

Florida Forever Project Evaluation Report

Heartland Wildlife Corridor ***Hardee and Highlands Counties***



Acquisition Type: Less-Than-Fee

Acres: 9,561

Just Value: \$6,439,243

Application Date: April 30, 2022

Project Sponsor: Rick Dantzler and Keith Fountain,
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Prepared By:

Division of State Lands

Office of Environmental Services



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Executive Summary

The Heartland Wildlife Corridor Florida Forever project is proposed as a less-than-fee acquisition containing 67 parcels, owned by 13 landowners, totaling 9,561 acres with a total tax assessed value of \$8,446,820. The project is located along the Hardee-Highlands County border, south of State Road 66. The closest city is Sebring. Almost all the properties included in the project are working cattle ranches, with the exception of one property that is a wholesale plant nursery.

The project area contains mostly pasture and altered landcovers (66%). The most abundant natural community in the project is mesic hammock. Depression marshes occur throughout the project area in the midst of pastures or occasionally embedded within flatwoods. Mesic flatwoods within the proposal vary significantly in their condition and management. In several locations, active management through fire, mowing, and/or chopping has allowed a relatively complete assemblage of native plants to persist, including dense wiregrass in some areas. Wetland communities include hydric hammock and occasional basin swamps. A small ditched blackwater stream found on Dark Hammock Ranch forms the headwaters of Fisheating Creek.

This assemblage of properties along with existing conservation lands provides a vital ecological corridor along the western edge of the Lake Wales Ridge to support wide-ranging imperiled species such as the Florida panther (*Puma concolor coryi*) and Florida black bear (*Ursus americanus floridanus*). Rare species documented or recorded in the project include common wild-pine (*Tillandsia fasciculata*), southeastern fox squirrel (*Sciurus niger niger*), gopher tortoise (*Gopherus polyphemus*) and Florida burrowing owl (*Athene cunicularia floridana*). The majority of the proposed project area falls within Priority 1 of the Florida Ecological Greenways Network (FEGN).

Boundary adjustments were made to the project during the project evaluation phase. Approximately 28 parcels containing intensive land uses were removed from the project in consultation with the project sponsor and the landowner. As a result the size of this project was reduced from the initial 15,541 acres to 9,561 acres.

If approved for acquisition, the Heartland Wildlife Corridor is recommended as a new project to be placed in the Less-than-Fee category. Of the 9,561 acres proposed for acquisition 9,534 are considered essential and 27 acres are considered non-essential due to the resources documented on the property (see Appendix C). An interagency team conducted a site visit to the project site on June 21 and 22, 2022. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

The Heartland Wildlife Corridor project will create a contiguous landscape of working lands and conservation areas to provide a critical wildlife corridor along the western edge of the Lake Wales Ridge. The project will protect a mix of open rangeland, wetlands, forests, hammocks and prairie that provide valuable habitat for wildlife and important water quality protection for the Peace River, Charlotte Harbor, Fisheating Creek and Lake Okeechobee.

Acquisition of this project would serve to:

- enhance the coordination and completion of land acquisition projects
- increase the protection of Florida's biodiversity at the species, natural community, and landscape levels
- conserve and protect a portion of Florida's rural landscape in order to provide and enhance wildlife corridors for rare and imperiled species
- provide surface and groundwater protection and protect natural floodplain functions
- protect, restore, and maintain the quality and natural functions of land, water and wetland systems

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Heartland Wildlife Corridor Florida Forever proposal is 9,579 acres (calculated through GIS 9,561 as reported in application) in westernmost Highlands County and the southeastern corner of Hardee County, approximately 7 miles southwest of Sebring. It is made up predominantly of working cattle ranches held by multiple owners, and is proposed for less-than-fee acquisition.

These properties are in a nearly continuous band that to the north connects to Highlands Hammock State Park and at its south edge adjoins a large complex of Wetland Reserve Program conservation easements. Lake Wales Ridge Wildlife and Environmental Area lies 1.25 miles to the east. Fisheating Creek originates as a small channelized stream within this project. This complex of properties could help to complete a wildlife corridor between Avon Park and Lake Okeechobee, and provide water quality protection for the Peace River and Charlotte Harbor, and for Fisheating Creek and Lake Okeechobee.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

This evaluation is based on information gathered from the proposal, aerial photography, US Geological Survey (USGS) 7.5' topographic maps, Florida Cooperative Landcover data (version 3.5), and information in the FNAI database. A field survey was conducted on June 21-22, 2022, by FNAI biologists Kim Alexander and Geoff Parks along with the Acquisition and Restoration Council (ARC) liaison staff.

The proposal property is located along the eastern edge of the DeSoto Slope, a plain that slopes westward from the Lake Wales Ridge toward the gulf coast. Peak elevations of about 95 feet above mean sea level occur along a slight north-south ridge along the central portion of the proposal area, with the lowest elevations of about 80 feet in the swamp on the northernmost parcel. Soils are predominantly poorly-drained fine sands, largely from the Pomona, Myakka, and Valkaria series. Overall, the proposal area contains approximately 66% pasture and altered landcovers, and 34% areas that could be categorized as natural communities.

The most abundant natural community in the proposal is mesic hammock, which occupies an estimated 10% of the overall project area. These are particularly concentrated on two of the properties and scattered in small patches on the others. Mesic hammocks on the proposal area have a canopy of live oak (*Quercus virginiana*) and/or cabbage palm (*Sabal palmetto*), with occasional swamp laurel oak (*Quercus laurifolia*) and sweetgum (*Liquidambar styraciflua*). Cabbage palm is the dominant midstory species and generally dominates the shrub layer as well, with occasional marlberry (*Ardisia escallonioides*), American beautyberry (*Callicarpa americana*), or American pokeweed (*Phytolacca americana*). The herbaceous layer is generally sparse and of low diversity; in many cases, hammocks on the sites have mature, well developed canopies but are disturbed by heavy grazing below. Species in the herb layer include Colombian waxweed (*Cuphea carthagenensis*), Baldwin's flatsedge (*Cyperus croceus*), witchgrass (*Dichanthelium sp.*), West Indian chickweed (*Drymaria cordata*), thin paspalum, mata-pasto (*Sida planicaulis*) tropical soda apple (*Solanum viarum*; FISC Category I), and Caesar's weed (*Urena lobata*; FISC Category I). Live oaks are frequently covered with resurrection fern (*Pleopeltis michauxiana*), Spanish moss (*Tillandsia usneoides*), and, less commonly, spreading air-plant (*Tillandsia utriculata*) and Florida butterfly orchid (*Encyclia tampensis*). Golden polypody (*Phlebodium aureum*) occurs commonly on palm trunks. Chinese tallow (*Triadica sebifera*; FISC Category I) was noted in this habitat at one site.

Depression marshes occur throughout the project area, and account for about 8 percent of the area. These marshes are typically found in the midst of pastures on the individual properties, but are occasionally embedded within flatwoods. In most of the project area these wetlands show notable impacts from grazing, drainage, and/or invasive plants, but one on the Dark Hammock property that

was seen during the site visit is healthy and diverse, vegetated with concentric bands of native species. Healthier marshes have species such as maidencane (*Panicum hemitomon*) bulltongue arrowhead (*Sagittaria lancifolia*) pickerelweed (*Pontederia cordata*), bluejoint panicum (*Coleataenia tenera*), spikerush (*Eleocharis sp.*), and blue maidencane, whereas others are heavily infested by West Indian marsh grass (*Hymenachne amplexicaulis*; FISC Category I) and/or Peruvian primrosewillow (*Ludwigia peruviana*; FISC Category I). Dry or heavily-grazed marshes on the proposal tend to have weedy species such as soft rush (*Juncus effusus ssp. solutus*), big carpetgrass (*Axonopus furcatus*), and dogfennel (*Eupatorium capillifolium*).

The mesic flatwoods on the proposal occupy about 6 percent of the area, and vary significantly in their condition and management. Canopy in the mesic flatwoods generally consists of slash pine (*Pinus elliottii*), although young longleaf pine (*Pinus palustris*) occurs in some stands. In a few cases, dense, tall saw palmettos (*Serenoa repens*) crowded out most herbaceous plants, but in several locations, active management through fire, mowing, and/or chopping has allowed a relatively complete assemblage of native plants to persist. Shrubs in the healthier flatwoods include pawpaw (*Asimina reticulata*), fetterbush (*Lyonia lucida*), gallberry (*Ilex glabra*), runner oak (*Quercus pumila*), shiny blueberry (*Vaccinium myrsinites*), myrtleleaf St. John's wort (*Hypericum myrtifolium*), St. Andrew's cross (*Hypericum hypericoides*), dwarf live oak (*Quercus minima*), and in especially dry sites, sand live oak (*Quercus geminata*). Groundcover species in mesic flatwoods on the Heartland Wildlife Corridor include wiregrass (*Aristida stricta*), bottlebrush threeawn (*Aristida spiciformis*), slender flattop goldenrod (*Euthamia caroliniana*), thin paspalum (*Paspalum setaceum*), queen's delight (*Stillingia sylvatica*), rosy camphorweed (*Pluchea baccharis*), whitehead bogbutton (*Lachnocaulon anceps*), blue maidencane (*Amphicarpum muehlenbergianum*), bluestem (*Andropogon sp.*), Elliott's milkpea (*Galactia elliottii*), bracken fern (*Pteridium aquilinum*), and witchgrass (*Dichantheium sp.*); dense wiregrass was seen in some areas. Cogongrass (*Imperata cylindrica*; FISC Category I) was noted in one location in the mesic flatwoods.

A few widely scattered areas of basin swamp on the northern 2/3 of the project take up about 4% of the total project area. Typical basin swamps on the property have a canopy of pond cypress (*Taxodium ascendens*) and/or swamp tupelo (*Nyssa biflora*), sometimes with red maple (*Acer rubrum*). Small trees and shrubs include dahoon (*Ilex cassine*), American beautyberry, Peruvian primrosewillow, coastalplain willow (*Salix caroliniana*), and cabbage palm. Pickerelweed can be found in wetter areas, while Virginia chain fern (*Woodwardia virginica*), West Indian marsh grass, purple bluestem (*Andropogon glomeratus var. glaucopsis*), carpetgrass, and dotted smartweed (*Persicaria punctata*) also occur. Common wild-pine and southern needleleaf (*Tillandsia setacea*) grow as epiphytes. On the Cracker Hammock property, wetland nightshade (*Solanum tampicense*; FISC Category I) is abundant.

Hydric hammock occurs in generally large patches in a band across the Hart Pasture and Cracker Hammock properties. Canopy trees include swamp laurel oak, cabbage palm, swamp tupelo, American elm (*Ulmus americana*), slash pine, live oak, and sweetgum. Wild lime (*Zanthoxylum fagara*) and Carolina ash (*Fraxinus carolinianus*) are common midstory trees and marlberry is occasional. Epiphytes include common wild-pine and southern needleleaf, as well as shoestring fern (*Vittaria lineata*) and golden polypody. Some of these areas are heavily grazed and have weedy species such as smutgrass (*Sporobolus indicus*) or West Indian marsh grass; others are more intact and have low-growing wetland natives such as lizard's tail (*Saururus cernuus*), savannah panicum (*Phanopyrum gymnocarpon*), and false nettle (*Boehmeria cylindrica*). Wetland nightshade was also found abundantly in hydric hammock on the Cracker Hammock property.

Improved pasture makes up approximately 55 percent of the Heartland Wildlife Corridor proposal area, with each one of the landowners active in raising cattle to some degree. Improved pastures on the project sites varied greatly among and even within sites, with some dense, tall hayfields of limpgrass (*Hemarthria altissima*; FISC Category II), and others being dominated by bahiagrass (*Paspalum notatum*). Smutgrass, dogfennel, and thistles (*Cirsium spp.*) are frequent associates of bahiagrass pastures. Wetter pasture areas vary from mixed pasturegrasses and native grasses to drained former marsh areas with scattered soft rush, to large former marshy sloughs with abundant growth of Iris (*Iris*

sp.) and dotted smartweed. Some improved pasture areas have scattered islands of oak-palm hammock, and others have large longleaf pines and standing snags. In many of the improved pastures, particularly on Hart Pasture and Cracker Hammock, topographic modifications for drainage are common, and sod harvesting takes place on at least one property. Cogongrass occasionally occurs in improved pastures on the site.

About 8% of the area is made up of semi-improved pasture, areas that retain a mix of native species interspersed with pasture grasses. In some cases, these consist mainly of slash pine, live oak (*Quercus virginiana*) and saw palmetto with heavily grazed bahia grass and relatively little else; other areas have a few native herbaceous species and additional shrubs intermixed. Longleaf pine also occurs as a canopy species in some places, and cabbage palm is a common component as well. Other species in these areas can include blue maidencane, slender flattop goldenrod, carpetgrass, sweet goldenrod (*Solidago odora*), and Caesar’s weed.

Agricultural lands make up approximately 2 percent of the proposal area, consisting mainly of a nursery business on the northernmost parcel, and two large areas of current or former sod farms.

Small developed areas are included within the footprint of most of the properties in this proposal. These are generally typical of Florida farms and ranches, including residences, pole barns, and outbuildings. In total, these make up less than 1% of the proposed project.

Several artificial ponds are scattered throughout the project. One that was viewed at Cracker Hammock had a marshy edge with pickerelweed, torpedo grass (*Panicum repens*) and water hyacinth (*Eichhornia crassipes*; FISC Category I) in the interior.

There are numerous small ditches on the proposal. One of these that crosses the Dark Hammock property is a small ditched blackwater stream that is the origin of Fisheating Creek.

Invasive exotic plants vary from property to property within the proposal. The most abundant and concerning is cogongrass, found in various habitats as listed above. An infestation of wetland nightshade on one of the properties is also substantial. Other species such as tropical soda apple, Chinese tallow, lantana (*Lantana camara*; FLEPPC Category I) and old world climbing fern (*Lygodium microphyllum*) are currently localized and not widespread.

Table 1. Natural communities and landcover types within Florida Forever proposal

Community or Landcover	Acres	Percent of Proposal
mesic hammock	1000	10
depression marsh	752	8
mesic flatwoods	621	6
hydric hammock	458	5
basin swamp	390	4
dome swamp	7	<1
pasture-improved	5269	55
pasture-semi-improved	800	8
agriculture	223	2
developed	44	<1
artificial pond	15	<1
Totals	9,579	100%

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Heartland Wildlife Corridor Florida Forever proposal based on field observations during the June 21-22, 2022, tour and results of the GIS analysis. The project area is located just off the western edge of the greater Lake Wales Ridge ecosystem, which contains a complex of conservation lands in private and public ownership and fills an important gap in the landscape in this area by improving connectivity. Portions of the project border Highlands Hammock

State Park on the west and south boundaries of the park. Multiple Wetland Reserve Program easements are in the vicinity of and border the southernmost parcel of the project properties.

Nearly all of the properties included in the proposal are working cattle ranches, with varied herd sizes. The cattle programs vary based on the size of the area and the needs of the landowners. On all areas, cows have access to both native and non-native areas. Most of the properties have several cattle pens and other infrastructure for cows.

The properties that comprise the project vary in size and condition. All are dominated by pastures that support working cattle operations as well as a multitude of wildlife species. All have some component of native uplands and wetlands interspersed throughout the pastures, and many include significant water resources. The headwaters of Fisheating Creek are located on the Dark Hammock Ranch, the southernmost parcel in the Heartland Wildlife Corridor. Many of the parcels, as working ranches, also have some agriculture, and also periodically sod farm operations. None of the current land uses within the project area decrease the significance of the properties for conservation, specifically their role in protecting various federal and state listed plant and wildlife species and enhancing habitat connectivity within the surrounding landscape.

Prescribed fire is a management tool used on many of the properties as a part of pasture management or to enhance and manage native uplands. Some properties burn more acreage annually, but resources are limited on others to conduct prescribed fire. Overall, the native habitats within the project boundary would benefit from the application of more frequent and seasonally diverse prescribed fire. The pastures on-site are relatively open, with snags and trees to provide perching and roosting habitat for wildlife. The level of invasive non-native plant species varies by property, with some experiencing higher infestations of invasive non-native plants than others. .

Wildlife species observed during the tour included several crested caracaras (*Caracara cheriway*), Florida sandhill cranes (*Antigone canadensis pratensis*), southern fox squirrel, eastern meadowlark (*Sturnella magna*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), killdeer (*Charadrius vociferus*), and many other species. Feral hogs (*Sus scrofa*) and their sign were observed on all areas, with most landowners reporting some measure of hog control. Landowners for many of the properties also report seeing Florida panther, Florida black bears, Florida burrowing owl, and gopher tortoise within the project boundary.

The pastures within the project are suitable for use by other listed wildlife such as the southeastern American kestrel. Properties on-site also contain wetland habitats that could support wood storks (*Mycteria americana*) and other listed wading bird species known to occur in the surrounding landscape.

Overall, the properties that comprise the Heartland Wildlife Corridor are in good condition and provide habitat for on-site wildlife use as well as significant habitat connectivity within a larger landscape of lands critical to the long-range conservation of wildlife and natural communities. Their proximity to existing conservation lands and those protected under easement provides a vital link connecting protected lands along the western edge of the Lake Wales Ridge. The size and juxtaposition of the Heartland Wildlife Corridor within the greater landscape is significant for wide-ranging imperiled species such as the Florida panther and Florida black bear.

The FWC GIS analysis of the Cooperative Land Cover v3.5 indicates that there is a mix of many different community types on-site, with the dominant types being improved pasture (7,498 acres; 48.4%), marshes (1,391 acres; 9%), rural (unimproved/woodland pasture) (1,135 acres; 7.3%), and mesic flatwoods (1,082 acres; 7%).

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from 0-10: a rank of 10 being the greatest value. The mean FLAM score for this property is 6.1. Approximately 91% is identified as Priority 1 or 2 for the Critical Lands and Waters Identification Project. The National Wetlands Inventory data shows 31% classified as wetlands. Additionally, 80% of the property shows an

imperiled species richness for 5-8 imperiled species. Nearly 100% of the property is within Priority 1 and 2 of the Florida Ecological Greenways Network, or Florida Wildlife Corridor.

Approximately 77% lies within a designated FWC Strategic Habitat Conservation Area (SHCA) for species including Cooper's hawk (*Accipiter cooperii*), American swallow-tailed kite (*Elanoides forficatus*), short-tailed hawk (*Buteo brachyurus*), Florida scrub-jay (*Aphelocoma coerulescens*), Florida grasshopper sparrow (*Ammodramus savannarum floridanus*), and Florida burrowing owl. The GIS analysis also shows several records for the Florida panther.

The FNAI Element Occurrence database shows several records for the crested caracara, Florida long-tailed weasel (*Mustela frenata peninsulae*) and southern fox squirrel. The GIS analysis contains more detailed information. The FNAI database also identified 71% of the project area as potential habitat for the crested caracara, 31% for Eastern indigo snake (*Drymarchon couperi*), 28% for Florida black bear, and 14% for wood stork.

In summary, establishment of a conservation easement within the Heartland Wildlife Corridor project would increase the amount of protected area and connectivity between established conservation lands in the greater landscape. Enhancing habitat management programs on these parcels to incorporate routine prescribed fire, particularly within native habitats, will improve and maintain conditions in native habitat and benefit many imperiled wildlife species. These properties lie within a landscape that is increasingly under pressure from expansion of nearby phosphate mine operations, cities, and developments. Long-term protection of intact private lands such as those within the Heartland Wildlife Corridor is vital to the long-term persistence of wildlife in this region.

GOALS, MEASURES AND CRITERIA

GOAL A:

ENHANCE THE COORDINATION AND COMPLETION OF LAND ACQUISITION PROJECTS

Measure A1:

The number of acres acquired through the state's land acquisition programs that contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors as identified and developed by the best available scientific data.

If acquired, all 9,561 acres would contribute to the enhancement of essential natural resources, ecosystem service parcels and connecting linkage corridors.

Measure A2:

The number of acres protected through the use of alternatives to fee simple acquisition.

The entirety of the project (9,561 acres) is proposed for fee-simple acquisition and will not contribute to fee-simple acquisition alternatives.

Measure A3:

The number of shared acquisition projects among Florida Forever funding partners and partners with other funding sources, including local governments and the federal government.

No funding partners have been identified for this project. Two of the properties within the project, Hart Pasture LLC (Albritton's Hart) and Bar Rocking C are also eligible for funding through the Rural and Family Lands Program administered by the Florida Forest Service (FFS).

GOAL B:

INCREASE THE PROTECTION OF FLORIDA'S BIODIVERSITY AT THE SPECIES, NATURAL COMMUNITY, AND LANDSCAPE LEVELS

Measure B1:

The number of acres acquired of significant Strategic Habitat Conservation Areas.

The SHCA Florida Forever Conservation Needs layer identifies important remaining habitat conservation needs for 33 terrestrial vertebrates on private lands. Priority 1 and 2 represent habitat for species considered imperiled or critically imperiled in Florida. The Florida Forever Measure Evaluation (FFME) table (Appendix B) reports the site contains approximately 9,298 acres (97% of site) of Strategic Habitat Conservation Areas. This is primarily within Priority 2 (48% of site) and Priority 1 (46%) with the remainder in Priority 3 (3%) and Priority 5 (<1%).

Measure B2:

The number of acres acquired of highest priority conservation areas for Florida's rarest species.

Habitat conservation priorities for 633 of Florida’s rarest species were mapped and divided into six priority classes. The FFME reports the proposed project contains approximately 9,298 acres (97% of site) of rare species habitat. The habitat is mostly divided between Priority 5 (45% of site), Priority 4 (39%), Priority 3 (10%), and Priority 2 (2%), with the remainder in Priority 6 (1%).

The following table lists the acres of habitat for each species that may be found on the site, based on the FNAI Habitat Conservation Priorities. Please note that habitats for these species overlap, so that the sum total of habitat for all species is more than the total acreage of the priority conservation areas. Acreage for aquatic species includes a terrestrial buffer.

Table 2. Rare species habitat based on FNAI Habitat Conservation Priorities

Scientific Name	Common Name	Global Rank	Acres
<i>Chionanthus pygmaeus</i>	pygmy fringe tree	G2G3	<1
<i>Hartwrightia floridana</i>	hartwrightia	G2	<1
<i>Polygala lewtonii</i>	Lewton's polygala	G2	43
<i>Romulus globosus</i>	round-necked romulus long-horned beetle	G1G2	36
<i>Trigonopeltastes floridana</i>	scrub palmetto flower scarab beetle	G2G3	27
<i>Typocerus fulvocinctus</i>	yellow-banded typocerus long-horned beetle	G2G3	<1
<i>Drymarchon couperi</i>	eastern indigo snake	G3	1,603
<i>Aphelocoma coerulescens</i>	Florida scrub-jay	G1G2	31
<i>Antigone canadensis pratensis</i>	Florid sandhill crane	G5T2	6,762
<i>Caracara cheriway</i>	crested caracara	G5	7,244
<i>Mycteria americana</i>	wood stork	G4	1,414
<i>Mustela frenata peninsulae</i>	Florida long-tailed weasel	G5T3?	5,201
<i>Puma concolor coryi</i>	Florida panther	G5T1	9,194

Measure B3:

The number of acres acquired of significant landscapes, landscape linkages, and conservation corridors, giving priority to completing linkages

The FFME reports approximately 9,219 acres (96%) of the proposed project contributes to protection of ecological greenways with 87% of the acreage falling within Priority 1 areas, 7% in Priority 2, and 2% in Priority 5. Prioritization is based on such factors as importance for wide-ranging species like Florida panther and Florida black bear, importance for maintaining a connected reserve network, and riparian corridors.

Measure B4:

The number of acres acquired of under-represented native ecosystems.

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The Florida Forever Measures table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Heartland Wildlife Corridor proposal contains 621 acres of mesic flatwoods (6% of site).

Measure B5:

The number of landscape-sized protection areas of at least 50,000 acres that exhibit a mosaic of predominantly intact or restorable natural communities established through new acquisition projects, or augmentations to previous projects.

The Heartland Wildlife Corridor proposal, along with adjacent conservation lands that include Highlands Hammock State Park, Sandy Gully Agricultural and Conservation Easement, Archbold Biological Station, and several Wetlands Reserve Program Easements, would contribute to a contiguous landscape-sized protection area of >73,500 acres.

Measure B6:

The percentage increase in the number of occurrences of imperiled species on publicly managed conservation areas.

This site supports habitat for several rare species of conservation concern. The entire proposal boundary falls within areas in which FWC classifies Florida black bear as “common” or “abundant” by FWC. Florida sandhill cranes, crested caracaras, swallow-tailed kites, and southeastern fox squirrels were all observed at multiple locations during the site visits. Several dozen rare species occur within 10 kilometers of the proposal; many of these depend on scrub habitat, which is not available on the proposal area, but some could have suitable habitat onsite. These include giant orchid (*Pteroglossaspis ecristata*, G2G3, S2, N, T), many-flowered grass pink (*Calopogon multiflorus*, G2G3, S2S3, N, T), Hartwrightia (*Hartwrightia floridana*, G2, S2, N, T), Eastern indigo snake (G3, S2?, T, FT), Florida burrowing owl (G4T3, S3, N, ST), Florida panther (G5T1, S1, E, FE), wood stork (G4, S2, T, FT), tricolored heron (*Egretta tricolor*, G5 S4, N, ST), snowy egret (*Egretta thula*, G5, S3, N, N) and little blue heron (*Egretta caerulea*, G5, S4, N, ST). During the site visit, a single Bachman’s sparrow (*Peucaea aestivalis*, G3, S3, N, N) was observed on property just west of the proposal that was removed from the final boundary. More extensive surveys may reveal the occurrence of additional rare plant or animal species.

The FFME lists the number of Element Occurrences by Global Rank (G-rank) that are found on the proposal. Note that the number of occurrences does not necessarily match the number of species in the following table because a) some species may have more than one occurrence on the proposal site, or b) some species observed on site do not meet the criteria for addition to the FNAI database at this time. The table below contains species falling into any of these observational categories, as well as species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of

locational precision. Rarity rankings are in the following order: FNAI global (G, T) and state (S) ranks, federal status, state status. Species ranks and conservation status are described in Appendix D.

Table 3. Rare plants and animals documented or reported to occur within the proposed project

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
Rare plants documented on site					
<i>Tillandsia fasciculata</i>	common wild-pine	G5	SNR	N	E
Additional rare plants reported on site by applicant					
Rare animals documented on site					
<i>Antigone canadensis pratensis</i>	Florida sandhill crane	G5T2	S2	N	ST
<i>Caracara cheriway</i>	crested caracara	G5	S2	T	FT
<i>Elanoides forficuatus</i>	swallow-tailed kite	G5	S2	N	N
<i>Sciurus niger niger</i>	southeastern fox squirrel	G5T5	S3	N	N
<i>Ursus americanus floridanus</i>	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on site by applicant					
<i>Gopherus polyphemus</i>	gopher tortoise	G3	S3	C	T
<i>Athene cunicularia floridana</i>	Florida burrowing owl	G4T3	S3	N	T

GOAL C:

PROTECT, RESTORE AND MAINTAIN THE QUALITY OF NATURAL FUNCTIONS OF LAND, WATER, AND WETLAND SYSTEMS OF THE STATE

Measure C1:

The number of acres of publicly-owned land identified as needing restoration; enhancement, and management, acres undergoing restoration or enhancement; acres with restoration activities completed, and acres managed to maintain such restored or enhanced conditions; the number of acres which represent actual or potential imperiled species habitat; the number of acres which are available pursuant to a management plan to restore, enhance, repopulate, and manage imperiled species habitat; and the number of acres of imperiled species habitat managed, restored, and enhanced, repopulated, or acquired.

The property is offered for less-than-fee acquisition, intended to be utilized in a manner consistent with existing uses. The approximately 621 acres of natural mesic flatwoods in the Heartland Wildlife Corridor project area are in fair to good ecological condition. Some potential for improving these areas, perhaps with assistance from cost-share programs, exists. The roughly 6,292 acres of pasture and agricultural lands would require considerable long-term commitment to restore to native species; and would be outside the scope of restoration commitment feasible for working cattle ranches.

Measure C4:

The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 4,864 acres (51%) of the proposed project may contribute to the protection of natural floodplain function. This area is mostly divided between Priority 4 (18% of site),

Priority 5 (12%), Priority 2 (10%), and Priority 3 (10%) with the remainder in Priority 6 (2%). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C5:

The number of acres acquired that protect surface waters of the State.

The FFME reports approximately 15,286 acres (99%) of the proposed project could provide protection for those surface waters of the State that currently remain in good condition. This area is divided between Priority 4 (36% of site), Priority 5 (26%), Priority 6 (20%), Priority 2 (13%), and Priority 7 (5%). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Measure C8:

The number of acres of functional wetland systems protected.

The FFME reports approximately 2,110 acres (22%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 2 (7% of site), Priority 3 (5%), Priority 4 (5%), Priority 5 (4%), and Priority 6 (<1% of site). Priority 1 areas are the most natural with the lowest intensity land uses.

Measure C11:

The number of acres of public conservation lands in which upland invasive, exotic plants are under maintenance control.

Invasive exotic plant control needs within the proposal area vary from property to property. In some areas, invasive plant issues are relatively minor, while on other lands, substantial infestations occur which could threaten natural communities. Cogongrass should be treated aggressively wherever it occurs to prevent expansion, as this species can spread rapidly and threaten the remaining native vegetation. The extensive population of wetland nightshade in one area is also likely to spread if not addressed. Tropical soda apple, Chinese tallow, old world climbing fern, and a handful of other species appear to be present in low numbers, although the entire site was not assessed. A baseline assessment to determine the full extent of invasive plant species is warranted if acquisition of the easement occurs.

GOAL D:

ENSURE THAT SUFFICIENT QUANTITIES OF WATER ARE AVAILABLE TO MEET THE CURRENT AND FUTURE NEEDS OF NATURAL SYSTEMS AND THE CITIZENS OF THE STATE

Measure D1:

The number of acres acquired which provide retention and storage of surface water in naturally occurring storage areas, such as lakes and wetlands, consistent with the maintenance of water resources or water supplies and consistent with district water supply plans.

The Heartland Wildlife Corridor project is located within both the South Florida and Southwest Florida Water Management Districts (SFWMD and SWFWMD). Half of the project is within the Peace River Watershed in SWFWMD's Heartland Planning Region (SWFWMD 2020). The other half is within the Fisheating Creek Watershed in SFWMD's Lower Kissimmee Basin Planning Region (SFWMD 2022).

Measure D2:

The quantity of water made available through the water resource development component of a district water supply plan for which a water management district is responsible.

Acquisition of the Heartland Wildlife Corridor project would benefit the water quality and quantity of the Peace River, Fisheating Creek, related waterbodies, and their respective watersheds.

Measure D3:

The number of acres acquired of groundwater recharge areas critical to springs, sinks, aquifers, other natural systems, or water supply.

Some areas of this property are in a restoration plan area (Lake Okeechobee Basin Management Action Plan [BMAP]), and the property would provide surface and ground water protection.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Heartland Wildlife Corridor

Categories	Scoring Criteria	Project Score
DEP High Profile Springs (In 1,2,3 or > spring sheds)	12, 24, 36	0
DEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	12
DEP Florida Aquifer Vulnerability (FAVA)	4,7,10	7
DEP Special Nutrient Impaired WBIDs	9	9
DEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
DEP Springsheds or within 5 miles	10, 7	0
DEP BMAPs	10	10
DEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	6
Total Possible	101	44

GIS Evaluation score is converted to a 1 to 5 value (low to high)

FINAL DEAR SCORE = 3 - Medium water quality protection benefits

GOAL E:

INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measures E1-E3

The Heartland Wildlife Corridor project is proposed for less-than-fee acquisition with no public access.

GOAL F:

PRESERVE SIGNIFICANT ARCHAEOLOGICAL OR HISTORIC SITES

Measure F1:

The increase in the number of and percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are protected or preserved for public use.

As a less-than-fee project, the Heartland Wildlife Corridor would not increase the number or percentage of historic and archaeological properties listed in the Florida Master Site File or National Register of Historic Places which are preserved for public use. However, through a conservation easement agreement that stipulates cultural resource protection, the Heartland Wildlife Corridor Florida Forever project would protect historic and archaeological sites that are listed in the Florida Master Site File.

Measure F2:

The increase in the number and percentage of historic and archaeological properties that are in state ownership.

As a less-than-fee project, the Heartland Wildlife Corridor would not meet Measure F2, as the number and percentage of historic and archaeological properties on the project would remain privately owned.

CULTURAL RESOURCES:

According to the Division of Historical Resource's (DHR) Florida Master Site File, there are currently two archaeological sites located within or intersecting the boundary of the Heartland Wildlife Corridor Florida Forever project. Of these two sites, Durham Mound (HG1167) is particularly noteworthy for being an intact midden mound with a pre-Columbian artifact assemblage suggesting at least 3,000 years of human landscape use in the project area.

FIELD OBSERVATIONS:

No staff from DHR participated in the field evaluation of the Heartland Wildlife Corridor Florida Forever Project.

GOAL G:**INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES****Measure G1:**

The number of acres acquired that are available for sustainable forest management.

The FFME reports approximately 6,732 acres (70% of site) could be available for sustainable forest management, divided between Priority 5 (6,732 acres) and Priority 3 (116 acres). Prioritization is based on 4 criteria set by FFS: whether trees are natural or planted, size of tract, distance to market, and hydrology. Priority 5 areas are considered "potential" pinelands; agricultural areas that could be restored to pineland.

Measure G2:

The number of acres of state owned forestland managed for economic return in accordance with current best management practices.

Properties within the project proposal are working cattle ranches and not managed for timber production. Cracker Hammock contains a certified tree farm, registered with American Tree Farm System, and is managed by a professional forester. Dark Hammock Ranch contains timber resources, but no forestry management plan is in place.

Measure G3:

The number of acres of forestland acquired that will serve to maintain natural groundwater recharge functions.

The FFME reports approximately 28 acres (< 1%) would provide forestland to maintain natural groundwater recharge functions.

Measure G4:

The percentage and number of acres identified for restoration actually restored by reforestation.

Properties within the project proposal are working cattle ranches that did not support forestland historically. Most landowners are not interested in planting trees; however, some upland agriculture fields may have potential for reforestation and areas of mesic flatwoods are present within the project.

FLORIDA FOREVER CRITERIA

The proposed project meets the following Florida Forever criteria (§ 259.105, F.S.)

- the project meets multiple goals
- the project is part of an ongoing governmental effort to restore, protect, or develop land areas or water resources project contributes to the solution of water resource problems on a regional basis
- the project has a significant portion of its land area in imminent danger of development, in imminent danger of losing its significant natural attributes or recreational open space, or in imminent danger of subdivision which would result in multiple ownership and make acquisition of the project costly or less likely to be accomplished
- the project may be acquired, in whole or in part, using alternatives to fee simple, including but not limited to, tax incentives, mitigation funds, or other revenues; the purchase of development rights, hunting rights, agricultural or silvicultural rights, or mineral rights; or obtaining conservation easements or flowage easements
- projects that contribute to improving the quality and quantity of surface water and groundwater

MANAGEMENT

If acquired as a perpetual conservation easement, primary management responsibility would remain with the landowner. Periodic monitoring of the site's management would occur to confirm continued compliance with the conditions of the easement. Monitoring would be coordinated by the Department of Environmental Protection (DEP), Division of State Lands (DSL), Office of Environmental Services (OES).

FUNDING SOURCES

Florida Forever would be the funding source.

OWNERSHIP PATTERN AND ACQUISITION PLANNING

Title and Legal Access, Jurisdictional and Sovereignty Lands, Legal Issues

Record of title, a designation of jurisdictional and sovereignty lands and any other legal issues will be determined at the time of acquisition and are not known at this time.

Known Encumbrances (easement, long-term leases, restrictive covenants, etc.)

The easements and encumbrances of record would be determined during the appraisal mapping. A current title insurance commitment would be obtained, or the owner's title insurance policy would be reviewed if the policy is available. The easements and encumbrances would be depicted or noted on the appraisal map.

Description and location of hazardous waste sites, dumps, borrow pits

There are no apparent contamination sites within the project based on the application form.

Estimated Cost of Appraisal and Mapping

DEP Bureau of Appraisal estimates \$10,000 to \$20,000 in appraisal fees.

Acquisition Phases

Subject to funding, the Heartland Wildlife Corridor Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING and DEVELOPMENT

Contribution to Recreation and Open Space Needs

The proposal has a moderate to high potential for contributing to recreation and open space needs. The proposal is for less than fee simple acquisition, and thus, the opportunity for public access recreation would depend on the terms of the acquisition. The property could function as a wildlife corridor located between surrounding conservation areas. Potential recreational activities could include ecotourism, agritourism, or hunting leases. These recreational uses would likely be compatible with the future land use designations of agriculture in Hardee County and Highlands County.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces

The subject property contains an abundance of natural resource features that provide habitat for an array of rare plants and animals. The property provides significant watershed and water quality protection. Because the potential for urban development is moderate in this area, there is a moderate potential for losing the natural attributes located on the subject property.

Potential for Being Subdivided

The subject property has a moderate potential for being subdivided because it is in proximity to existing residential type uses in the cities in Sebring and Lake Placid. The future land use designation has a maximum residential density of one dwelling unit per five acres, and Highlands County and Hardee County have a relatively low rate of population growth. The subject property is surrounded predominantly by the Agriculture future land use designation. The surrounding existing land uses are predominantly rural and agriculture in character with some nearby agricultural/residential land uses, which pose a moderate threat of conversion of the subject property to non-agricultural use.

Development Potential

Based on the Highlands County Future Land Use Map, the properties within Highlands County are designated "agriculture" which has a maximum density of one unit per five acres unless units are clustered in which case the maximum density is one unit per acre. Clustered subdivisions are allowed according to the Highlands County Comprehensive Plan subject to land development regulations and open space requirements. Specifically for the properties in Highlands County (9,164 acres), the development potential is 1,832 developable residential units. Based on the Hardee County Future Land Use Map, the properties are designated "agriculture" which allows a residential density of one unit per five acres. The properties in Hardee County would allow developable residential units. In both counties development potential is moderate.

Existing Land Uses and Future Land Use Designations

Existing Land Uses: The existing land use on the subject property is agriculture (predominantly cattle grazing, haying, silviculture, palmetto berry harvesting, sod, row crops and citrus). The existing land use on the surrounding area is: (North) Conservation; (South) agriculture; (East) agriculture/residential; and (West) agriculture.

Future Land Uses: The 9 properties in Highlands County are designated as "agriculture" on the Highlands County Comprehensive Plan Future Land Use Map. The agriculture future land use category allows the following: agriculture use; residential density of one dwelling unit per five acres (one dwelling unit per ten acres if development parcel is located in wetlands and no suitable uplands) and clustering of residential development; churches; schools; cemeteries; agro-industrial research and educational

facilities; telecommunication facilities; self-contained temporary plants such as asphalt plants or pipe yards intended to serve a specific project for a limited period of time; solar based power generation facilities; wastewater treatment plants; and recreation and open space. Thus, the subject property has a residential development potential of 1,832 dwelling units (9,164 acres with a density of one dwelling unit per five acres).

The properties in Hardee County, according to the Hardee County Comprehensive Plan Future Land Use Map, are designated “agriculture” which allows for a residential density of one unit per five acres. The “agriculture” designation also allows for industrial uses “when such activity is related to the extraction or processing of minerals, or when related to agriculture; or is of a scale and nature that would not be acceptable in a town center”.

Transportation Planning Issues

The project falls within Florida Department of Transportation (FDOT) District 1 and is located adjacent to State Road 66. Within two miles of the site there are two designated evacuation routes, SR 66 and US Highway 27, the SUN Trail Network, and SR 25, a Strategic Intermodal System (SIS) facility. While the Department finds no adverse impact to this proposed project, there should be coordination with the appropriate FDOT District staff during the acquisition process to ensure that issues related to the transportation system and partnering opportunities are addressed and incorporated into the management plan as appropriate.

REFERENCES CITED

Southwest Florida Water Management District. 2020. *2020 Regional Water Supply Plan - Heartland Planning Region*. Brooksville; Southwest Florida Water Management District.

Southwest Florida Water Management District. *District Maps – Major Watersheds*. Southwest Florida Water Management District. Retrieved from <https://www4.swfwmd.state.fl.us/with/map/>.

South Florida Water Management District. 2022. *Water Supply Planning*. South Florida Water Management District. Retrieved from <https://www.sfwmd.gov/our-work/water-supply>.

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Staff in the DEP’s DSL and FNAI determined the final project recommendations. Sine Murray and Hannah Turbiville in DSL’s OES were responsible for the overall coordination of this report, with contributions from the following:

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- Florida Forest Service – Catherine Ingram, Richard Larsen & Calin Ionita
- Florida Department of State, Division of Historical Resources – Jason O’Donoughue & Brandon Ackermann
- Florida Department of Transportation – Ben Naselius
- Florida Department of Economic Opportunity – Barbara Powell
- DEP Division of Environmental Assessment and Restoration – Kevin Coyne
- DEP DSL, Bureau of Appraisal

APPENDICES

Appendix A:

Final FF measures table: Report requirement 259.105 (15)d, prepared by FNAI

Heartland Wildlife Corridor: Florida Forever Measure Evaluation 20220902

GIS ACRES = 9,580

MEASURES	Resource Acres ^a	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	4,429	46%
Priority 2	4,553	48%
Priority 3	266	3%
Priority 4	0	0%
Priority 5	50	< 1%
Total Acres	9,298	97%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	196	2%
Priority 3	945	10%
Priority 4	3,730	39%
Priority 5	4,322	45%
Priority 6	105	1%
Total Acres	9,298	97%
B3: Ecological Greenways		
Priority 1	8,348	87%
Priority 2	708	7%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	163	2%
Total Acres	9,219	96%
B4: Under-represented Natural Communities		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (G2)	0	0%
Rockland Hammock (G2)	0	0%
Dry Prairie (G2)	0	0%
Seepage Slope (G2)	0	0%
Sandhill (G3)	0	0%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	621	6%
Upland Hardwood Forest (G5)	0	0%
Total Acres	621	6%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	0	
G3	0	
G4	1	
G5	2	
Total	3	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	944	10%
Priority 3	912	10%
Priority 4	1,717	18%
Priority 5	1,135	12%
Priority 6	156	2%
Total Acres	4,864	51%

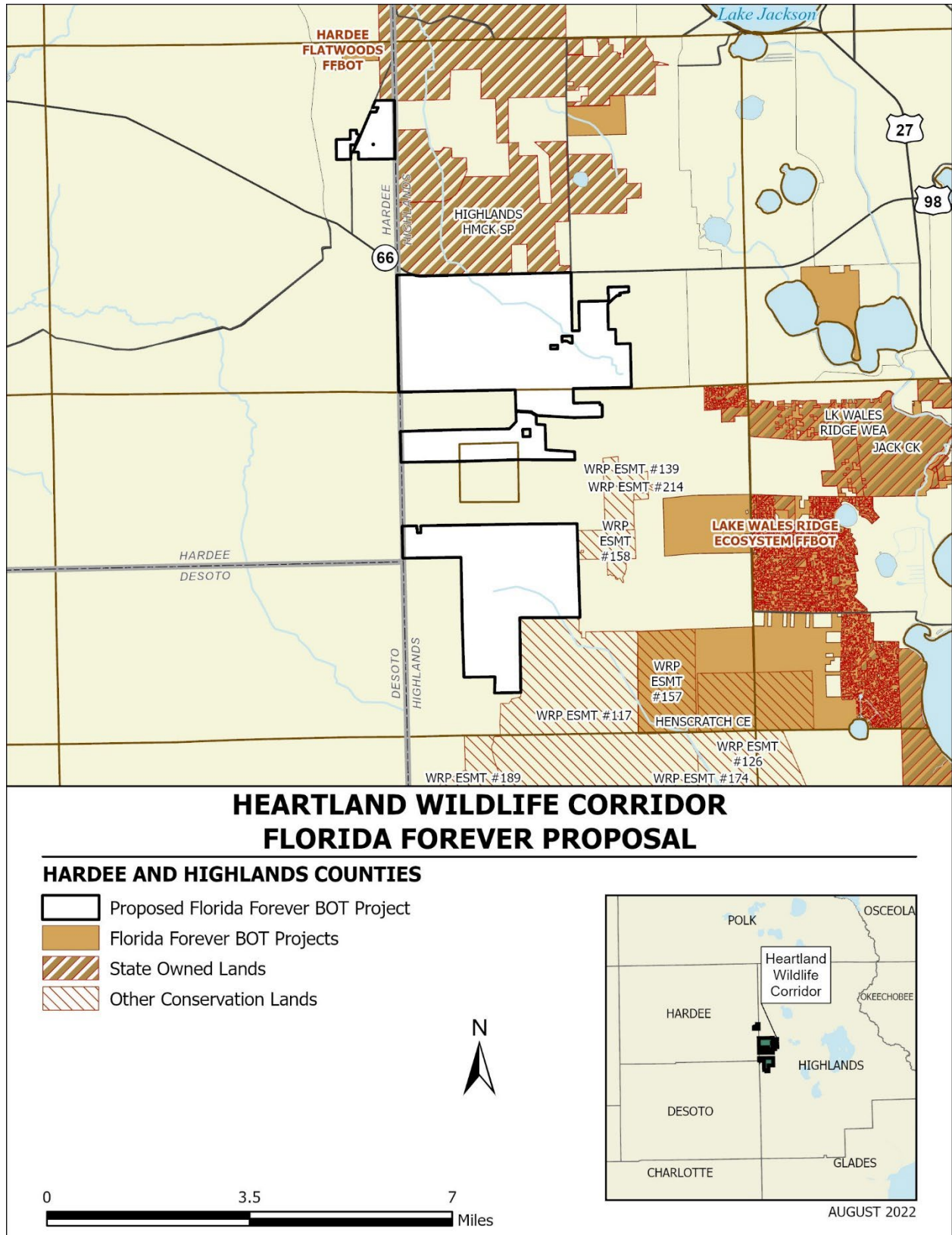
MEASURES (continued)	Resource Acres ^a	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	2,011	21%
Priority 3	0	0%
Priority 4	3,429	36%
Priority 5	249	3%
Priority 6	2,963	31%
Priority 7	0	0%
Total Acres	8,652	90%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	690	7%
Priority 3	521	5%
Priority 4	481	5%
Priority 5	411	4%
Priority 6	6	< 1%
Total Acres	2,110	22%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	896	9%
Priority 4	2,253	24%
Priority 5	2,508	26%
Priority 6	3,925	41%
Total Acres	9,581	100%
E2: Recreational Trails (miles)		
<small>(prioritized trail opportunities from Office of Greenways and Trails & Univ. Florida)</small>		
Land Trail Priorities	0.0	
Land Trail Opportunities	4.5	
Total Miles	4.5	
F2: Arch. & Historical Sites (number)		
	1	sites
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	116	1%
Priority 4	0	0%
Priority 5 - Potential Pinelands	6,617	69%
Total Acres	6,732	70%
G3: Forestland for Recharge		
	28	< 1%

^aAcres of each resource in the project and percentage of project represented by each resource are listed except where noted. This analysis converts site boundary into pixels, which causes slight differences from GIS acres; this effect is most noticeable on small sites.

Appendix B:

Final FF proposal boundary maps: Report requirement 259.105 (15)k, prepared by FNAI

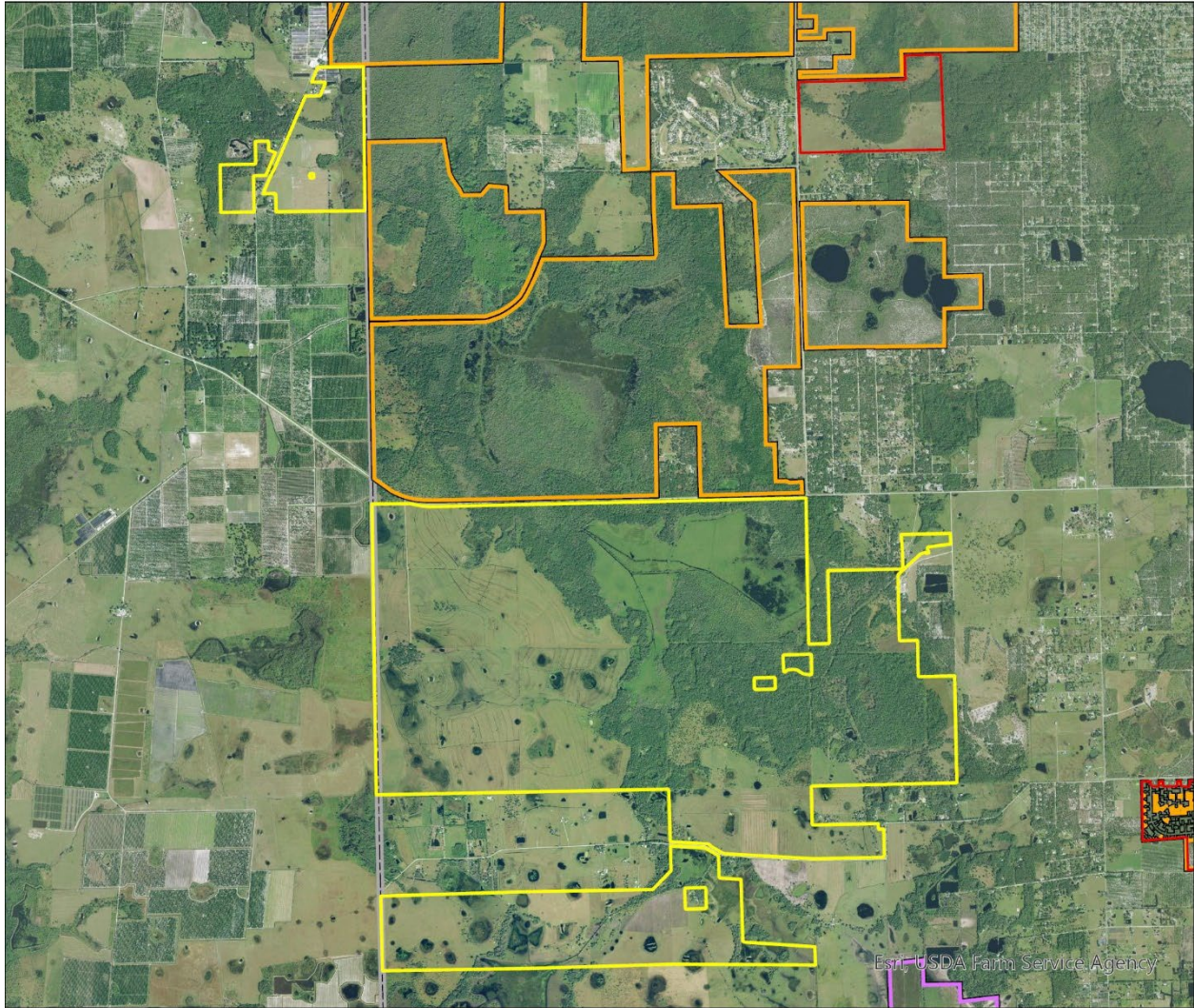
B1: Florida Forever map



B2: Aerial map

Heartland Wildlife Corridor Florida Forever Proposal - Map 1

FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF AUGUST 2022



Map Produced by: N. Pasco, August 2022

Background: USA NAIP Imagery Resolution = 1.0 meter

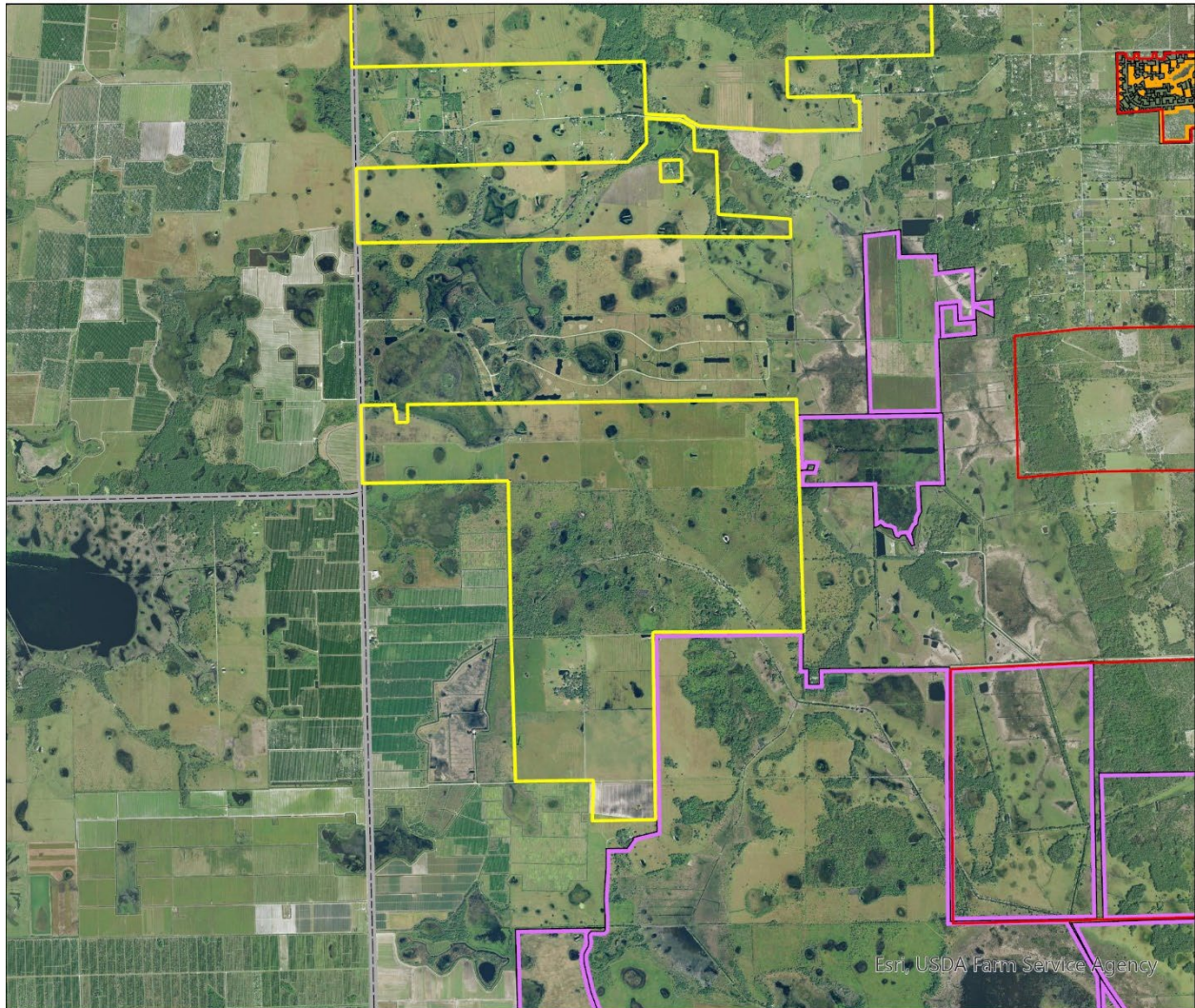


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Heartland Wildlife Corridor Florida Forever Proposal - Map 2

FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF AUGUST 2022

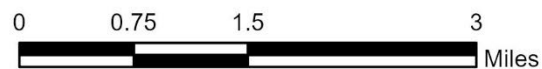


Map Produced by: N. Pasco, August 2022

Background: USA NAIP Imagery Resolution = 1.0 meter



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Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

HARDEE COUNTY

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Hardee	12-35-27-0000-06230-0000	CORD JASON K	15	\$43,436	\$8,073	Essential
Hardee	12-35-27-0000-04020-0000	HARTT RYNE E	18.94	\$97,140	\$3,268	Essential
Hardee	12-35-27-0000-05040-0000	HARTT RYNE E	36.45	\$185,248	\$10,314	Essential
Hardee	12-35-27-0000-04030-0000	ROCKING CROSS RANCH INC	16.5	\$123,135	\$33,623	Essential
Hardee	12-35-27-0000-04320-0000	ROCKING CROSS RANCH INC	48.83	\$208,830	\$9,265	Essential
Hardee	12-35-27-0000-05045-0000	ROCKING CROSS RANCH INC	10	\$70,000	\$2,250	Essential
Hardee	12-35-27-0000-05150-0000	ROCKING CROSS RANCH INC	0.85	\$4,869	\$980	Essential
Hardee	12-35-27-0000-07520-0000	ROCKING CROSS RANCH INC	51.36	\$231,328	\$8,338	Essential
Hardee	12-35-27-0000-08120-0000	ROCKING CROSS RANCH INC	79.87	\$378,056	\$16,998	Essential
Hardee	12-35-27-0000-06210-0000	WINDMILL FARMS NURSERIES INC	27.12	\$128,915	\$52,765	Essential
Hardee	12-35-27-0000-06220-0000	WINDMILL FARMS NURSERIES INC	44.13	\$140,650	\$2,420	Essential
Hardee	12-35-27-0300-00001-0001	WINDMILL FARMS NURSERIES INC	6.3	\$44,100	\$1,365	Essential
Hardee	12-35-27-0300-00001-0002	WINDMILL FARMS NURSERIES INC	6.3	\$44,100	\$1,365	Essential
Hardee	12-35-27-0300-00001-0003	WINDMILL FARMS NURSERIES INC	6.3	\$44,100	\$1,242	Essential

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Hardee	12-35-27-0300-00001-0004	WINDMILL FARMS NURSERIES INC	6.3	\$44,100	\$1,287	Essential
Hardee	12-35-27-0400-00001-0001	WINDMILL FARMS NURSERIES INC	6.3	\$87,270	\$49,184	Essential
Hardee	12-35-27-0400-00001-0002	WINDMILL FARMS NURSERIES INC	6.3	\$44,100	\$1,365	Essential
Hardee	12-35-27-0400-00001-0003	WINDMILL FARMS NURSERIES INC	6.3	\$44,100	\$752	Essential
Hardee	12-35-27-0400-00001-0004	WINDMILL FARMS NURSERIES INC	6.3	\$44,100	\$752	Essential
			399.45	\$2,007,577	\$205,606	

HIGHLANDS COUNTY

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Highlands	C-06-36-28-A00-0130-0000	ALGIN CATTLE CO.	501.86	\$237,976	\$103,468	Essential
Highlands	C-16-36-28-A00-0010-0000	BAR ROCKING C RANCH LLC	398.9	\$188,104	\$81,784	Essential
Highlands	C-18-36-28-A00-0010-0000	BAR ROCKING C RANCH LLC	342.29	\$354,520	\$154,139	Essential
Highlands	C-18-36-28-A00-0020-0000	BAR ROCKING C RANCH LLC	10	\$5,130	\$2,230	Essential
Highlands	C-17-36-28-A00-0010-0000	BAR ROCKING C RANCH LLC	379.62	\$212,322	\$97,040	Essential
Highlands	C-33-35-28-010-0010-0000	CRACKER HAMMOCK LLC	11.04	\$2,262	\$983	Essential
Highlands	C-33-35-28-010-00A0-0000	CRACKER HAMMOCK LLC	326.94	\$103,395	\$47,005	Essential
Highlands	C-33-35-28-010-0040-0000	CRACKER HAMMOCK LLC	10.42	\$1,800	\$782	Essential

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Highlands	C-33-35-28-010-0050-0000	CRACKER HAMMOCK LLC	13.11	\$2,368	\$1,029	Essential
Highlands	C-33-35-28-010-0060-0000	CRACKER HAMMOCK LLC	13.13	\$2,064	\$897	Essential
Highlands	C-33-35-28-010-0070-0000	CRACKER HAMMOCK LLC	12.95	\$2,166	\$942	Essential
Highlands	C-33-35-28-010-0080-0000	CRACKER HAMMOCK LLC	12.71	\$2,130	\$926	Essential
Highlands	C-33-35-28-010-0090-0000	CRACKER HAMMOCK LLC	10.79	\$1,770	\$769	Essential
Highlands	C-33-35-28-010-0100-0000	CRACKER HAMMOCK LLC	13.55	\$2,338	\$1,016	Essential
Highlands	C-33-35-28-010-0110-0000	CRACKER HAMMOCK LLC	20.78	\$4,968	\$2,160	Essential
Highlands	C-33-35-28-010-0120-0000	CRACKER HAMMOCK LLC	20.63	\$4,900	\$2,130	Essential
Highlands	C-33-35-28-010-0130-0000	CRACKER HAMMOCK LLC	22.23	\$3,856	\$1,676	Essential
Highlands	C-33-35-28-010-0140-0000	CRACKER HAMMOCK LLC	20	\$3,946	\$1,716	Essential
Highlands	C-33-35-28-010-0150-0000	CRACKER HAMMOCK LLC	10.46	\$2,884	\$1,254	Essential
Highlands	C-33-35-28-010-0160-0000	CRACKER HAMMOCK LLC	5.58	\$962	\$418	Essential
Highlands	C-33-35-28-010-0170-0000	CRACKER HAMMOCK LLC	5.57	\$852	\$370	Essential
Highlands	C-33-35-28-010-0180-0000	CRACKER HAMMOCK LLC	10.12	\$1,722	\$748	Essential
Highlands	C-33-35-28-010-0190-0000	CRACKER HAMMOCK LLC	10	\$1,624	\$706	Essential
Highlands	C-33-35-28-010-0200-0000	CRACKER HAMMOCK LLC	10	\$1,802	\$783	Essential
Highlands	C-33-35-28-010-0210-0000	CRACKER HAMMOCK LLC	5.12	\$884	\$384	Essential
Highlands	C-33-35-28-010-0220-0000	CRACKER HAMMOCK LLC	5.06	\$874	\$380	Essential

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Highlands	C-33-35-28-010-0230-0000	CRACKER HAMMOCK LLC	14.64	\$2,526	\$1,098	Essential
Highlands	C-33-35-28-010-0240-0000	CRACKER HAMMOCK LLC	15.63	\$2,696	\$1,172	Essential
Highlands	C-33-35-28-010-0250-0000	CRACKER HAMMOCK LLC	10.17	\$1,756	\$763	Essential
Highlands	C-33-35-28-010-0260-0000	CRACKER HAMMOCK LLC	11.59	\$6,678	\$5,548	Essential
Highlands	C-33-35-28-010-0270-0000	CRACKER HAMMOCK LLC	10.14	\$1,876	\$816	Essential
Highlands	C-20-36-28-A00-0010-0000*	DARK HAMMOCK LEGACY RANCH LLC	2,038.31	\$1,131,164	\$659,922	Essential
Highlands	C-19-35-28-A00-0020-0000	HART PASTURE LLC	0.29	\$374	\$162	Essential
Highlands	C-28-35-28-A00-0010-0000	HART PASTURE LLC	653.33	\$241,250	\$104,891	Essential
Highlands	C-29-35-28-A00-0010-0000	HART PASTURE LLC	628.73	\$224,272	\$97,509	Essential
Highlands	C-30-35-28-A00-0010-0000	HART PASTURE LLC	636.84	\$345,391	\$152,413	Essential
Highlands	C-31-35-28-A00-0010-0000	HART PASTURE LLC	655.79	\$414,015	\$177,471	Essential
Highlands	C-32-35-28-A00-0010-0000	HART PASTURE LLC	644.59	\$275,322	\$119,705	Essential
Highlands	C-27-35-28-A00-0220-0000	MID-STATE RANCH INC	80.13	\$13,742	\$5,975	Essential
Highlands	C-34-35-28-A00-0010-0000	MID-STATE RANCH INC	212.27	\$37,108	\$16,134	Essential
Highlands	C-04-36-28-A00-0020-0000	ROCKING CROSS RANCH INC	283.69	\$150,034	\$65,319	Essential
Highlands	C-03-36-28-A00-0010-0000	ROCKING CROSS RANCH INC	77.97	\$46,250	\$20,108	Essential
Highlands	C-04-36-28-A00-0010-0000	SKIPPER CATTLE CORP	478.29	\$219,280	\$95,339	Essential

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Highlands	C-27-35-28-A00-0210-0000	WATSON JOHN C III + GENA ANN	77.74	\$41,121	\$21,004	Essential
Highlands	C-34-35-28-A00-0030-0000	WATSON JOHN C III + GENA ANN	369.19	\$112,128	\$48,752	Essential
Highlands	C-27-35-28-A00-0240-0000	WATSON JOHN C III + GENA ANN	13.88	\$2,394	\$1,041	Essential
Highlands	C-27-35-28-A00-0230-0000	WATSON JOHN C III + GENA ANN	29.98	\$6,210	\$2,700	Essential
Highlands	C-27-35-28-A00-0250-0000	WATSON JOHN C III + GENA ANN	15.74	\$8,460	\$3,678	Essential
			9161.79	\$4,431,666	\$2,107,255	

*Partial or Prorated Parcel

Appendix D:**Imperiled Species FNAI Ranking Definitions**

FNAI
Definitions of imperiled species ranks and conservation status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

- G1** = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- G2** = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- G3** = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- G4** = Apparently secure globally (may be rare in parts of range).
- G5** = Demonstrably secure globally.
- GH** = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
- GX** = Believed to be extinct throughout range.
- GXC** = Extirpated from the wild but still known from captivity or cultivation.
- G#?** = Tentative rank (e.g., G2?).
- G#G#** = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
- G#T#** = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
- G#Q** = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
- G#T#Q** = Same as above, but validity as subspecies or variety is questioned.
- GU** = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
- GNA** = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- GNR** = Element not yet ranked (temporary).
- GNRTNR** = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

- S1** = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
- S2** = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
- S3** = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- S4** = Apparently secure in Florida (may be rare in parts of range).
- S5** = Demonstrably secure in Florida.
- SH** = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
- SX** = Believed to be extirpated throughout Florida.
- SU** = Unrankable; due to a lack of information no rank or range can be assigned.
- SNA** = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
- SNR** = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida

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FNAI
Definitions of imperiled species ranks and conservation status

populations and that federal status may differ elsewhere.

- C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
- E = Endangered: species in danger of extinction throughout all or a significant portion of its range.
- E, T = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
- E, PDL = Species currently listed endangered but has been proposed for delisting.
- E, PT = Species currently listed endangered but has been proposed for listing as threatened.
- E, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
- T = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
- PE = Species proposed for listing as endangered
- PS = Partial status: some but not all of the species' infraspecific taxa have federal
- PT = Species proposed for listing as threatened
- SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
- SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

- C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service
- FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
- FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
- FXN = Federal listed as an experimental population in Florida
- FT(S/A) = Federal Threatened due to similarity of appearance
- ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
- SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for *Pandion haliaetus* (Osprey) indicates that this status applies in Monroe county only.)
- N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: <<http://www.doacs.state.fl.us/pi/>>.

- E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
- T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
- N = Not currently listed, nor currently being considered for listing.

Appendix E:

Site Visit Photos



1. Mesic flatwoods Dark Hammock Ranch



2. Improved pasture common throughout project

October 14, 2022



3. Headwaters Fisheating Creek (Dark Hammock Ranch)



3. Depression Marsh (Dark Hammock Ranch)



4. Basin marsh/swamp impacted by invasive plant species (Cracker Hammock)



4. Mesic hammock (Cracker Hammock)



5. Mesic hammock with residence (Dark Hammock Ranch)



6. Cypress dome



6. Improved pasture (Skipper Cattle)



7. Mesic hammock and improved pasture (Hart Pasture)