

Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation
Land Conservation and Planning
Red Hills Conservation 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 **Red Hills Conservation** 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

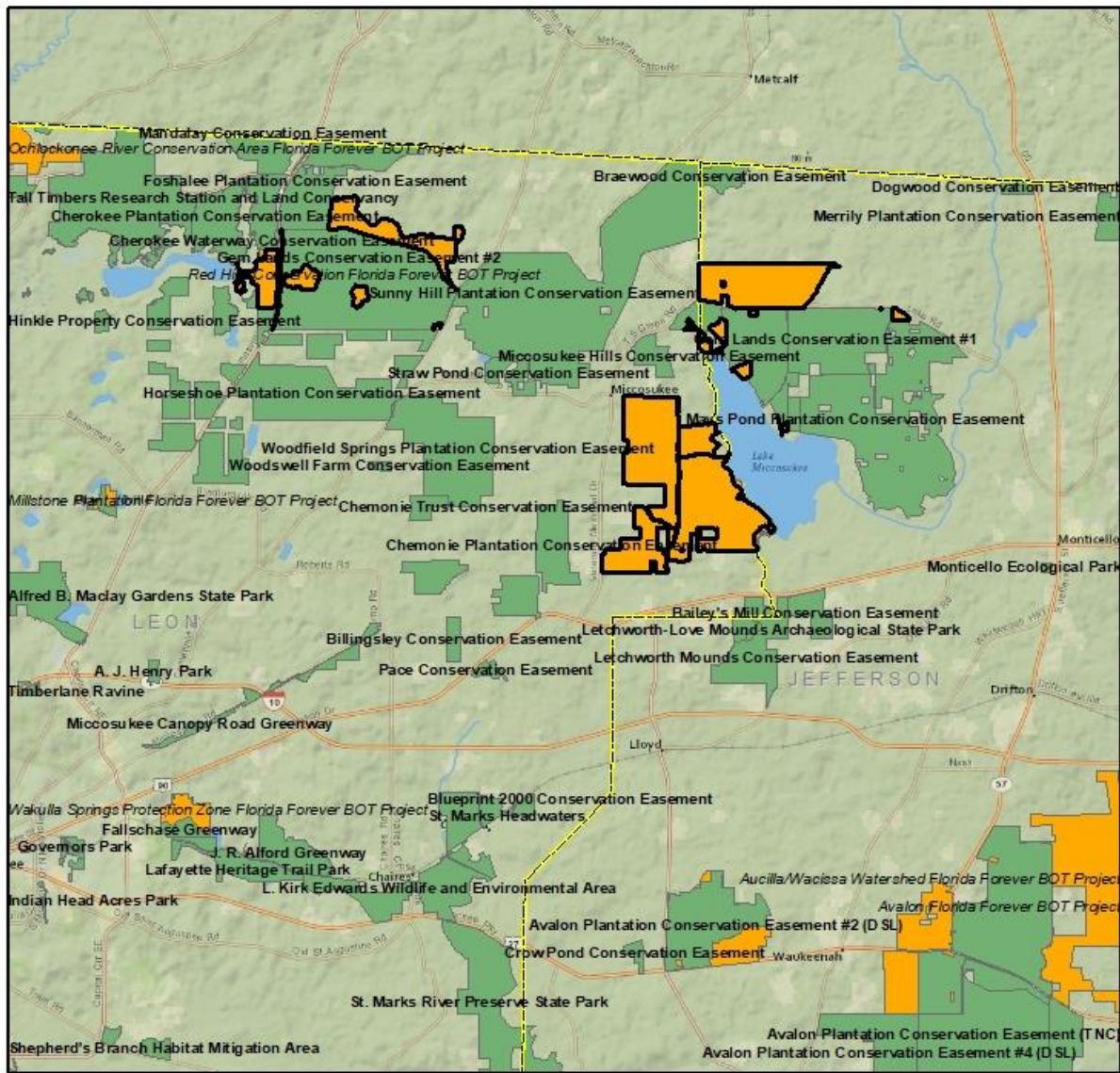
The FWC utilizes the Florida Cooperative Land Cover (CLC) GIS data layer for identification and mapping of land cover. The CLC is a cooperative effort between the FWC and the Florida Natural Areas Inventory (FNAI) to develop ecologically-based statewide land cover from existing sources and expert review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



**Red Hills Conservation
Florida Forever Project**
Leon & Jefferson Counties
8,902 Remaining Acres

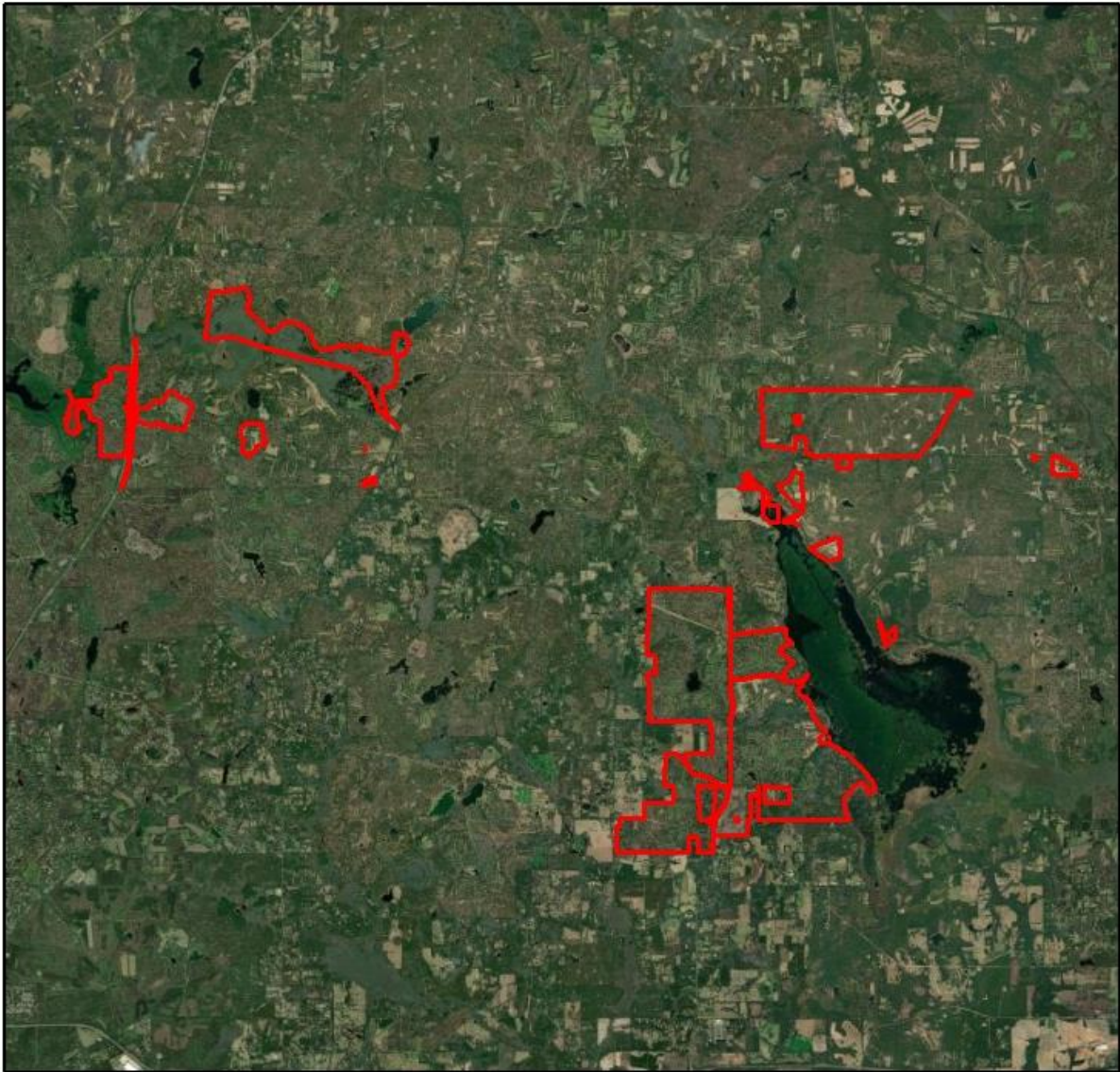


0 3 6 9 12 Miles

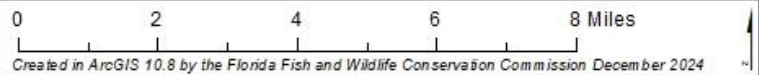
Created in ArcGIS 10.8 by the Florida Fish and Wildlife Conservation Commission December 2024

Vicinity Map

- Red Hills Conservation Boundary
- County Boundaries
- Conservation Lands
- Florida Forever Projects

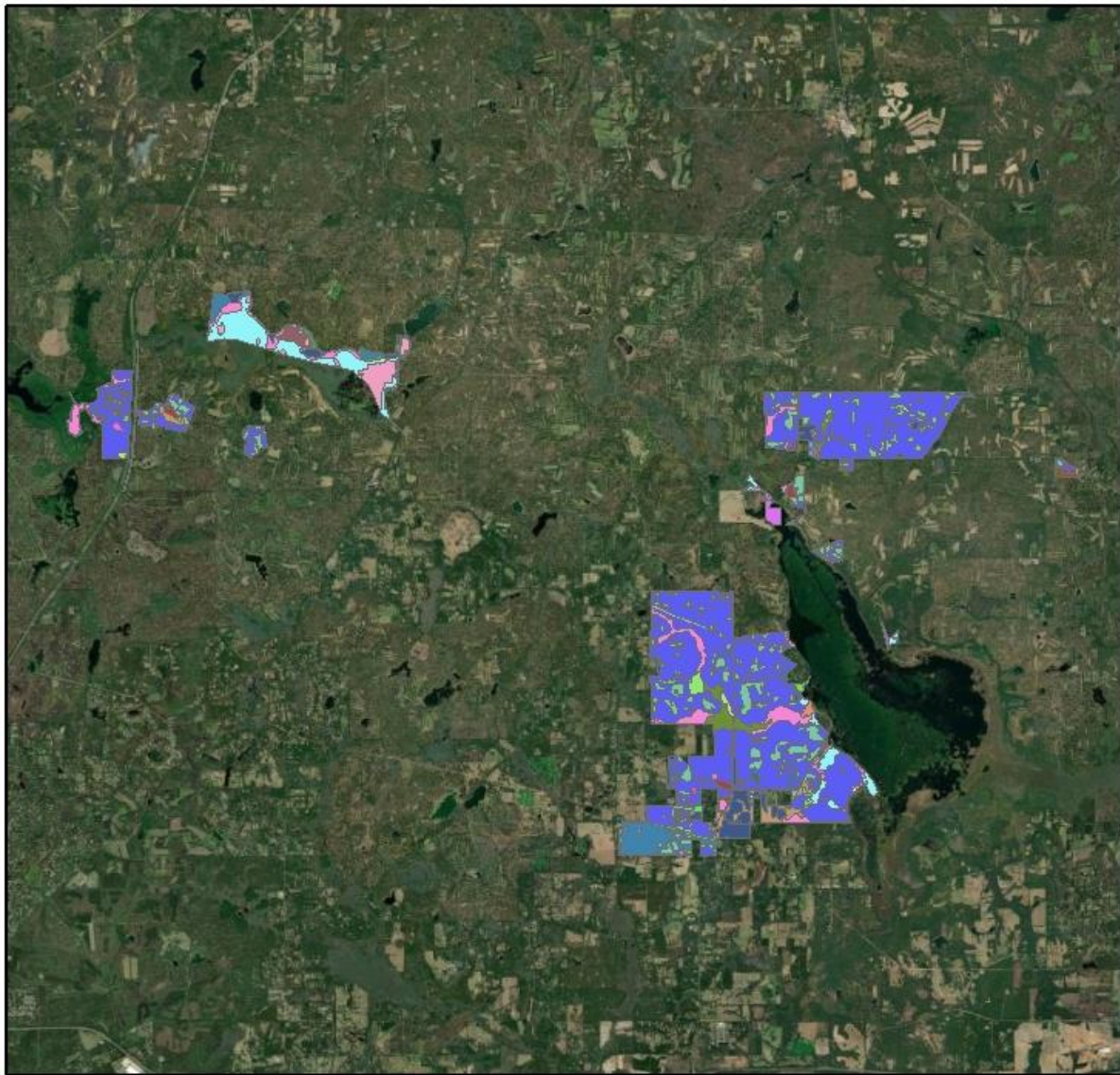


Red Hills Conservation
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Aerial Imagery

 Red Hills Conservation Boundary

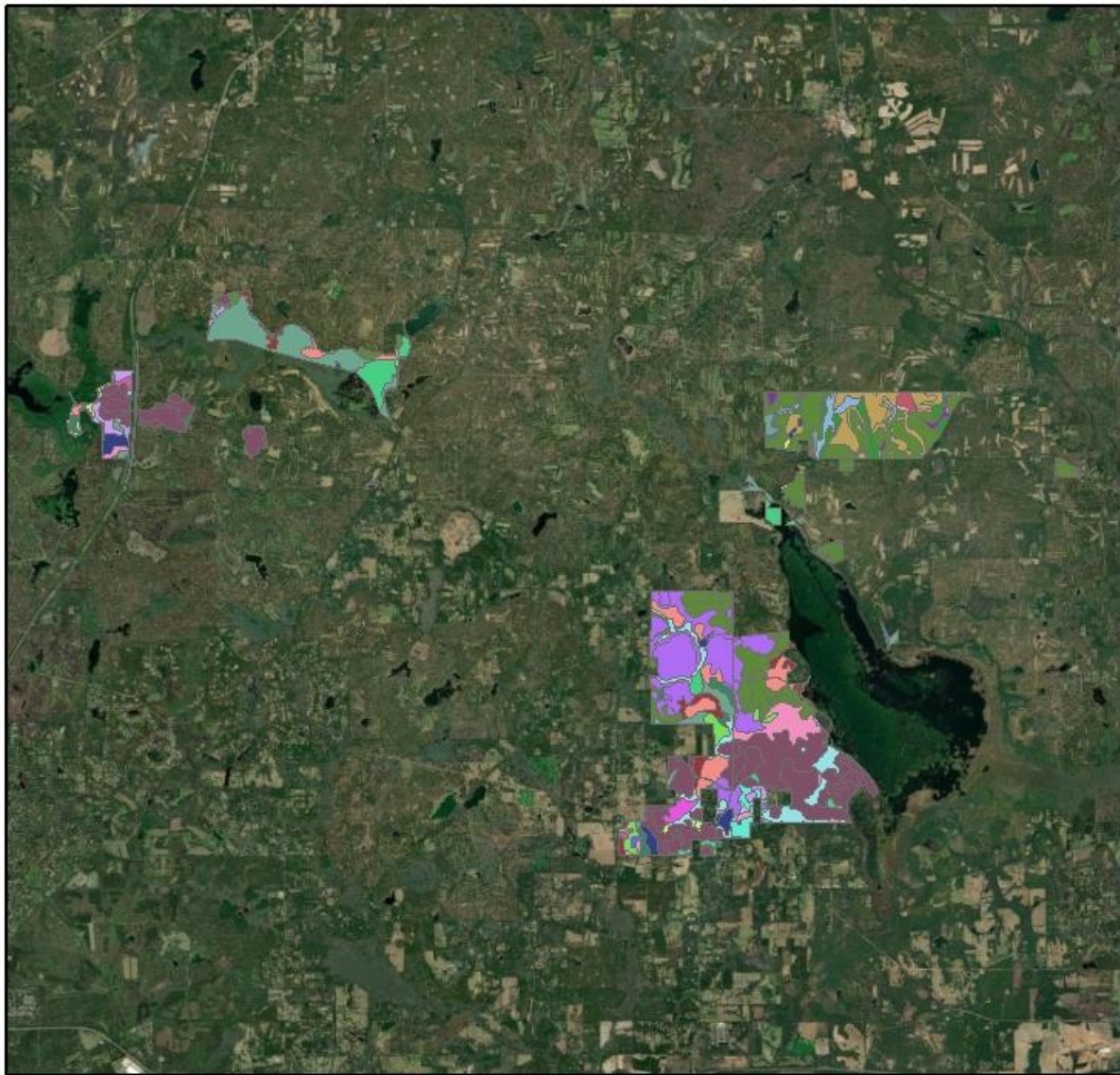


**Red Hills Conservation
Florida Forever Project
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Cooperative Land Cover

Artificial Impoundment/Reservoir	Hydric Pine Flatwoods	Rural Open Forested
Artificial/Farm Pond	Improved Pasture	Rural Open Pine
Basin Marsh	Marshes	Shrub and Brushland
Basin Swamp	Mixed Hardwood-Coniferous	Stormwater Treatment Areas
Classic Upland Lake	Mixed Hardwood-Coniferous Swamps	Successional Hardwood Forest
Coniferous Plantations	Mixed Scrub-Shrub Wetland	Transportation
Cypress	Mixed Wetland Hardwoods	Upland Coniferous
Depression Marsh	Other Coniferous Wetlands	Upland Hardwood Forest
Dome Swamp	Residential, Low Density	Upland Pine
Field Crops	Row Crops	Utilities
Floating/Emergent Aquatic Vegetation	Rural Open	Wet Coniferous Plantations
		Wet Flatwoods

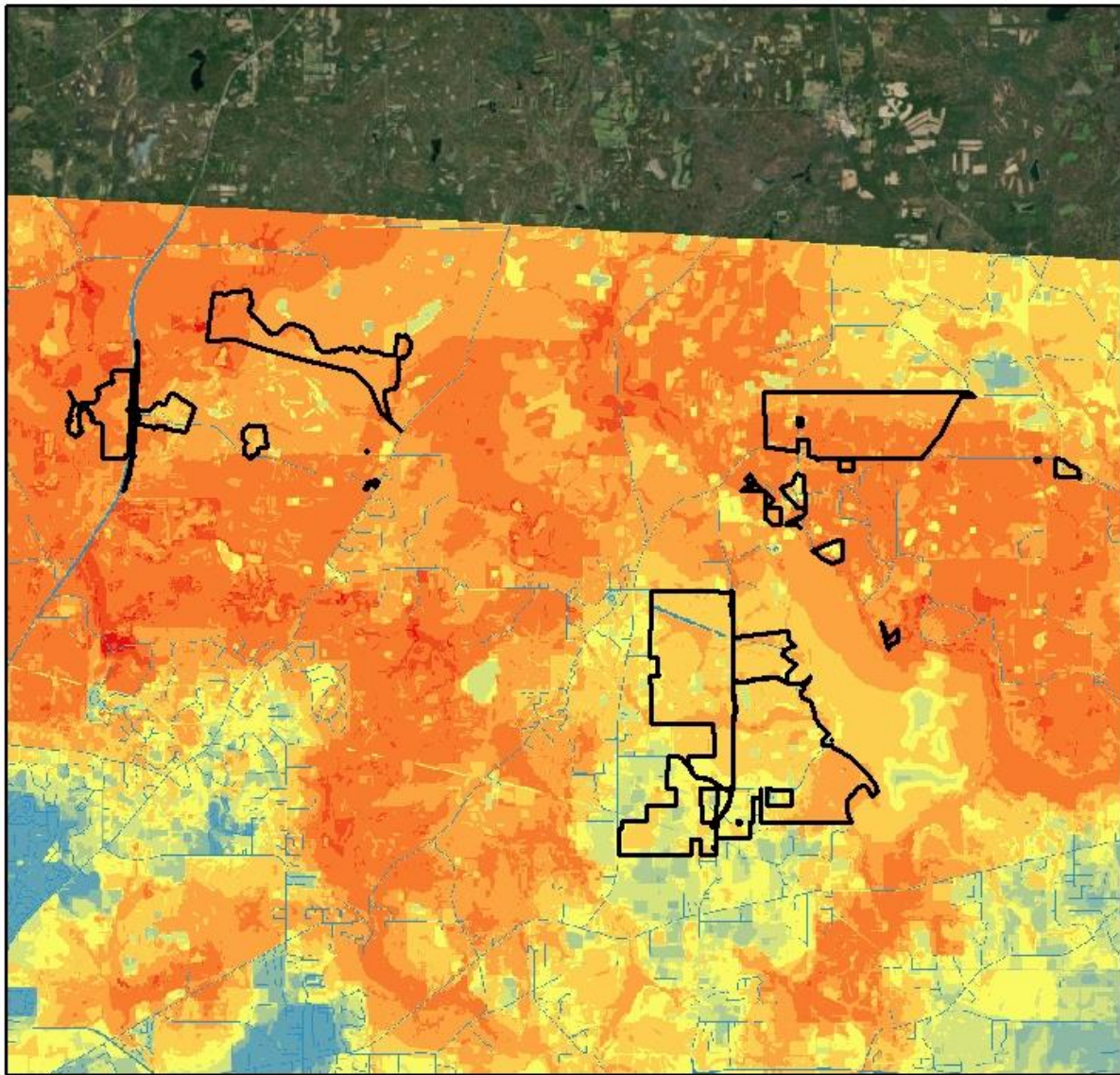


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Soil Types

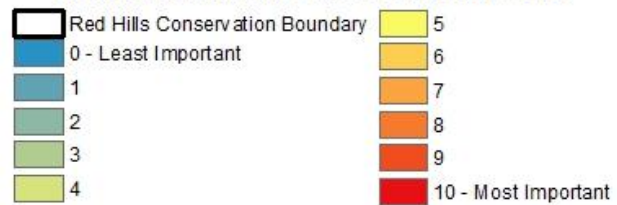
Albany loamy sand	Leefield loamy sand	Orangeburg fine sandy loam
Albany sand	Lucy fine sand	Orangeburg sandy loam
Blanton fine sand	Lucy loamy fine sand	Pelham fine sand
Bonifay fine sand	Lynchburg fine sandy loam	Plummer fine sand
Cowarts loamy fine sand	Lynchburg loamy fine sand	Rains fine sandy loam
Dothan loamy fine sand	Micoosukee fine sandy loam	Surrency fine sand
Faceville fine sandy loam	Norfolk loamy fine sand	Troup fine sand
Fuquay fine sand	Norfolk loamy sand	Wagram loamy fine sand
Leefield fine sand	Ocilla fine sand	Water
		Yonges fine sandy loam



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Florida Landscape Assessment Model



FWC Florida Landscape Assessment Model 2023		
	Value	Acres
	0	102.2
	1	0.0
	2	0.0
	3	35.8
	4	355.2
	5	1079.3
	6	3027.2
	7	2723.0
	8	1532.2
	9	50.9
	10	0.2
Mean FLAM value =	6.4	

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: 11052024 09:59:49

Shape Name: Unnamed polygon centered at -84.056605 °, 30.59879 °

Boundary Area: 8901.86 acres

Buffer Area: 0 acres

Total Area: 8901.86 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
Orchards/Groves	18332	Orchards/Groves	18332	0.00	0 %
Rural	1830	Rural Open Pine	18312	7.89	0.09 %
Isolated Freshwater Marsh	2121	Basin Marsh	21212	16.69	0.19 %
Isolated Freshwater Marsh	2121	Depression Marsh	21211	38.77	0.44 %
Rural	1830	Rural Open Forested	18311	9.87	0.11 %
Cultural-Lacustrine	3200	Artificial Impoundment/Reservoir	3220	37.52	0.42 %
Cultural-Lacustrine	3200	Artificial/Farm Pond	3210	9.00	0.1 %
Low Intensity Urban	1821	Residential, Low Density	18212	2.48	0.03 %
Cultural-Lacustrine	3200	Stormwater Treatment Areas	3250	3.77	0.04 %
Tree Plantations	18333	Coniferous Plantations	183332	359.71	4.04 %
Improved Pasture	183313	Improved Pasture	183313	904.58	10.16 %
Transportation	1840	Transportation	1840	98.96	1.11 %
Tree Plantations	18333	Wet Coniferous Plantations	1833321	1.41	0.02 %
Cropland/Pasture	18331	Field Crops	183312	71.20	0.8 %
Basin Swamp	22132	Basin Swamp	22132	560.89	6.3 %
Dome Swamp	22131	Dome Swamp	22131	4.30	0.05 %
Cropland/Pasture	18331	Row Crops	183311	15.88	0.18 %
Wet Flatwoods	2221	Hydric Pine Flatwoods	22211	0.04	0 %
Rural	1830	Rural Open	1831	75.14	0.84 %
Shrub and Brushland	1500	Shrub and Brushland	1500	0.01	0 %
Prairies and Bogs	2110	Wet Prairie	2111	0.00	0 %
Utilities	1860	Utilities	1860	18.00	0.2 %
Mixed Hardwood-Coniferous	1400	Successional Hardwood Forest	1410	214.58	2.41 %
High Pine and Scrub	1200	Upland Coniferous	1230	351.75	3.95 %
Upland Hardwood Forest	1110	Upland Hardwood Forest	1110	30.58	0.34 %
Mixed Hardwood-Coniferous	1400	Mixed Hardwood-Coniferous	1400	31.31	0.35 %
High Pine and Scrub	1200	Upland Pine	1231	4,911.56	55.17 %
Freshwater Forested Wetlands	2200	Mixed Wetland Hardwoods	2233	94.41	1.06 %
Wet Flatwoods	2221	Wet Flatwoods	2221	157.66	1.77 %
Natural Lakes and Ponds	3100	Clastic Upland Lake	3111	86.60	0.97 %
Freshwater Forested Wetlands	2200	Mixed Hardwood-Coniferous Swamps	2240	546.32	6.14 %
Other Coniferous Wetlands	2220	Other Coniferous Wetlands	2220	4.08	0.05 %
Marshes	2120	Marshes	2120	169.93	1.91 %
Prairies and Bogs	2110	Mixed Scrub-Shrub Wetland	2112	6.84	0.08 %
Cypress	2211	Cypress	2211	56.68	0.64 %
Freshwater Non-Forested Wetlands	2100	Floating/Emergent Aquatic Vegetation	2140	3.45	0.04 %
TOTAL:				8,901.86	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	6,115.29	68.7 %
CLIP P1 in submerged lands/state waters	12.59	0.14 %
CLIP P1 in terrestrial	1,352.88	15.2 %
CLIP P2 in submerged lands/state waters	9.07	0.1 %
CLIP P2 in terrestrial	1,409.74	15.84 %
TOTAL:	8,899.56	99.97 %

CLIP- Landscape Category

Priority	Total Area (acres)	Percent of Area
0	210.98	2.37 %
2	544.56	6.12 %
3	8,146.33	91.51 %
TOTAL:	8,901.86	100 %

CLIP- Biodiversity Category

Priority	Total Area (acres)	Percent of Area
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0	197.73	2.22 %
1	504.51	5.67 %
2	2,039.45	22.91 %
3	4,859.01	54.58 %
4	1,238.73	13.92 %
5	62.44	0.7 %
TOTAL:	8,901.86	100 %
Priority FWC Strategic Habitat Conservation Areas 2024		
Priority	Total Area (acres)	Percent of Area
3	5,057.73	56.82 %
5	410.59	4.61 %
TOTAL:	5,468.31	61.43 %
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		3,045.92 34.22 %
Cooper's hawk		410.58 4.61 %
Cooper's hawk	American swallow-tailed kite	2,011.80 22.6 %
	TOTAL:	5,468.31 61.43 %
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
Common	5,141.85	57.76 %
Occasional	747.74	8.4 %
Rare	3,012.27	33.84 %
TOTAL:	8,901.86	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	753.57	8.47 %
1	713.81	8.02 %
2	0.49	0.01 %
3	60.32	0.68 %
4	43.61	0.49 %
5	2,636.70	29.62 %
6	1,773.54	19.92 %
7	1,971.38	22.15 %
8	948.45	10.65 %
TOTAL:	8,901.86	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	
Alligator Snapping Turtle	Macrochelys temminckii	G3	S3	N	PT	AB	2018-04-11	70.69	0.79 %	
American Alligator	Alligator mississippiensis	G5	S4	FT(S/A)	SAT	B	2020-05-03	70.69	0.79 %	
branched tearthumb	Persicaria meisneriana var. beyrichiana	G5?T5?	S1	E	N	BC	2009-11-05	35.51	0.4 %	
Eastern Diamondback Rattlesnake	Crotalus adamanteus	G3	S3	N	UR	E	1990-07-21	12.26	0.14 %	
Eastern Indigo Snake	Drymarchon couperi	G3	S2?	FT	T	E	1970	375.50	4.22 %	
Florida Black Bear	Ursus americanus floridanus	G5T4	S4	N	N	BC	2022-07-06	3,250.67	36.52 %	
Godfrey's swampprivet	Forestiera godfreyi	G2	S2	E	N	E	1990-04-05	57.03	0.64 %	
Gopher Tortoise	Gopherus polyphemus	G3	S3	ST	N	A	2015	0.13	0 %	
Gopher Tortoise	Gopherus polyphemus	G3	S3	ST	N	C	2015	0.03	0 %	
Gopher Tortoise	Gopherus polyphemus	G3	S3	ST	N	D	2015	1.40	0.02 %	
Hoary Edge	Achalarus lyciades	G5	S2	N	N	BC	2023-06-16	0.12	0 %	
Little Blue Heron	Egretta caerulea	G5	S4	ST	N	E	1988-06-15	198.01	2.22 %	

Little Blue Heron	Egretta caerulea	G5	S4	ST	N	E	1989-05-30	304.32	3.42 %
Miccosukee gooseberry	Ribes echinellum	G1	S1	E	T	AB	2019-01-23	6.43	0.07 %
Red-cockaded Woodpecker	Dryobates borealis	G3	S2	FE	E, PT	E	2007	1.44	0.02 %
Round-tailed Muskrat	Neofiber alleni	G2	S2	N	N	E	1931-12-11	196.60	2.21 %
smooth hedgenettle	Stachys tenuifolia	G5	S1	E	N	NR	1982-08-02	159.06	1.79 %
Southeastern Fox Squirrel	Sciurus niger niger	G5T5	S3	N	N	E	2019-01-22	0.62	0.01 %
White Ibis	Eudocimus albus	G5	S4	N	N	E	1988-06-15	198.01	2.22 %
TOTAL:								4,938.50	55.48 %

Suitable Habitat that Supports Species Known to Occur in the Vicinity

COMMON NAME	SCIENTIFIC NAME	Total Area (acres)	Percent of Area
Alligator Snapping Turtle	Macrochelys temminckii	261.56	2.94 %
Godfrey's swampprivet	Forestiera godfreyi	16.49	0.19 %
hyssopleaf hedgenettle	Stachys lythroides	209.50	2.35 %
Miccosukee gooseberry	Ribes echinellum	24.96	0.28 %
Red-cockaded Woodpecker	Dryobates borealis	574.20	6.45 %
Wood Stork	Mycteria americana	829.95	9.32 %
TOTAL:		1,916.66	21.53 %

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	8,515.19	95.66 %
5	385.92	4.34 %
TOTAL:	8,901.11	99.99 %

Water Resources

FDEP Surface Water Classification

Waterbody Name	Water Type	Water Basin	Classification	Total Area (acres)	Percent of Area
WARD CREEK	STREAM	459	3F	566.64	6.37 %
PATTY SINK DRAIN	STREAM	533	3F	805.69	9.05 %
LAKE MICCOSUKEE OUTLET	STREAM	791L	3F	5,828.03	65.47 %
LAKE MICCOSUKEE	LAKE	791N	3F	14.70	0.17 %
LAKE IAMONIA	LAKE	442	3F	2.08	0.02 %
LAKE IAMONIA DRAIN	STREAM	442A	3F	1,684.73	18.93 %
TOTAL:				8,901.86	100 %

Outstanding Florida Waters

Name	OFW Type	Total Area (acres)	Percent of Area
Ochlockonee River	Special	44.50	0.5 %
TOTAL:		44.50	0.5 %

Florida Geological Survey Springs

No Records Found

National Wetlands Inventory

Wetland Type	Wetland Code	Total Area (acres)	Percent of Area
FRESHWATER EMERGENT WETLAND	PEM1C	33.12	0.37 %
FRESHWATER EMERGENT WETLAND	PEM1Ch	4.69	0.05 %

FRESHWATER EMERGENT WETLAND	PEM1A	1.14	0.01 %
FRESHWATER EMERGENT WETLAND	PEM1/UBF	0.14	0 %
LAKE	L1UBH	27.83	0.31 %
LAKE	L2AB4G	50.34	0.57 %
FRESHWATER EMERGENT WETLAND	PEM1/AB4F	56.31	0.63 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1C	49.16	0.55 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1A	108.87	1.22 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1/SS1C	80.50	0.9 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1/3A	119.19	1.34 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1/3B	6.06	0.07 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1/4A	8.94	0.1 %
FRESHWATER EMERGENT WETLAND	PEM1F	150.23	1.69 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO3/6C	3.69	0.04 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6C	408.07	4.58 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6/EM1F	0.70	0.01 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6/SS6F	6.62	0.07 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6/3C	60.20	0.68 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS4A	1.17	0.01 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS3C	8.92	0.1 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS3/EM1C	5.83	0.07 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS1A	104.86	1.18 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6F	309.83	3.48 %
RIVERINE	R4SBC	9.12	0.1 %
FRESHWATER POND	PUBHx	0.30	0 %
FRESHWATER POND	PUSC	0.72	0.01 %
FRESHWATER POND	PUBH	2.64	0.03 %
FRESHWATER POND	PUBHh	16.26	0.18 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS6C	9.25	0.1 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS6F	0.39	0 %
LAKE	L2AB3H	3.74	0.04 %
RIVERINE	R5UBH	1.57	0.02 %
	TOTAL:	1,650.43	18.54 %
Priority Floodplain Resources			
Priority	Total Area (acres)	Percent of Area	
2	690.00	7.75 %	
3	659.91	7.41 %	
1	828.62	9.31 %	
0	6,612.36	74.28 %	
4	110.98	1.25 %	
TOTAL:	8,901.86	100 %	