

Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation
Land Conservation and Planning
Fair Bluff 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 **Fair Bluff** 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

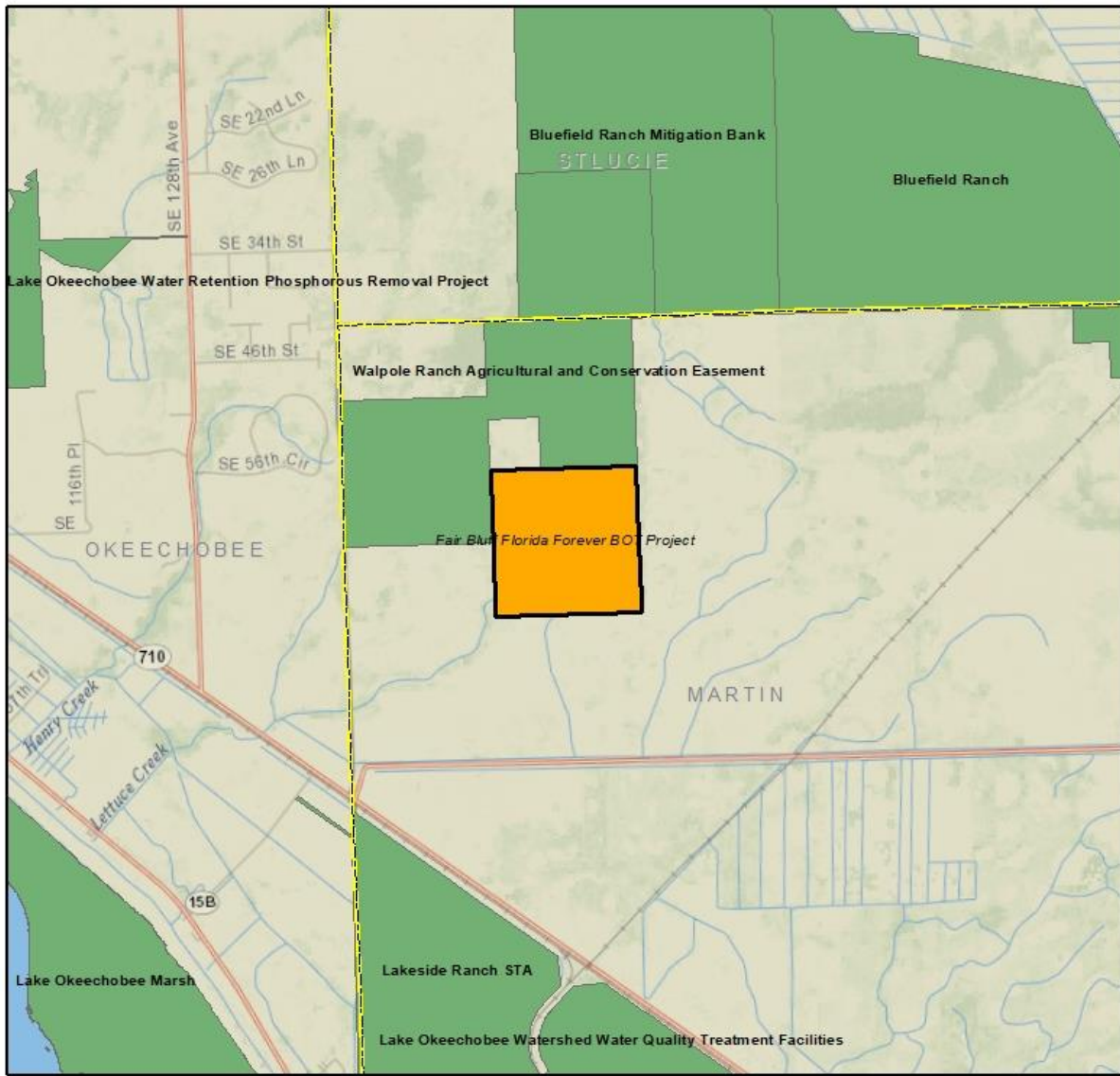
The FWC utilizes the Florida Cooperative Land Cover (CLC) GIS data layer for identification and mapping of land cover. The CLC is a cooperative effort between the FWC and the Florida Natural Areas Inventory (FNAI) to develop ecologically-based statewide land cover from existing sources and expert review 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



**Fair Bluff
Florida Forever Project**
Martin County
639 Remaining Acres



0 1 2 3 4 Miles

Created in ArcGIS 10.8 by the Florida Fish and Wildlife Conservation Commission December 2024

Vicinity Map

-  Fair Bluff Boundary
-  County Boundaries
-  Conservation Lands
-  Florida Forever Projects



Fair Bluff
Florida Forever Project
 Martin County
 639 Remaining Acres



0 0.15 0.3 0.45 0.6 Miles

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Aerial Imagery



Fair Bluff Boundary



**Fair Bluff
Florida Forever Project**
Martin County
639 Remaining Acres

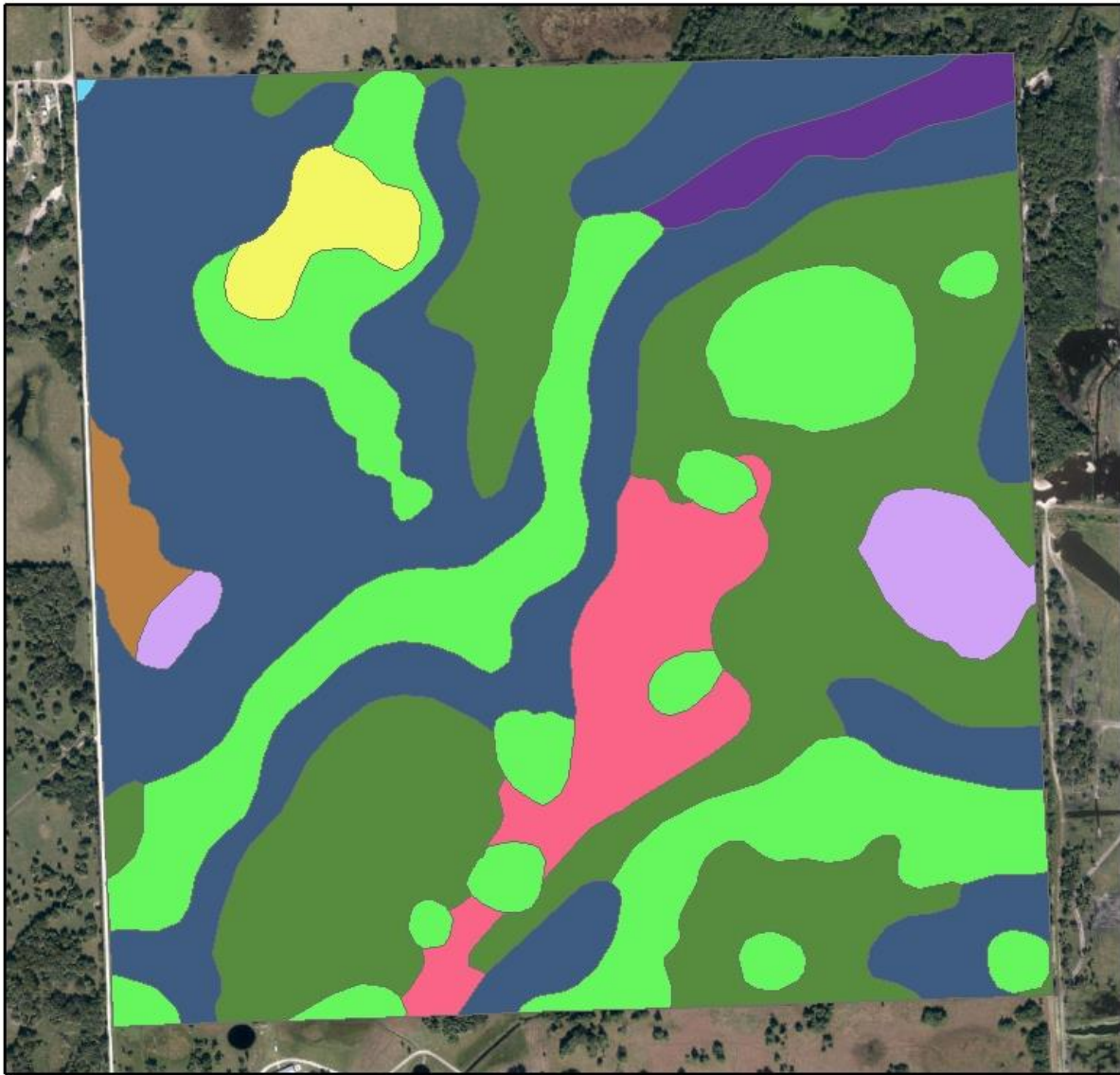


0 0.15 0.3 0.45 0.6 Miles

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Cooperative Land Cover

Dry Flatwoods	Mesic Hammock
Freshwater Forested Wetlands	Mixed Hardwood-Coniferous
Improved Pasture	Prairies and Bogs
Marshes	Rural



Fair Bluff
Florida Forever Project
 Martin County
 639 Remaining Acres

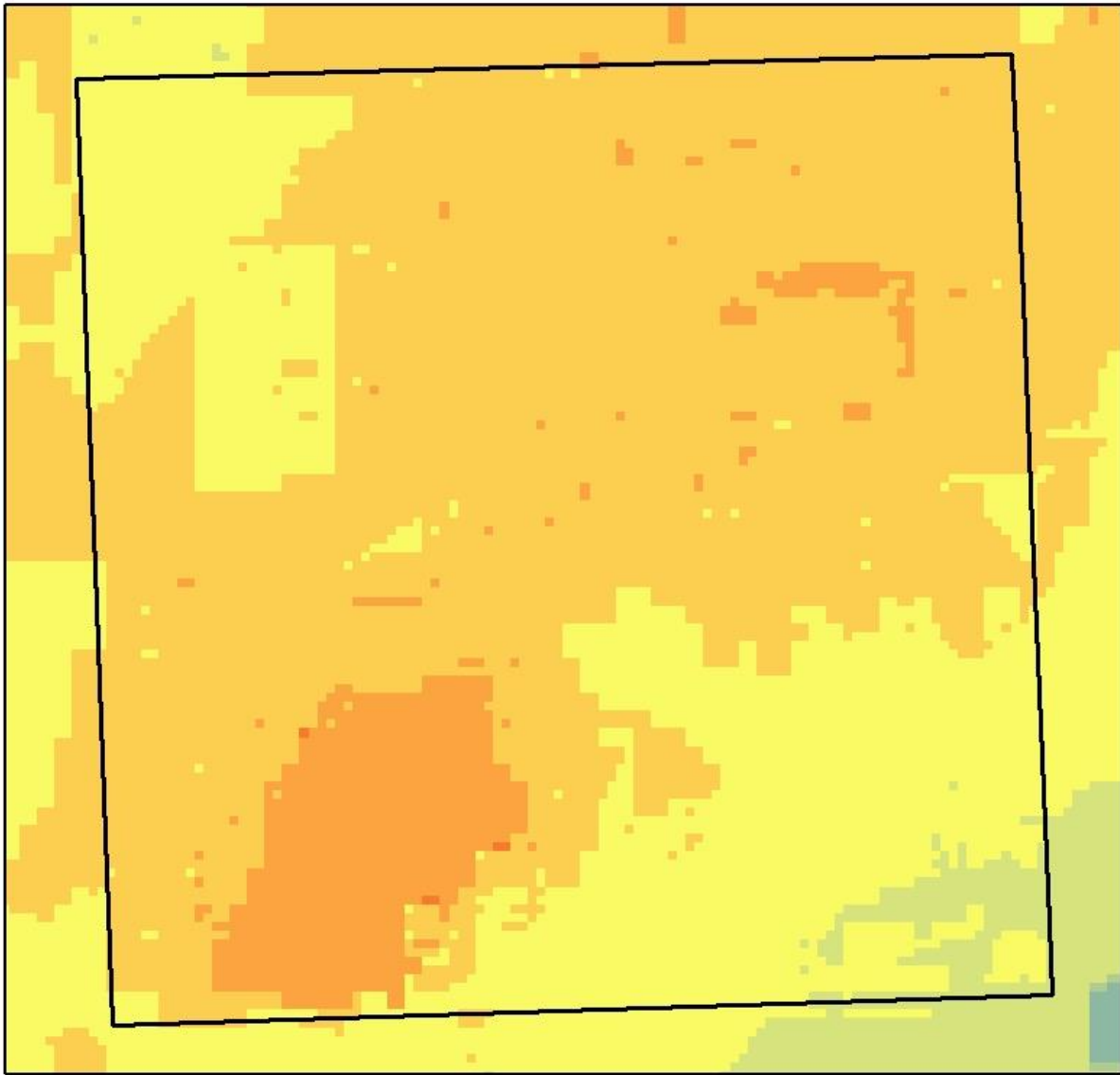


0 0.15 0.3 0.45 0.6 Miles

Created in ArcGIS 10.8 by the Florida Fish and Wildlife Conservation Commission December 2024

Soil Types

	Basinger fine sand		Placid and Basinger fine sands
	Gator and Tequesta mucks		Riviera fine sand, frequently ponded
	Malabar fine sand		Samsula muck, frequently ponded
	Pineda-Riviera fine sands association		Waveland and Immokalee fine sands
	Pinellas fine sand		



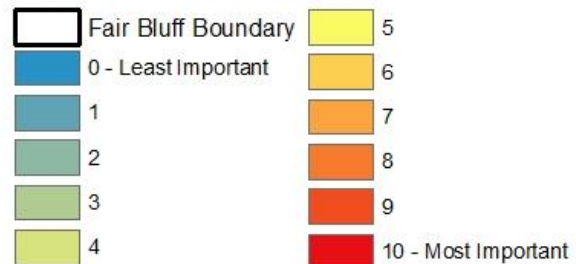
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0 0.15 0.3 0.45 0.6 Miles

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Florida Landscape Assessment Model



FWC Florida Landscape Assessment Model 2023		
	Value	Acres
	0	0.0
	1	0.0
	2	0.0
	3	0.0
	4	12.7
	5	182.6
	6	388.0
	7	55.5
	8	0.3
	9	0.0
	10	0.0
Mean FLAM value =	5.8	

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: 11082024 09:09:35

Shape Name: Unnamed polygon centered at -80.653124 °, 27.18406 °

Boundary Area: 639.06 acres

Buffer Area: 0 acres

Total Area: 639.06 acres

FWC Wildlife Data and Models

Cooperative Land Cover v3.7

Name - State	Code - State	Name - Site	Code - Site	Total Area (acres)	Percent of Area
Marshes	2120	Marshes	2120	46.57	7.29 %
Prairies and Bogs	2110	Mixed Scrub-Shrub Wetland	2112	22.14	3.46 %
Freshwater Forested Wetlands	2200	Mixed Wetland Hardwoods	2233	59.05	9.24 %
Improved Pasture	183313	Improved Pasture	183313	56.19	8.79 %
Rural	1830	Oak - Cabbage Palm Forests	183111	63.47	9.93 %
Dry Flatwoods	1310	Mesic Flatwoods	1311	47.92	7.5 %
Mesic Hammock	1120	Mesic Hammock	1120	23.82	3.73 %
Mixed Hardwood-Coniferous	1400	Mixed Hardwood-Coniferous	1400	298.00	46.63 %
Prairies and Bogs	2110	Wet Prairie	2111	11.09	1.74 %
Rural	1830	Rural Open	1831	10.80	1.69 %
TOTAL:				639.06	100 %

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

CLIP Priority	Total Area (acres)	Percent of Area
All other cells	115.50	18.07 %
CLIP P1 in submerged lands/state waters	6.24	0.98 %
CLIP P1 in terrestrial	190.90	29.87 %
CLIP P2 in terrestrial	326.42	51.08 %
TOTAL:	639.06	100 %

CLIP- Landscape Category

Priority	Total Area (acres)	Percent of Area
2	639.06	100 %
TOTAL:	639.06	100 %

CLIP- Biodiversity Category

Priority	Total Area (acres)	Percent of Area
0	0.06	0.01 %
1	0.83	0.13 %
2	169.67	26.55 %
3	401.98	62.9 %
4	60.35	9.44 %
5	6.18	0.97 %
TOTAL:	639.06	100 %

Priority FWC Strategic Habitat Conservation Areas 2024

Priority	Total Area (acres)	Percent of Area
3	398.86	62.41 %
5	24.93	3.9 %
TOTAL:	423.80	66.32 %

FWC Strategic Habitat Conservation Areas 2024

Species 1	Species 2	Species 3	Species 4	Species 5	Species 6	Total Area (acres)	Percent of Area
American swallow-tailed kite						340.16	53.23 %
Cooper's hawk						24.93	3.9 %
Cooper's hawk	American swallow-tailed kite					35.81	5.6 %
Florida burrowing owl						22.90	3.58 %
TOTAL:						423.80	66.32 %

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
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Rare	639.06	100 %
TOTAL:	639.06	100 %
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	6.86	1.07 %
3	0.36	0.06 %
5	141.60	22.16 %
6	0.15	0.02 %
7	401.57	62.84 %
8	88.52	13.85 %
TOTAL:	639.06	100 %

Florida Natural Areas Inventory Data

Element Occurrences

No Records Found

Suitable Habitat that Supports Species Known to Occur in the Vicinity

COMMON NAME	SCIENTIFIC NAME	Total Area (acres)	Percent of Area
Crested Caracara	Caracara cheriway	152.43	23.85 %
Eastern Indigo Snake	Drymarchon couperi	524.49	82.07 %
Florida Sandhill Crane	Antigone canadensis pratensis	199.98	31.29 %
Wood Stork	Mycteria americana	132.98	20.81 %
TOTAL:		1,009.88	158.03 %

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

Priority Level	Total Area (acres)	Percent of Area
2	598.99	93.73 %
TOTAL:	598.99	93.73 %

Water Resources

FDEP Surface Water Classification

Waterbody Name	Water Type	Water Basin	Classification	Total Area (acres)	Percent of Area
MYRTLE SLOUGH	STREAM	3213D	3F	639.06	100 %
TOTAL:				639.06	100 %

Outstanding Florida Waters

No Records Found

Florida Geological Survey Springs

No Records Found

National Wetlands Inventory			
Wetland Type	Wetland Code	Total Area (acres)	Percent of Area
FRESHWATER EMERGENT WETLAND	PEM1C	56.48	8.84 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1/SS1C	21.74	3.4 %
RIVERINE	R5UBFx	6.84	1.07 %
RIVERINE	R5UBH	0.19	0.03 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1B	9.84	1.54 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1C	50.86	7.96 %
RIVERINE	R2UBHx	2.20	0.34 %
	TOTAL:	148.14	23.18 %
Priority Floodplain Resources			
Priority	Total Area (acres)	Percent of Area	
3	140.23	21.94 %	
4	2.85	0.45 %	
0	495.98	77.61 %	
TOTAL:	639.06	100 %	