

Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation
Land Conservation and Planning
Limestone Ranch 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 **Limestone Ranch** 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.

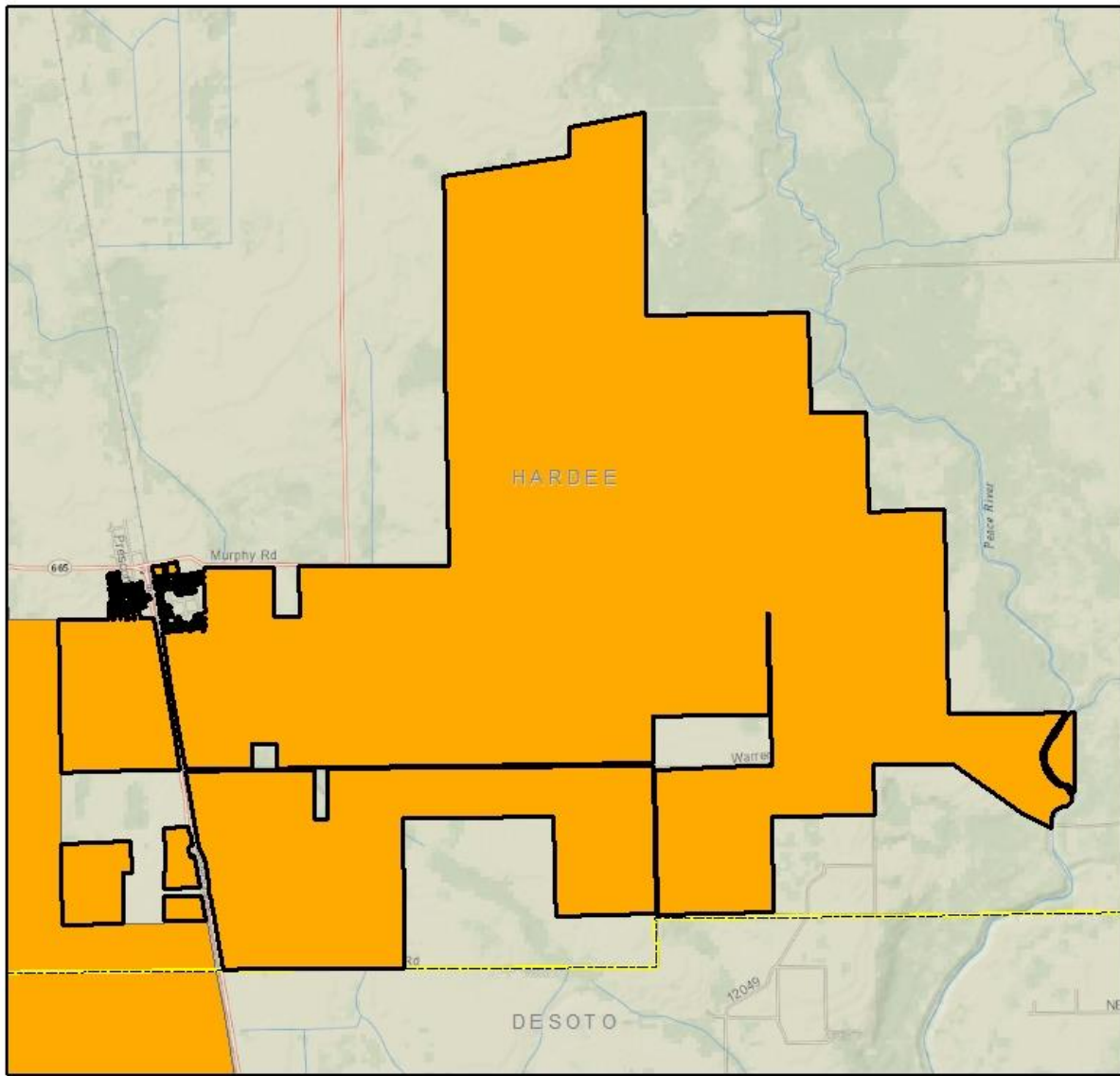
GIS Data

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.

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 2009² - 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 Potential Habitat 2008
- 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



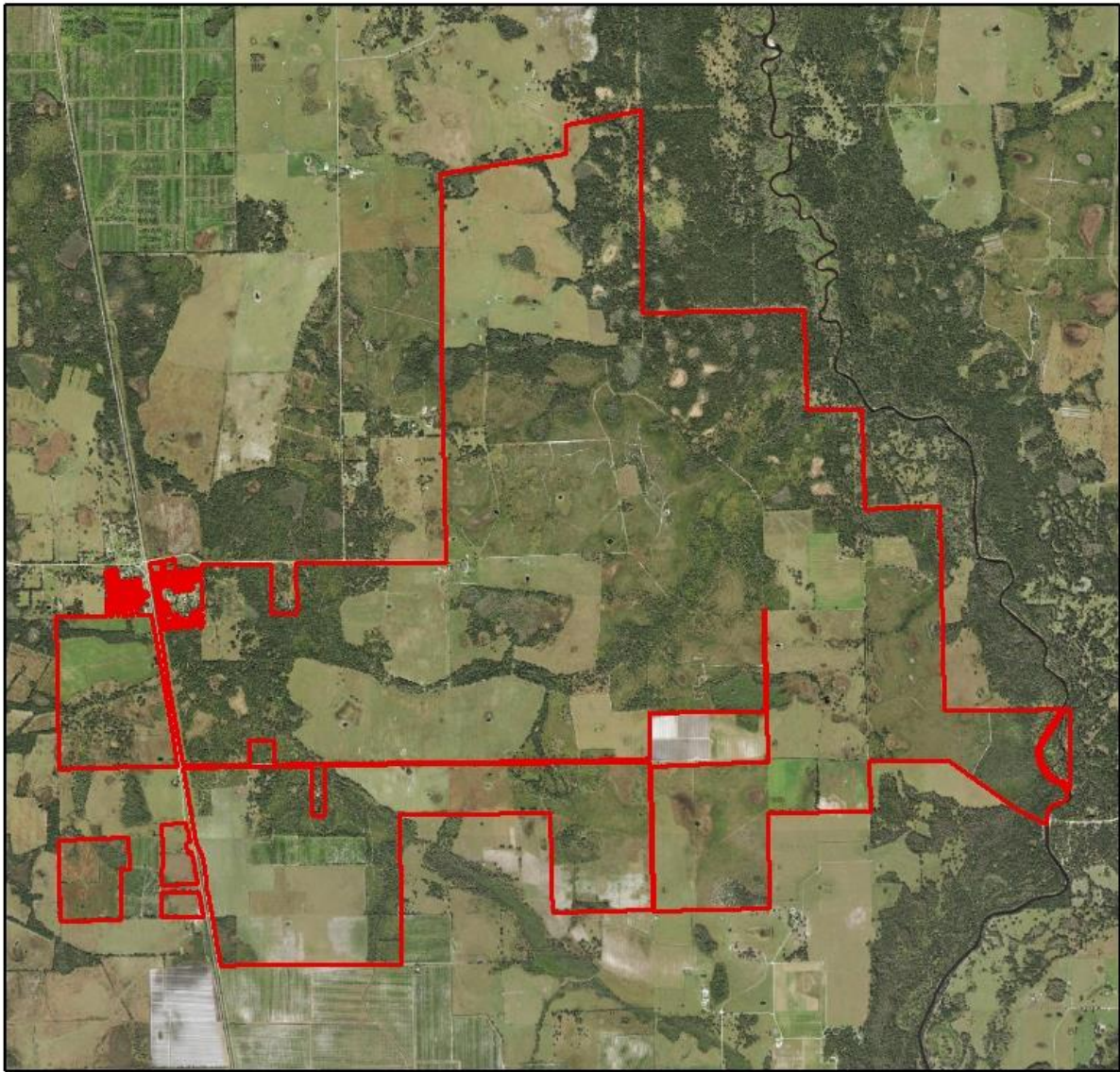
Limestone Ranch
Florida Forever Project
 Hardee County, Florida
 6,382 Remaining Acres



0 0.75 1.5 2.25 3 Miles
 Created in ArcGIS 10.7 by the Florida Fish and Wildlife Conservation Commission November 2021

General Location

-  Limestone Ranch
-  County
-  Conservation Lands
-  Florida Forever Projects



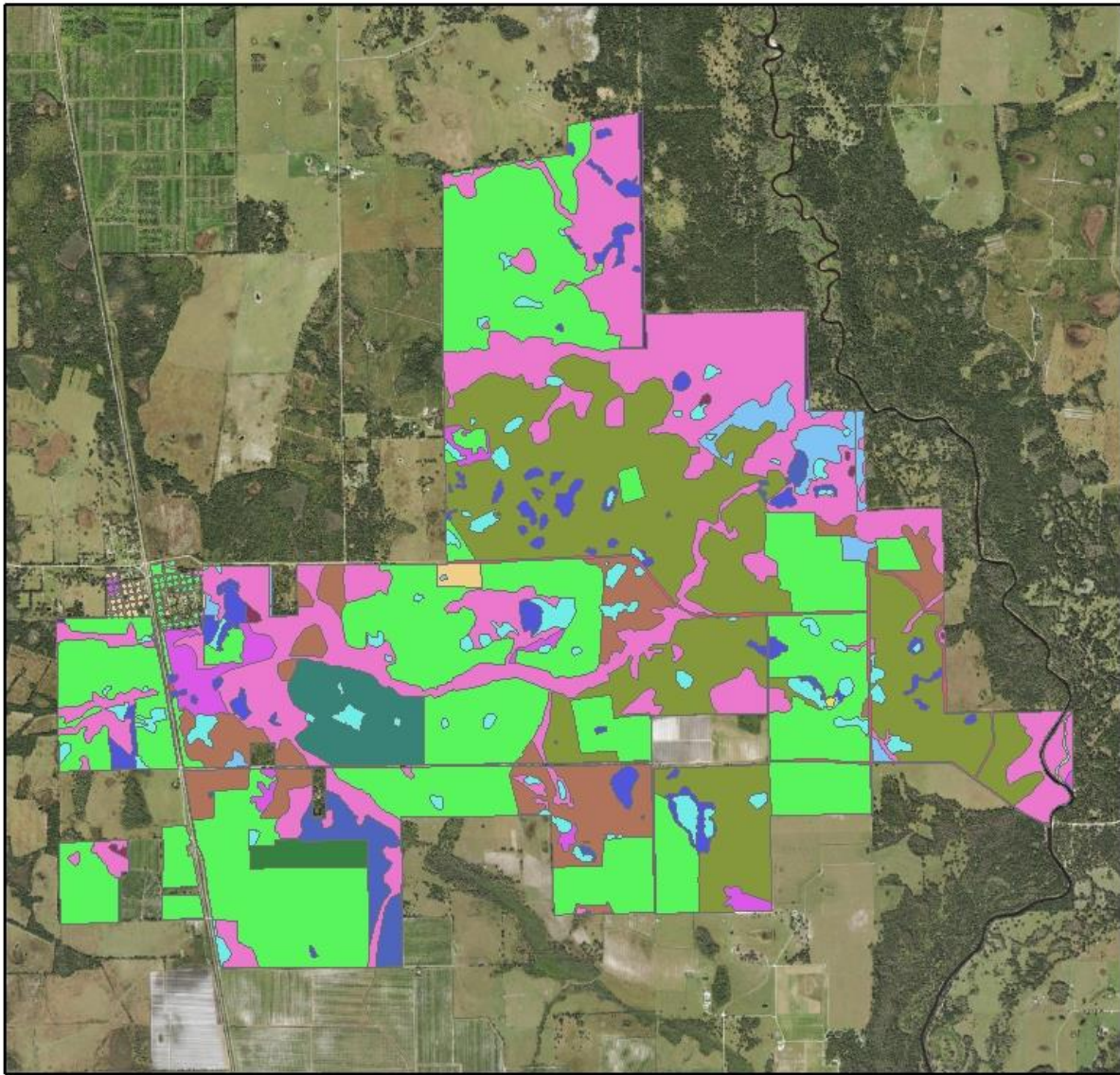
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Aerial Imagery

 Limestone Ranch



Limestone Ranch
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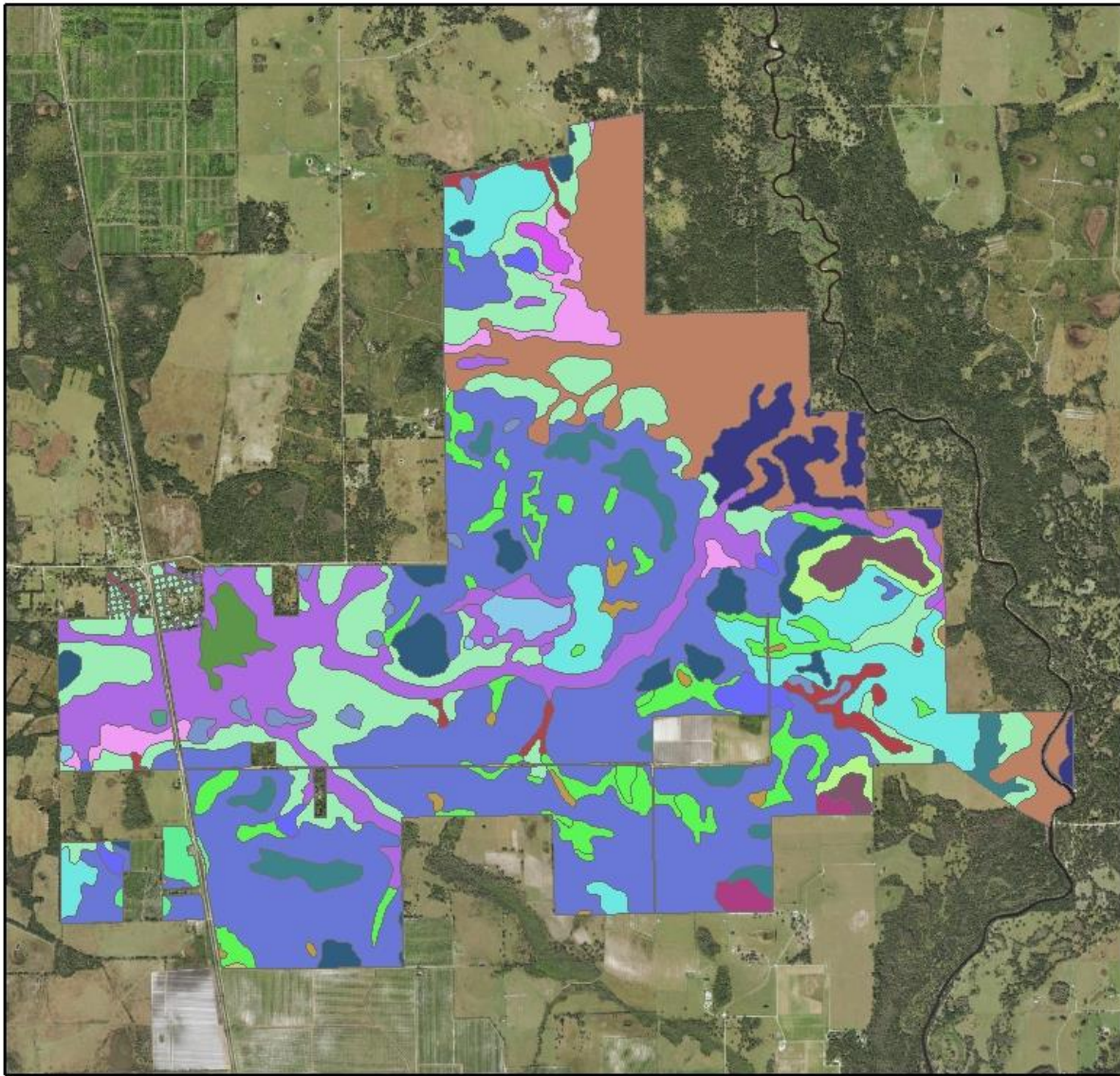


0 0.75 1.5 2.25 3 Miles

Created in ArcGIS 10.7 by the Florida Fish and Wildlife Conservation Commission November 2021

Cooperative Land Cover

Cropland/Pasture	Improved Pasture	Orchards/Groves
Cultural - Lacustrine	Low Intensity Urban	Prairies and Bogs
Cypress	Marshes	Rural
Estuarine	Mesic Flatwoods	Scrubby Flatwoods
Freshwater Forested Wetlands	Mixed Hardwood-Coniferous	Shrub and Brushland
Freshwater Non-Forested Wetlands	Natural Rivers and Streams	Transportation
		Utilities



Limestone Ranch
Florida Forever Project
 Hardee County, Florida
 6,382 Remaining Acres

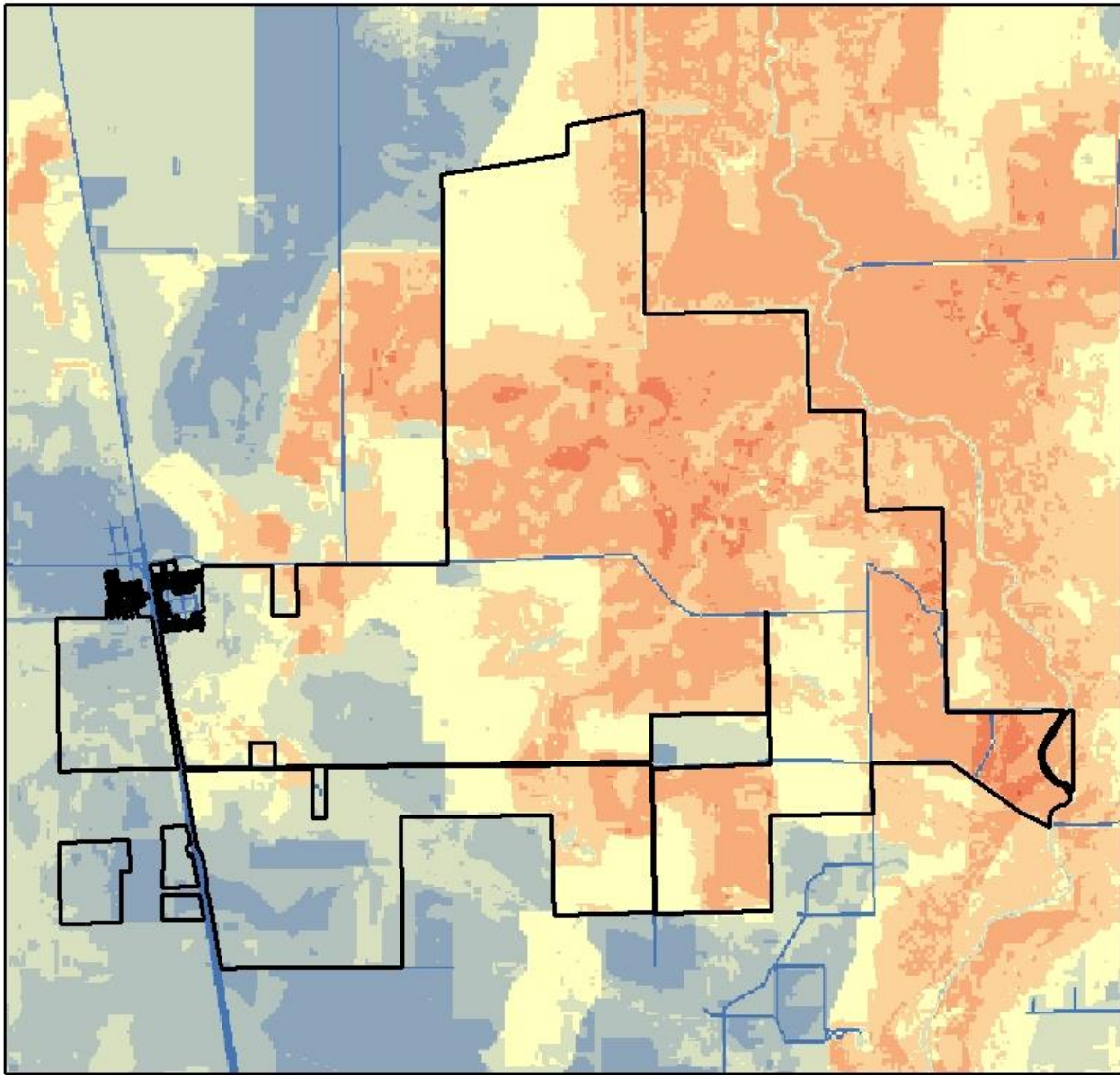


0 0.75 1.5 2.25 3 Miles

Created in ArcGIS 10.7 by the Florida Fish and Wildlife Conservation Commission November 2021

Soil Types

Adamsville fine sand	Holopaw fine sand	Popash mucky fine sand
Basinger fine sand	Immokalee fine sand	Smyrna sand
Bradenton loamy fine sand	Kaliga muck	St. Lucie fine sand
Bradenton-Felda-Chobee association	Manatee mucky fine sand	Tavares fine sand
Cassia fine sand	Myakka fine sand	Wabasso fine sand
Farnon fine sand	Ona-Ona, wet, fine sand	Water
Felda fine sand	Placid fine sand	Zolfo fine sand
Floridana mucky fine sand	Pomona fine sand	

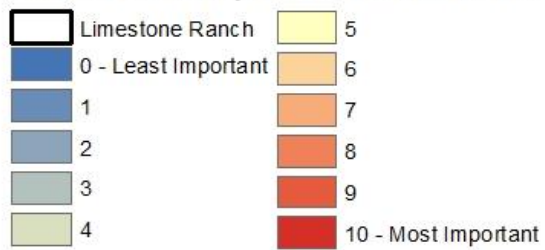


**Limestone Ranch
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Florida Landscape Assessment Model



FWC Florida Landscape Assessment Model 2023		
	Value	Acres
	0	62.8
	1	0.0
	2	197.5
	3	738.2
	4	582.9
	5	1528.2
	6	1369.0
	7	1756.5
	8	145.2
	9	0.2
	10	0.0
Mean FLAM value =	5.4	

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: 04242018 08:24:53

Shape Name: Limestone Ranch Florida Forever Project

Boundary Area: 6382.46 acres

Buffer Area: 0 acres

Total Area: 6382.46 acres

FWC Wildlife Data and Models

Cooperative Land Cover v3.2.5

Name - State	Code - State	Name - Site	Code - Site	Total Area (acres)	Percent of Area
Natural Rivers and Streams	4100	Natural Rivers and Streams	4100	3.49	0.05 %
Low Intensity Urban	1821	Residential, Low Density	18212	27.90	0.44 %
Cultural - Lacustrine	3200	Artificial Impoundment/Reservoir	3220	0.46	0.01 %
Freshwater Forested Wetlands	2200	Other Wetland Forested Mixed	2240	55.21	0.87 %
Cultural - Lacustrine	3200	Artificial/Farm Pond	3210	0.88	0.01 %
Rural	1830	Rural Open Forested	18311	2.70	0.04 %
Rural	1830	Unimproved/Woodland Pasture	183314	29.30	0.46 %
Transportation	1840	Transportation	1840	60.40	0.95 %
Improved Pasture	183313	Improved Pasture	183313	2,193.02	34.36 %
Orchards/Groves	18332	Orchards/Groves	18332	52.11	0.82 %
Cropland/Pasture	18331	Row Crops	183311	164.11	2.57 %
Freshwater Forested Wetlands	2200	Mixed Wetland Hardwoods	2233	1,366.45	21.41 %
Rural	1830	Rural Open	1831	75.25	1.18 %
Rural	1830	Rural Structures	1832	0.07	0 %
Shrub and Brushland	1500	Shrub and Brushland	1500	103.02	1.61 %
Mesic Flatwoods	1311	Mesic Flatwoods	1311	1,737.43	27.22 %
Mixed Hardwood-Coniferous	1400	Mixed Hardwood-Coniferous	1400	107.54	1.68 %
Utilities	1860	Utilities	1860	17.97	0.28 %
Freshwater Non-Forested Wetlands	2100	Floating/Emergent Aquatic Vegetation	2140	1.04	0.02 %
Cypress	2211	Cypress	2211	8.04	0.13 %
Marshes	2120	Marshes	2120	205.27	3.22 %
Prairies and Bogs	2110	Wet Prairie	2111	150.28	2.35 %
Prairies and Bogs	2110	Mixed Scrub-Shrub Wetland	2112	20.47	0.32 %
TOTAL:				6,382.43	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	4,182.65	65.53 %
CLIP P1 in submerged lands/state waters	1.20	0.02 %
CLIP P1 in terrestrial	739.96	11.59 %
CLIP P2 in submerged lands/state waters	2.21	0.03 %
CLIP P2 in terrestrial	1,451.50	22.74 %
TOTAL:	6,377.52	99.92 %

Priority FWC Strategic Habitat Conservation Areas 2009

Priority Class	Total Area (acres)	Percent of Area
Priority 1	146.04	2.29 %
Priority 2	99.06	1.55 %
Priority 3	523.89	8.21 %
Priority 5	733.44	11.49 %
TOTAL:	1,502.44	23.54 %

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 swallow-tailed kite						359.03	5.63 %
Cooper's hawk						733.44	11.49 %
Cooper's hawk	American swallow-tailed kite					164.86	2.58 %
Florida grasshopper sparrow						128.69	2.02 %
Florida grasshopper sparrow	Florida scrub jay					17.35	0.27 %
Florida scrub jay						97.73	1.53 %
Florida scrub jay	American swallow-tailed kite					1.33	0.02 %
TOTAL:						1,502.44	23.54 %

FWC - WCPR Focal Species

Richness Class	Total Area (acres)	Percent of Area
1 - 3 Focal Species Overlap	1,679.90	26.32 %

10 - 12 Focal Species Overlap	506.98	7.94 %
4 - 6 Focal Species Overlap	2,676.64	41.94 %
7 - 9 Focal Species Overlap	1,412.56	22.13 %
TOTAL:	6,276.09	98.33 %
FWC Wildlife Observations		
No Records Found		
Panther location		
No Records Found		
Panther mortality		
No Records Found		
Panther Priority Habitat		
No Records Found		
Black bear location		
No Records Found		
Black bear road kill		
No Records Found		
Bear Range		
Bear Range	Total Area (acres)	Percent of Area
Occasional	6,382.46	100 %
TOTAL:	6,382.46	100 %
Rare Fish		
No Records Found		
Rare Fish Imperiled Waters		
No Records Found		
Southern bald eagle nest		
Nest ID	County	# Features
HD005	Hardee	1
TOTAL:		1

Florida Natural Areas Inventory Data

Element Occurrences

COMMON NAME	SCIENTIFIC NAME	GLOBAL RANK	STATE RANK	FWC STATUS	FEDERAL STATUS	Total Area (acres)	Percent of Area
A Mayfly	Stenacron floridense	G3G4	S3S4	N	N	0.43	0.01 %
Bachman's Sparrow	Peucaea aestivalis	G3	S3	N	N	72.93	1.14 %
Giant Orchid	Pteroglossaspis ecristata	G2G3	S2	T	N	0.02	0 %
Gopher Tortoise	Gopherus polyphemus	G3	S3	ST	C	63.68	1 %
Little Blue Heron	Egretta caerulea	G5	S4	ST	N	4.18	0.07 %
TOTAL:						141.24	2.21 %

Potential Habitat 2008

COMMON NAME	SCIENTIFIC NAME	Total Area (acres)	Percent of Area
Eastern Indigo Snake	Drymarchon couperi	980.70	15.37 %
Manatee	Trichechus manatus	80.90	1.27 %
Florida Sandhill Crane	Grus canadensis pratensis	425.23	6.66 %
TOTAL:		1,486.83	23.3 %

USFWS

Critical Habitat

No Records Found

Water Resources

FDEP Surface Water Classification

Name	Type	Basin	Classification	Total Area (acres)	Percent of Area
BEAR BRANCH	STREAM	BEAR BRANCH	3F	36.27	0.57 %
CHARLIE CREEK ABOVE PEACE RIVER	STREAM	CHARLIE CREEK ABOVE PEACE RIVER	3F	17.88	0.28 %
LIMESTONE CREEK	STREAM	LIMESTONE CREEK	3F	4,188.75	65.63 %
PEACE RIVER ABOVE CHARLIE CREEK	STREAM	PEACE RIVER ABOVE CHARLIE CREEK	3F	2,043.59	32.02 %
PEACE RIVER ABOVE JOSHUA CREEK	STREAM	PEACE RIVER ABOVE JOSHUA CREEK	3F	95.97	1.5 %
TOTAL:				6,382.46	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	PEM1A	14.41	0.23 %
FRESHWATER EMERGENT WETLAND	PEM1Ad	17.52	0.27 %
FRESHWATER EMERGENT WETLAND	PEM1C	27.94	0.44 %
FRESHWATER EMERGENT WETLAND	PEM1Cd	29.17	0.46 %
FRESHWATER EMERGENT WETLAND	PEM1F	62.25	0.98 %
FRESHWATER EMERGENT WETLAND	PEM1Fd	242.43	3.8 %
FRESHWATER EMERGENT WETLAND	PEM1Fx	8.99	0.14 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1Ad	23.74	0.37 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1Cd	38.28	0.6 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1F	347.87	5.45 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1Fd	951.14	14.9 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO2C	0.96	0.02 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO2F	0.62	0.01 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO2Fd	0.35	0.01 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS1Cd	37.10	0.58 %
FRESHWATER POND	PAB4F	1.04	0.02 %
FRESHWATER POND	PABH	2.94	0.05 %
FRESHWATER POND	PUBH	0.34	0.01 %
FRESHWATER POND	PUBHx	5.07	0.08 %
RIVERINE	R2UBH	0.80	0.01 %
	TOTAL:	1,812.94	28.41 %

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			

Soils - NFWWMD			
Depth to Water Table (cm)			
No Records Found			

Soils - SRWMD			
Depth to Water Table (cm)			
No Records Found			

Soils - SJRWMD			
Depth to Water Table (cm)			
No Records Found			

Soils - SWFWMD			
Depth to Water Table (cm)			
Soil Series	Depth to Water Table (cm)	Total Area (acres)	Percent of Area
St. Lucie fine sand	201	32.78	0.51 %
Tavares fine sand, 0 to 5 percent slopes	145	74.38	1.17 %
Adamsville fine sand	84	69.77	1.09 %
Zolfo fine sand	84	32.15	0.5 %
Cassia fine sand	59	182.94	2.87 %
Farnton fine sand	31	21.60	0.34 %
Immokalee fine sand, 0 to 2 percent slopes	31	196.11	3.07 %
Myakka fine sand, 0 to 2 percent slopes	31	474.43	7.44 %
Ona fine sand	31	1.63	0.03 %

Pomona fine sand	31	782.78	12.27 %
Smyrna sand	31	2,080.02	32.61 %
Wabasso fine sand	31	119.57	1.87 %
Bradenton loamy fine sand	20	170.44	2.67 %
Basinger fine sand, 0 to 2 percent slopes	15	270.01	4.23 %
Bradenton loamy fine sand, frequently flooded	15	9.92	0.16 %
Bradenton-Felda-Chobee association, frequently flooded	15	776.41	12.17 %
Felda fine sand	15	656.66	10.29 %
Felda fine sand, frequently flooded	15	8.70	0.14 %
Holopaw fine sand	15	80.08	1.26 %
Basinger fine sand depressional	0	69.20	1.08 %
Felda fine sand, depressional	0	6.01	0.09 %
Floridana mucky fine sand, depressional	0	47.20	0.74 %
Kaliga muck	0	63.64	1 %
Manatee mucky fine sand, depressional	0	59.32	0.93 %
Placid fine sand, depressional	0	32.74	0.51 %
Popash mucky fine sand	0	55.50	0.87 %
Water	0	4.52	0.07 %
TOTAL:		6,378.52	100 %

Soils - SFWMD

Depth to Water Table (cm)

No Records Found