Florida Forever Project Evaluation Report

Goodno Ranch

Glades County

Acquisition Type: Less-Than-Fee
Acres: 1,185
Just Value: $6,132,015
Application Date: April 30, 2022
Project Sponsor: Keith Fountain Law, PLLC

Prepared By:
Division of State Lands
Office of Environmental Services

FLORIDA FOREVER
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Submitted to the Acquisition and Restoration Council
October 14, 2022

Executive Summary

The proposed Goodno Ranch Florida Forever project contains 6 parcels, owned by Dwayne A. House Revocable Trust, totaling 1,185 acres in Glades County. The project is a working cattle ranch located directly north of State Road 80 and borders the Caloosahatchee River just east of the Caloosahatchee Ecoscape Florida Forever project. The closest city is LaBelle. The project is proposed as a less-than-fee acquisition and has a total tax assessed value of $6,132,015.

The property is mostly comprised of pasture (both improved and semi-improved) and mesic hammock, protecting almost 2 miles of frontage along the Caloosahatchee River. The property lies in a key region between the core habitat for the Florida panther (*Puma concolor coryi*) and the expansion zone required for long-term maintenance of the remaining panther population. Additional rare species documented or reported on-site include the Florida sandhill crane (*Antigone canadensis pratensis*), tricolor heron (*Egretta tricolor*), little blue heron (*Egretta caerulea*), and American alligator (*Alligator mississippiensis*). Nearly all of the proposed project area falls within Priority 1 of the Florida Ecological Greenways Network (FEGN).

The Goodno Ranch property has a lengthy history, starting in the late 1800s with cattle drives moving through the area. In 1909, Edgar Goodno purchased what would become Goodno Ranch. Mr. Goodno was recognized as one of the first to bring Brahma bulls to the United States. Henry Ford eventually took interest in the property and attempted to establish a rubber tree plantation. According to the Division of Historical Resources (DHR), there are nine archaeological sites located within or intersecting the boundary of the proposed project that collectively contain evidence of a variety of pre-Columbian occupations spanning at least 3,000 years of Florida history.

If approved for addition to the 2023 Florida Forever Priority List, the project should be considered as an amendment to the Caloosahatchee Ecoscape Florida Forever project boundary in the Critical Natural Lands category. All of the 1,185 acres proposed for acquisition are considered 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, 2022. Information included in this project evaluation report is a result of this site visit.

PURPOSE FOR ACQUISITION

If acquired, the purpose of Goodno Ranch project will conserve a portion of Florida's rural landscape of working ranchlands to facilitate improved habitat connectivity critical or the survival of the Florida panther. The project will also preserve nearly 2 miles of shoreline on the Caloosahatchee River fand contribute to the protection of the water quality in the river and the downstream estuaries of Charlotte Harbor.

Acquisition of this project would serve to:

- enhance the coordination and completion of land acquisition projects
- preserve significant archaeological or historic sites
- 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
- ensure that sufficient quantities of water are available to meet the current and future needs of natural systems and the citizens of the state

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Goodno Ranch Florida Forever project is a 1,169-acre tract (per GIS; 1,185 acres per the application) located approximately 10 miles east of LaBelle in Glades County. It is held by a single owner and is proposed for less-than-fee acquisition. Goodno Ranch is bordered by the Caloosahatchee River on the north, the South Florida Water Management District (SFWMD) Caloosahatchee River Basin Water Quality Treatment and Testing Facility to the west, and private lands to the south and east. The property also borders State Road 80 for approximately a mile along its southern border.

The project connects via existing conservation easements and as-yet unprotected lands in the Caloosahatchee River Ecoscape Florida Forever project, which extends south to Okaloacoochee Slough State Forest. To the north, this potential corridor continues as the Fisheating Creek Ecosystem Florida Forever project and connects with Fisheating Creek Wildlife Management Area (WMA). .

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, FNAI Florida Cooperative Landcover Data (Version 3.5), and information in the FNAI database, as well as a field survey on June 21, 2022 by FNAI biologists Kim Alexander and Geoff Parks along with the Acquisition and Restoration Council (ARC) liaison staff.

The proposal property is situated on the Immokalee Rise (Brooks 1981), a district that lies on a slight rise above the Caloosahatchee Valley to the north, the Okeechobee Basin to the east, and the low plains to the south and west that grade into the Everglades, Corkscrew Swamp, and the gulf coast. The project area itself is mostly level to gently sloping except where a steep spoil berm approximately 25 feet high parallels the river. Soils consist of predominantly poorly-drained to very-poorly-drained sands, with some areas of muck. The surrounding land use is largely agricultural, although residential development is increasing to the south and west along SR 80.

The Caloosahatchee River is the main source of freshwater for the Caloosahatchee estuary and contributes to the water quality of the lower Charlotte Harbor. Impacts from recent releases of water from Lake Okeechobee have heightened concerns about water quality in the river, which is currently classified as impaired.

The long-term conservation strategy for the Florida panther relies on panthers dispersing into and occupying suitable habitat north of the Caloosahatchee River. This property lies in a key region between core panther habitat and the expansion zone required for long-term maintenance of the panther population.

The Goodno Ranch is mainly divided between improved pasture (approximately half the site), semi-improved pasture (approximately 10%) and naturally vegetated areas (36%). Generally, improved pasture makes up the southern section of the property, grading to the north into semi-improved pasture and closed-canopy forests closer to the Caloosahatchee River.

The largest area of natural habitat on the project area is a band of mesic hammock north of the pastures, which extends west across most of the property from the eastern boundary. Live oak (*Quercus virginiana*) and cabbage palm (*Sabal palmetto*) dominate the canopy. Abundant epiphytes include Spanish moss (*Tillandsia usneoides*), golden polypody (*Phlebodium aureum*), and southern needleleaf (*Tillandsia setacea*); shrubs and small trees include citrus (*Citrus sp.*), Brazilian pepper (*Schinus terebinthifolia*; FISC Category I), and American beautyberry (*Callicarpa americana*). Cattle impacts to the soil are pronounced, and the relatively sparse herbaceous layer consisted of Caesar's

weed (*Urena lobata*; FISC Category I), basketgrass (*Oplismenus sp.*), and guinea-hen weed (*Petiveria alliacea*).

West of the mesic hammock is a forested wetland best characterized as hydric hammock. This area has a canopy of sugarberry (*Celtis laevigata*), live oak, cabbage palm, and strangler fig (*Ficus aurea*), with midstory dominated by Brazilian pepper. Scattered canopy openings are dominated by mostly weedy herbaceous species including crowngrass (*Paspalum sp.*), bushmint (*Hyptis sp.*), beggarticks (*Bidens alba*), guinea hen weed, tropical milkweed (*Asclepias curassavica*), Caesar's weed, and Everglades Key false buttonweed (*Spermacoce neoterminalis*). Small shrubs are limited but a few wild coffee (*Psychotria nervosa*) were seen.

Basin marshes occur within the forested areas. These are somewhat overgrown, with an herb layer consisting of wetland species such as lizard's tail (*Saururus cernuus*), climbing aster (*Symphyotrichum carolinianum*), and giant leather fern (*Acrostichum danaeifolium*) below a discontinuous canopy of shrubs and small trees, mainly coastalplain willow (*Salix caroliniana*) and Brazilian pepper.

The remaining 40 acres of natural habitat on the property is made up of depression marshes, which are scattered throughout the pastures. Impacts of cattle grazing are evident in these wetlands, which consist of a mix of invasive West Indian marsh grass (*Hymenachne amplexicaulis*) along with native herbs and grasses such as soft rush (*Juncus effusus ssp. solutus*), maidencane (*Panicum hemitomon*) lemon bacopa (*Bacopa caroliniana*), Colombian waxweed (*Cuphea carthagenensis*), and pickerelweed (*Pontederia cordata*). The marshes generally lack woody plants except for occasional coastalplain willow (*Salix caroliniana*).

The largest portion of the property is in improved pasture, consisting mainly of bahiagrass (*Paspalum notatum*) in some locations and limpograss (*Hemarthria altissima*) in others. cabbage palm occurred as individual trees or in small patches, and scattered herbaceous species among the pasture grasses included big carpetgrass (*Axonopus furcatus*) flatsedge (*Cyperus sp.*), slender flattop goldenrod (*Euthamia caroliniana*), coffeeweed (*Senna obtusifolia*), tropical soda apple (*Solanum viarum*), and Everglades Key false buttonweed (*Spermacoce neoterminalis*), with occasional red maple and iris (*Iris sp.*) in some wetter areas.

A peninsula of semi-improved pasture extends into the improved pasture from the north. This area has a broken canopy of cabbage palm and live oak and a midstory of Brazilian pepper, hog plum (*Ximenia americana*), and strangler fig. In addition to non-native pasture grasses in the groundcover, Caesar's weed was also present, and rosary pea (*Abrus precatorius*; FISC Category I) was a common vine.

The high spoil ridges above the river are more open and herbaceous than the hammocks, but otherwise have many of the same species. Trees growing on the spoil berm include sugarberry, cabbage palm, live oak, strangler fig, and Brazilian pepper. The herbaceous layer consists of native and non-native weedy species such as beggarticks, Baldwin's flatsedge (*Cyperus croceus*), Everglades Key false buttonweed, smutgrass (*Sporobolus indicus*), and Guinea grass (*Urochloa maxima*; FISC Category II). Vines, particularly peppervine (*Nekemias arborea*), are common.

A small developed area reported on the application to have a house and an artificial pond near the southeast corner of the property were not seen during the site visit. Combined, these make up less than 1% of the property.

Acquisition of the proposal would contribute to protection of water quality in the Caloosahatchee River and estuary, as well as facilitating improved connectivity for Florida panthers.

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

Community or Landcover	Acres	Percent of Proposal
mesic hammock	200	17%
hydric hammock	142	12%
basin marsh	43	4%
depression marsh	40	3%
pasture-improved	596	51%
pasture—semi-improved	111	9%
spoil area	34	3%
artificial pond	2	<1%
developed	1	<1%
road	<1	<1%
Totals	**1,169**	**100%**

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Goodno Ranch Florida Forever less-than-fee proposal based on field observations during the June 21, 2022 site visit, results of the GIS analysis, and follow-up discussions with the landowner and other site visit participants.

Goodno Ranch has a few structures on the property including one house, pole barns, pens, culverts, and fencing across the property for cattle and horses. Besides the use of cattle grazing as a habitat management tool on the property, Goodno Ranch primarily focuses on their cow/calf operation. The southwest corner of the property has been identified as a restoration project, but there have been some concerns regarding flooding of other parts of the property. Portions for the property are still under consideration for Wetland Reserve Easements.

Fire-dependent natural communities observed during the site visit included mesic hammock, depression marsh, basin marsh, and freshwater forested wetland. The landowner mentioned that previous ownersdid not conduct any prescribed fire or mechanical treatments in the natural communities within Goodno Ranch; however, there may have been periodic wildfires that occurred throughout the area. Given the history of fire suppression and cattle grazing on the property, the natural communities on Goodno Ranch do not appear to be in the best condition. The current landowner contracts prescribed burning on the pastures every three years. The landowner also contracts out roller chopping in the pasture habitat every five years to help aerate the soil. There is no non-native plant control throughout the property or any habitat management on natural communities.

Non-native plants such as Brazilian pepper, climbing fern (*Lygodium sp*.), and Caesar weed were observed during the field visit. Citrus trees were also observed in at least one mesic hammock. There are some rubber trees (*Ficus elastica*) that were planted many years ago and still occur on the property. Most of the mesic hammocks had a very overgrown understory and midstory in regard to density and height. Most of the depression marshes were highly degraded, which is likely due to cattle use. Of all the natural communities, the freshwater forested wetlands seemed to be in the best condition, although it was still slightly overgrown. Native plants like wild coffee, pop ash (*Fraxinus caroliniana*), and elms (*Ulma* spp.) were abundant within the freshwater forested wetlands. The improved pasture areas were in great condition and relatively open, with adequate trees to provide perching and roosting habitat for wildlife.

Wildlife species observed during the tour included white-tailed deer (*Odocoileus virginianus*), sandhill crane, black vulture (*Coragyps atratus*), turkey vulture (*Cathartes aura*), red-shouldered hawk (*Buteo lineatus*), swallow-tailed kites (*Elanoides forficatus*), eastern meadowlark (*Sturnella magna*), cattle egret (*Bubulcus ibis*), great egret (*Ardea alba*), white ibis (*Eudocimus albus*), crested caracara

(*Caracara cheriway*), and red-bellied woodpecker (*Melanerpes carolinus*). Across the Caloosahatchee River on property owned by the SFWMD, multiple snail kites (*Rostrhamus sociabilis*) were observed. Other notable sightings made by the landowner in the last ten years were Florida panther (*Puma concolor coryi*) with cubs, Florida black bear (*Ursus americanus*), eastern indigo snake (*Drymarchon couperi*), coyote (*Canis latrans*), and feral hog (*Sus scrofa*). There have been burrowing owls (*Athene cunicularia*) observed on the property by FWC staff outside of this site visit.

The FNAI element occurrence database only contains one record of a Florida panther on the property in 2018. It does not contain any records for other rare wildlife or plant species on Goodno Ranch. The absence of information in the FNAI database is not unusual as private lands such as Goodno Ranch generally do not report their observations to FNAI. In the preliminary evaluation report, FNAI mentions that there are nearby records of bald eagles (*Haliaeetus leucocephalus*). The habitat conditions on Goodno Ranch will favor listed species (e.g., crested caracara and sandhill cranes) that have adapted to thrive in pasture habitat. The FNAI database identified 100% of the Goodno Ranch as potential habitat for the Florida panther, 78% for Florida black bear, and 48% for crested caracara. The entire property is also designated as a Florida panther secondary dispersal zone.

The FWC GIS analysis of the Cooperative Land Cover v3.5 indicates that Goodno Ranch comprises a mixture of many different community types including improved pasture (32%), marshes (16%), mesic hammock (14%), rural (oak-cabbage palm forests) (12%), freshwater forested wetland (12%), and isolated freshwater marsh (5.98%). Approximately 38% of the property is classified as wetland based on the National Wetlands Inventory. A high percentage of this proposal contributes to priority 5 Landscape Category, priority 1 in terrestrial and waters category for Critical Lands and Waters Identification Project, and priority 5 in the Biodiversity Category.

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 a 0-10; a rank of 10 being of greatest value. Goodno Ranch is at a value of 7.6 within the FLAM ranking system.

The entire property is within Priority 1 of the FEGN, except a small portion that is within Priority 2. Additionally, the entire property is considered common Florida black bear range. 90% of the property shows an imperiled species richness for 7-9 imperiled species.

Approximately 56% lies within a designated FWC Strategic Habitat Conservation Area (SHCA) for species including Cooper’s hawk (*Accipiter cooperii*), Florida panther, Big Cypress fox squirrel (*Sciurus niger avicennia*), and Florida snail kite.

This property needs significant habitat management to help restore the natural communities to their historic condition and potential conversion of altered communities back to historical natural communities. Acquisition of Goodno Ranch under the Florida Forever program along with future restoration would benefit the overall conservation of Florida’s wildlife, plants, and habitats, especially by providing connectivity between established conservation lands nearby.

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 1,185 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 (1,185 acres) is proposed for less-than-fee acquisition via conservation easement.

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.

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 1,042 acres (89% of site) of SHCA. This is primarily within Priority 1 (74% of site) with the remainder in Priority 3 (10%) and Priorirty 5 (5%).

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 1,168 acres (100% of site) of rare species habitat. The habitat is mostly divided between Priority 5 (61% of site), Priority 4 (29%), and Priority 3 (10%), 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
Caracara cheriway	crested caracara	G5	694
Mustela frenata peninsulae	Florida long-tailed weasel	G5T3?	759
Puma concolor coryi	Florida panther	G5T1	1,169

Measure B3:

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

The FFME reports approximately 1,163 acres (99%) of the proposed project contributes to protection of ecological greenways with 91% of the acreage falling within Priority 1 areas, and 8% in Priority 2. 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 FFME table lists the acreages of under-represented natural communities found on the site. Based on this analysis, none of the proposal area is occupied by under-represented natural communities.

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 Goodno Ranch proposal would not contribute to a contiguous landscape-sized protection area of >50,000 acres.

Measure B6:

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

The project site lies within the Florida panther secondary zone and within one mile of the dispersal zone, identified as needed for panthers to cross the Caloosahatchee and disperse north. In addition to the property's potential importance for panthers, it also provides habitat for four bird species of concern that were seen on the site visit; Florida sandhill cranes, little blue herons, tricolored herons, and swallow-tailed kites. The owner reports that American alligator, occurs on the property as well. More extensive surveys may reveal rare plants or additional species of rare animals.

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					
none					
Additional rare plants reported on site by applicant					
none					
Rare animals documented on site					
Antigone canadensis pratensis	Florida sandhill crane	G5T2	S2	N	ST
Egretta caerulea	little blue heron	G5	S4	N	ST
Egretta tricolor	tricolored heron	G5	S4	N	ST
Elanoides forficatus	swallow-tailed kite	G5	S2	N	N
Additional rare animals reported on site by applicant					
Alligator mississippiensis	American alligator	G5	S4	SAT	FT(S/A)

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 200 acres of natural uplands and 225 acres of natural wetlands on Goodno Ranch are in relatively degraded ecological condition with fairly low native diversity, and would require moderate long-term efforts to restore to ecological health. The approximately 707 acres of pasture would require extensive long-term commitment to restore to native species, likely far beyond what is reasonable to expect for a working cattle ranch. The hydrology of the site has been altered by ditching as part of cattle and agricultural operations. Although restoring natural hydrology would be costly, there was consideration of creating water management facilities onsite, but the project as initially designed did not go forward.

Non-native invasive plants are relatively well-established on the property with Brazilian pepper being of particular concern, but with a wide variety of other species noted during the site visit as well. Significant efforts would likely be necessary to control invasive plants on site.

Measure C4:

The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 548 acres (47%) of the proposed project may contribute to the protection of natural floodplain function. This area is divided between Priority 4 (35%), Priority 5 (8%), and Priority 3 (4%). 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 1,168 acres (100%) 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 (63% of site) and Priority 2 (37%). 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 442 acres (38%) of the proposed project would provide protection for functional wetland systems. These areas are predominantly Priority 4 (28% of site), with the remainder divided equally between Priority 3 and Priority 5 (each at 5% 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.

A significant portion of the property appears to be impacted by non-native species. 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 Goodno Ranch property contains approximately 224 acres of wetland plant communities that provide hydrologic benefits through surface water storage and retention and groundwater recharge.

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.

Goodno Ranch is located within the SFWMD Lower West Coast Water Supply Planning Area. The property is not specifically included in any water resource development project listed in the water supply plan. However, open green space and water retention helps to promote the recharge of the surficial aquifer system.

Measure D3:

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

The entire property sits adjacent to the south bank of the Caloosahatchee River. The property is in restoration plan areas (Caloosahatchee and Lake Okeechobee Basin Management Action Plans [BMAPs]) and would provide surface and ground water protection.

Table 4. Spatial Analysis for Potential Water Quality Benefits of Goodno Ranch

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	8
DEP Florida Aquifer Vulnerability (FAVA)	4,7,10	4
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**	**37**

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 Goodno Ranch 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 Goodno Ranch Florida Forever project 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 Goodno Ranch 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, Goodno Ranch 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 DHR's Florida Master Site File, there are currently nine archaeological sites located within or intersecting the boundary of the Goodno Ranch Florida Forever project. The assemblage of sites found throughout the project collectively contain evidence of a variety of pre-Columbian occupations spanning at least 3,000 years of Florida history.

Of note is the inclusion of Long Hammock C (GL66) within the project boundary. This site is a recorded archaeological midden, which has been assessed by the State Historic Preservation Officer as being eligible for inclusion in the National Register of Historic Places.

Importantly, three archaeological sites recorded within the Goodno Ranch Florida Forever Project Boundary (GL47, GL66, GL68) have been noted in the Florida Master Site File as containing human remains. Regardless of acquisition, these sites are protected under §872.05, Florida Statutes. No ground disturbance may be conducted within the boundaries of these sites without prior consultation with the State Historic Preservation Office.

FIELD OBSERVATIONS:

No staff from DHR participated in the field evaluation of the Goodno Ranch Florida Forever Project.

GOAL G:

INCREASE THE AMOUNT OF FORESTLAND AVAILABLE FOR SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES

The primary land use is grazing. The forest features present onsite are not actively managed (there is not a need for active management), but are extremely important for the environment (water quality, aquifer recharge), wildlife (providing shelter, food), and passage ground for Florida's endangered species such as the Florida panther. The only recommendation for forested land is to prevent the spread of non-native, invasive species and eradicate those present onsite.

Measure G1:

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

The FFME reports approximately 429 acres (37% of site) could be available for sustainable forest management. This is entirely Priority 5. Prioritization is based on 4 criteria set by the Florida Forest Service: 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 G3:

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

The FFME reports that the property would not provide forestland to maintain natural groundwater recharge functions.

FLORIDA FOREVER CRITERIA

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

- the project is part of an ongoing governmental effort to restore, protect, or develop land areas or water resources
- the project has significant archaeological or historic value

- 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 Goodno Ranch Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING AND DEVELOPMENT

Contribution to Recreation and Open Space Needs

The proposal has moderate potential for contributing to recreation and open space needs. The applicant proposes a less-than fee acquisition, and no public use would be allowed on the property. The property would function as a wildlife corridor..

Potential for Losing Significant Natural Attributes or Recreational Open Spaces

Much of the subject property is improved pasture however the property does contain wetlands, and forested natural areas. The property is identified as a Florida panther dispersal zone which could be lost if the property were to be developed.

Potential for Being Subdivided

Low Potential (944 acres) and High Potential (241 acres): The portions of the property with a Residential Future Land Use Designation have a high potential for subdividing. Areas designated as agricultural open, agricultural residential, and conservation have a lower potential for subdividing.

Existing Land Uses and Future Land Use Designations

Existing Land Uses: The subject property is classified with the following land use/land cover with a variety of natural communities: pastureland (1,185 acres). The property can be described as a mosaic of improved pasture, and freshwater marsh, forested natural areas, live oak and cabbage palm, mixed wetlands, and hardwoods.

Future Land Uses: The subject property is designated as Agricultural/Residential (1 unit/5 acres), Agricultural/Open (1 unit/20 acres), Residential (7 units/acre), Commercial (60% impervious surface maximum), and Conservation (1 unit /20 acres) on the Glades County Comprehensive Plan Future Land Use Map (FLUM). These designations are implemented with a FLUM overlay map and plan policies that direct the location and amount of potential residential and nonresidential uses within the property and result in allowing the following: approximately 284 acres of Agricultural/Residential (56 potential development units), and approximately 482 acres of Agricultural/Open (24 potential development units), approximately 241 acres of Residential (1,687 potential development units), approximately 8 acres of commercial, and approximately 87 acres of conservation (4 potential development units).

Development Potential

Based on the Glades County Comprehensive Plan future land use designation of Agricultural/Open, Agricultural/Residential, and Residential, the subject property is allowed 1,771 developable units.

Transportation Planning Issues

The project falls within Florida Department of Transportation (FDOT) District 1, and is located adjacent to State Road 80, a Strategic Intermodal System (SIS) facility. Within two miles of the site there are two designated evacuation routes, SR 80 and SR 78, as well as the SUN Trail Network. 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

Brooks, H. K. 1981. *Guide to the physiographic divisions of Florida.* Florida Cooperative Extension Service, Institute of Food and Agriculture Sciences, University of Florida).

ACKNOWLEDGEMENTS

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:

- Florida Natural Areas Inventory – Geoffrey Parks & Kimberly Alexander
- Florida Fish and Wildlife Conservation Commission – Rachael Welsh & Eric Suarez
- Florida Forest Service – Catherine Ingram & Calin Ionita
- Florida Department of State, Division of Historical Resources – Jason O'Donoughue & Brandon Ackermann
- South Florida Water Management District – Justin Nolte & Steven Coughlin
- 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

Goodno Ranch: Florida Forever Measure Evaluation 20220803

GIS ACRES = 1,169

MEASURES	Resource Acres[a]	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	869	74%
Priority 2	0	0%
Priority 3	116	10%
Priority 4	0	0%
Priority 5	57	5%
Total Acres	1,042	89%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	115	10%
Priority 4	337	29%
Priority 5	716	61%
Priority 6	1	<1%
Total Acres	1,168	100%
B3: Ecological Greenways		
Priority 1	1,066	91%
Priority 2	97	8%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Total Acres	1,163	99%
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)	0	0%
Upland Hardwood Forest (G5)	0	0%
Total Acres	0	0%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	0	
G3	0	
G4	1	
G5	0	
Total	1	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	43	4%
Priority 4	409	35%
Priority 5	96	8%
Priority 6	0	0%
Total Acres	548	47%

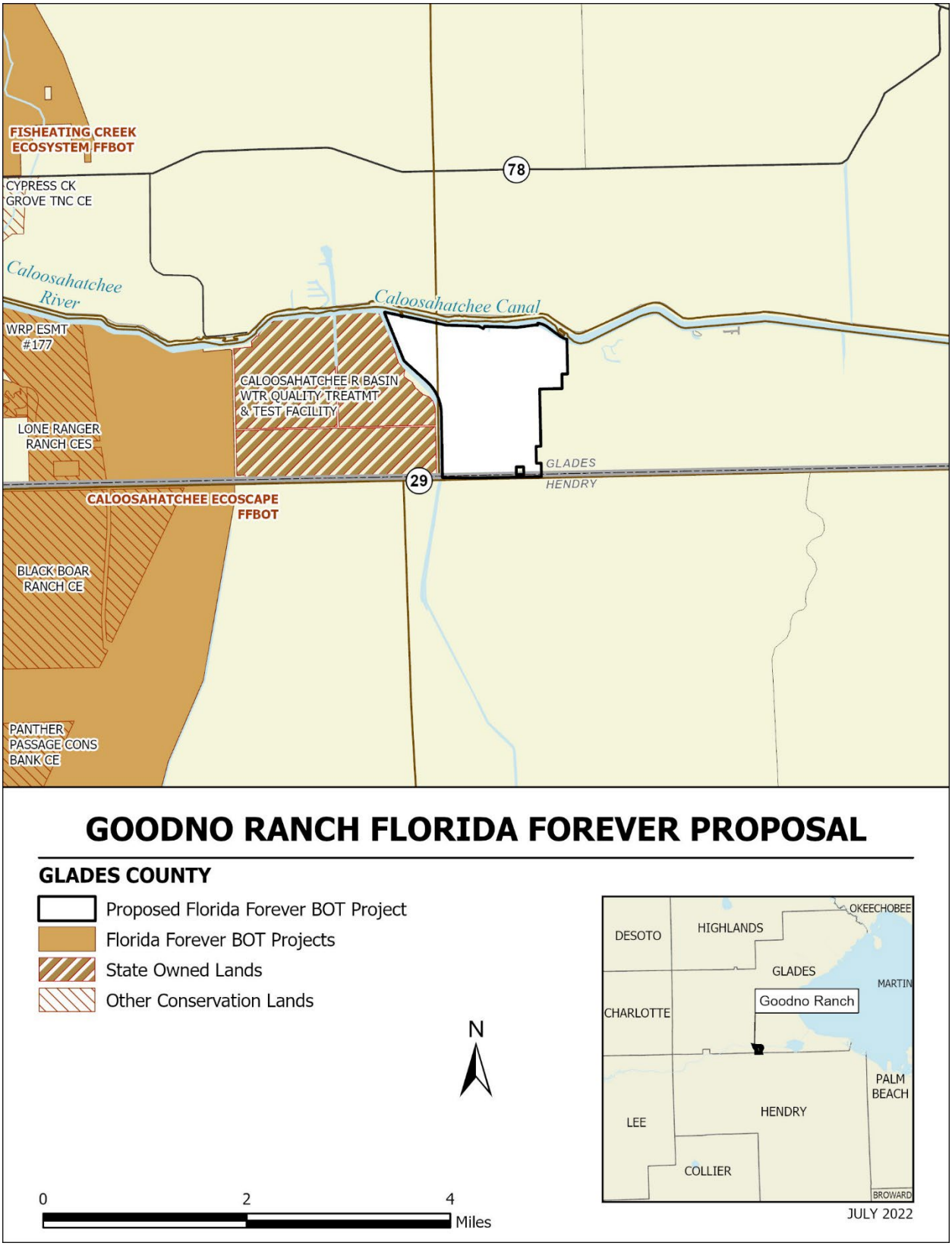
MEASURES (continued)	Resource Acres[a]	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	435	37%
Priority 3	0	0%
Priority 4	733	63%
Priority 5	0	0%
Priority 6	0	0%
Priority 7	0	0%
Total Acres	1,168	100%
C7: Fragile Coastal Resources		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
C8: Functional Wetlands		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	58	5%
Priority 4	324	28%
Priority 5	60	5%
Priority 6	0	0%
Total Acres	442	38%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	435	37%
Priority 4	372	32%
Priority 5	344	29%
Priority 6	18	2%
Total Acres	1,168	100%
E2: Recreational Trails (miles)		
(prioritized trail opportunities from Office of Greenways and Trails & Univ. Florida)		
Land Trail Priorities	0.0	
Land Trail Opportunities	0.0	
Total Miles	0.0	
F2: Arch. & Historical Sites (number)	9 sites	
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5 - Potential Pinelands	429	37%
Total Acres	429	37%
G3: Forestland for Recharge	0	0%

[a]Acres 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

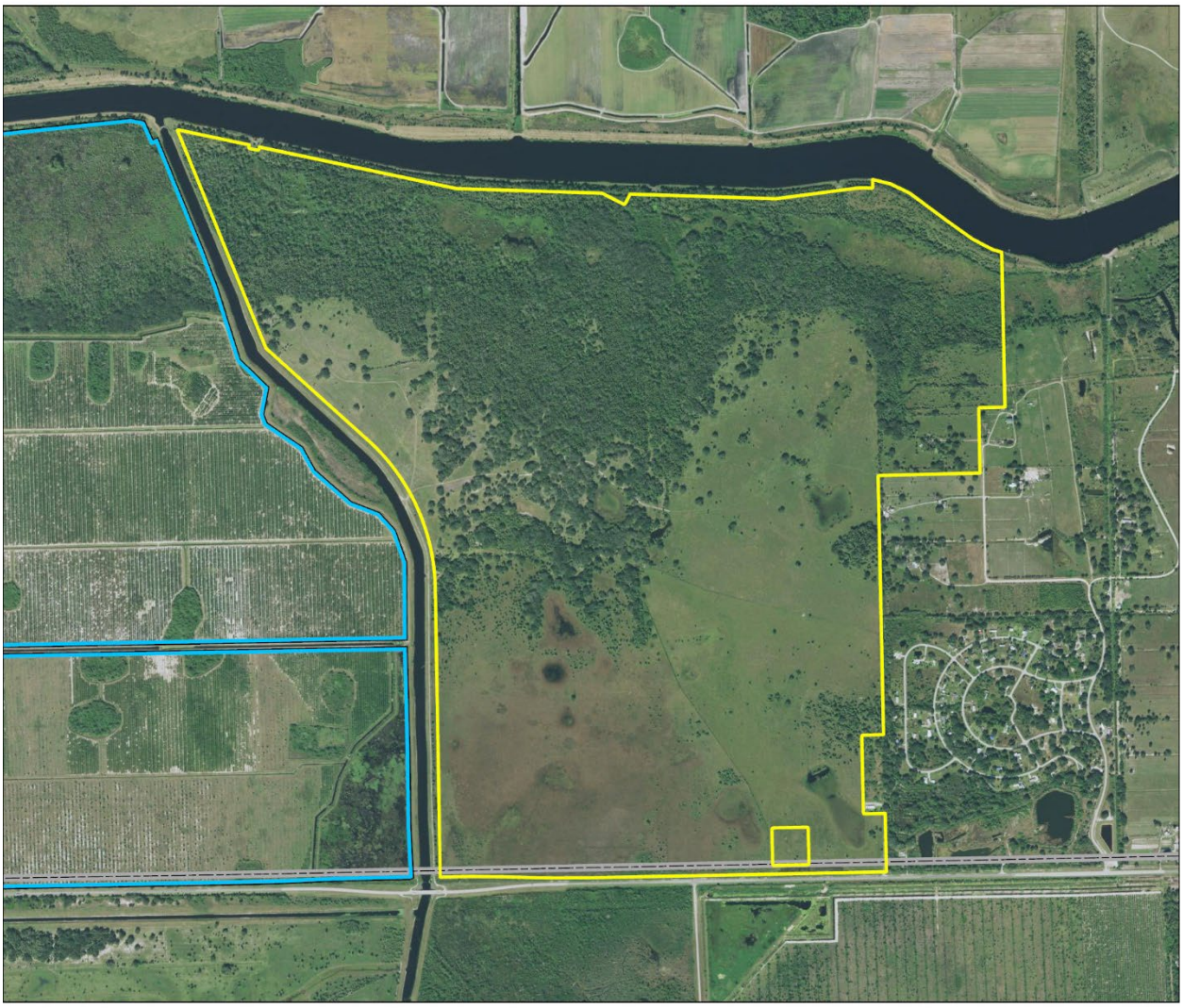
B1: Florida Forever map



B2: Aerial map

Goodno Ranch Florida Forever Proposal

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



Map Produced by: N. Pasco, July 2022

Background: USA NAIP Imagery Resolution = 1.0 meter

Florida Forever Proposal Boundary

Existing Water Mangement District Conservation Lands

FLORIDA Natural Areas INVENTORY

1018 Thomasville Road
Suite 200-C
Tallahassee, Florida 32303
850-224-8207
fax 850-681-9364
www.fnai.org

N

0 0.25 0.5 1 Miles

Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Glades	A25-42-30-A00-002B-0000	HOUSE DWAYNE A REV TR	133.67	$788,653	$16,891	Essential
Glades	A29-42-31-A00-005E-0000	HOUSE DWAYNE A REV TR	76.43	$450,937	$14,185	Essential
Glades	A30-42-31-A00-0040-0000	HOUSE DWAYNE A REV TR	310.14	$1,829,826	$32,564	Essential
Glades	A31-42-31-A00-0010-0000	HOUSE DWAYNE A REV TR	632.31	$2,797,972	$106,292	Essential
Glades	A32-42-31-A00-0070-0000	HOUSE DWAYNE A *RT*	20.01	$189,815	$83,495	Essential
Glades	A36-42-30-A00-001B-0000	HOUSE DWAYNE A REV TR	12.68	$74,812	$3,728	Essential
			1185.24	**$6,132,015**	**$257,155**	

Appendix D:

Imperiled Species FNAI Ranking Definitions

FNAI
Definitions of imperiled species ranks and conservation status

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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

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 hammock

2. Caloosahatchee River

3. Mesic hammock

4. Depression marsh

5.Improved pasture

6. Swallow-tail kite flying above hammock