

**ITEM 19:**

Consider a 10-year update to the L. Kirk Edwards Wildlife and Environmental Area Management Plan (Lease No. 4619).

**LOCATION:**

Leon County

**APPLICANT:**

Florida Fish and Wildlife Conservation Commission (FWC)

**DSL STAFF REMARKS:**

*Background*

Located in eastern Leon County, the L. Kirk Edwards Wildlife and Environmental Area (LKEWEA) gives outdoor enthusiasts the opportunity to explore vital habitat for wildlife in the form of uplands, sinkholes, forested wetlands and marshes. Its location provides access to waters and wetlands associated with Lower Lake Lafayette, making the LKEWEA prime habitat for various species of wading birds and the American alligator, while drier, upland areas are inviting to species such as gopher tortoise, the southern fox squirrel and eastern indigo snake.

The LKEWEA is owned in part by the Trustees and partially by the FWC. The original 687 acres were donated to the Florida Game and Freshwater Fish Commission, now the FWC, by Louise Kirk Edwards on December 27, 1977. The FWC acquired 4.82 additional acres in 1984, and another 33.83 acres in 1987. The 1,057-acre Wood Sink addition, which was originally part of the Upper St. Marks River Corridor Florida Forever Project, was purchased by the State of Florida from the Nature Conservancy (TNC) in December 2008. Prior to acquisition by the TNC, this tract was owned by St. Joe (formerly known as the St. Joe Timber Company). Title to the Wood Sink addition of the LKEWEA is held by the Board of Trustees. In May 2009, the DSL, as staff to the Board of Trustees, entered into a lease agreement for the Wood Sink Addition with FWC as lessee and lead manager of the entire LKEWEA.

The LKEWEA is managed by the FWC for the conservation of imperiled and more common wildlife, and for fish and wildlife based public outdoor recreation. The area is managed to conserve the important natural communities that provide habitat for a wide range of imperiled and common wildlife species. Current and anticipated resource uses of the property are diverse. Hunting continues to be a popular recreational activity on the LKEWEA. The area also offers excellent opportunities for bird watching. The diversity of vegetation not only harbors a variety of bird species but also provides good opportunities for mammalian wildlife viewing. Other uses include hiking, paddling, photography, biking, sightseeing and horseback riding.

*Management Plan Overview*

Through the services of the Florida Natural Areas Inventory (FNAI), FWC has mapped the natural and anthropogenic community types on LKEWEA. Through this work, FNAI has identified and mapped a total of 18 community types within the LKEWEA. The largest natural community types consist of basin swamp and upland pine.

The FWC has developed the Florida Landscape Assessment Model (FLAM) as a Geographic Information Systems-based assessment tool that incorporates a wide variety of landscape and

wildlife species data. The FLAM evaluates the Florida landscape based upon important natural resources and habitat needs of wildlife to identify ecologically significant lands in the state, and to assess the potential impacts of management and land-use changes. The FLAM was developed to provide 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) identify appropriate parcels for public land acquisition for wetland and upland habitat mitigation purposes. The FLAM ranks habitat from a 0-10; a rank of 10 being of greatest value. The FLAM (2020) indicates that the LKEWEA has a very high mean wildlife value of 7.9.

The FWC completed a Wildlife Conservation Prioritization and Recovery Species Management Strategy (WCPR Strategy) for the LKEWEA in October 2010. The WPCR Strategy recommends formal monitoring for 6 species (gopher tortoise, Bachman's sparrow, brown-headed nuthatch, northern bobwhite, wood stork, and southeastern bat) and recommends opportunistic monitoring for the remaining species. The WCPR Strategy additionally includes 14 species, including gopher frog, Florida pine snake, gopher tortoise, swallow-tailed kite, Bachman's sparrow, brown-headed nuthatch, Cooper's hawk, Louisiana waterthrush, limpkin, northern bobwhite, southern bald eagle, wading birds, Florida black bear, and the southeastern bat.

The Division of Historical Resources (DHR) observations are broken down into five categories: archeological sites, resource groups, historical structures, historic bridges and historic cemeteries. The DHR Master Site File indicates three known archaeological sites, two resource groups, and one historical bridge on the LKEWEA. The FWC will submit subsequently located historic sites on LKEWEA to DHR for inclusion in their Master Site File.

The FWC has adopted a comprehensive approach to the planning and administration of fish and wildlife resource based public outdoor recreational opportunities for the LKEWEA. To accomplish this, the FWC has worked with recreational stakeholders and the general public to develop a Recreation Master Plan for the LKEWEA. This plan will be used to further design and develop appropriate infrastructure that supports the recreational use of the area by the general public. The LKEWEA Recreation Master Plan includes planning for parking, trail design, and area resource interpretation.

The Florida Legislature requires that all land management plans include long and short-term goals. These goals must be measurable objectives, and short-term goals must be achievable within a two-year planning period. Pursuant to Section 253.034, F.S., the Division of State Lands began compiling the short-term goals from each land management plan approved since July 1, 2016. The Division has included short-term goals from this management plan as part of this item.

Management goals presented in the draft plan include:

- Improve extant habitat and restore disturbed areas.
- Maintain, improve, or restore imperiled species populations and habitats.
- Monitor, maintain, improve, or restore game and non-game species populations and habitats.
- Remove exotic and invasive plants and animals and conduct needed maintenance and control.
- Provide public access and recreational opportunities.

- Protect water quality and quantity, restore hydrology to the extent feasible, and maintain the restored condition.
- Manage timber resources to improve or restore natural communities for the benefit of wildlife.
- Protect, preserve, and maintain historical resources.
- Develop the capital facilities and infrastructure necessary to meet the goals and objectives of this management plan.
- Enhance fish and wildlife conservation, resource and operational management through development of an optimal boundary.
- Develop appropriate adaptation strategies in response to projected climate change effects and their potential impacts on fish and wildlife conservation, resources, and the operational management of the LKEWEA.
- Provide access and use of the LKEWEA to current cooperative managers and continue collaborative management and research efforts.

### *Public Involvement*

The FWC conducted a Management Advisory Group Meeting on June 26, 2018, in Tallahassee, Florida, resulting in the top three ranked ideas:

- Provide high quality outdoor recreation opportunities to meet user expectations.
- Minimize adverse impacts from problematic plants and animals, including exotics.
- Manage fish and wildlife populations and their habitats.

Results of this meeting were used by the FWC to develop management goals and objectives and to identify opportunities and strategies for inclusion in this Management Plan.

A public hearing, as required by Chapter 259.032(10), Florida Statutes, was held on July 26, 2019 in Lake Panasoffkee, Florida. There were questions and comments made by the public during the testimony period. Those comments primarily the trail system and trail heads.

### *Surplus Lands*

The evaluation of LKEWEA by FWC has determined that all portions of the area are being managed and operated for the original purposes of acquisition and remain integral to the continued conservation of important fish and wildlife resources, and continue to provide good fish and wildlife resource based public outdoor recreational opportunities. Therefore, no portion of the LKEWEA is recommended for potential surplus review.

### *State Land Management Review Team*

A Land Management Review (LMR) was conducted in October 2017. The review team found that the property is managed in accordance with the purposes for which it was acquired and the management practices, including public access, are in compliance with the management plan. No recommendations were offered by the team

The 2017 LMR notes were reviewed as part of developing this plan and the agreed upon changes and recommendations were made to this management plan.

### **DSL STAFF RECOMMENDATION:**

Approve the management plan.

**ARC RECOMMENDATION:**

- APPROVE**
- APPROVE WITH MODIFICATIONS:** \_\_\_\_\_
- DEFER**
- WITHDRAW**
- NOT APPROVE**
- OTHER:** \_\_\_\_\_



**L. Kirk Edwards Wildlife Management and Environmental Area  
Land Management Plan Short Term Goals**

Section	Section Description	Goal	Item Number	Item Description
6.2	Imperiled Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration	Maintain, improve or restore imperiled species populations and habitats.	6.2.1	Update WCPR strategy by 2022.

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*Source:* Florida DEP, Office of Environmental Services, Revised 2020-MWE.

**LAND MANAGEMENT PLAN EXECUTIVE SUMMARY**

Lead Agency: Florida Fish and Wildlife Conservation Commission (FWC)  
 Common Name of Property: L. Kirk Edwards Wildlife and Environmental Area (LKEWEA)  
 Location: Leon County, Florida  
 Acreage Total: 1,783 Acres  
 Acreage Breakdown:

<b>Land Cover Classification</b>	<b>Acres</b>	<b>Percent of Total Area</b>
Basin marsh	111.68	6.5%
Basin swamp	551.68	32.0%
Bottomland forest	265.89	15.4%
Canal/Ditch	3.88	0.2%
Depression marsh	2.24	0.1%
Developed	1.94	0.1%
Dome swamp	17.26	1.0%
Firebreak	6.89	0.4%
Floodplain swamp	46.5	2.7%
Mesic hammock	65.63	3.8%
Pine plantation	25.89	1.5%
Restoration upland pine	60.59	3.5%
Road	12.77	0.7%
Sinkhole	0.51	<0.1%
Successional hardwood forest	18.30	1.06%
Upland hardwood forest	38.94	2.26%
Upland pine	462.82	26.9%
Wet flatwoods	28.9	1.7%

\*GIS-calculated acreage for land cover classification varies slightly from actual total acreage.

Lease/Management Agreement No.: 4619 (Appendix 12.1)

Use: Single          Management Responsibilities:  
 Multiple X Agency FWC Responsibilities  
LEAD, SUBLESSEE (Wildlife and Environmental Area, resource protection, law enforcement)

Designated Land Use: Wildlife and Environmental Area

Sublease (s): None

Encumbrances: Leon County easement as described in Warranty Deed; Access Easement with private landowner (Appendix 12.2 and 12.3)

Type Acquisition: Fish and Wildlife Habitat Program

Unique Features: Natural: Natural communities, Karst formation (Wood Sink)

Archaeological/Historical: Three sites, two resource groups and one structure documented within LKEWEA

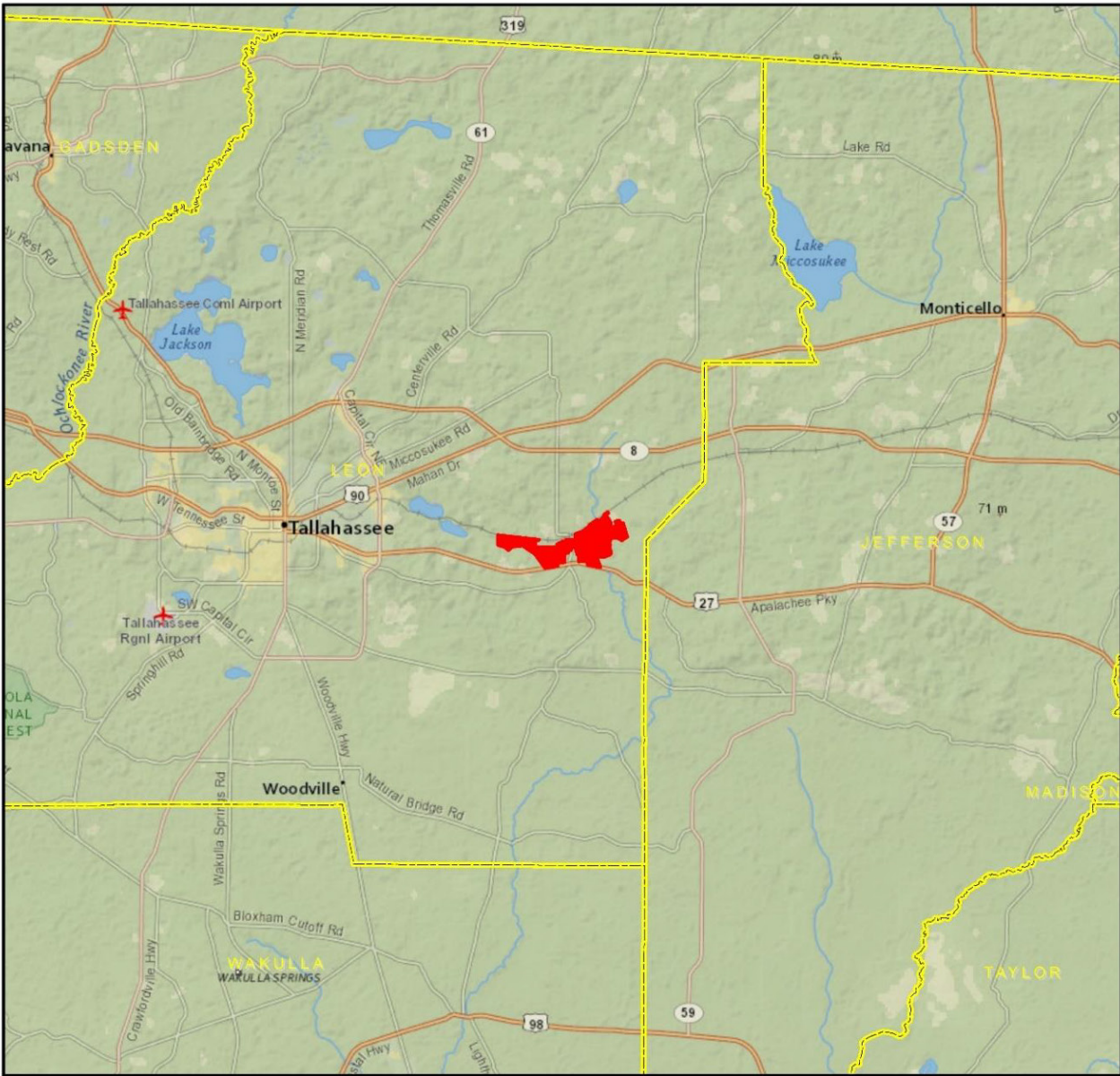
Management Needs: Habitat restoration and improvement; public access and recreational opportunities; hydrological preservation and restoration; exotic and invasive species maintenance and control; imperiled species habitat maintenance, enhancement, and restoration.

Acquisition Needs/Acreage: 45 parcels on the FWC Additions and Inholdings list; 1,295 acres remaining in the Upper St. Marks River Corridor Florida Forever Project (Figure 15).

Surplus Lands/Acreage: None

Public Involvement: Management Advisory Group consensus building meeting and Public Hearing (Appendix 12.5 and 12.6)

Florida Fish and Wildlife Conservation Commission | LKEWEA Management Plan



 **L. Kirk Edwards Wildlife and Environmental Area**  
Leon County, Florida  
1,783 Acres



0 4.5 9 18 Miles

Created in ArcGIS 10.6 by the Florida Fish and Wildlife Conservation Commission June 2020

**General Location**



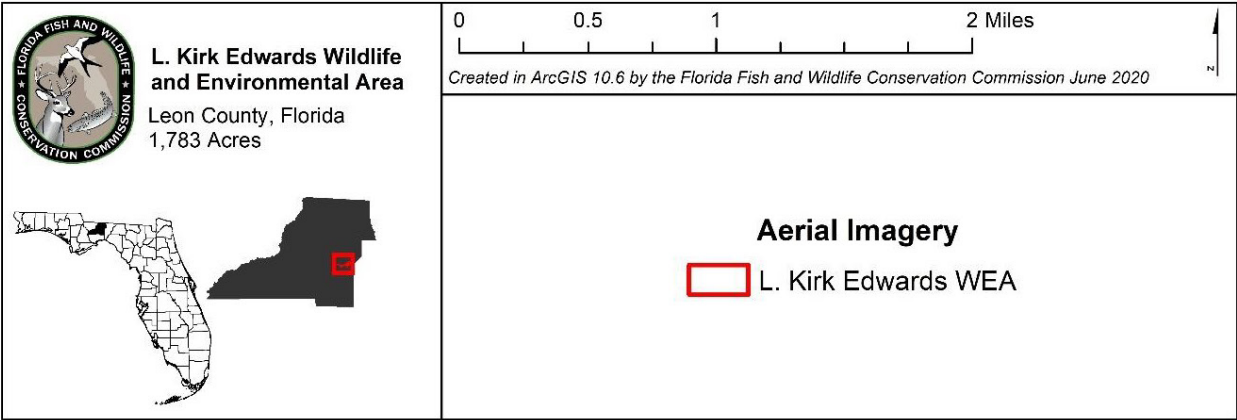
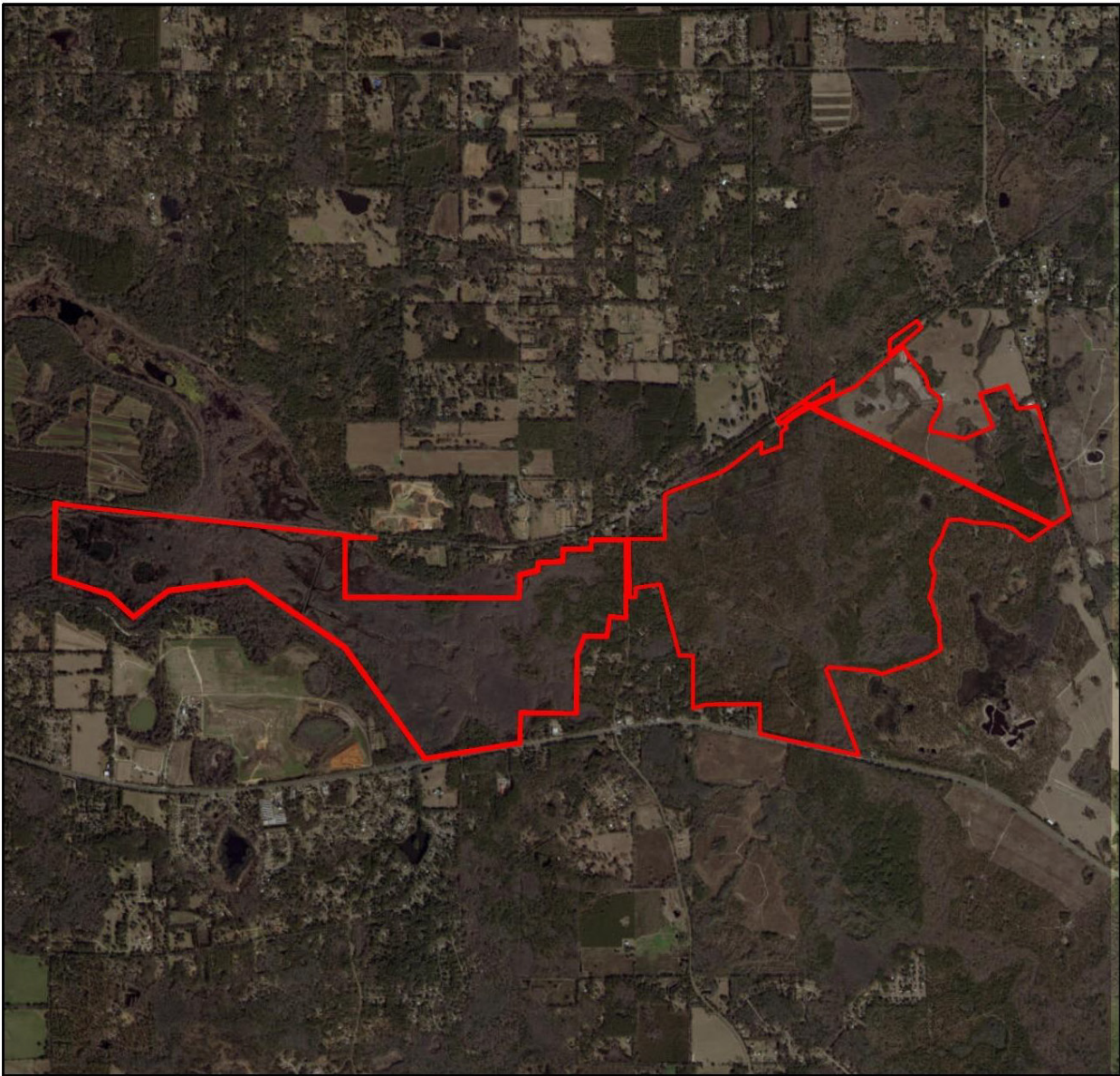
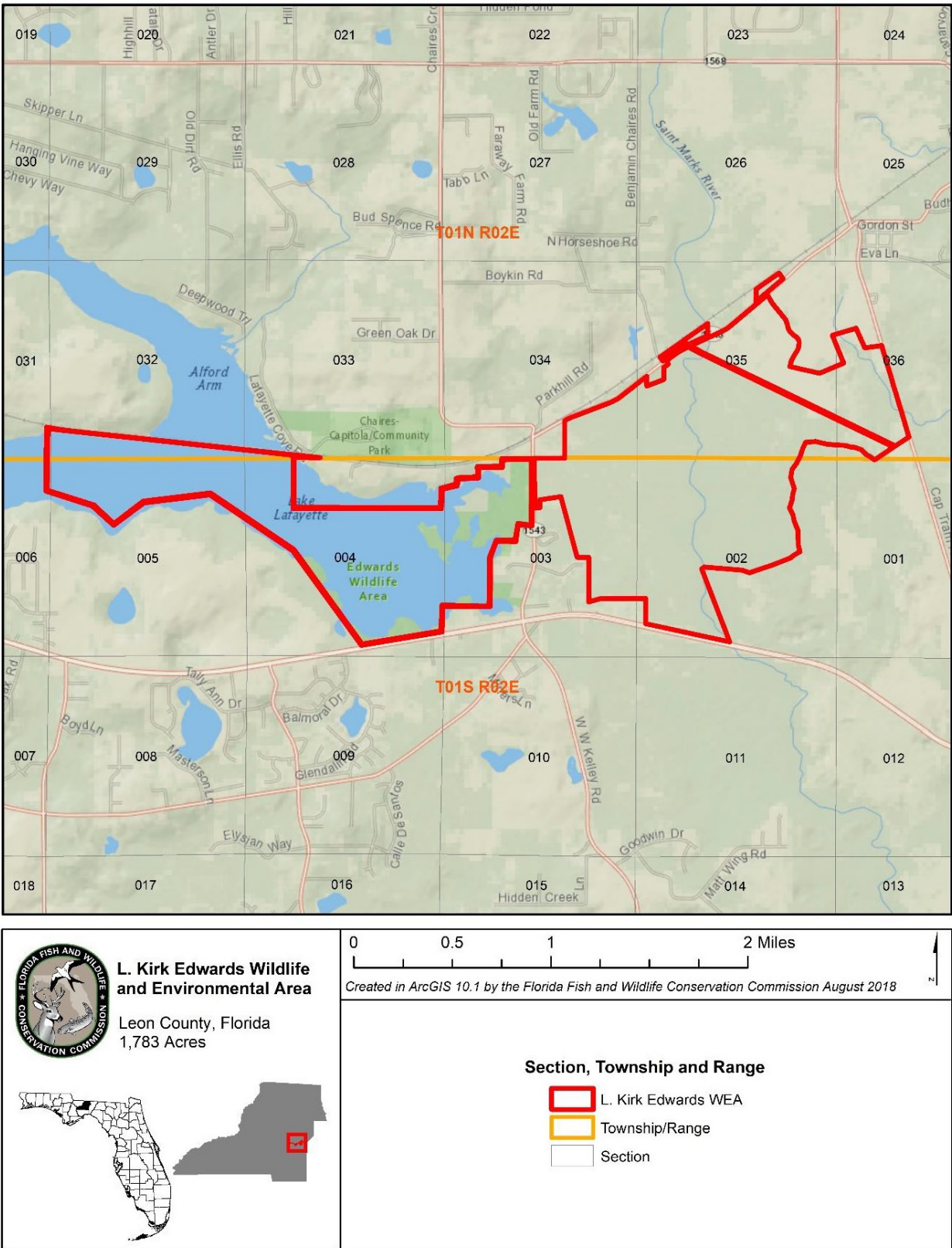
-  L. Kirk Edwards WEA
-  County

Figure 1. General Location of the LKEWEA





**Figure 2. LKEWEA Boundary and Aerial Imagery**



**Figure 3. Section, Township and Range Location of the LKEWEA**  
Florida Fish and Wildlife Conservation Commission | LKEWEA Management Plan



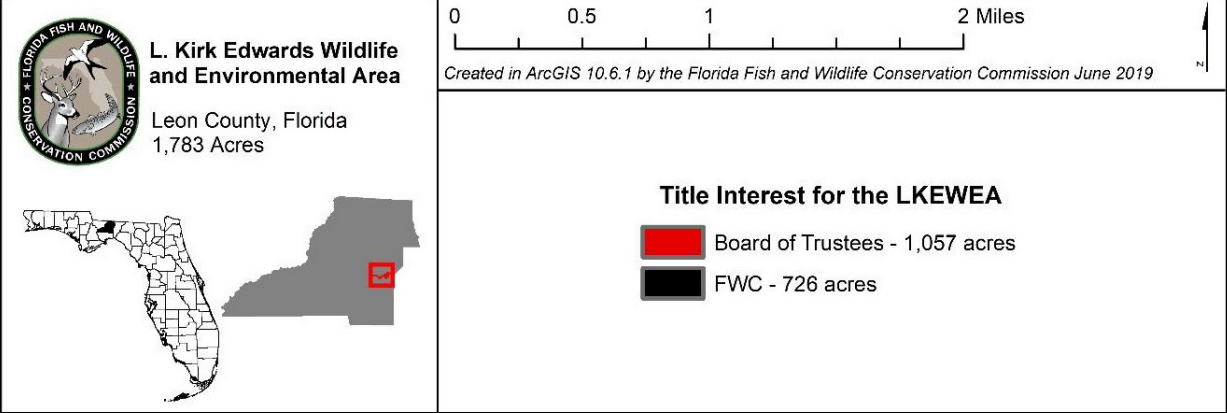
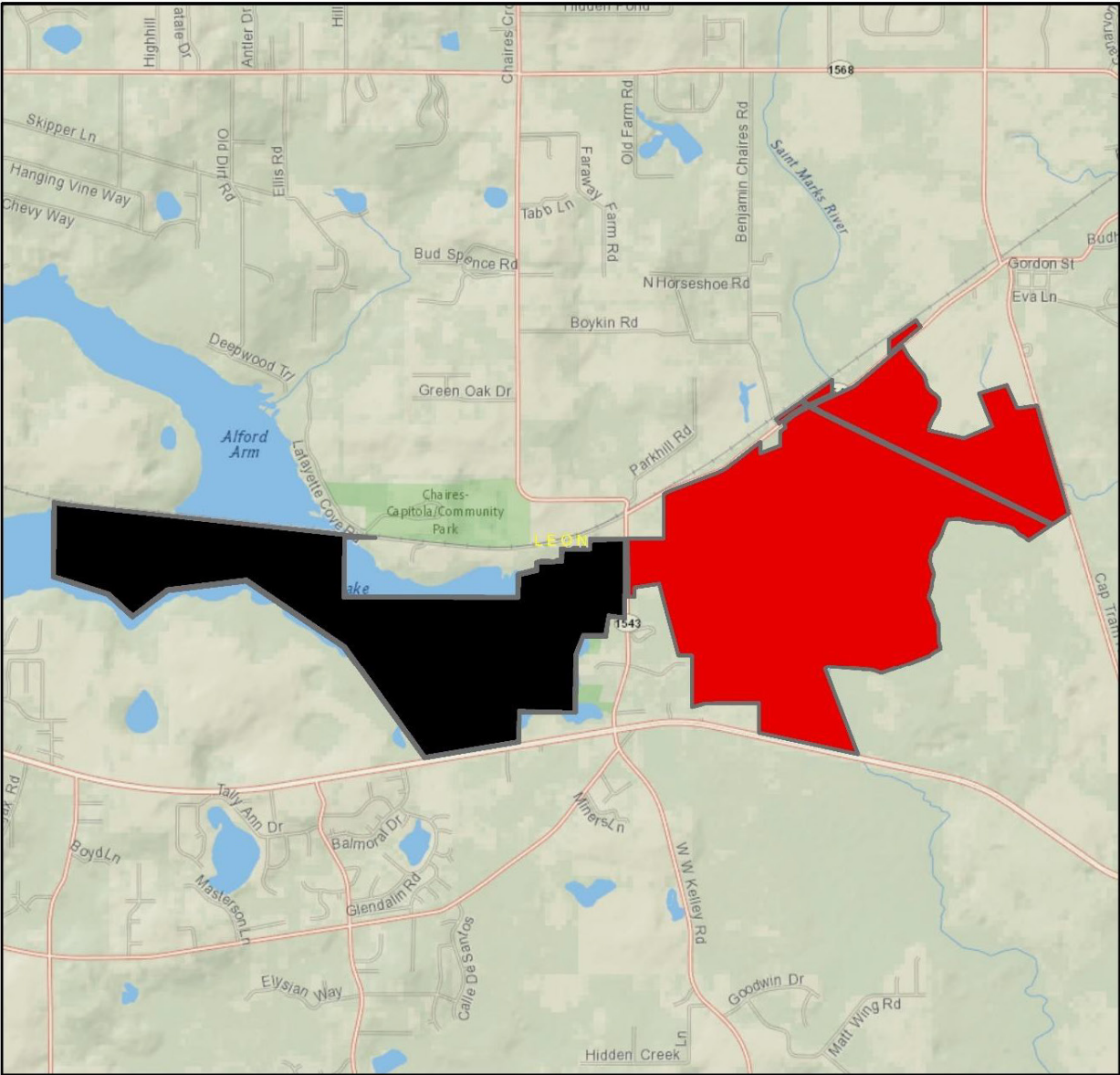


Figure 4. Title Interest for the LKEWEA

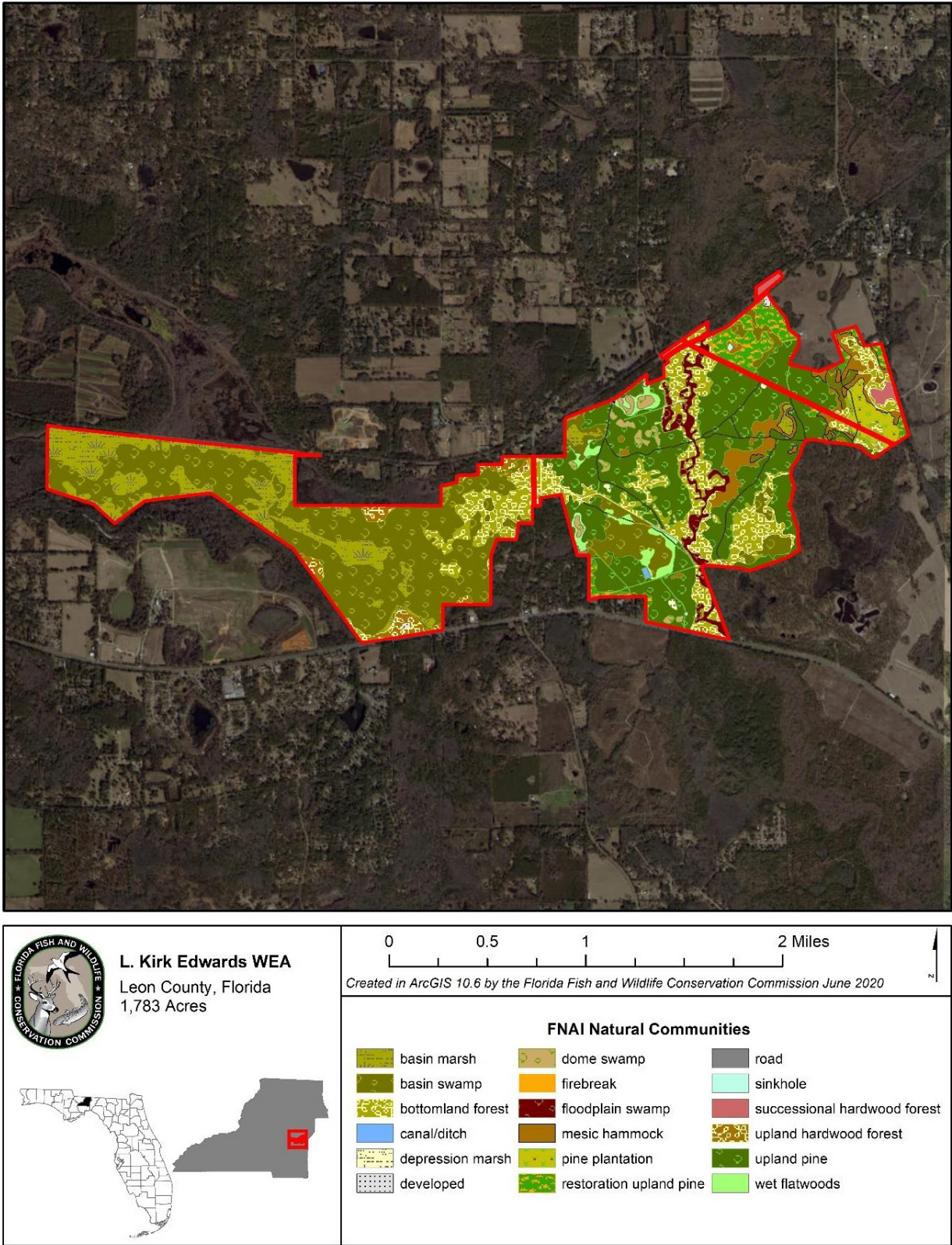


Figure 8. Natural and Altered Communities found at the LKEWEA



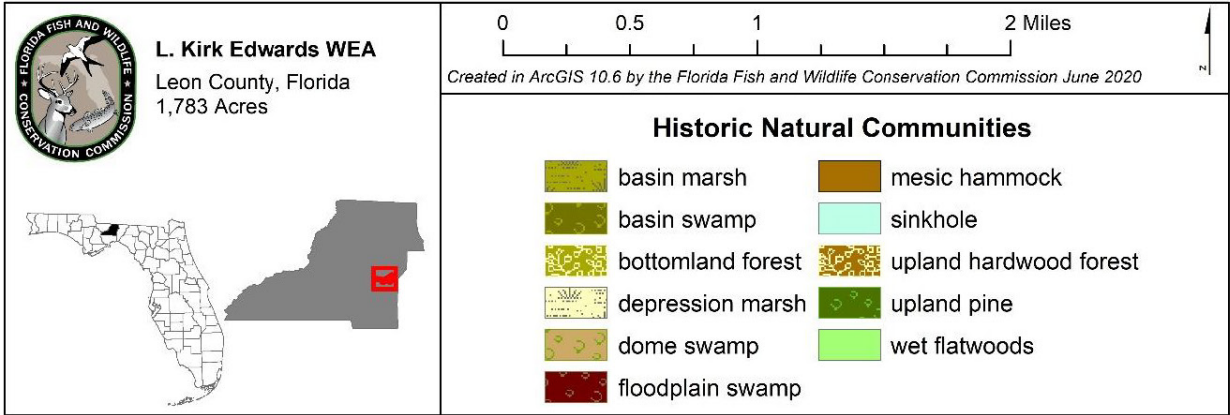
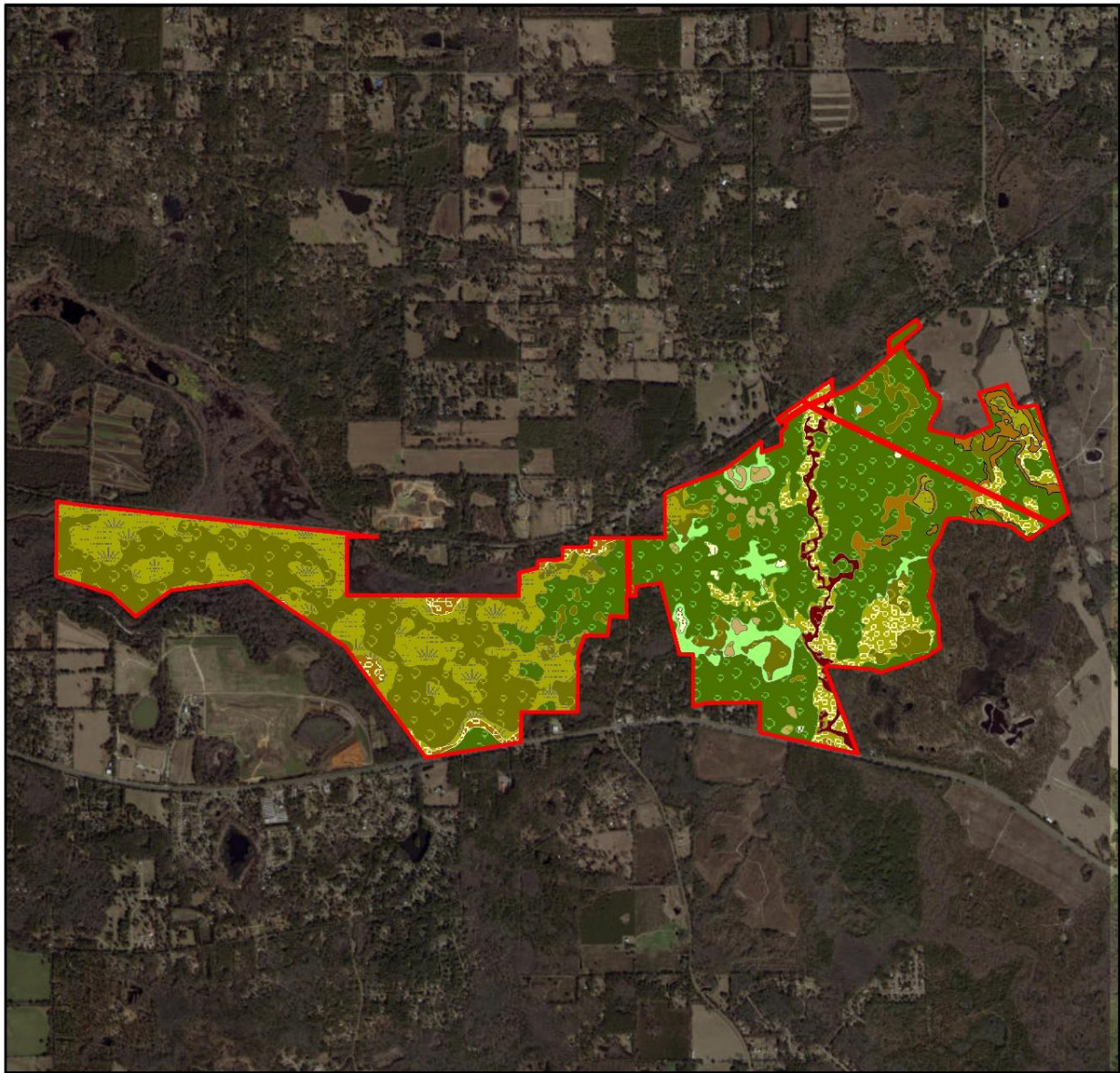
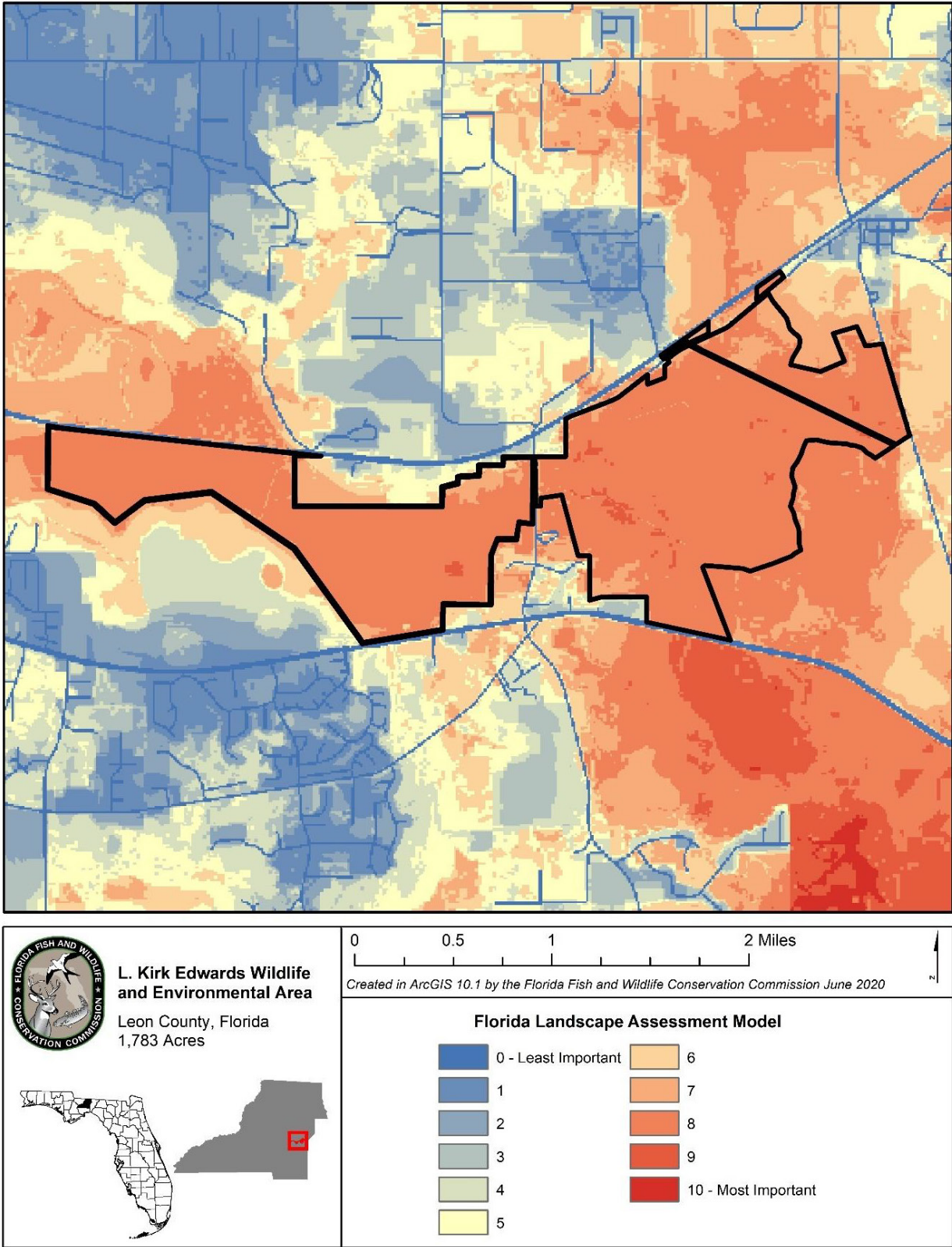


Figure 9. Historic Natural Communities at the LKEWEA





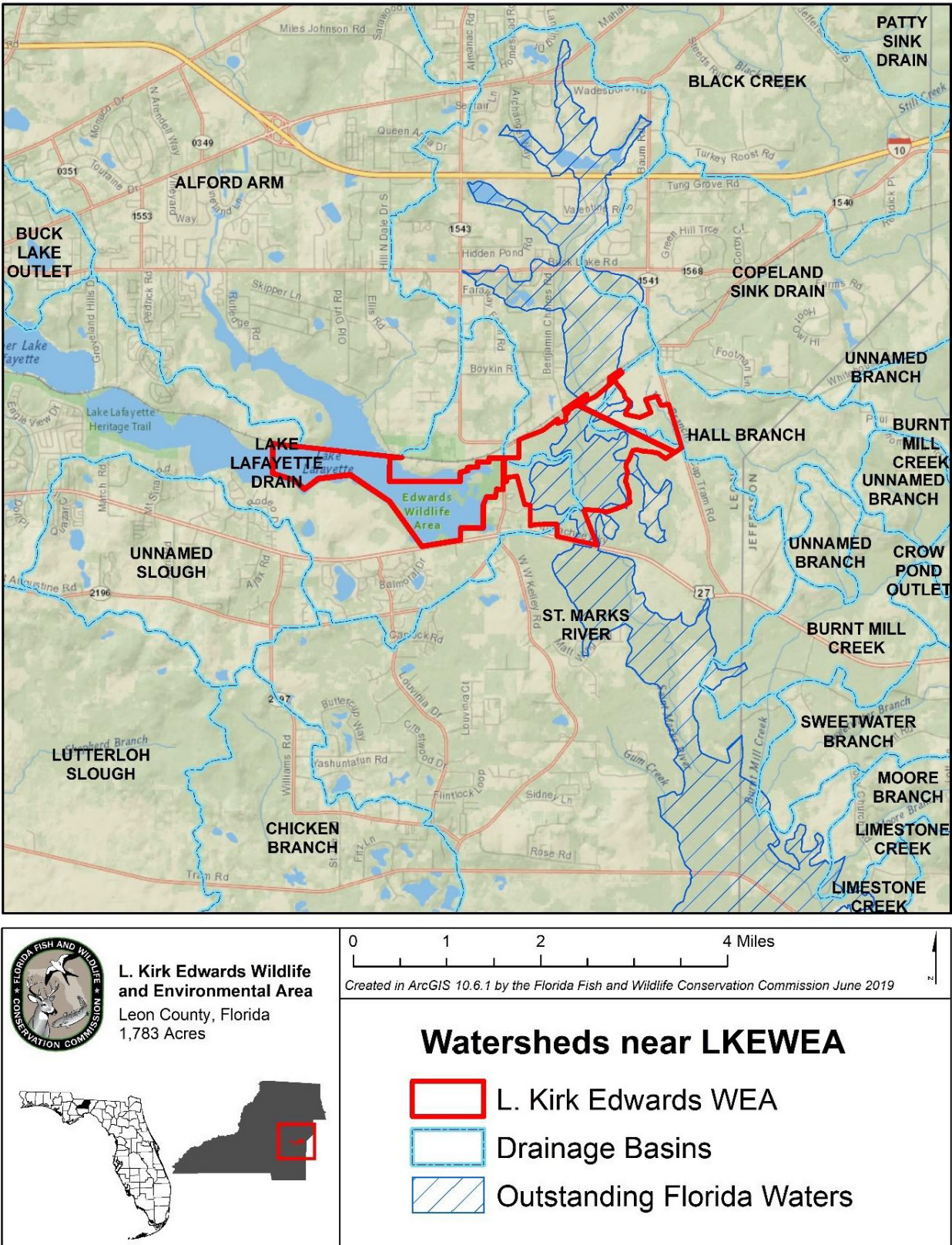
**Figure 10. Florida Landscape Assessment Model**





Figure 11. FNAI Element Occurrences at LKEWEA





**Figure 12. The LKEWEA Water Resources**

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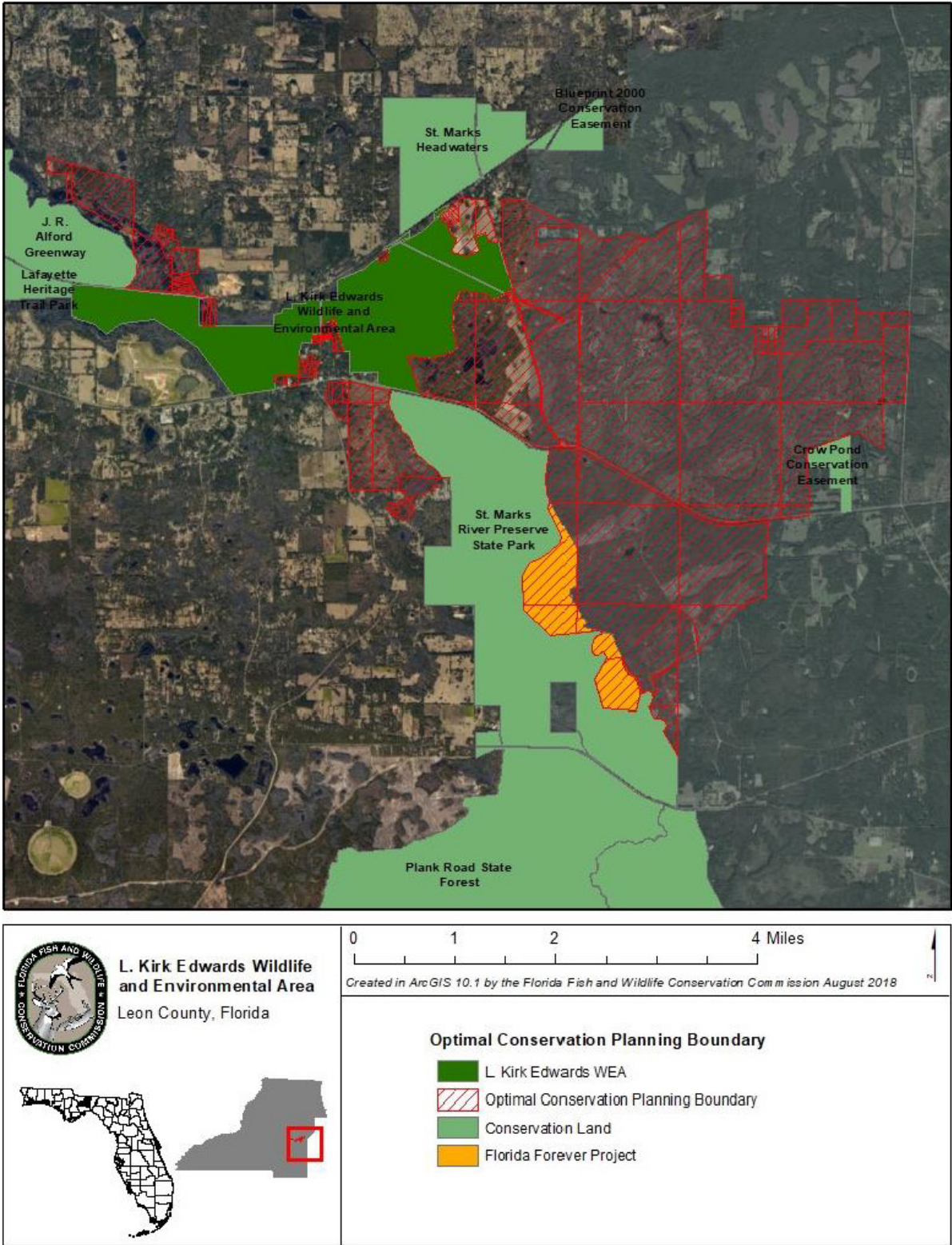
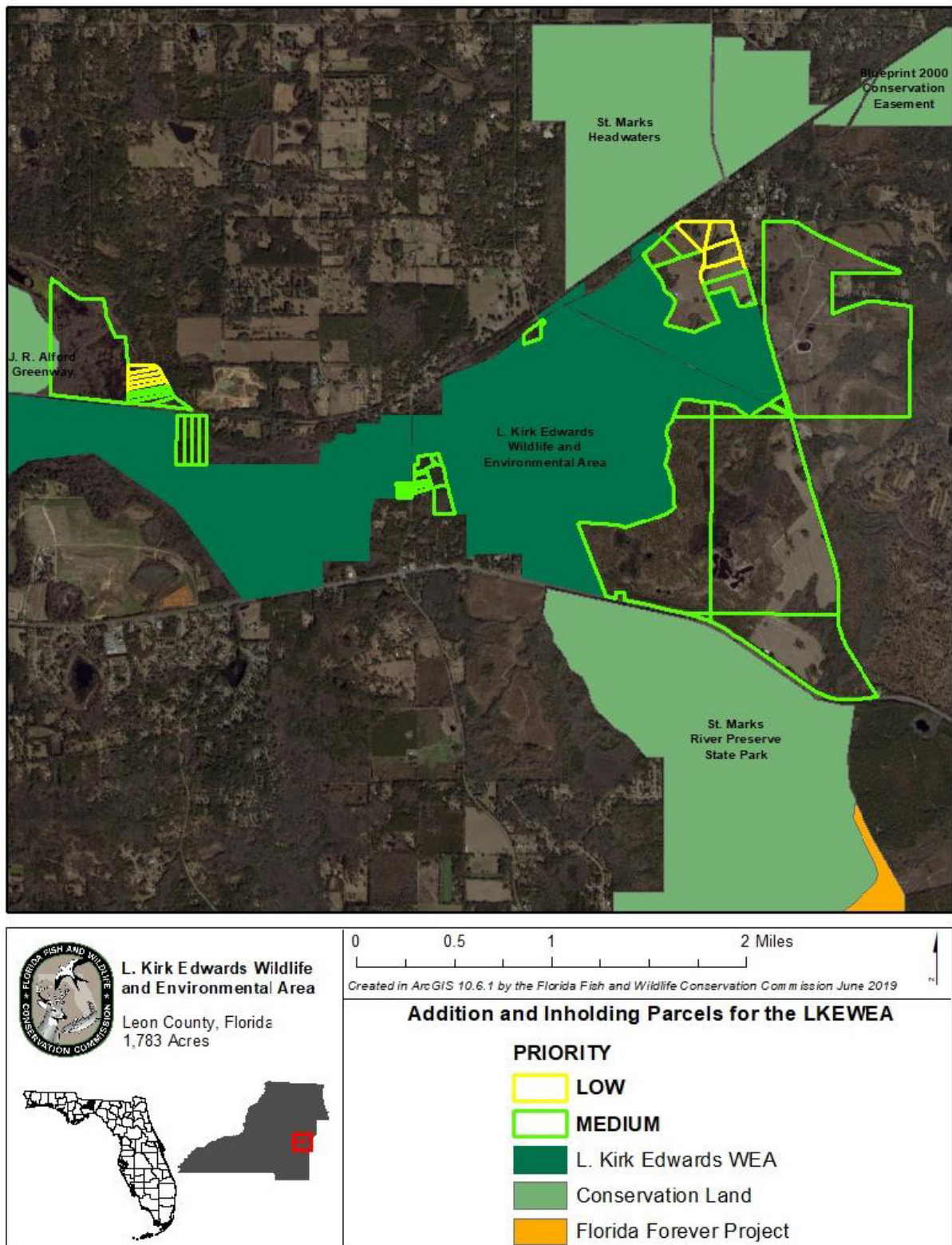


Figure 13. Optimal Conservation Planning Boundary





**Figure 14. FWC Additions and Inholding Parcels**



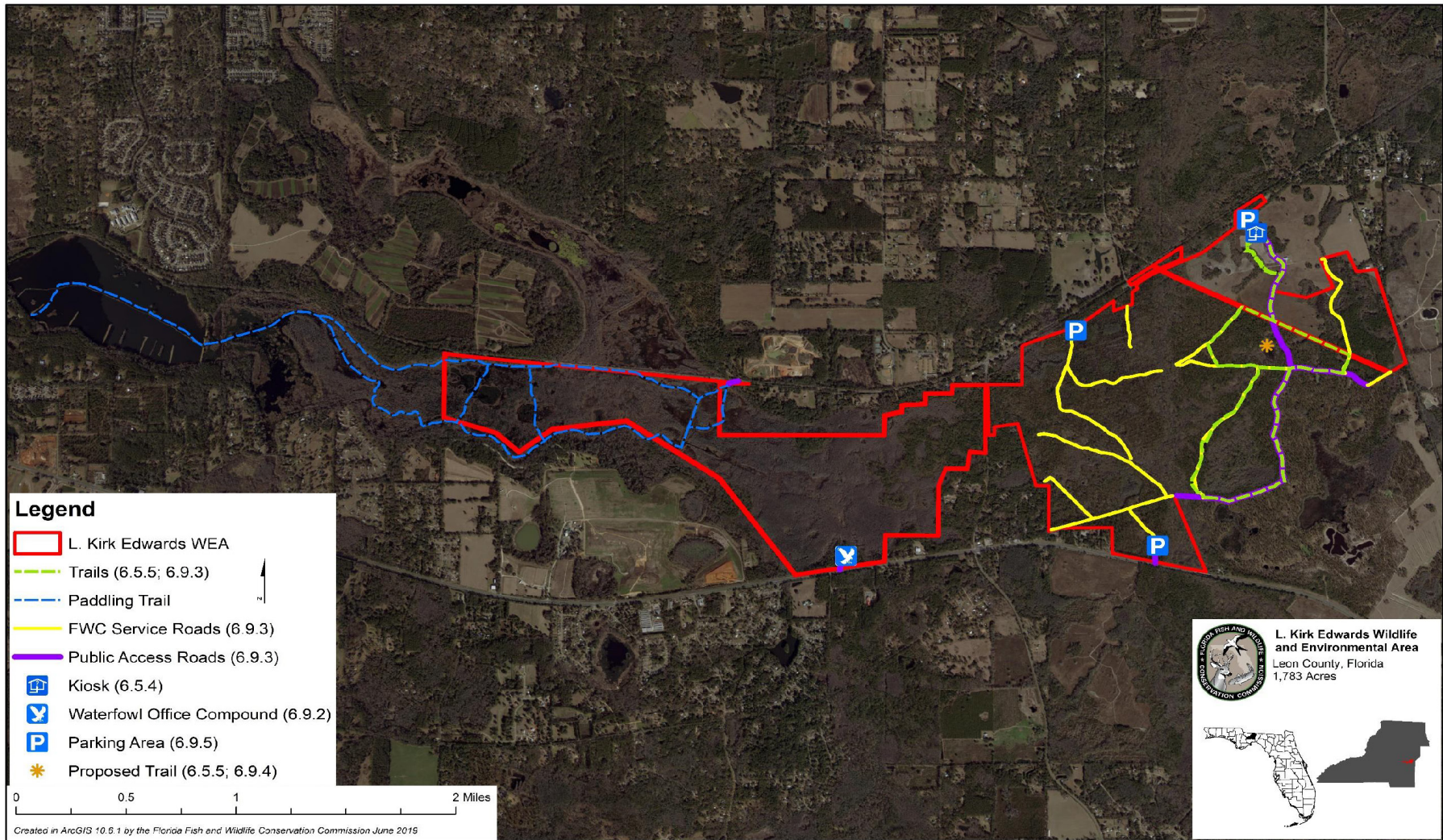


Figure 15. The LKEWEA Project Locations