

**Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation
Land Conservation and Planning
Lake Santa Fe 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 **Lake Santa Fe** 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

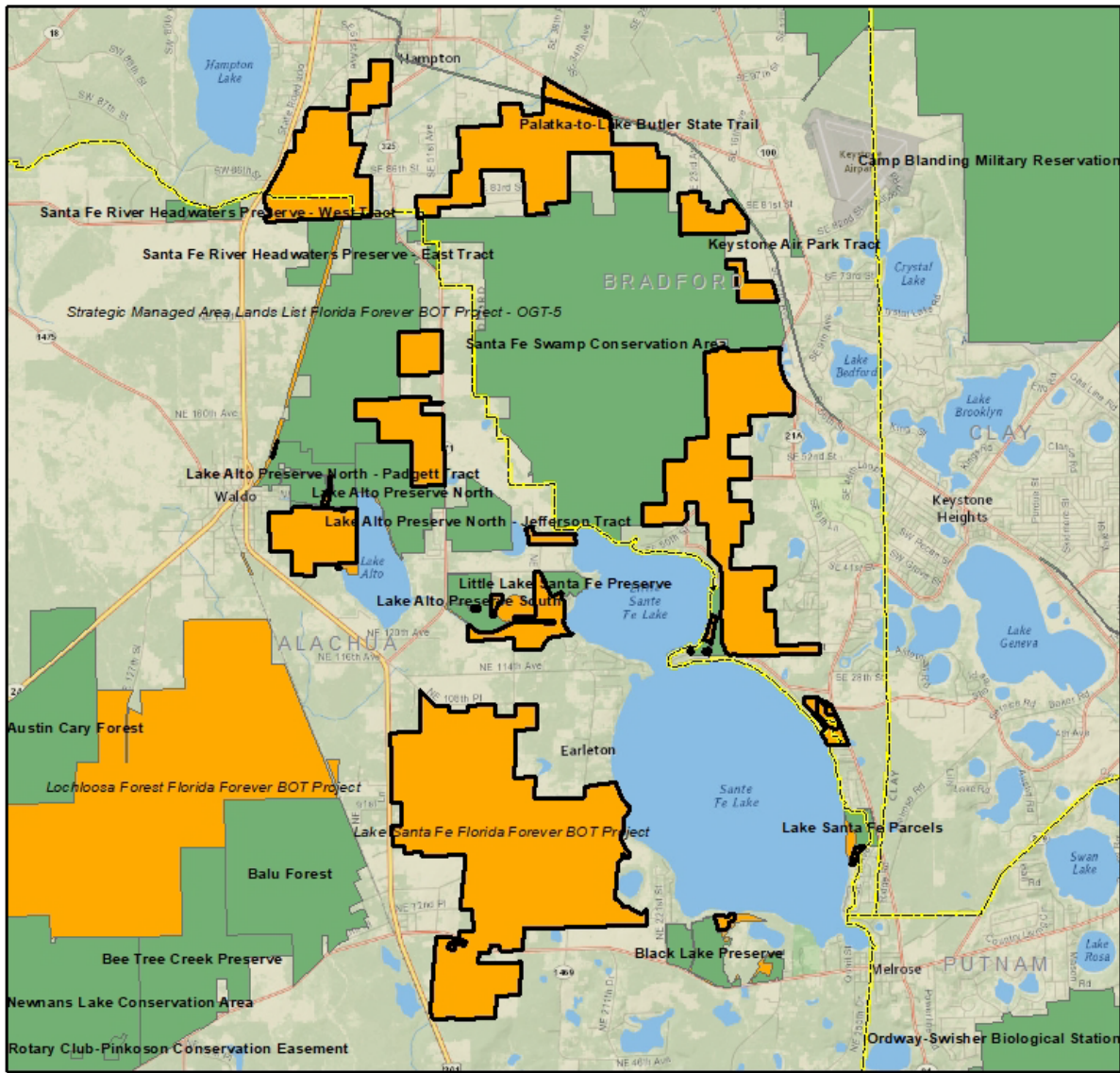
The FWC utilizes the Florida Cooperative Land Cover (CLC) GIS data layer for identification and mapping of land cover. The CLC is a cooperative effort between the FWC and the Florida Natural Areas Inventory (FNAI) to develop ecologically-based statewide land cover from existing sources and expert review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

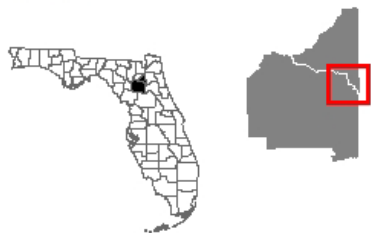
Important fish and wildlife resource GIS data were queried using Environmental Resource Analysis GIS computer software. These data include the following GIS layers:

- 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



**Lake Santa Fe
Florida Forever Project**
Alachua and
Bradford County
8,750 Remaining Acres

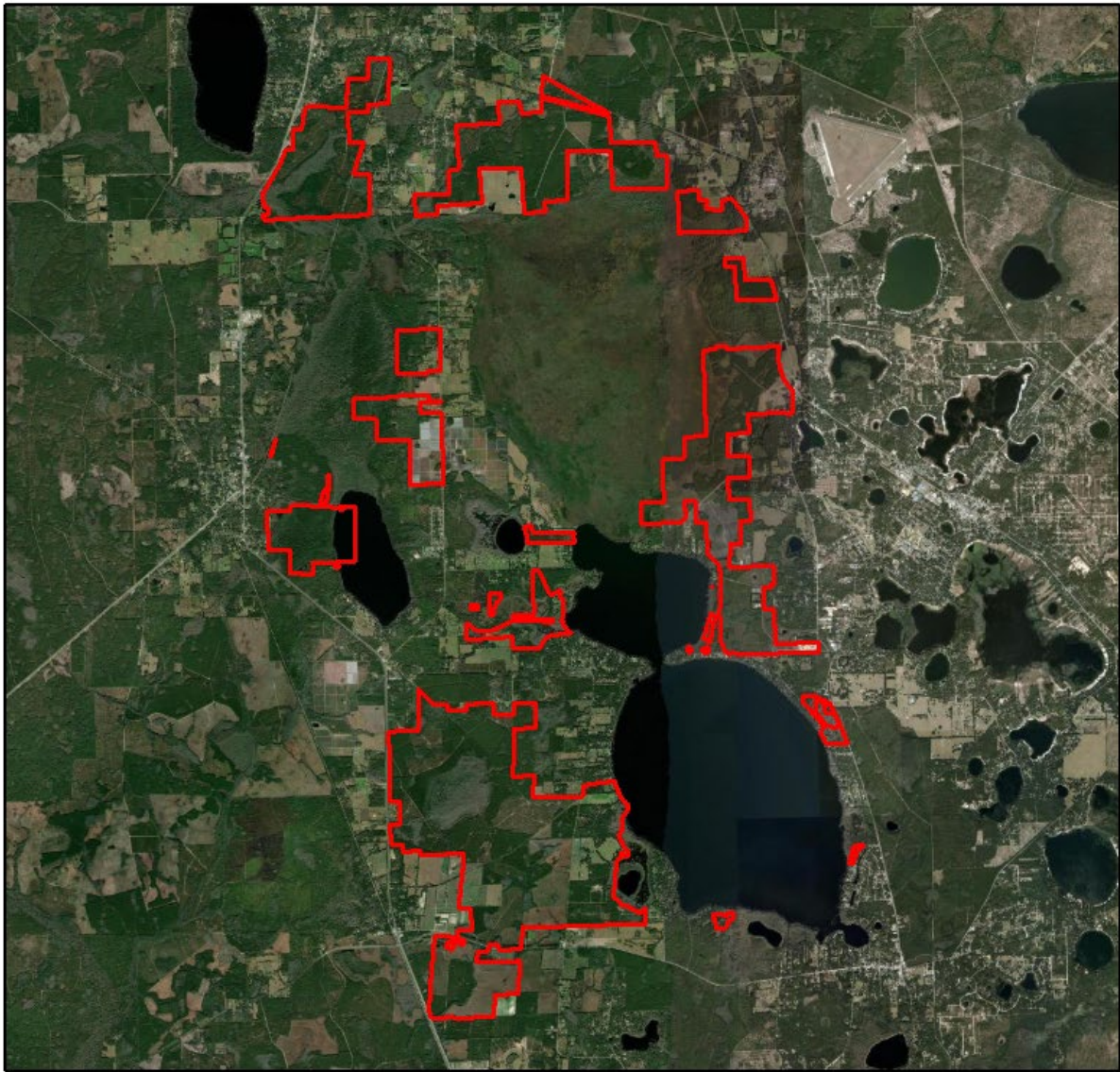


0 1.5 3 4.5 6 Miles

Created in ArcGIS 10.8 by the Florida Fish and Wildlife Conservation Commission October 2023

Vicinity Map

-  Lake Santa Fe Boundary
-  County Boundary
-  Conservation Lands
-  Florida Forever Projects



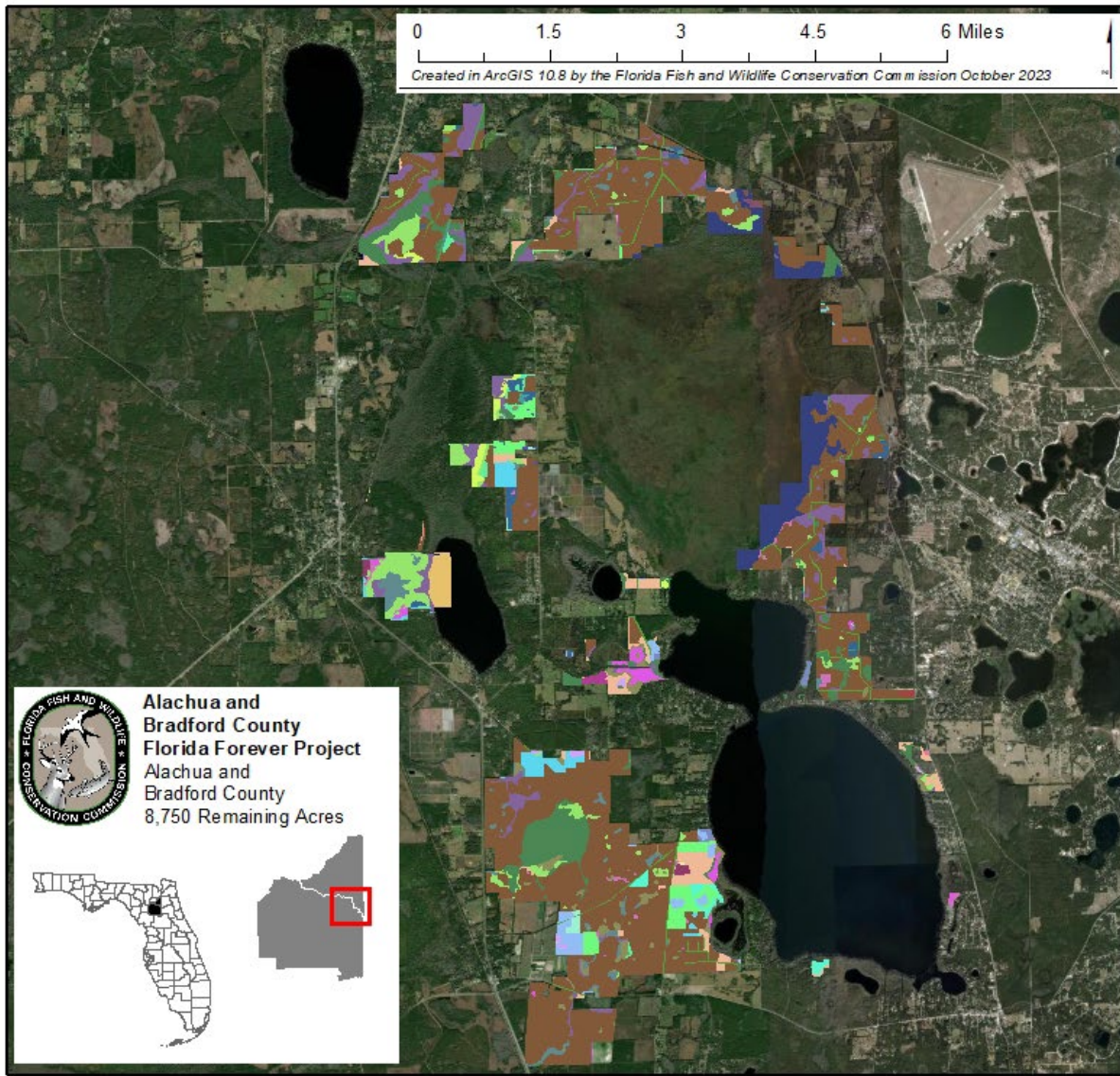
Lake Santa Fe
Florida Forever Project
 Alachua and
 Bradford County
 10,218 Remaining Acres

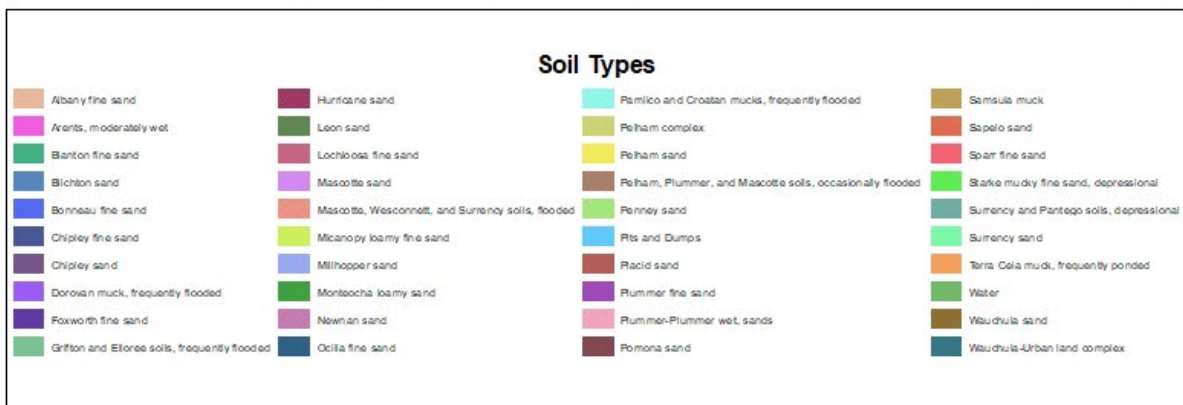
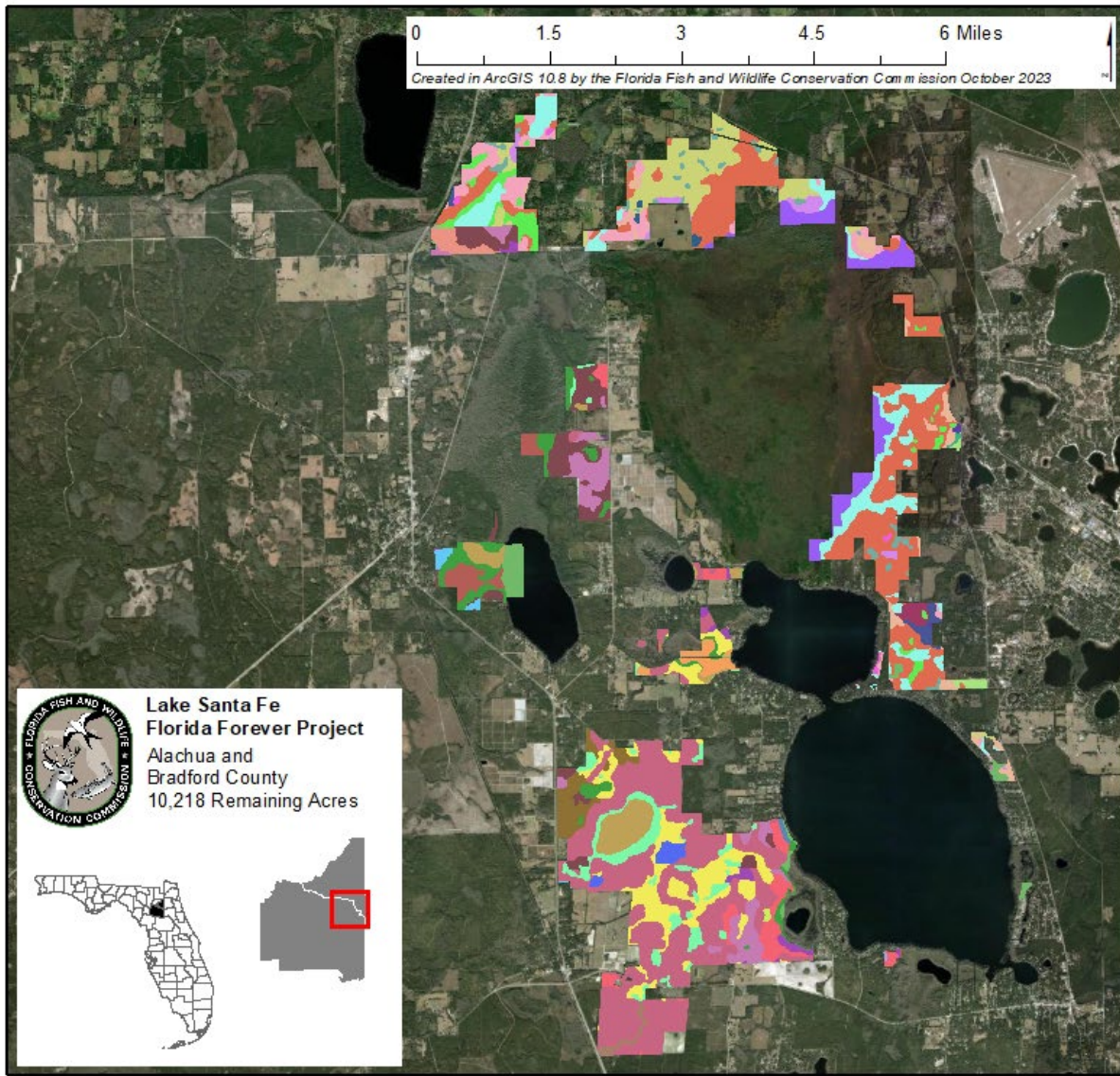


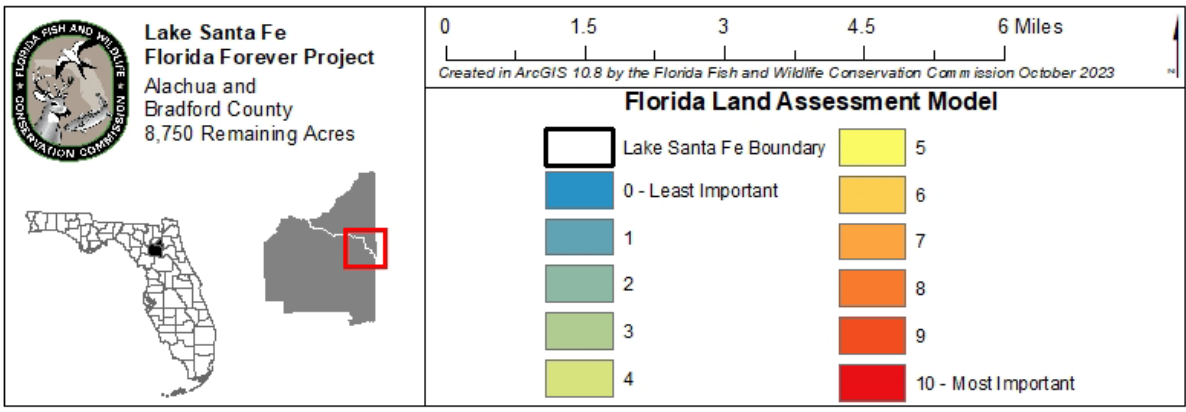
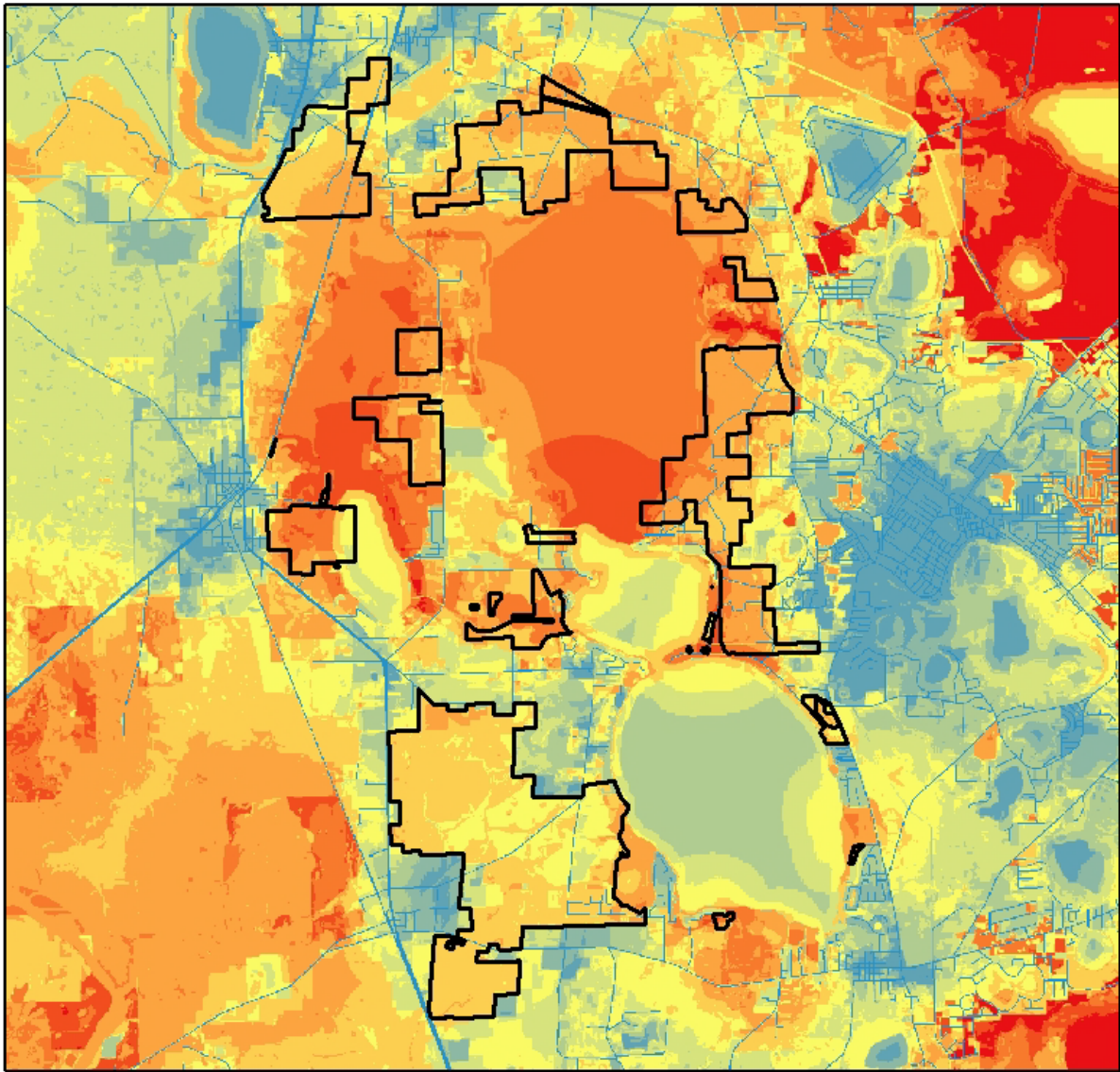
Aerial Imagery



Lake Santa Fe Boundary







FWC Florida Landscape Assessment Model 2023		
	Value	Acres
	0	194.5
	1	1.1
	2	23.7
	3	86.8
	4	198.3
	5	2011.7
	6	3311.3
	7	2051.9
	8	805.2
	9	68.4
	10	0.0
Mean FLAM value =	6.0	

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: 11082023 10:21:40

Shape Name: Unnamed polygon centered at -82.107195 °, 29.781457 °

Boundary Area: 8,750.31 acres

Buffer Area: 0 acres

Total Area: 8,750.31 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	1.54	0.02 %
High Intensity Urban	1822	Residential, Med. Density - 2-5 Dwelling Units/AC	18221	26.39	0.3 %
Orchards/Groves	18332	Orchards/Groves	18332	112.57	1.29 %
Rural	1830	Rural Open Forested	18311	5.89	0.07 %
Low Intensity Urban	1821	Low Structure Density	18212	23.92	0.27 %
Cultural - Lacustrine	3200	Aquacultural Ponds	3211	0.60	0.01 %
Cultural - Lacustrine	3200	Cultural - Lacustrine	3200	6.73	0.08 %
Natural Rivers and Streams	4100	Natural Rivers and Streams	4100	1.50	0.02 %
Cultural - Lacustrine	3200	Artificial Impoundment/Reservoir	3220	1.37	0.02 %
Basin Swamp	22132	Basin Swamp	22132	494.16	5.65 %
Tree Plantations	18333	Coniferous plantation	183332	4,735.07	54.11 %
Rural	1830	Unimproved/Woodland Pasture	183314	61.93	0.71 %
Transportation	1840	Transportation	1840	194.57	2.22 %
Dome Swamp	22131	Gum Pond	221312	1.91	0.02 %
Improved Pasture	183313	Improved Pasture	183313	207.73	2.37 %
Baygall	2231	Bay Swamp	22311	59.11	0.68 %
Wet Flatwoods	2221	Hydric Pine Flatwoods	22211	187.78	2.15 %
Cropland/Pasture	18331	Field Crops	183312	29.57	0.34 %
Cropland/Pasture	18331	Row Crops	183311	19.60	0.22 %
Natural Lakes and Ponds	3100	Natural Lakes and Ponds	3100	93.20	1.07 %
Rural	1830	Rural Structures	1832	4.72	0.05 %
Rural	1830	Rural Open	1831	108.77	1.24 %
Extractive	1870	Extractive	1870	1.10	0.01 %
Utilities	1860	Utilities	1860	0.06	0 %
Shrub and Brushland	1500	Shrub and Brushland	1500	23.05	0.26 %
High Pine and Scrub	1200	Upland Coniferous	1230	38.29	0.44 %
Upland Hardwood Forest	1110	Upland Hardwood Forest	1110	0.26	0 %
Mixed Hardwood-Coniferous	1400	Mixed Hardwood-Coniferous	1400	271.57	3.1 %
Mesic Flatwoods	1311	Mesic Flatwoods	1311	142.39	1.63 %
Bare Soil/Clear Cut	1880	Bare Soil/Clear Cut	1880	8.81	0.1 %
Freshwater Forested Wetlands	2200	Mixed Wetland Hardwoods	2233	642.86	7.35 %
Wet Flatwoods	2221	Wet Flatwoods	2221	0.56	0.01 %
Lacustrine	3000	Lacustrine	3000	0.75	0.01 %
Freshwater Forested Wetlands	2200	Mixed Hardwood-Coniferous Swamps	2240	544.59	6.22 %
Cypress	2211	Cypress	2211	164.93	1.88 %
Prairies and Bogs	2110	Mixed Scrub-Shrub Wetland	2112	407.78	4.66 %
Prairies and Bogs	2110	Wet Prairie	2111	41.93	0.48 %
Freshwater Non-Forested Wetlands	2100	Floating/Emergent Aquatic Vegetation	2140	0.35	0 %
Marshes	2120	Marshes	2120	82.43	0.94 %
TOTAL:				8,750.31	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	3,852.98	44.03 %
CLIP P1 in submerged lands/state waters	4.10	0.05 %
CLIP P1 in terrestrial	1,849.07	21.13 %
CLIP P2 in submerged lands/state waters	3.06	0.03 %
CLIP P2 in terrestrial	3,021.74	34.53 %
TOTAL:	8,730.95	99.78 %

CLIP- Landscape Category

Priority	Total Area (acres)	Percent of Area
0	9.06	0.1 %
1	21.81	0.25 %
2	316.24	3.61 %

3	8,403.21	96.03 %					
TOTAL:	8,750.31	100 %					
CLIP- Biodiversity Category							
Priority	Total Area (acres)	Percent of Area					
0	123.96	1.42 %					
1	103.77	1.19 %					
2	829.20	9.48 %					
3	3,056.06	34.93 %					
4	3,732.15	42.65 %					
5	905.17	10.34 %					
TOTAL:	8,750.31	100 %					
Priority FWC Strategic Habitat Conservation Areas 2021							
Priority	Total Area (acres)	Percent of Area					
0	6,976.64	79.73 %					
2	1,446.37	16.53 %					
5	327.30	3.74 %					
TOTAL:	8,750.31	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
Cooper's hawk						332.55	3.8 %
Cooper's hawk	Short-tailed hawk					594.34	6.79 %
Cooper's hawk	Striped newt					15.55	0.18 %
Florida mouse	Striped newt					2.51	0.03 %
Short-tailed hawk						519.25	5.93 %
Striped newt						306.60	3.5 %
					TOTAL:	1,770.81	20.24 %
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					
Frequent	8,750.31	100 %					
TOTAL:	8,750.31	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	812.17	9.28 %					
1	99.45	1.14 %					
2	8.86	0.1 %					
3	3,887.70	44.43 %					
4	2,758.83	31.53 %					
5	498.75	5.7 %					
6	667.45	7.63 %					
7	17.11	0.2 %					
TOTAL:	8,750.31	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
Berner's Microcaddisfly	Hydroptila berneri	G4G5	S3	N	N	E	2007-05-25	3.21	0.04 %
Eastern Diamondback Rattlesnake	Crotalus adamanteus	G3	S3	N	UR	E	1989-09	0.29	0 %
Florida Black Bear	Ursus americanus floridanus	G5T4	S4	N	N	B	2020-11-19	8,750.31	100 %
Florida Cernotinan Caddisfly	Cernotina truncona	G4	S3	N	N	E	2007-05-25	3.21	0.04 %
Florida ladies'-tresses	Spiranthes floridana	G1	S1	N	N	H	1928-04-15	33.60	0.38 %
Frosted Flatwoods Salamander	Ambystoma cingulatum	G2	S1	FT	T	X?	1976-01-30	64.43	0.74 %

Gopher Tortoise	Gopherus polyphemus	G3	S3	ST	N	C?	2018-19 winter	1.27	0.01 %
Gopher Tortoise	Gopherus polyphemus	G3	S3	ST	N	U	2009	243.55	2.78 %
Hampton false foxglove	Agalinis flexicaulis	G1G2	S1S2	N	N	C?	2009-10-17	0.17	0 %
Narrowleaf Naiad	Najas filifolia	G3	S2	T	UR	AB	2009	90.16	1.03 %
Narrowleaf Naiad	Najas filifolia	G3	S2	T	UR	AB	2014	5.28	0.06 %
Pine Snake	Pituophis melanoleucus	G4	S3	ST	UR	E	1971-10-09	59.03	0.67 %
Porter's Long-horn Caddisfly	Oecetis porteri	G3G4	S2S3	N	N	E	2007-05-25	24.80	0.28 %
Round-tailed Muskrat	Neofiber alleni	G2	S2	N	N	E	1963-12-13	165.80	1.89 %
Skelley's June Beetle	Phyllophaga skelleyi	G2	S2	N	N	E	1984-05-06	2,768.14	31.63 %
Timber Rattlesnake	Crotalus horridus	G4	S3	N	N	D	2011-06-09	323.32	3.69 %
Umber Shadowfly	Neurocordulia obsoleta	G5	S2	N	N	X?	1975-04	221.89	2.54 %
ZZ	Blackwater stream	G4	S3	N	N	B	2005-05-02	2.12	0.02 %
TOTAL:								12,760.58	145.83 %

Suitable Habitat that Supports Species Known to Occur in the Vicinity

COMMON NAME	SCIENTIFIC NAME	Total Area (acres)	Percent of Area
Florida Sandhill Crane	Antigone canadensis pratensis	606.61	6.93 %
Frosted Flatwoods Salamander	Ambystoma cingulatum	3,188.78	36.44 %
Narrowleaf Naiad	Najas filifolia	1,237.66	14.14 %
Porter's Long-horn Caddisfly	Oecetis porteri	414.09	4.73 %
Round-tailed Muskrat	Neofiber alleni	2.84	0.03 %
Wood Stork	Mycteria americana	156.47	1.79 %
TOTAL:		5,606.45	64.07 %

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
3	8,398.91	95.98 %
4	174.77	2 %
5	82.91	0.95 %
TOTAL:	8,656.59	98.93 %

Water Resources

FDEP Surface Water Classification

Waterbody Name	Water Type	Water Basin	Classification	Total Area (acres)	Percent of Area
UNNAMED SLOUGH	STREAM	2689	3F	162.85	1.86 %
SALUDA SWAMP DRAIN	STREAM	2691	3F	1,790.91	20.47 %
LOCHLOOSA CREEK	STREAM	2693	3F	1,120.82	12.81 %
LAKE BROOKLYN OUTLET	STREAM	2509C1	3F	69.87	0.8 %
SANTA FE RIVER HEADWATERS	STREAM	3605F	3F	4,042.73	46.2 %
SANTA FE LAKE	LAKE	3605G	3F	6.77	0.08 %
LAKE ALTO	LAKE	3605H	3F	88.75	1.01 %
DOUBLE RUN CREEK	STREAM	3630	3F	89.88	1.03 %
HAMPTON DITCH	STREAM	3633	3F	564.84	6.46 %

THERESSA SLOUGH	STREAM	3639	3F	193.39	2.21 %
UNNAMED SLOUGH	STREAM	3646	3F	619.51	7.08 %
TOTAL:				8,750.31	100 %
Outstanding Florida Waters					
Name	OFW Type	Total Area (acres)		Percent of Area	
Santa Fe River System	Special	1,370.04		15.66 %	
TOTAL:		1,370.04		15.66 %	
Florida Geological Survey Springs					
No Records Found					
National Wetlands Inventory					
Wetland Type		Wetland Code	Total Area (acres)		Percent of Area
FRESHWATER EMERGENT WETLAND		PEM1/FO6C	3.82		0.04 %
FRESHWATER EMERGENT WETLAND		PEM1/SS1F	19.72		0.23 %
FRESHWATER EMERGENT WETLAND		PEM1/FO6F	15.48		0.18 %
FRESHWATER EMERGENT WETLAND		PEM1/AB3F	2.04		0.02 %
FRESHWATER EMERGENT WETLAND		PEM1/SS2F	1.01		0.01 %
FRESHWATER EMERGENT WETLAND		PEM1/SS3C	25.15		0.29 %
FRESHWATER EMERGENT WETLAND		PEM1/SS6F	1.91		0.02 %
FRESHWATER POND		PAB3/FO2F	0.00		0 %
LAKE		L2AB3H	0.88		0.01 %
LAKE		L1UBHx	0.24		0 %
FRESHWATER POND		PAB3/EM1F	57.38		0.66 %
FRESHWATER POND		PAB3H	1.74		0.02 %
LAKE		L1UBH	89.54		1.02 %
FRESHWATER EMERGENT WETLAND		PEM1F	43.96		0.5 %
FRESHWATER EMERGENT WETLAND		PEM1Cx	5.02		0.06 %
FRESHWATER EMERGENT WETLAND		PEM1C	107.35		1.23 %
FRESHWATER EMERGENT WETLAND		PEM1A	31.46		0.36 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO3/6C	86.15		0.98 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO2F	8.15		0.09 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO3/4C	56.15		0.64 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO1C	7.24		0.08 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO1/4C	15.88		0.18 %
FRESHWATER EMERGENT WETLAND		PEM1Fx	8.17		0.09 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO7C	176.64		2.02 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO6/7C	44.59		0.51 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO6/4C	9.57		0.11 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO6/3C	684.87		7.83 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO4C	32.03		0.37 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO4/1C	25.51		0.29 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO4/6C	1.48		0.02 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO3C	4.58		0.05 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO4/3C	8.42		0.1 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO3B	129.67		1.48 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO6F	280.58		3.21 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO6C	20.88		0.24 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO6/EM1F	9.65		0.11 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO6/SS3C	3.98		0.05 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO6/EM1C	22.52		0.26 %
FRESHWATER POND		PUBH	7.53		0.09 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS7B	87.88		1 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS3/FO6B	11.88		0.14 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS6/3C	0.00		0 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS6/EM1Cd	6.85		0.08 %
FRESHWATER FORESTED/SHRUB WETLAND		PSSF	22.20		0.25 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS6F	0.91		0.01 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS3B	42.99		0.49 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO7/6B	97.93		1.12 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO7/1C	8.77		0.1 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS3/6C	1.86		0.02 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO7/6C	17.83		0.2 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS3/4B	12.25		0.14 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS1/3B	28.25		0.32 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS1/FO6F	3.94		0.05 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO7/1A	30.03		0.34 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS1C	4.76		0.05 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS1Cx	0.80		0.01 %
FRESHWATER FORESTED/SHRUB WETLAND		PSS1F	1.27		0.01 %
RIVERINE		R5UBH	10.71		0.12 %
RIVERINE		R5UBFx	1.59		0.02 %
RIVERINE		R4SBC	4.23		0.05 %
RIVERINE		R2UBHx	1.64		0.02 %
FRESHWATER POND		PUBHx	2.03		0.02 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO3/SS3B	87.55		1 %
FRESHWATER FORESTED/SHRUB WETLAND		PFO4A	29.06		0.33 %

FRESHWATER POND	PUBFx	1.69	0.02 %
	TOTAL:	2,569.81	29.37 %
Priority Floodplain Resources			
Priority	Total Area (acres)	Percent of Area	
5	38.26	0.44 %	
4	1,581.40	18.07 %	
3	959.10	10.96 %	
0	5,414.97	61.88 %	
2	639.28	7.31 %	
1	117.31	1.34 %	
TOTAL:	8,750.31	100 %	