, alignments, and transportation corridors during early planning stages, (2) assess direct, secondary, and cumulative impacts to habitat and wildlife resources, and (3) help identify appropriate parcels for land conservation, and for wetland and upland habitat mitigation.

Environmental Resource Analysis

FWC Land Conservation and Planning

Analysis Shape Type: Polygon

Analysis Timestamp: 10242023 02:18:51

Shape Name: Unnamed polygon centered at -82.148233 °, 26.656585 °

Boundary Area: 136.38 acres

Buffer Area: 0 acres

Total Area: 136.38 acres

FWC Wildlife Data and Models

Cooperative Land Cover v3.6

Name - State	Code - State	Name - Site	Code - Site	Total Area (acres)	Percent of Area
High Intensity Urban	1822	Commercial and Services	18223	4.35	3.19 %
High Intensity Urban	1822	Residential, Med. Density - 2-5 Dwelling Units/AC	18221	2.97	2.18 %
Exotic Plants	7000	Brazilian Pepper	7300	7.59	5.57 %
Rural	1830	Rural Open Forested	18311	18.49	13.56 %
Transportation	1840	Transportation	1840	1.53	1.12 %
Vineyard and Nurseries	18334	Tree Nurseries	183341	7.21	5.29 %
Rural	1830	Unimproved/Woodland Pasture	183314	0.45	0.33 %
Rural	1830	Rural Structures	1832	6.60	4.84 %
Rural	1830	Rural Open	1831	1.14	0.83 %
Shrub and Brushland	1500	Shrub and Brushland	1500	1.18	0.87 %
Estuarine	5000	Estuarine	5000	1.91	1.4 %
Mangrove Swamp	5250	Mangrove Swamp	5250	68.08	49.92 %
Salt Marsh	5240	Salt Marsh	5240	14.70	10.78 %
Tidal Flat	5220	Tidal Flat	5220	0.18	0.13 %
TOTAL:				136.38	100 %

Critical Lands and Waters Identification Project (CLIP) Priority 1 and 2 - Terrestrial and Waters

CLIP Priority	Total Area (acres)	Percent of Area
CLIP P1 in submerged lands/state waters	2.25	1.65 %
CLIP P1 in terrestrial	123.12	90.28 %
TOTAL:	125.37	91.93 %

CLIP- Landscape Category

Priority	Total Area (acres)	Percent of Area
0	114.99	84.32 %
1	21.38	15.68 %
TOTAL:	136.38	100 %

CLIP- Biodiversity Category

Priority	Total Area (acres)	Percent of Area
0	14.56	10.68 %
1	4.84	3.55 %
2	32.45	23.8 %
3	77.75	57.01 %
4	6.78	4.97 %
TOTAL:	136.38	100 %

Priority FWC Strategic Habitat Conservation Areas 2021

Priority	Total Area (acres)	Percent of Area
0	45.87	33.63 %
2	6.58	4.83 %
3	0.71	0.52 %
5	83.22	61.02 %
TOTAL:	136.38	100 %

FWC Strategic Habitat Conservation Areas 2009

Species 1	Species 2	Species 3	Species 4	Species 5	Species 6	Total Area (acres)	Percent of Area
American crocodile	Mangrove cuckoo					6.42	4.71 %
Mangrove cuckoo						83.72	61.39 %
TOTAL:						90.15	66.1 %

Panther location

No Records Found

Panther mortality

No Records Found

Panther Priority Habitat

No Records Found

Bear Range		
Bear Range	Total Area (acres)	Percent of Area
Rare	136.10	99.8 %
TOTAL:	136.10	99.8 %
Rare Fish		
No Records Found		
Rare Fish Imperiled Waters		
No Records Found		
Southern bald eagle nest		
No Records Found		
Imperiled Species Richness		
Number of Species	Total Area (acres)	Percent of Area
0	12.12	8.89 %
1	3.83	2.81 %
2	0.01	0 %
3	101.83	74.67 %
4	6.97	5.11 %
5	0.59	0.43 %
6	2.27	1.67 %
7	1.43	1.05 %
8	7.33	5.37 %
TOTAL:	136.38	100 %

Florida Natural Areas Inventory Data									
Element Occurrences									
COMMON NAME	SCIENTIFIC NAME	GLOBAL RANK	STATE RANK	FWC STATUS	FEDERAL STATUS	EO Rank	Last Observation	Total Area (acres)	Percent of Area
Smalltooth Sawfish	Pristis pectinata	G1G3	S1S2	FE	E	E	2009-09-02	0.26	0.19 %
							TOTAL:	0.26	0.19 %
Suitable Habitat that Supports Species Known to Occur in the Vicinity									
COMMON NAME		SCIENTIFIC NAME			Total Area (acres)		Percent of Area		
Smalltooth Sawfish		Pristis pectinata			90.77		66.56 %		
Wood Stork		Mycteria americana			83.03		60.88 %		
		TOTAL:			173.80		127.44 %		

USFWS									
Critical Habitat									
No Records Found									

Area of Critical State Concern									
Apalachicola									
No Records Found									
Big Cypress									
No Records Found									
Green Swamp									
No Records Found									
Key West									
No Records Found									
Lower Keys									
No Records Found									
Upper Keys									
No Records Found									

Florida Ecological Greenways Network									
Wildlife Corridor Classification									
No Records Found									

Water Resources									
FDEP Surface Water Classification									
Waterbody Name	Water Type	Water Basin	Classification	Total Area (acres)	Percent of Area				
PINE ISLAND SOUND (UPPER SEGMENT)	ESTUARY	2065E	2	1.08	0.79 %				
PINE ISLAND	ESTUARY	2092E	2	135.30	99.21 %				

TOTAL:	136.38	100 %
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