

Florida Forever Project Evaluation Report

Avalon ***Jefferson County***



Acquisition Type: Less-Than-Fee

Acres: 13,272

Just Value: \$20,148,285

Application Date: April 30, 2022

Project Sponsors: Tall Timbers Research Station and Land Conservancy and
Saunders Ralston Dantzler Real Estate

Prepared By:

Division of State Lands

Office of Environmental Services



Submitted to the Acquisition and Restoration Council
October 14, 2022

Executive Summary

The original proposed Rosewood-Avalon Florida Forever project contained 14 parcels, totaling 3,680 acres in Jefferson County. The project is bordered by US 27 along its southern boundary and US 19/State Road 57 along its western boundary. The project is proposed as a less-than-fee acquisition and has a total tax assessed value of \$5,369,817.

On August 23, 2022, the Office of Environmental Services (OES) received an emergency request to incorporate additional acreage into the original project proposal due to the failing health of the property landowner. The Turner-Avalon amendment contains an additional 41 parcels, totaling 9,592 acres in Jefferson County. This acreage is composed of three disjunct tracts generally located on both the north and south sides of US 27 and extending west from CR 259 to near the town of Lamont. This amendment to the project is proposed as a less-than-fee acquisition and has a total tax assessed value of \$14,778,468.

The proposals generally fall within what is referred to as the Red Hills region, with eastern portions of the Turner-Avalon amendment located within the Aucilla lowlands. The majority of upland areas across both proposals is characterized as “old field” upland pine natural community; dominated by loblolly pine, with occasional longleaf pine and groundcover that lacks some key native components including wiregrass (*Aristida stricta*). Large areas of good quality upland hardwood forest and bottomland forest are frequently present across both proposals. These forests often support a mature tree canopy and include small seepage streams. Pine plantation is very common, and some portions of the proposals have been impacted by past agricultural activities including cotton and tung oil production. Currently, all properties are managed to support silviculture and hunting activities (quail and deer) and are regularly managed with prescribed fire. The proposals are located within the Northwest Florida Sentinel Landscape, a component of the Department of Defense Readiness and Environmental Protection Integration Program.

A wide variety of rare plant and animal species are documented or reported to occur in the proposal tracts. These include Florida black bear (*Ursus americanus floridanus*), gopher tortoise (*Gopherus polyphemus*), southern fox squirrel (*Sciurus niger niger*), Bachman’s sparrow (*Peucaea aestivalis*), one-toed amphiuma (*Amphiuma pholeter*), yellow fringed orchid (*Platanthera ciliaris*) and Florida mountain-mint (*Pycnanthemum floridanum*). Lands within both proposals (Turner-Avalon [76%] and Rosewood-Avalon [41%]) are in Priority 2 of the Florida Ecological Greenways Network (FEGN).

Cultural resources located within or intersecting the boundary of the Rosewood-Avalon Florida Forever proposal includes archaeological sites that contain evidence of a variety of pre-Columbian occupations and historic structures associated with the Florida tung oil industry of the mid-twentieth century.

An interagency team conducted a site visit to the Rosewood-Avalon project site on June 29, 2022. Information included in this project evaluation report for the initial Rosewood-Avalon proposal is a result of this interagency site visit.

Florida Natural Areas Inventory (FNAI) staff conducted a separate field survey for the Turner-Avalon proposal on August 23, 2022 and prepared a separate site evaluation report of the additional acreage. Information from FNAI’s site evaluation report of the Turner-Avalon proposal has been identified separately and included herein as appropriate. The Florida Fish and Wildlife Conservation Commission (FWC) also provided an initial Florida Forever project analysis for the Turner-Avalon proposal (see Appendix F). A site visit and evaluation of the Turner-Avalon proposal was not conducted by the interagency team.

If approved for addition to the 2023 Florida Forever Priority List, it is recommended that the final project containing 13,272 acres be called Avalon and placed in the Critical Natural Lands Category as a new standalone project. All 13,272 acres proposed for acquisition are considered essential due to the resources documented on the property (see Appendix C).

PURPOSE FOR ACQUISITION

Together, these proposals will provide a substantial contribution to the long-term protection of forestland and wetland systems characteristic of the Red Hills Region of Florida. The project will protect high quality ecological communities that provide critical habitat for the region's rare wildlife and plant species and contribute to a contiguous corridor of conservation lands that will provide important ecological connectivity in a rapidly growing region of the state.

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
- provide and enhance wildlife corridors and valuable habitat 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
- increase the amount of forestland available for sustainable management of natural resources

LOCATION AND PROXIMITY TO OTHER MANAGED AREAS

The Rosewood-Avalon Florida Forever proposal comprises a contiguous tract of 3,680 acres (per application; 3,674 GIS acres) in central Jefferson County, 6 miles south of the county seat of Monticello. The site is bordered on the south by US-27 and on the west by US-19/SR-57 (which intersect at Capps at the property's southwestern corner). Avalon Plantation and Oak Hill conservation easements approach the proposal very closely from the south side of US-27. The eastern edge of the proposal shares about 2 miles of common border with the Aucilla/Wacissa Watershed Florida Forever project, although the shared border is not continuous because of an excluded private tract of approximately 545 acres. The Aucilla/Wacissa Watershed project is contiguous with the Econfina Timberlands project, Turkey Scratch Plantation conservation easement, and Three Creeks Ranch conservation easement. Other nearby conservation lands and projects include Aucilla Wildlife Management Area, Middle Aucilla Conservation Area, and parcels within the St. Joe Timberland Florida Forever project.

Turner-Avalon Amendment

The Turner-Avalon Amendment is composed of three disjunct tracts totaling 9,592 acres in central Jefferson County, approximately 6 miles south of the county seat of Monticello. The westernmost block, known as the Avalon Annex tract, is on the north side of US-27 about 3.3 miles east of the county line. This tract contains a mile of frontage along US-27, and fronts CR-59 for 1.75 miles along the west. A tract known as the St. Joe tract lies 2.3 miles to the east; this tract is on the south side of US-27 with 4 miles of frontage along the highway, and fronts CR-259 for a half mile on its west edge. The Avalon Plantation conservation easement makes up the southern and eastern boundaries of this tract, with the Oak Hill conservation easement abutting a small area at the parcel's east edge; the proposed Rosewood-Avalon Florida Forever Project lies to the northeast directly across US-27. The third tract lies about 2 miles to the southeast, extending from the east edge of the Oak Hill Conservation Easement to near Lamont, where it has about 0.1 mile of frontage on US 27 and a smaller amount of frontage along Salt Lake Road. This parcel is less than a mile from the Three Creeks Ranch Conservation Easement and the Moore and Whit Foster Conservation Easements. Other nearby existing or proposed conservation lands include Aucilla Wildlife Management Area, Middle Aucilla Conservation Area, the Aucilla/Wacissa Watershed Florida Forever project, and the St. Joe Timberland Florida Forever project.

RESOURCE DESCRIPTION

Florida Natural Areas Inventory (FNAI)

This evaluation is based on information gathered from the proposal application, high resolution aerial imagery, U.S. Geologic Survey (USGS) 7.5' topographic maps, Cooperative Land Cover data (FNAI, Florida Cooperative Land Cover Map, version 2.3), and information in the FNAI database. A field survey was conducted on July 6, 2022 by FNAI staff Amy Jenkins and Dale Jackson, along with the Acquisition and Restoration Council (ARC) liaison staff and representatives for the landowner.

The property lies within what is commonly referred to as the Red Hills region, characterized by rolling, moderately well drained uplands with clay soils overlain by loamy sands, and isolated lakes and depressional wetlands. On-site elevations range from 90 feet to 230 feet.

Upland vegetation primarily resembles the upland pine natural community, although all of it was altered historically to support agriculture (chiefly cotton and tung oil according to the manager). The "upland pine" now growing on former old fields generally supports a flora lacking some key native components including wiregrass. Although longleaf pine historically dominated the canopy, these sites are now often dominated by loblolly pine, with occasional small pockets of longleaf pine. A grid of mowed lanes and narrow woods roads that support hunting activities (quail and deer) are imbedded within these open canopied pinelands. The pinelands make up around 43% of the proposal and are generally managed with mowing and prescribed fire.

According to the property manager, loblolly is harvested selectively throughout the uplands. The subcanopy is largely absent and the tall shrub layer is sparse, indicative of the fairly regular burning that takes place on the property. Species observed in the tall shrub layer include winged sumac (*Rhus copallinum*), sweetgum (*Liquidambar styraciflua*), and common persimmon (*Diospyros virginiana*). The short shrub layer, however, is dense and diverse, with many vine species. Species observed include winged sumac, sawtooth blackberry (*Rubus pensilvanicus*), sarsaparilla vine (*Smilax pumila*), yellow jessamine (*Gelsemium sempervirens*), earleaf greenbrier (*Smilax auriculata*), trumpet creeper (*Campsis radicans*), American beautyberry (*Callicarpa americana*), and sand blackberry (*Rubus cuneifolius*). Herbs were mostly early successional in nature and lacked the typical species found in upland pine such as wiregrass. Species observed during the site visit include goldenrod (*Solidago sp.*), common ragweed (*Ambrosia artemisiifolia*), oblongleaf twinflower (*Dyschoriste oblongifolia*), clover (*Trifolium sp.*), vervain (*Verbena sp.*), lespedeza (*Lespedeza sp.*), tick-trefoil (*Desmodium sp.*), sugarcane plumegrass (*Saccharum giganteum*), partridge pea (*Chamaecrista fasciculata*), and bluestem (*Andropogon sp.*). The invasive, Japanese climbing fern (*Lygodium japonicum*) was occasionally observed in the pinelands on the property.

Almost a quarter of the property is comprised of good quality upland hardwood forests that include small seepage streams. These closed-canopied forests have variable species assemblages where a drier forest meets the pinelands and as the forest slopes downward to the seepage stream it transitions to a more mesic or even hydric (bottomland forest) suite of species. Despite this variation, the areas are mapped as upland hardwood forest for the purposes of this evaluation because of the difficulty in discerning the difference on aerial photography. The closed canopy of the upland hardwood forest is diverse and includes southern magnolia (*Magnolia grandiflora*), loblolly pine (*Pinus taeda*), white oak (*Quercus alba*), sweetgum, spruce pine (*Pinus glabra*), tuliptree (*Liriodendron tulipifera*), American hornbeam (*Carpinus caroliniana*), laurel oak (*Quercus hemisphaerica*), Florida maple (*Acer saccharum ssp. floridanum*), American beech (*Fagus grandifolia*), and swamp chestnut oak (*Quercus michauxii*). Understory woody species are also quite diverse in this community and include smaller saplings of the canopy species plus water oak (*Quercus nigra*), pignut hickory (*Carya glabra*), bluestem palmetto (*Sabal minor*), American beautyberry, laurel greenbrier (*Smilax laurifolia*), muscadine (*Vitis rotundifolia*), switchcane (*Arundinaria gigantea*), red buckeye (*Aesculus pavia*), and smallflower pawpaw (*Asimina*

parviflora). A diverse suite of herbs was observed in the upland hardwood forests including woodoats (*Chasmanthium sp.*), Virginia chain fern (*Woodwardia virginica*), bracken fern (*Pteridium aquilinum*), witchgrass (*Dichantherium sp.*), greendragon (*Arisaema dracontium*), elephantsfoot (*Elephantopus sp.*), prostrate blue violet (*Viola walteri*), Violet (*Viola sp.*), trillium (*Trillium sp.*), partridgeberry (*Mitchella repens*), woodsgrass (*Oplismenus hirtellus*), Florida yam (*Dioscorea floridana*), Carolina wild petunia (*Ruellia caroliniensis*), Christmas fern (*Polystichum acrostichoides*), jack-in-the-pulpit (*Arisaema triphyllum*), woodland pinkroot (*Spigelia marilandica*), and sedge (*Carex sp.*). The state-listed, commercially exploited species needle palm (*Rhapidophyllum hystrix*) was observed in many upland hardwood forest areas on the proposal, including at least one very healthy large population covering many acres along a seepage stream. The lower elevation portions of the upland hardwood forest along seepage streams contained a slightly different suite of species including, water oak, red maple (*Acer rubrum*), spruce pine, American hornbeam, switchcane, Virginia willow (*Itea virginica*), eastern poison ivy (*Toxicodendron radicans*), and crossvine (*Bignonia capreolata*). Herbs in this area include netted chain fern (*Woodwardia areolata*), Virginia chain fern, maiden fern (*Thelypteris sp.*), royal fern (*Osmunda regalis var. spectabilis*), and woodsgrass. Three non-native invasive plant species were observed in the upland hardwood forests: Japanese climbing fern, coral ardisia (*Ardisia crenata*), and tung oil tree (*Aleurites fordii*). One mole salamander (*Ambystoma talpoideum*) was observed during the site visit in an upland hardwood forest near the edge of a basin marsh.

Four basin swamps occur across the property and make up around three percent of the total acreage. Pond cypress (*Taxodium ascendens*) and swamp tupelo (*Nyssa biflora*) are the dominant canopy species within the basin swamps. The tall shrub layer is fairly sparse and includes sweetbay (*Magnolia virginiana*), sweet pepperbush (*Clethra alnifolia*), common buttonbush (*Cephalanthus occidentalis*), and sweetgum. Shrubs such as common buttonbush and sweetbay were infrequent as well as herbaceous species such as sedge and narrowfruit horned beaksedge (*Rhynchospora inundata*).

Several basin marshes, ranging from 1 to 38 acres each, are embedded within swamp or upland hardwood forest on the proposal. The canopy of basin marsh is sparse and often restricted to the outer edges. It includes swamp tupelo and sweetgum. Similarly, the subcanopy consists of sparse examples of swamp tupelo, common persimmon, and water oak. Shrubs include common buttonbush, cat greenbrier (*Smilax glauca*), southern bayberry (*Morella cerifera*), and sawtooth blackberry. Much of these marshes is open water with variable sized areas of herbaceous vegetation including species such as sedge, lizard's tail (*Saururus cernuus*), narrowfruit horned beaksedge, netted chain fern, taperleaf waterhorehound (*Lycopus rubellus*), and waterlily (*Nymphaea sp.*).

A single sinkhole, with sinkhole lake included, occurs on the property surrounded by a pine plantation. The edge of the sinkhole has a canopy of swamp tupelo and sweetgum with a few buttonbush in the shrub layer. The sinkhole lake was mostly open water with duckweed (*Lemna sp.*). An American alligator (*Alligator mississippiensis*) was observed in this sinkhole lake during the site visit.

One highly disturbed depression marsh occurs on the property and was observed during the site visit. It is mostly herbaceous and includes non-native species such as bahiagrass (*Paspalum notatum*) and showy rattlebox (*Crotalaria spectabilis*), indicating its level of disturbance. This marsh was likely disturbed along with the surrounding uplands during farming. Other species more indicative of a depression marsh were observed and include smartweed (*Polygonum sp.*), meadowbeauty (*Rhexia sp.*), spikerush (*Eleocharis sp.*), crowngrass (*Paspalum sp.*), purple passionflower (*Passiflora incarnata*), foxtail (*Setaria sp.*), and rush (*Juncus sp.*).

Upland mixed woodland often exists as an ecotone between uplands (sandhill or upland pine) and either a wetland or hardwood forest. Several small areas of upland mixed woodland are mapped on the proposal, but other hardwood forests likely include small fringes of this community type along the upper elevation edges. One such area was observed during the site visit and had a canopy and subcanopy including southern red oak (*Quercus falcata*), mockernut hickory (*Carya tomentosa*), pignut hickory,

and sassafras (*Sassafras albidum*). In the shrub layer was a mix of woody species and vines including American beautyberry, Virginia creeper (*Parthenocissus quinquefolia*), and earleaf greenbrier. Herbs included tick-trefoil, woodoats, and witchgrass.

Just over 22% of the proposal is made up of altered landcover types; the most dominant is pine plantation, which occupies 20% of the property. Roads, clearings, clearcut pine plantation, and small developed areas containing small structures or mown lawn make up the remaining altered types and are minimal across the property. At least one of the pine plantations on the property that was observed during the site visit was planted with longleaf pine (*Pinus palustris*) but also contained scattered and often heavy infestations of the non-native invasive Japanese climbing fern. The subcanopy was composed of longleaf pine with scattered large laurel oak trees. The shrub layer consists of American beautyberry, muscadine, mockernut hickory, yellow jessamine, sand blackberry, earleaf greenbrier. The herbaceous layer is mostly dominated by weedy species such as common ragweed, partridge pea, witchgrass, showy rattlebox, lespedeza, and bahiagrass.

A small, improved pasture occurs in the southwestern corner of the property and has scattered canopy trees within the planted pasture grasses, mostly southern magnolia and live oak (*Quercus virginiana*). Shrubs are present but in very low numbers and include American beautyberry, loblolly pine. The pasture is planted with bahiagrass.

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

Community or Landcover	Acres	Percent of Proposal
“upland pine” (old field)	1,589	43%
upland hardwood forest	970	26%
basin swamp	94	3%
basin marsh	58	2%
dome swamp	53	2%
freshwater forested wetland	35	1%
upland mixed woodland	32	1%
sinkhole	4	<1%
depression marsh	1	<1%
pine plantation	746	20%
road	58	2%
clearing	18	<1%
pasture – improved	7	<1%
clearcut pine plantation	4	<1%
developed	5	<1%
Totals	3,674	100%

Turner-Avalon Amendment

This evaluation is based on information gathered from the proposal application, high resolution aerial imagery, U.S. Geological Survey (USGS) 7.5’ topographic maps, Cooperative Land Cover data (FNAI, Florida Cooperative Land Cover Map, version 3.4), and the FNAI database. A field survey was conducted on August 23, 2022 by FNAI staff Amy Jenkins and Geoff Parks, along with the project sponsor.

The Avalon Annex tract and portions of the others lie in the Tallahassee Red Hills, an area of rolling, moderately well drained uplands with clay soils overlain by loamy sands. The Magnolia Hill tract lies on the boundary between two physiographic provinces; the hill that gives the tract its name is essentially the southeasternmost extension of the Red Hills and is surrounded by swamps and marshes more characteristic of the Greenville Islands and Swamps. Elevations of the Avalon Annex vary from about

90 ft at its western boundary at the outflow of Burnt Mill Creek to about 215 feet at the eastern edge. The St. Joe tract contains numerous hills rising to above 200 ft, dissected by drainages flowing to Bailey Mill Creek, which mostly lie at about 100 ft MSL. On the Magnolia Hill tract, Magnolia Hill, which rises to about 189 feet above MSL, separates Anderson Bay and Aucilla-associated lowlands (65-70 MSL) from the coastal lowlands to the south (<40 feet MSL).

Somewhat less than half of the land on the project tracts is in natural vegetation. The natural community with the largest spatial extent (14% of the project) resembles upland pine. It occurs in a few areas on the Magnolia Hill tract and is the predominant cover on the northern half of the Avalon Annex tract. These are open stands of widely spaced pines on gently to steeply rolling hills. Much of this upland pine was altered historically to support agriculture. The "upland pine" now growing on former old fields generally supports flora lacking some key native components including wiregrass. A grid of mowed lanes and narrow woods roads that support hunting activities (quail and deer) are imbedded within these open canopied pinelands. Canopy composition is variable; the upland pine of the Avalon Annex has a canopy of mature longleaf pine, but some stands have slash pine (*Pinus elliotii*), loblolly pine, shortleaf pine (*Pinus echinata*), or a mixture. The owner is reported to use prescribed fire frequently in these communities, and this is evidenced by the openness of the stands and char on pine trunks observed during the site visit. These communities mostly lack midstory, but a few mockernut hickory and southern red oak do occur. In a few well preserved areas, grasses such as indiagrass (*Sorghastrum sp.*), sugarcane plume grass, wiregrass, and Curtiss' dropseed (*Sporobolus curtissii*), grow intermixed with myriad herbs including tall ironweed (*Vernonia angustifolia*), scaleleaf aster (*Symphotrichum adnatum*), dollarleaf (*Rhynchosia reniformis*), button rattlesnakemaster (*Eryngium yuccifolium*); small shrubs such as littleleaf buckbrush (*Ceanothus microphyllus*), southern bayberry, and runner oak (*Quercus pumila*) help to make a dense and diverse groundcover. One wet sloping site at Avalon Annex is notable in that the groundcover is in excellent condition with a large array of more hydrophytic species such as toothache grass (*Ctenium aromaticum*), savannah meadowbeauty (*Rhexia alifanus*) and the state-listed yellow fringed orchid. However, most areas mapped as upland pine are not in excellent condition, but are better classified as "old-fields" and are dominated by weedy species such as yankeeweed (*Eupatorium compositifolium*), bahiagrass, common ragweed, showy rattlebox, sweet tanglehead (*Heteropogon melanocarpus*) are more dominant, and only scattered remnants of the native groundcover persist.

Bottomland forests are found in low-lying areas on all three tracts, making up about 13% of the project area. They are generally associated with stream drainages, but sometimes found on slight elevations above basin swamps. Bottomland forest occurs along the Burnt Mill Creek drainage on the west edge of the Avalon Annex, along Bailey Mill Creek and Welaunee Creek in the St. Joe Tract, and likely along the eastern and southern edges of the Magnolia Hill tract as well. These are low, poorly drained hardwood forests that have a canopy of sweetgum, tuliptree, swamp chestnut oak, swamp laurel oak (*Quercus laurifolia*), red maple, American beech, southern magnolia, slash pine, spruce pine, and water oak. The shrub layer is relatively open but very diverse, including American witchhazel (*Hamamelis virginiana*), devil's walkingstick (*Aralia spinosa*), American holly (*Ilex opaca*), lanceleaf greenbrier (*Smilax smallii*), possumhaw (*Viburnum nudum*), switchcane, sawtooth blackberry, horse sugar (*Symplocos tinctoria*), fetterbush (*Lyonia lucida*), and Virginia willow. Herbaceous plants include Spanish needles (*Bidens bipinnata*), woodoats, witchgrass, Florida yam, Carolina elephantsfoot (*Elephantopus carolinianus*), woodland lettuce (*Lactuca floridana*), Japanese climbing fern (FISC-I), partridgeberry, cinnamon fern (*Osmunda cinnamomea*), bracken fern, maiden fern, and state-threatened southern lady fern (*Athyrium filix-femina* var. *asplenioides*). Another state-threatened species, angle pod (*Gonolobus suberosus*) was observed during the site visit in bottomland forest along a road crossing. Several invasive plants are present in the bottomland forest. Tung oil tree (FISC-II) is found frequently in this community, in some areas as a dominant component of the subcanopy. Other invasive species that are present but more localized in bottomland forests include white-flowered tradescantia (*Tradescantia fluminensis*; FISC-I) which was dense at one location, as well as Japanese honeysuckle (*Lonicera japonica*; FISC I), heavenly bamboo (*Nandina domestica*; FISC II), and Chinese

privet (*Ligustrum sinense*; FISC-I). It is likely that small higher areas of upland hardwood forest or lower spots occupied by basin swamp are included in some of the mapped bottomlands, due to the difficulty of distinguishing these communities on aerial photographs.

Upland hardwood forest occurs in scattered small- to medium-sized areas throughout all three tracts, often on lower hill slopes between pine plantation or upland pine and lower bottomland communities. These forests have a varied canopy including spruce pine, swamp chestnut oak, American beech, water oak, pignut hickory, white oak, southern red oak, and red maple. Shrubs and small trees include American witchhazel, mockernut hickory, sparkleberry (*Vaccinium arboreum*), switch cane, American beautyberry, sweetgum, yellow jessamine, sarsaparilla vine, muscadine, and the with herbaceous layer consisting of woodoats, Carolina elephantsfoot, tick-trefoil, little brown jug (*Asarum arifolium*), wild yam (*Dioscorea villosa*), Christmas fern, and sarsaparilla vine.

Basin swamps occupy large areas adjacent to Anderson Bay and Lake Iamonia on the Magnolia Hill tract, and occur as small inclusions in bottomlands in the St. Joe tract. Pond cypress, swamp tupelo, sweetgum, and sweetbay, in varying mixtures, are the dominant canopy species within the basin swamps. The tall shrub layer consists of sweet pepperbush, titi (*Cyrilla racemiflora*), Virginia willow, and fetterbush. Intermittent patches of herbaceous plants include lizard's tail, Virginia chain fern, sedge, green arrow arum (*Peltandra virginica*), and netted chain fern.

A large basin marsh—a portion of Lake Iamonia—occupies the west edge of a small disjunct parcel of the Magnolia Hill tract. Canopy is generally lacking although pond cypress occurs at the edges and very occasionally in the marsh interior. This marsh is dominated by emergent herbaceous plants including Cuban bulrush (*Cyperus blepharoleptos*), willow herb (*Decodon verticillatus*), maidencane (*Panicum hemitomon*), pickerelweed (*Pontederia cordata*), beaksedge (*Rhynchospora* sp.), arrowhead (*Sagittaria* sp.), goldenrod, broadleaf cattail (*Typha latifolia*), and yellow-eyed grass (*Xyris* sp.), with occasional open water areas containing floating aquatics such as frog's bit (*Limnobium spongia*) and white waterlily (*Nymphaea odorata*). Clumps of shrubs—including common buttonbush, marsh St. John's wort (*Triadenum* sp.), and coastalplain willow (*Salix caroliniana*)—occur as well but are not common. Other areas of basin marsh are mapped in an isolated basin on east of Magnolia Hill and surrounding Galilee Lake in the St. Joe tract, but these were not observed during the site visit.

Three small sinkhole lakes are found in the project area. Two were seen during the site visit. Mature swamp tupelo and sweetgum fringe the gently sloping edges of the basins. The shrub layer is dense at the edges, consisting of titi, common buttonbush, bayberry (*Morella* sp.), coastalplain willow, and American snowbell (*Styrax americanus*). The middle of these lakes were open water, likely due to the depth of the basin, but around the edges grow willow herb, rush, maidencane, sedge, and smallfruit beggarticks (*Bidens mitis*), with frog's bit, duckweed, American burreed (*Sparaginum americanum*), and Florida mudmidget (*Wolffiella gladiata*) growing in the shallow water. Another sinkhole lake near the north edge of the St. Joe tract was not visited.

Several small depression marshes are scattered through the pinelands on the Magnolia Hill property and the eastern portion of the St. Joe tract. These are herb-dominated communities, although shrubs and small trees—common buttonbush, common persimmon, peelbark St. John's wort (*Hypericum fasciculatum*), and slash pine—were found around the edges and occasionally as small clumps in the interior. Dominant vegetation includes a variety of graminoids and other wetland herbs such as maidencane, beaksedge, sedge, bluestem, spadeleaf (*Centella asiatica*), saltmarsh umbrellasedge (*Fuirena breviseta*), soft rush (*Juncus effusus* ssp. *solutus*), primrosewillow (*Ludwigia* sp.), smartweed (*Persicaria* sp.), and pale meadowbeauty (*Rhexia mariana*).

About 1% of the project is made up of baygall, mostly lying at the intergrade between the basin swamp and the shrub bog at Anderson Bay on the Magnolia Hill tract. Canopy of the baygall is predominantly sweetbay with some sweetgum; the shrub layer is moderate to dense, made up of sweet pepperbush,

fetterbush, water oak, and swamp laurel oak. The groundcover is intermittent, consisting of woodoats, netted chain fern, Virginia chain fern, and warty sedge (*Carex verrucosa*).

Aerial photos show a large area at the center of Anderson Bay that lacks tree canopy, suggesting that it is a shrub bog. This community was not seen during the site visit, although the view from the adjacent baygall during the site visit confirmed that a tree canopy was absent.

Dome swamps are relatively uncommon in the project area, but a handful occur intermixed with the pinelands on all three tracts. One dome swamp was inspected during the site inspection and was found to be in excellent condition. The swamp was bordered by a shrub layer of fetterbush and common buttonbush and dense growth of species such as narrowfruit horned beaksedge, marsh St. John's wort, and coral greenbrier (*Smilax walteri*). In the interior grow large mature pond cypress trees with only scattered herbaceous plants, including sedge, Virginia chain fern, soft rush, threeway sedge (*Dulichium arundinaceum*), taperleaf waterhorehound, and millet beaksedge (*Rhynchospora miliacea*),

Galilee Lake on the St. Joe tract is mapped as a clastic upland lake; this is an open waterbody amid pinelands. It is surrounded by a partial fringe of basin marsh and generally lacks floating vegetation.

One small area on the east side of the Magnolia Hill tract has been mapped as wet flatwoods. This area was not seen during the site visit, so its composition and condition are not known.

Just over 55% of the proposal is made up of altered landcover types; the most dominant is pine plantation, which occupies nearly half (46%) of the property. Most of these areas are being managed much like upland pine communities, consisting of low to moderate density stands of mature loblolly and slash pine with very little understory and a tall, dense groundcover of mostly ruderal herbaceous and woody species such as common ragweed, giant ragweed (*Ambrosia trifida*), showy rattlebox, beggarticks (*Bidens alba*), dogfennel (*Eupatorium capillifolium*), hairy indigo (*Indigofera hirsuta*), switchgrass (*Panicum virgatum*), sweet tanglehead, water oak, devil's walkingstick, sweetgum, winged sumac, American beautyberry, muscadine, winged sumac sand blackberry, earleaf greenbrier, common persimmon, pignut hickory, Virginia creeper, and laurel oak. Japanese climbing fern (FISC-I) was seen at multiple locations in the pine plantations and is sometimes abundant. While most of the pine plantations seen on the site visit were mature and resembled native communities, a few dense stands of younger slash and loblolly pine were observed. Most younger stands, however—both newly planted stands and open, medium-aged trees—were longleaf, consistent with the applicant's note that the landowner has been working to gradually transition the site's pine stands to longleaf.

Cleared areas, predominantly wildlife food plots, are extensive (over 5% of the property) and are scattered abundantly within the pinelands on all three tracts. These vary, but those seen during the site visit are mostly dominated by a tall layer of weedy herbaceous species including showy rattlebox, common ragweed, beggarticks, dogfennel, hairy indigo, switchgrass, sweet tanglehead, Foxtail grass, and goldenrod, mixed with sapling common persimmon and winged sumac.

A few other altered land use types occupy a very small portion of the project area (<1% in total). One small area of improved pasture was seen to be occupied by horses during the site visit; it was not assessed in detail. One area mapped as agriculture is a wildlife food plot growing corn, and there are small scattered developed areas including one small complex with a residence and outbuildings, and a few scattered pole barns, sheds, and grain bins, many of which remain from previous owners and are in dilapidated condition.

Table 2. Natural communities and landcover types within Turner-Avalon Amendment

Community or Landcover	Acres	Percent of Proposal
“upland pine” (old field)	1296	14
bottomland forest	1288	13
upland hardwood forest	566	6
basin swamp	426	4
shrub bog	358	4
basin marsh	99	1
baygall	91	<1
depression marsh	48	<1
dome swamp	32	<1
wet flatwoods	23	<1
clastic upland lake	16	<1
sinkhole lake	11	<1
pine plantation	4395	45.8
clearing	512	5.3
successional hardwood forest	222	2.3
road	103	1.1
clearcut pine plantation	40	<1
agriculture	34	<1
pasture - improved	23	<1
developed	12	<1
Totals	9,595	100%

Florida Fish and Wildlife Conservation Commission (FWC)

This summary provides a resource assessment of the Rosewood-Avalon Florida Forever proposal based on field observations during the July 6, 2022 site visit and results of the GIS analysis. The property is proposed as a less-than-fee acquisition and consists of one parcel in Jefferson County totaling 3,674 acres. The Aucilla River Corridor Florida Forever Board of Trustees (BOT) Project borders the parcel to the east. Avalon Plantation and Oak Hill conservation easements lie to the south across Highway 19/27. Highway 19 borders the parcel to the west and rural private lands form the northern boundary.

The landowners primarily manage Rosewood-Avalon for hunting and there is a lease. There would not be public access if established as a conservation easement. Several species of invasive exotic plants were observed during the site visit, including climbing fern and coral ardisia. The landowners are treating some of these species. Loblolly pine is the dominant species in the uplands and the landowners have planted some longleaf pine in various canopy gaps. The landowners burn the uplands approximately every three years, conducting most burns during the dormant season. Most of the groundcover did not appear to support characteristic species, such as wiregrass, but is functioning as a pine community capable of supporting the list of Species of Greatest Conservation Need (SGCN) below.

A variety of upland and wetland communities occur on the property that provide diverse habitat for wildlife. Some communities and habitats observed on the site visit included pinelands, upland hardwood forest, seepage stream, isolated wetlands, and sinkholes. SGCN observed in the uplands included northern bobwhite (*Colinus virginianus*), brown-headed nuthatch (*Sitta pusilla*), and common ground-dove (*Columbina passerina*). Additional SGCN observations are reported in the application. Examples include Bachman’s sparrow, red-headed woodpecker (*Melanerpes erythrocephalus*), and white-breasted nuthatch (*Sitta carolinensis*).

Species observed in the wetland habitats on the site visit included American alligator, southern leopard frog (*Lithobates sphenoccephalus*), mole salamander, and cottonmouth (*Agkistrodon piscivorus*). Additional species observations reported in the application include beaver (*Castor canadensis*) and several species of freshwater turtles. The application also notes that hollow trees located throughout the bottomlands and close to water sources provide potential roost sites for bats. Aucilla Wildlife Management Area (WMA) is less than ten miles to the southwest and supports breeding colonies of the little blue heron (*Egretta caerulea*), a state-listed species. The various waterbodies on Rosewood-Avalon provide foraging habitat for wading birds and waterfowl and could potentially support breeding colonies of wading birds, as on Aucilla WMA.

The tracks of a small Florida black bear were observed on the site visit and hunting lessees reported seeing a large Florida black bear on the property. Florida black bears are common in this part of Florida and establishing the property as an easement would protect connectivity to conservation lands to the east and south; however, bears would have to cross Highway 19/27 to reach conservation lands to the south, including Aucilla WMA. Rosewood-Avalon is enrolled in the U.S. Fish and Wildlife Service's Safe Harbor Program due to presence of the federally listed red-cockaded woodpecker (*Picoides borealis*) on the adjacent Avalon Plantation Conservation Easement. South of Avalon Plantation is Aucilla WMA and to the south of Aucilla WMA is St. Marks National Wildlife Refuge (NWR), which supports a population of red-cockaded woodpeckers. Trees on Aucilla WMA are not currently old enough to support red-cockaded woodpecker clusters, but there is potential for a corridor from St. Marks NWR to Rosewood-Avalon in the future.

The FWC GIS analysis of the Cooperative Land Cover v3.5 indicates that the Rosewood-Avalon property is a mix of many different community types including pine plantations (59%), freshwater forested wetlands (21%), and upland hardwood forest (6%). For a complete list of natural community types present, see the attached FWC GIS analysis for more detailed information.

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 5.6.

The property shows an imperiled species richness for 5-8 imperiled species (96%). The eastern mudminnow (*Umbra pygmaea*) and ironcolor shiner (*Notropis chalybaeus*) were the two rare fish species identified in the analysis for the riverine systems within the boundary.

The FNAI database identified 99% of the Rosewood-Avalon property as potential habitat for the Florida black bears and 6% for wood stork (*Mycteria americana*). Approximately 30% of the property is within Priority 2 of the FEGN, or Florida Wildlife Corridor.

Turner-Avalon Amendment

FWC completed an updated Florida Forever Project Proposal Analysis that includes the additional 9,596-acre Turner-Avalon Amendment made to the original project proposal. The results of this GIS analysis can be found in Appendix F.

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 13,272 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 (13,272 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 3,596 acres (98% of site) of Strategic Habitat Conservation Areas. This is primarily within Priority 3 (91% of site) with the remainder in Priority 5 (7%).

Turner-Avalon Amendment

The Florida Forever Measure Evaluation (FFME) table (Appendix B) reports the site contains approximately 8,640 acres (90% of site) of Strategic Habitat Conservation Areas. This is primarily within Priority 3 (69% of site) and Priority 5 (21%) with the remainder in Priority 2 (<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 214 acres (6% of site) of rare species habitat, all of it in Priority 6 areas.

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 3. Rare species habitat based on FNAI Habitat Conservation Priorities Rosewood-Avalon

Scientific Name	Common Name	Global Rank	Acres
<i>Mycteria americana</i>	wood stork	G4	214

Turner-Avalon Amendment

The FFME reports the proposed project contains approximately 2,115 acres (22% of site) of rare species habitat, all of it in Priority 6 areas.

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 4. Rare species habitat based on FNAI Habitat Conservation Priorities Turner-Avalon Amendment

Scientific Name	Common Name	Global Rank	Acres
<i>Aphodius baileyi</i>	Bailey's pocket gopher aphodius beetle	G2G3	160
<i>Mycotrupes cartwrighti</i>	Cartwright's mycotrupes beetle	G3	1119
<i>Dryobates borealis</i>	red-cockaded woodpecker	G3	221
<i>Mycteria americana</i>	wood stork	G4	622

Measure B3:

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

The FFME reports approximately 3,630 acres (99%) of the proposed project contributes to protection of ecological greenways with 58% of the site falling within Priority 5 areas, and 41% 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.

Turner-Avalon Amendment

The FFME reports approximately 8,763 acres (91%) of the proposed project contributes to protection of ecological greenways with 76% of the site falling within Priority 2 areas, and 15% in Priority 5.

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 lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Rosewood-Avalon Tract proposal contains 1,589 acres of upland pine (43% of site), and 970 acres of upland hardwood forest (26%).

Turner-Avalon Amendment

. The FFME lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Turner-Avalon proposal contains 1,296 acres of upland pine (14% of site), 566 acres of upland hardwood forest (26%), and 23 acres of wet flatwoods (< 1%).

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 Rosewood-Avalon Tract proposal would not at this time contribute to a contiguous landscape-sized protection area of >50,000 acres. However, Aucilla Wildlife Management Area is part of the closest landscape-sized protection area, which is approximately 5 miles from the proposal, and it is nearly connected to the proposal by two large conservation easements.

Turner-Avalon Amendment

The Turner-Avalon proposal would not at this time contribute to a contiguous landscape-sized protection area of >50,000 acres. However, Aucilla Wildlife Management Area is part of the closest landscape-sized protection area, which is approximately 1.2 miles from the proposal, and it is nearly connected to the proposal by two large conservation easements.

Measure B6:

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

The table below lists rare plant and animal species known or reported to occur on site. The entire site is within a general region where the Florida black bear is considered by FWC to be abundant, although this encompasses a broad area that includes much of the central and eastern Panhandle. During the July 6 site inspection, the team observed a fresh black bear track along one of the woods roads, as well as an alligator (near adult size) in the sinkhole lake. Peter Kleinhenz (Tall Timbers) compiled a bird observation list that included little blue heron; on previous reconnaissance trips in April, he reported observations of Bachman's sparrow singing, Louisiana waterthrush, and white-breasted nuthatch, as well as King's hairstreak (a skipper butterfly). Several occurrences of needle palm (*Rhapidophyllum hystrix*) were observed in the high-quality upland hardwood forests during the July site survey. The FNAI database contains no additional records of rare species on the proposal, but this may reflect a lack of surveys. Given the extent of rolling pine uplands, the absence of evidence of gopher tortoises on site was especially notable during the site survey; this may reflect past harvest as well as poor condition of the groundcover.

The Avalon Plantation conservation easement immediately to the south is known to harbor several rare plants and animals, including Florida mountain mint (G3, S3, N, T), Flyr's brickell-bush (*Brickellia cordifolia*; G3, S2, N, E), red-cockaded woodpecker (*Dryobates borealis*; G3, S2, E,PT, FE), bald eagle (*Haliaeetus leucocephalus*, G5, S3, N, N), Golden-banded Skipper (*Autochton cellus*; G4, S1, N, N), Cartwright's mycotrupes beetle (*Mycotrupes cartwrighti*; G3, S2, N, N), and several other rare invertebrates. The one-toed amphiuma (G3, S3, N, N; an "aquatic" salamander) was captured in headwaters of Bailey Mill Creek just southwest of Capps and may occur in creek mucks on site. The mud sunfish (*Acantharchus pomotis*; G4G5, S3, N, N) has been taken further downstream in the same creek.

Turner-Avalon Amendment

A wide variety of rare plant and animal species are documented or reported to occur in the proposal tracts, as listed in the table below. Gopher tortoise, southern fox squirrel, two imperiled birds (Bachman's sparrow and white-breasted nuthatch), and four imperiled plants (little brown jug, southern lady fern, angle pod, and yellow fringed orchid) were observed during the site visit. Other species

documented in the FNAI database include one-toed amphiuma (captured in the headwaters of Bailey Mill Creek on the St. Joe tract), bald eagles, and Florida mountain-mint. The site is also within a region where the Florida black bear is considered abundant by FWC.

Staff from Tall Timbers have reported a variety of other imperiled species from the site. These include swallow tailed kite, Louisiana waterthrush (common as a migrant but noteworthy if nesting), and red-cockaded woodpecker. The woodpecker is present on the Avalon conservation easement; artificial cavities for this species have been provided on the proposal property to allow that population to expand. In addition, the application reports a wide variety of rare insects (mayflies, dragonflies, and a beetle; listed below).

There are several other rare or listed species documented nearby that may occur on the properties. Species documented very near the Avalon Annex include eastern diamondback rattlesnake (*Crotalus adamanteus*; G3,S3,N,N), Bailey's pocket gopher Aphodius beetle (*Aphodius baileyi*; G2G3, S2, N, N), and Hubbell's pocket gopher Aphodius beetle (*Aphodius hubbellii*; GNR, S3?, N, N). The Avalon Plantation Conservation easement, adjoining the St. Joe tract, is known to harbor one additional imperiled plant (Flyr's brickell-bush; G3, S2, N, E) and several rare invertebrates (golden-banded skipper, G4, S1, N, N; a mayfly, *Isonychia sicca*, G5, S2S3, N, N; American rubyspot, *Hetaerina americana*, G5, S2, N, N; elfin skimmer, *Nannothemis bella*, G4G5, S2, N, N; hoary edge, *Achalarus lyciades*, G5, S2, N, N; lace-winged roadside skipper, *Amblyscirtes aesculapius*, G3G4, S3S4, N, N.). Additionally, 2 fish--the mud sunfish (G4G5, S3, N, N) and the eastern mudminnow (G5, S3, N, N) have been documented in Bailey Mill Creek downstream from the St. Joe tract. Additional surveys of the site could document these or other imperiled species.

A gopher tortoise recipient site lying mostly within the footprint of the proposal on the Avalon Annex received 416 tortoises between 2014 and 2016 and is undergoing continued monitoring. A second gopher tortoise recipient site on the Avalon Conservation Easement received 142 tortoises between 2016 and 2018. Although not adjacent to the proposal parcels, this recipient site appears to be connected to tortoise habitat on the Magnolia Hill tract by over a mile of potentially suitable uplands. Both recipient sites are permitted by FWC under a Scientific Collecting permit and may continue to receive tortoises to the properties.

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 tables below contain 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 4. Rare plants and animals documented or reported to occur within the proposed Rosewood-Avalon project

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
Rare plants documented on site					
<i>Rhapidophyllum hystrix</i>	Needle palm	G4	S4	N	CE*
Additional rare plants reported on site by applicant					
Rare animals documented on site					
<i>Alligator mississippiensis</i>	American alligator	G5	S4	SAT	FT(S/A)
<i>Egretta caerulea</i>	little blue heron	G5	S4	N	ST
<i>Ursus americanus floridanus</i>	Florida black bear	G5T4	S4	N	N
Additional rare animals reported on site by applicant					
<i>Satyrium kingi</i>	King's hairstreak	G3G4	S2	N	N
<i>Parkesia motacilla</i>	Louisiana waterthrush	G5	S2	N	N
<i>Peucaea aestivalis</i>	Bachman's sparrow	G3	S3	N	N
<i>Sitta carolinensis</i>	white-breasted nuthatch	G5	S2	N	N

Table 5. Rare plants and animals documented or reported to occur within the proposed Turner-Avalon Amendment

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
Rare plants documented on site					
<i>Asarum arifolium</i>	little brown jug	G5	S3	N	T
<i>Athyrium filix-femina ssp. asplenioides</i>	southern lady fern			N	T
<i>Gonolobus suberosus</i>	angle pod			N	T
<i>Platanthera ciliaris</i>	yellow fringed orchid			N	T
<i>Pycnanthemum floridanum</i>	Florida mountain-mint	G3	S3	N	T
Additional rare plants reported on site by applicant					
<i>Rhapidophyllum hystrix</i>	needle palm	G4	S4	N	CE*
Rare animals documented on site					
<i>Amphiuma pholeter</i>	One-toed amphiuma	G3	S3	N	N
<i>Gopherus polyphemus</i>	gopher tortoise	G3	S3	CE	ST
<i>Haliaeetus leucocephalus</i>	bald eagle	G5	S3	N	N
<i>Peucaea aestivalis</i>	Bachman's sparrow	G3	S3	N	N
<i>Sitta carolinensis</i>	white-breasted nuthatch	G5	S2	N	N
<i>Sciurus niger niger</i>	southern fox squirrel	G5T5	S3	N	N
<i>Ursus americanus floridanus</i>	Florida black bear	G5T4	S4	N	N

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
Additional rare animals reported on site by applicant					
<i>Cordulegaster obliqua fasciata</i>	banded spiketail	G4T3Q	S3	N	N
<i>Dromogomphus armatus</i>	southeastern spinyleg	G4	S3	N	N
<i>Hexagenia bilineata</i>	a mayfly	G5	S2	N	N
<i>Mycotrupes cartwrighti</i>	Cartwright's mycotrupes beetle	G3	S2	N	N
<i>Neurocordulia obsoleta</i>	umber shadowfly	G5	S2	N	N
<i>Progomphus alachuensis</i>	tawny sanddragon	G3	S3	N	N
<i>Stenacron floridense</i>	a mayfly	G3G4	S3S4	N	N
<i>Parkesia motacilla</i>	Louisiana waterthrush	G5	S2	N	N
<i>Elanoides forficatus</i>	swallow-tailed kite				
<i>Egretta caerulea</i>	little blue heron	G5	S4	N	ST
<i>Dryobates borealis</i>	red-cockaded woodpecker	G3	S2	E	FE

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.

Restoration may be limited for the site since the proposal is for less-than-fee acquisition. However, the greatest potential for restoration lies in the extensive (>1,500 acres) upland pine areas of the property. Although classified here as upland pine for the purposes of this evaluation, these uplands have a significantly altered canopy and groundcover composition. Having developed on former agricultural land, these areas retain many “old-field” characteristics. Off-site pine species such as loblolly pine, non-native bahiagrass, and early successional native species dominate some areas as a result of decades of chopping and mowing. Restoration efforts in these areas might include removal of loblolly pines, planting native groundcover species, and re-establishment of longleaf pine. Management with fire has helped to retain some native groundcover species, although wiregrass is lacking and was not observed during the field assessment. The remnant natural areas would benefit from continued frequent fire and the discontinued use of lanes mowed through the areas. Monitoring and eradication of invasive plant species, especially in the high-quality upland hardwood forests would be beneficial. The problem appears to be relatively minor and very manageable at this time; coral ardisia, Chinese tallow tree, tung oil tree, Chinaberry, mimosa, and Japanese climbing fern, all listed invasive species (FISP), were noted during the site visit. The manager of the property stated that Japanese climbing fern and Chinese tallow tree are being actively treated on the property.

Approximately 20% of the property is planted in pine plantation, at least some of which was planted in longleaf pine. These areas provide an opportunity for restoration within the proposal. The plantations would benefit from prescribed fire. Thinning and some other form of fuel reduction may be necessary to burn these areas safely.

Turner-Avalon Amendment

Realistically, restoration expectations may be limited for the site since the proposal is for less-than-fee acquisition. Opportunities for restoration exist on the extensive acres of pine plantation; the current owners have invested significantly in a regime of burning, thinning, and mowing that has resulted in pine plantations that much more closely resemble natural communities than is typical. However, the groundcover of these areas resembles “old field” conditions rather than healthy native vegetation. The restoration of native upland pine groundcover in these areas would be costly and a substantial commitment not normally expected of private landowners. The remnant natural areas would benefit from continued frequent fire and the discontinued use of lanes mowed through the areas.

Monitoring and ongoing treatment of invasive plants and other aggressive weeds, especially in the high-quality upland pine, would be beneficial. Japanese climbing fern, and several species that are not listed as invasive but are increasingly recognized as threats to the integrity of native pinelands (particularly sweet tanglehead, showy rattlebox, and hairy indigo) are widespread in plantations on the site and could expand to impact the remnant upland pine communities. A wider diversity of invasive plants has been noted in bottomland forests on the proposal tracts. High density of tung oil tree and heavy, white-flowered tradescantia infestations could pose a risk to the native diversity of these communities. A complete assessment of invasive plants onsite should be completed prior to an easement being acquired.

Measure C3:

The percentage completion of targeted capital improvements in surface water improvement and management plans created under s. 373.453 (2), regional or master stormwater management system plans, or other adopted restoration plans.

There are no permits, no capital improvements in surface water improvement and management plans, no regional or master management system plans or adopted restoration plans known at this time for this project area. Note: this project is in both Suwannee River and Northwest Florida Water Management Districts.

Measure C4:

The number of acres acquired that protect natural floodplain functions.

The FFME reports approximately 1,035 acres (28%) of the proposed project may contribute to the protection of natural floodplain function. This area is divided between Priority 3 (11% of site), Priority 2 (10%), and Priority 4 (7%). Priority 1 areas are the most natural with the lowest intensity land uses.

Turner-Avalon Amendment

The FFME reports approximately 2,193 acres (23%) of the proposed project may contribute to the protection of natural floodplain function. This area is divided between Priority 2 (10% of site), Priority 3 (6%), Priority 4 (6%), and Priority 1 (1%). 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 3,618 acres (98%) 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 5 (47% of site), Priority 4 (40%), and Priority 2 (11%), with the remainder in Priorities 7 and 6 (<1% each). These areas represent acreage that contributes to the protection of state-designated Outstanding Florida Waters, springs, rare fish habitat, or other surface waters.

Turner-Avalon Amendment

The FFME reports approximately 9,289 acres (97%) 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 5 (54% of site), Priority 4 (21%), and Priority 6 (19%), with the remainder in Priority 2 (3%). 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 983 acres (27%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 3 (12% of site), Priority 2 (11%), and Priority 4 (4%). Priority 1 areas are the most natural with the lowest intensity land uses.

Turner-Avalon Amendment

The FFME reports approximately 2,300 acres (24%) of the proposed project would provide protection for functional wetland systems. This area is divided between Priority 2 (11% of site), Priority 3 (7%), Priority 4 (4%), Priority 1 (2%), and Priority 5 (<1%). 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.

Approximately 30 acres of invasive plants exist within the original Rosewood Avalon project proposal, the majority of which is tung oil tree. Japanese climbing fern, chinaberry and coral ardisia were also noted during the site visit. The land manager sprays tallow and lygodium.

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.

This Rosewood-Avalon project is an extremely large area comprised of multiple properties and locations. The project is within the Wacissa Basin Management Action Plan (BMAP), Wacissa Priority Focus Area, and Wacissa Spring shed. The project appears to have little to no development within or around the project area. There are significant natural resources present (streams) such that protecting the site can provide additional long-term benefits such as a protected corridor for wildlife movement. Portions of the project are within Zone A. The eastern edge of the property is within the study area of the FEMA flood map revisions that are ongoing. However, it does not appear there will be any changes. Water improvement projects would only increase the ability of the project area to achieve additional storage. Unfortunately, the number of properties and size of the project makes it difficult to estimate natural retention within the project area.

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.

This project is not in a District water supply plan.

Measure D3:

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

The Rosewood Avalon project is in a restoration plan area (Wassica Springs BMAP), and the property would provide surface and ground water protection.

Table 2. Spatial Analysis for Potential Water Quality Benefits of Rosewood-Avalon

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	0
DEP Florida Aquifer Vulnerability (FAVA)	4,7,10	10
DEP Special Nutrient Impaired WBIDs	9	0
DEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	0
DEP Springsheds or within 5 miles	10, 7	10
DEP BMAPs	10	10
DEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	30

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

FINAL DEAR SCORE = 2 - Medium low water quality protection benefits

GOAL E:

INCREASE NATURAL RESOURCE-BASED PUBLIC RECREATIONAL AND EDUCATIONAL OPPORTUNITIES

Measures E1-E3

Both the original project (Rosewood-Avalon) and the amended acreage (Turner-Avalon) are 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 Rosewood-Avalon 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 Rosewood-Avalon 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, Rosewood-Avalon 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 Florida Master Site File, there are currently three archaeological sites, and three historic structures located within or intersecting the boundary of the Rosewood-Avalon Florida Forever project. The assemblage of archaeological sites found throughout the project collectively contain evidence of a variety of pre-Columbian occupations encompassing at least 6,000 years of Florida history. The historic structures located within the project include a building complex associated with the Florida tung oil industry of the mid-twentieth century,

Notably, while not within the boundaries of this Florida Forever project, the National Register of Historic Places listed structure the Asa May House (JE123) sits adjacent to this project and represents one of the finest examples of antebellum architecture in the region. Portions of the Rosewood-Avalon Florida Forever Project include undeveloped land that was no doubt once part of the cultural landscape associated with JE123. Moreover, there is a high likelihood for as-yet-recorded archaeological resources associated with the antebellum cultural landscape to be present within the project area.

FIELD OBSERVATIONS:

All archaeological and historic sites currently listed in the Florida Master Site File that were observed during the field review appear to be in good condition. Based upon our field evaluation, there are likely a number of unrecorded archaeological sites throughout the entire Rosewood-Avalon Florida Forever Project. Should any artifacts be discovered on the project in the future, DHR recommends leaving them in place and contacting DHR's Public Lands Archaeology program.

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

The Rosewood-Avalon project is set up perfectly as is for sustainable resource management. Areas that are not planted pine provide habitat, ground cover, and food for wildlife. Stands that are pine are already sustainably managed. Incorporating some growing season fire to encourage warm season grass seeding is recommended. Uplands could stand to have groundcover converted to wiregrass.

Measure G1:

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

The FFME reports approximately 2,332 acres (63% of site) could be available for sustainable forest management, divided between Priority 3 (2,237 acres) and Priority 5 (95 acres). Prioritization is based on 4 criteria set by the Florida Forest Service (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.

There are 2,171 acres of planted pine that can be managed for an economic return. In addition, there are another 325 acres of upland hardwoods that can be cut and replanted with pine, if necessary.

Turner-Avalon Amendment

The FFME reports approximately 6,028 acres (63% of site) could be available for sustainable forest management, divided between Priority 3 (4,067 acres) and Priority 5 (1,961 acres). Prioritization is based on four 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 G3:

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

The FFME reports approximately 285 acres (8% of the site) would provide forestland to maintain natural groundwater recharge functions.

Turner-Avalon Amendment

The FFME reports approximately 851 acres (9% of the site) would provide forestland to maintain natural groundwater recharge functions.

Measure G4:

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

The FNAI preliminary report identified 1,589 acres within the original Rosewood-Avalon project proposal as restored upland pine habitat.

FLORIDA FOREVER CRITERIA

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

- the project meets multiple goals
- 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

The Acquisition and Restoration Council shall give increased priority to:

- projects that contribute to improving the water quality and flow of springs
- projects for which the state’s land conservation plans overlap with the military’s need to protect lands, water, and habitat to ensure the sustainability of military missions including:

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), 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 Avalon Florida Forever project will be phased based upon price.

GOVERNMENT PLANNING AND DEVELOPMENT

Contribution to Recreation and Open Space Needs

Moderate Potential: The property will serve as an important link between public lands in the vicinity of the project by providing an important wildlife corridor and helping to preserve wetlands in a high recharge area. The site is proposed for less than fee simple use and the application identifies that there will be no public uses allowed on the property for recreational purposes. The conservation of the property would help to maintain 10.1 miles of scenic viewshed along the public roads in Jefferson County.

Potential for Losing Significant Natural Attributes or Recreational Open Spaces

High Potential: Most of the project falls within the Aucilla River watershed. According to the U.S. Geological Survey, most of the site lies within a medium to high recharge potential area. The entire project lies within the Wacissa Springs Group Basin Management Action Plan. The majority of the 982 acres of wetlands are forested. Wetlands make up approximately one-quarter of the site. Most of this area is high quality wetlands with some timber which has been allowed to recover over the last several decades. In some areas, the lower portions of bottomland forests on the property consist of sand bottom streams. There are seeps and springs on some of the terraces above the streams. There are several isolated water bodies containing swamp tupelos that provide canopy cover for some of the wetland areas. There are about 56 acres of high-quality emergent wetlands on the site. There are several large sinkholes, some of which contain open water. Loblolly Pine is the dominant upland species. Approximately 202 acres of the site is classified as upland natural hardwood forest. There is significant biological diversity on the site. Signs of white-tailed deer, beaver, racoon, coyote, and Florida

Black Bear have all been observed. The site is enrolled in the US Fish and Wildlife Service's Safe Harbor program due to the presence of red-cockaded woodpecker sightings immediately adjacent to the property.

Potential for Being Subdivided

Moderate to Low: The property is in a rural area. The population of Jefferson County is one of the lowest in the state with 14,590 residents according to 2021 BEBR projections. Between 2010 and 2021, the population of the County declined by approximately 171 persons.

According to Department records, there has only been slight land use activity in the County since 1993. Development is frequently preceded by changes in the zoning or Future Land Use Map. There have been only 11 large scale amendments to the comprehensive plan, most of which were text amendments relating to the agricultural to residential uses. Staff found only one large scale land use change involving a 30-acre change from Agriculture-20 to Agriculture 5. These statistics are indicative of a relatively low level of Future Land Use Map activity in the county over the last 29 years.

Existing Land Uses and Future Land Use Designations

Existing Land Uses: According to the Jefferson County Property appraiser's assessments contained in the application, the property is currently in use as planted pine, natural timber, forested swamp, and pasture.

Future Land Uses: The property is designated as Agriculture-20. Properties with this designation generally are used for very large-scale agricultural activities, frequently involving plantations and timber-producing lands. Agriculture uses may include livestock, crop production, pasture lands, silviculture, orchards and groves, forestry operations and outdoor recreation. Residential density is limited to one unit per 20 acres.

Development Potential

Based on the current Future Land Use category on the site, the property can be developed at 1 unit/20 acres for a total of 184 dwelling units.

Transportation Planning Issues

The proposed project is located within Florida Department of Transportation (FDOT) District 3 and is located adjacent to State Road 57 and State Road 20, both Strategic Intermodal System (SIS) facilities. Within two miles of the site are seven Designated Evacuation Routes, primarily SR 20, SR 57, and Interstate 10 (a 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.

ACKNOWLEDGEMENTS

The DEP's DSL determined the final project recommendations. The Office of Environmental Services was responsible for the overall coordination of this report, with contributions from the following:

- Florida Natural Areas Inventory – Amy Jenkins, Dale Jackson & Geoffrey Parks
- Florida Fish and Wildlife Conservation Commission – Laramie Ferry, Josh Hendricks & Diana Pepe
- Florida Forest Service – Catherine Ingram & Dean Blankenship
- Florida Department of State, Division of Historical Resources – Jason O'Donoghue & Brandon Ackermann

- Suwannee River Water Management District – William McKinstry
- 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

Rosewood-Avalon Tract: Florida Forever Measure Evaluation 20220802

GIS ACRES = 3,675

MEASURES	Resource Acres ^a	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	3,349	91%
Priority 4	0	0%
Priority 5	247	7%
Total Acres	3,596	98%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	214	6%
Total Acres	214	6%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	1,510	41%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	2,120	58%
Total Acres	3,630	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)	1,589	43%
Mesic/Wet Flatwoods (G4)	0	0%
Upland Hardwood Forest (G5)	970	26%
Total Acres	2,559	70%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	0	
G3	1	
G4	1	
G5	2	
Total	4	
C4: Natural Floodplain Function		
Priority 1	0	0%
Priority 2	369	10%
Priority 3	392	11%
Priority 4	274	7%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	1,035	28%

MEASURES (continued)	Resource Acres ^a	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	390	11%
Priority 3	0	0%
Priority 4	1,452	40%
Priority 5	1,745	47%
Priority 6	20	< 1%
Priority 7	12	< 1%
Total Acres	3,618	98%
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	407	11%
Priority 3	431	12%
Priority 4	145	4%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	983	27%
D3: Aquifer Recharge		
Priority 1	0	0%
Priority 2	28	< 1%
Priority 3	875	24%
Priority 4	404	11%
Priority 5	2,368	64%
Priority 6	0	0%
Total Acres	3,674	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	0.0	
Total Miles	0.0	
F2: Arch. & Historical Sites (number)		
	3 sites	
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	2,237	61%
Priority 4	0	0%
Priority 5 - Potential Pinelands	95	3%
Total Acres	2,332	63%
G3: Forestland for Recharge		
	285	8%

^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.

Turner-Avalon: Florida Forever Measure Evaluation 20220823

GIS ACRES = 9,596

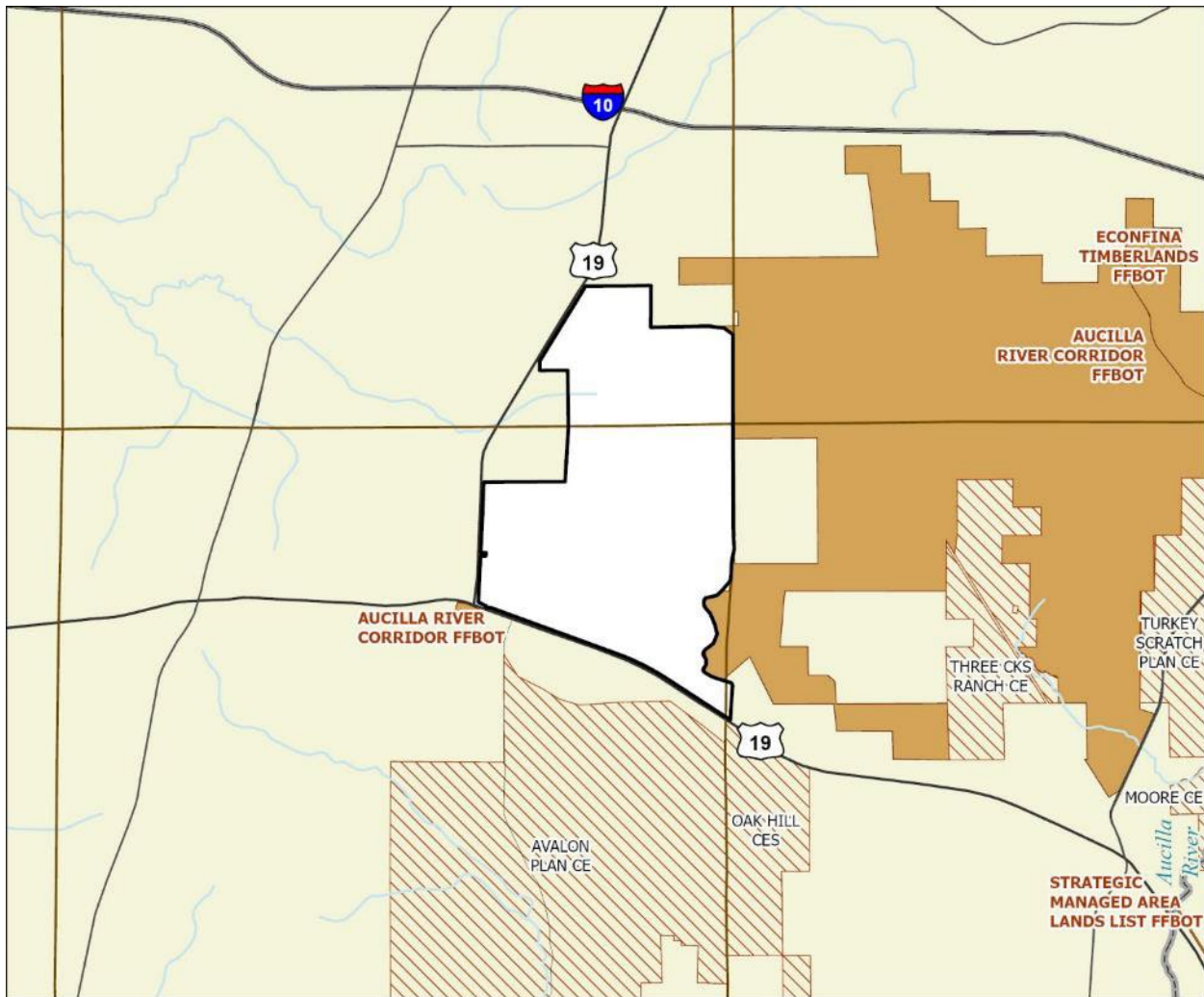
MEASURES	Resource Acres ^a	% of project
B1: Strategic Habitat Conservation Areas		
Priority 1	0	0%
Priority 2	1	< 1%
Priority 3	6,658	69%
Priority 4	0	0%
Priority 5	1,981	21%
Total Acres	8,640	90%
B2: FNAI Habitat Conservation Priorities		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	2,115	22%
Total Acres	2,115	22%
B3: Ecological Greenways		
Priority 1	0	0%
Priority 2	7,305	76%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	1,458	15%
Total Acres	8,763	91%
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)	1,296	14%
Mesic/Wet Flatwoods (G4)	23	<1%
Upland Hardwood Forest (G5)	566	6%
Total Acres	1,885	20%
B6: Occurrences of FNAI Tracked Species		
G1	0	
G2	0	
G3	3	
G4	1	
G5	4	
Total	7	
C4: Natural Floodplain Function		
Priority 1	111	1%
Priority 2	914	10%
Priority 3	594	6%
Priority 4	574	6%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	2,193	23%

MEASURES (continued)	Resource Acres ^a	% of project
C5: Surface Water Protection		
Priority 1	0	0%
Priority 2	240	3%
Priority 3	0	0%
Priority 4	2,043	21%
Priority 5	5,209	54%
Priority 6	1,797	19%
Priority 7	0	0%
Total Acres	9,289	97%
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	200	2%
Priority 2	1,088	11%
Priority 3	853	7%
Priority 4	358	4%
Priority 5	2	< 1%
Priority 6	0	0%
Total Acres	2,300	24%
D3: Aquifer Recharge		
Priority 1	10	< 1%
Priority 2	296	3%
Priority 3	3,199	33%
Priority 4	907	9%
Priority 5	5,186	54%
Priority 6	0	0%
Total Acres	9,598	100%
E2: Recreational Trails (miles)		
<small>(prioritized trail opportunities from Office of Greenways and Trails & Univ. Florida)</small>		
Land Trail Priorities	0.1	
Land Trail Opportunities	0.0	
Total Miles	0.1	
F2: Arch. & Historical Sites (number) 24 sites		
G1: Sustainable Forestry		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	4,067	42%
Priority 4	0	0%
Priority 5 - Potential Pinelands	1,961	20%
Total Acres	6,028	63%
G3: Forestland for Recharge	851	9%

^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:

B1: Florida Forever map (Rosewood-Avalon)



ROSEWOOD-AVALON FLORIDA FOREVER PROPOSAL

JEFFERSON COUNTY

-  Proposed Florida Forever BOT Project
-  Florida Forever BOT Projects
-  State Owned Lands
-  Other Conservation Lands
-  State Aquatic Preserve

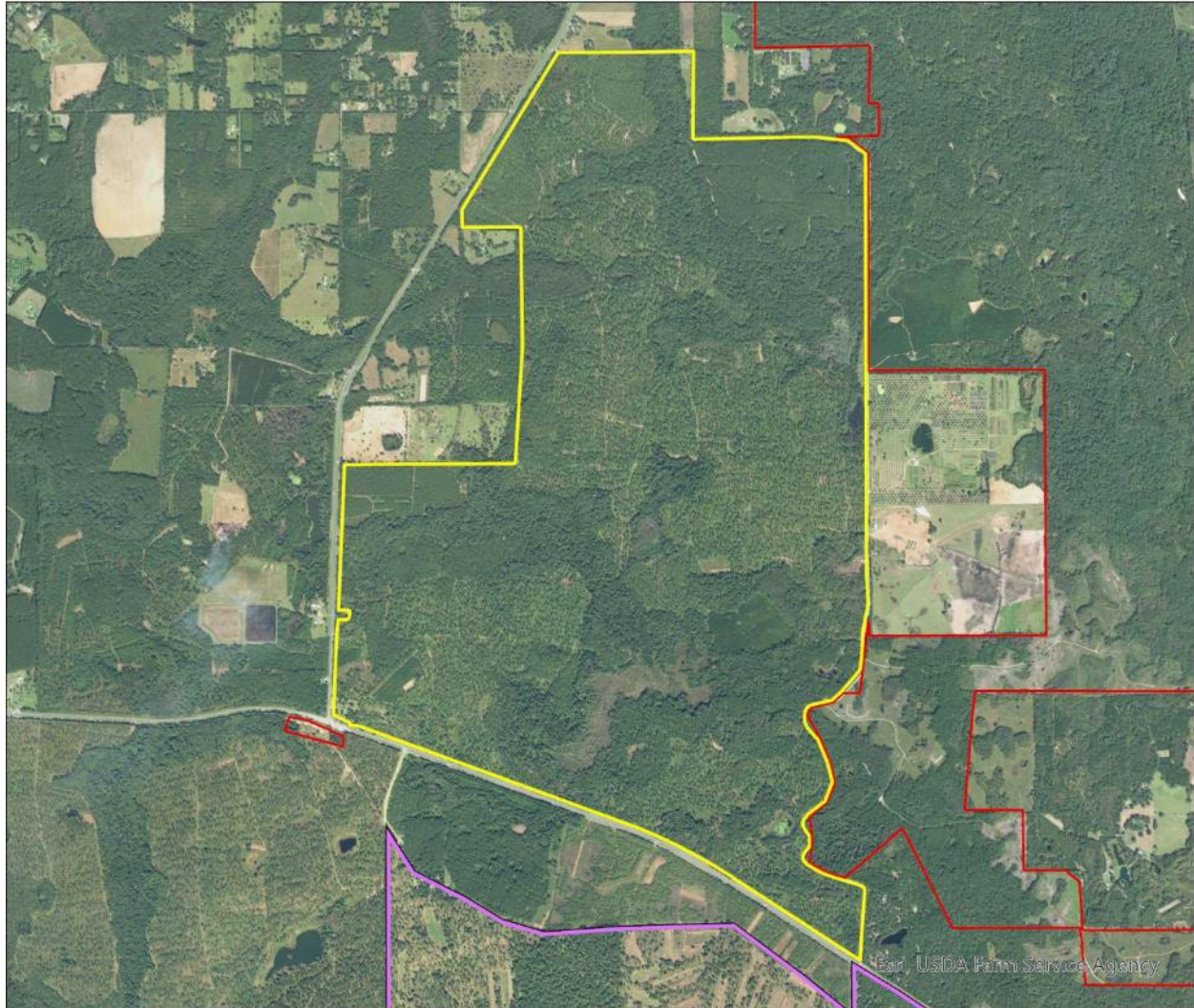


JULY 2022

B2: Aerial map (Rosewood-Avalon)

Rosewood-Avalon Florida Forever Proposal

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



Map Produced by: N. Pasco, July 2022

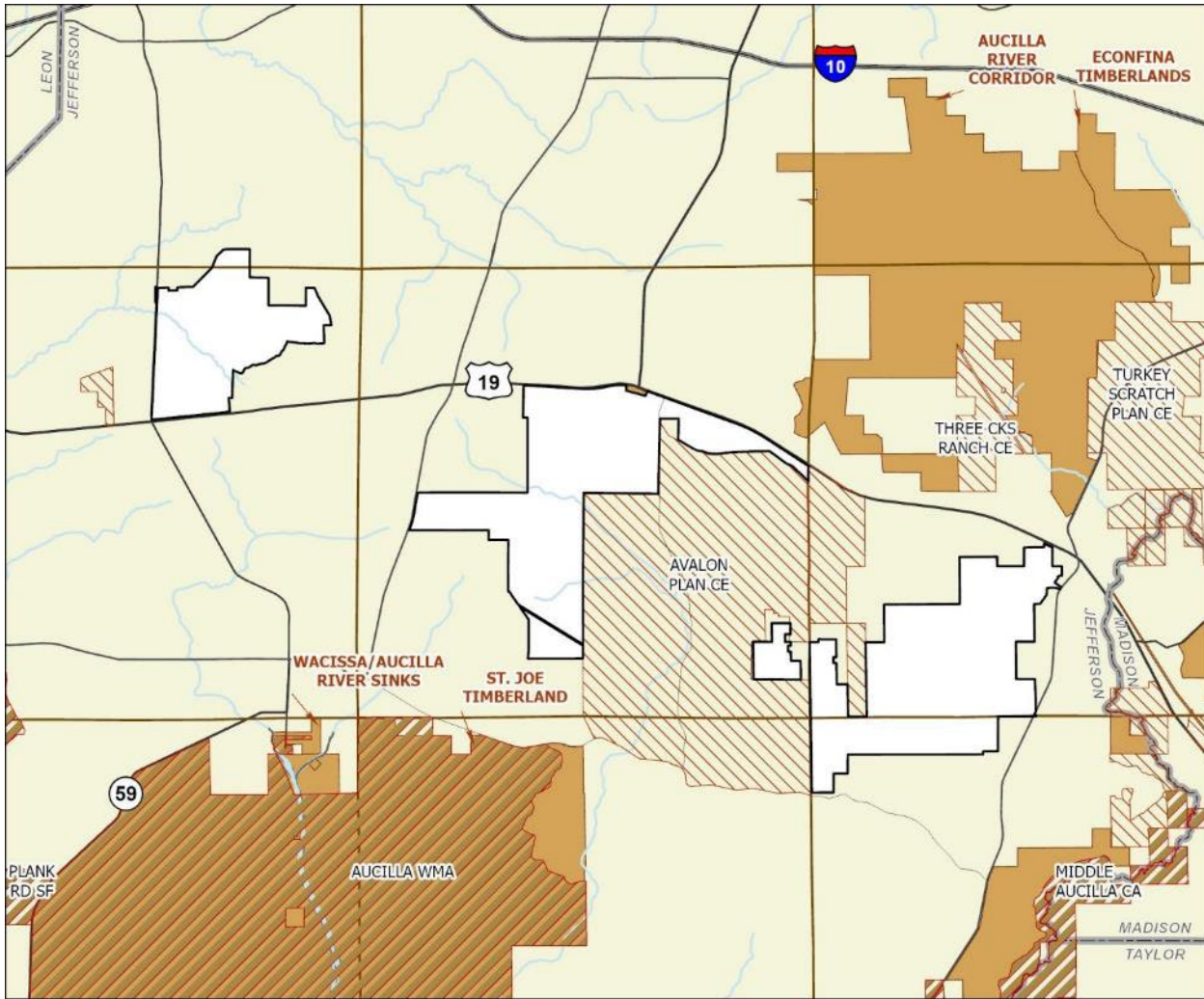
Background: USA NAIP Imagery Resolution = 1.0 meter



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B3: Florida Forever map (Turner-Avalon)



TURNER-AVALON FLORIDA FOREVER PROPOSAL

JEFFERSON COUNTY

-  Proposed Florida Forever BOT Project
-  Florida Forever BOT Projects
-  State Owned Lands
-  Other Conservation Lands
-  State Aquatic Preserve

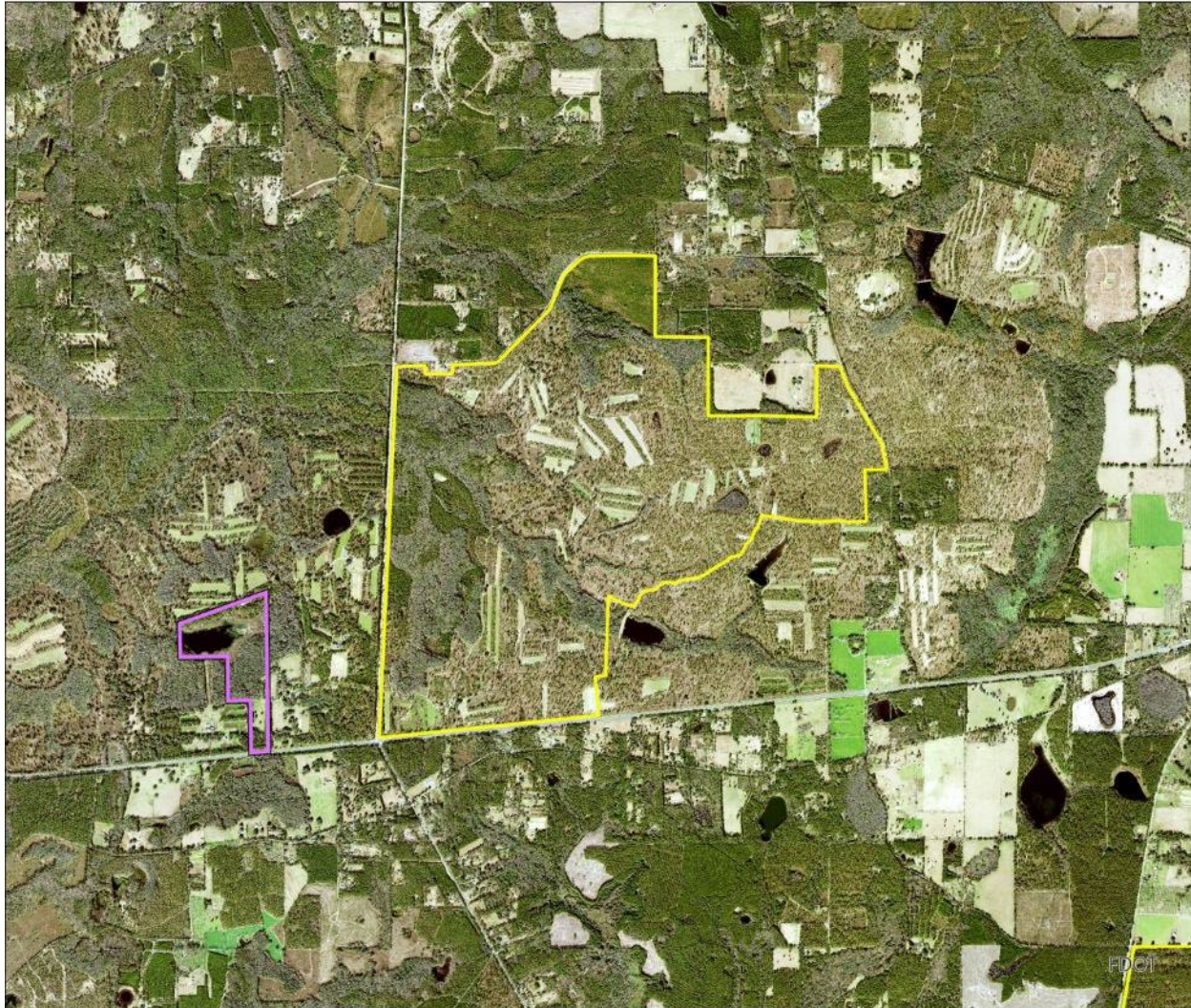


SEPTEMBER 2022

B4: Aerial map (Turner-Avalon)

Turner-Avalon 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: FDOT Aerial Imagery 2019 Resolution = 0.07 meter



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B5: Aerial map (Turner-Avalon)

Turner-Avalon 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: FDOT Aerial Imagery 2019 Resolution = 0.07 meter



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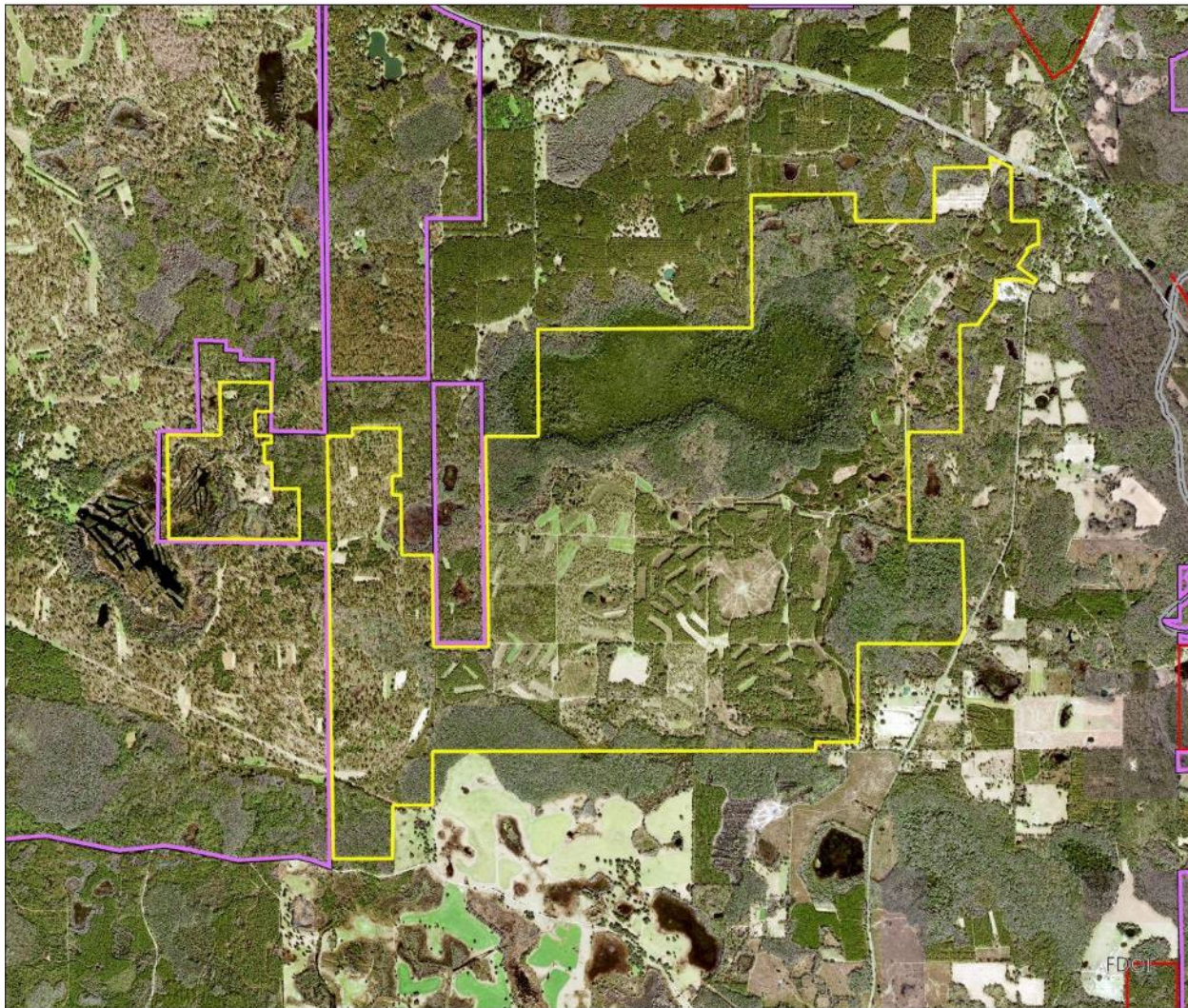


	Florida Forever Proposal Boundary
	Florida Forever BOT Projects
	Existing Private Conservation Lands

B6: Aerial map (Turner-Avalon)

Turner-Avalon Florida Forever Proposal - Map 3

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



Map Produced by: N. Pasco, August 2022

Background: FDOT Aerial Imagery 2019 Resolution = 0.07 meter



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Appendix C:

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY (ROSEWOOD-AVALON)

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Jefferson	01-1S-4E-0000-0010-0000	AVALON PLANTATION LLC	640	\$640,000	\$176,091	Essential
Jefferson	02-1S-4E-0000-0010-0000	AVALON PLANTATION LLC	485.44	\$485,440	\$112,280	Essential
Jefferson	03-1S-4E-0000-0014-0000	AVALON PLANTATION LLC	68	\$136,000	\$17,156	Essential
Jefferson	03-1S-4E-0000-0026-0000	AVALON PLANTATION LLC	1.26	\$6,930	\$299	Essential
Jefferson	10-1S-4E-0000-0014-0000	AVALON PLANTATION LLC	94.91	\$189,820	\$28,428	Essential
Jefferson	11-1S-4E-0000-0010-0000*	AVALON PLANTATION LLC	563.5	\$563,500	\$143,200	Essential
Jefferson	12-1S-4E-0000-0011-0000	AVALON PLANTATION LLC	599.85	\$599,850	\$119,005	Essential
Jefferson	13-1S-4E-0000-0012-0000	AVALON PLANTATION LLC	145.45	\$261,810	\$43,083	Essential
Jefferson	14-1S-4E-0000-0010-0000*	AVALON PLANTATION LLC	0.38	\$1,645	\$839	Essential
Jefferson	18-1S-5E-0000-0022-0000	AVALON PLANTATION LLC	16.81	\$67,240	\$3,198	Essential
Jefferson	25-1N-4E-0000-0151-0000	AVALON PLANTATION LLC	40	\$200,536	\$108,001	Essential
Jefferson	26-1N-4E-0000-0011-0000	AVALON PLANTATION LLC	73	\$219,000	\$23,183	Essential
Jefferson	35-1N-4E-0000-0010-0000	AVALON PLANTATION LLC	355.95	\$747,495	\$97,692	Essential
Jefferson	36-1N-4E-0000-0030-0000	AVALON PLANTATION LLC	595.5	\$1,250,550	\$104,313	Essential
			3680.05	\$5,369,817	\$976,769	

*Prorated or Partial Parcel

PROPERTY ID #'S FOR FINAL RECOMMENDED BOUNDARY (TURNER-AVALON)

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Jefferson	01-1S-3E-0000-0010-0000	TURNER ROBERT E III	190.37	\$571,110	\$56,880	Essential
Jefferson	02-1S-3E-0000-0030-0000	TURNER ROBERT E III	539.95	\$1,349,875	\$157,392	Essential
Jefferson	03-1S-3E-0000-0011-0000	TURNER ROBERT E III	363.90	\$1,006,737	\$184,301	Essential
Jefferson	10-1S-3E-0000-0011-0000	TURNER ROBERT E III	505.55	\$1,290,021	\$175,538	Essential
Jefferson	11-1S-3E-0000-0011-0000	TURNER ROBERT E III	283.69	\$851,070	\$74,605	Essential
Jefferson	15-1S-3E-0000-0261-0000	TURNER ROBERT E III	1.00	\$7,000	\$272	Essential
Jefferson	35-1N-3E-0000-0120-0000	TURNER ROBERT E III	74.00	\$296,000	\$22,484	Essential
Jefferson	09-1S-4E-0000-0011-0000	AVALON PLANTATION LLC	212.61	\$382,698	\$49,292	Essential
Jefferson	10-1S-4E-0000-0013-0000	AVALON PLANTATION LLC	210.40	\$378,720	\$51,173	Essential
Jefferson	11-1S-4E-0000-0010-0000	AVALON PLANTATION LLC	81.00	\$631,000	\$160,354	Essential
Jefferson	13-1S-4E-0000-0011-0000	AVALON PLANTATION LLC	165.92	\$298,656	\$51,723	Essential
Jefferson	14-1S-4E-0000-0011-0000	AVALON PLANTATION LLC	196.61	\$446,697	\$154,923	Essential
Jefferson	15-1S-4E-0000-0010-0000	AVALON PLANTATION LLC	640.00	\$640,000	\$203,614	Essential
Jefferson	16-1S-4E-0000-0010-0000	AVALON PLANTATION LLC	480.00	\$480,000	\$101,307	Essential
Jefferson	19-1S-4E-0000-0070-0000	AVALON PLANTATION LLC	78.50	\$157,000	\$24,571	Essential
Jefferson	20-1S-4E-0000-0011-0000	AVALON PLANTATION LLC	349.25	\$349,250	\$101,323	Essential
Jefferson	21-1S-4E-0000-0010-0000	AVALON PLANTATION LLC	640.00	\$416,000	\$144,325	Essential

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Jefferson	28-1S-4E-0000-0010-0000	AVALON PLANTATION LLC	547.39	\$547,390	\$147,731	Essential
Jefferson	33-1S-4E-0000-0011-0000	AVALON PLANTATION LLC	114.06	\$205,308	\$34,281	Essential
Jefferson	04-2S-5E-0000-0080-0000	RET PROPERTIES LLC	155.00	\$232,500	\$43,671	Essential
Jefferson	05-2S-5E-0000-0010-0000	RET PROPERTIES LLC	271.00	\$542,000	\$68,035	Essential
Jefferson	05-2S-5E-0000-0020-0000	TURNER R E III	10.00	\$28,000	\$2,930	Essential
Jefferson	05-2S-5E-0000-0030-0000	TURNER R E III	39.00	\$85,800	\$11,238	Essential
Jefferson	06-2S-5E-0000-0010-0000	RET PROPERTIES LLC	160.00	\$160,000	\$31,256	Essential
Jefferson	06-2S-5E-0000-0020-0000	TURNER R E III	286.00	\$286,000	\$253,333	Essential
Jefferson	21-1S-5E-0000-0090-0000	RET PROPERTIES LLC	62.90	\$110,075	\$14,005	Essential
Jefferson	22-1S-5E-0000-0370-0000	RET PROPERTIES LLC	43.36	\$83,329	\$15,421	Essential
Jefferson	25-1S-4E-0000-0060-0000	AVALON PLANTATION LLC	35.00	\$61,250	\$3,855	Essential
Jefferson	27-1S-5E-0000-0180-0000	RET PROPERTIES LLC	79.21	\$217,735	\$10,326	Essential
Jefferson	27-1S-5E-0180-0000-0060	RET PROPERTIES LLC	3.52	\$11,880	\$683	Essential
Jefferson	27-1S-5E-0180-0000-011A	RET PROPERTIES LLC	0.49	\$2,205	\$2,205	Essential
Jefferson	28-1S-5E-0000-0010-0000	RET PROPERTIES LLC	640.00	\$436,215	\$169,881	Essential
Jefferson	29-1S-5E-0000-0020-0000	AVALON PLANTATION LLC	320.00	\$160,000	\$14,303	Essential

COUNTY	PARCEL ID	OWNER	ACRES PER TAX CARD	JUST VALUE	ASSESSED VALUE	PARCEL DESIGNATION
Jefferson	30-1S-5E-0000-0030-0000	TURNER R E III	10.00	\$10,000	\$8,858	Essential
Jefferson	31-1S-5E-0000-0010-0000	TURNER R E III	30.00	\$30,000	\$26,574	Essential
Jefferson	31-1S-5E-0000-0030-0000	TURNER R E III	235.50	\$235,500	\$208,603	Essential
Jefferson	31-1S-5E-0000-0060-0000	RET PROPERTIES LLC	160.00	\$144,000	\$31,929	Essential
Jefferson	32-1S-5E-0000-0010-0000	RET PROPERTIES LLC	1199.00	\$907,247	\$272,539	Essential
Jefferson	36-1S-4E-0000-0010-0000	TURNER R E III	4.30	\$403,000	\$356,971	Essential
Jefferson	36-1S-4E-0000-0020-0000	AVALON PLANTATION LLC	154.00	\$277,200	\$26,381	Essential
Jefferson	36-1S-4E-0000-0042-0000	TURNER R E	20.00	\$50,000	\$6,840	Essential
			9592.48	\$14,778,468	\$3,475,926	

*Prorated or Partial Parcel

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

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

ns

2019-04-19

Page 2

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 for Rosewood-Avalon



1. "Old Field" upland pine



2. Seepage stream within bottomland forest

October 14, 2022



3. Bottomland forest with needle palm



4. Bottomland forest and basin swamp



5. Basin marsh



6. Sinkhole



7. "Old Field" upland pine with mowed hunting lane



8. Bear track

October 14, 2022

Appendix F:

FWC updated Florida Forever Project Proposal Analysis that includes the additional 9,596-acre Turner-Avalon Amendment

**Florida Fish and Wildlife Conservation Commission
Division of Habitat and Species Conservation
Land Conservation and Planning
Rosewood Avalon
Florida Forever Project Proposal Analysis
August 2022**



This document contains the Florida Fish and Wildlife Conservation Commission's (FWC) Geographic Information System (GIS) data analysis of the **Rosewood Avalon Florida Forever Project Proposal**. This analysis was performed to provide FWC and others with important fish and wildlife resource information to be used in evaluating Florida Forever project proposals. The data selected for analysis are those considered by FWC to spatially reflect important fish and wildlife habitat and life history requirements.

Should the Acquisition and Restoration Council (ARC) approve this project for further evaluation, FWC will complete a field review and associated assessment report for this project proposal that will be incorporated within the ARC Florida Forever Project Evaluation Report.

GIS Data

The FWC utilizes the Florida Cooperative Land Cover (CLC) GIS data layer for identification and mapping of land cover. The CLC is a cooperative effort between the FWC and the Florida Natural Areas Inventory (FNAI) to develop ecologically-based statewide land cover from existing sources and expert review of aerial photography. Land cover acreage estimates found in this document are based on GIS analysis of these data.

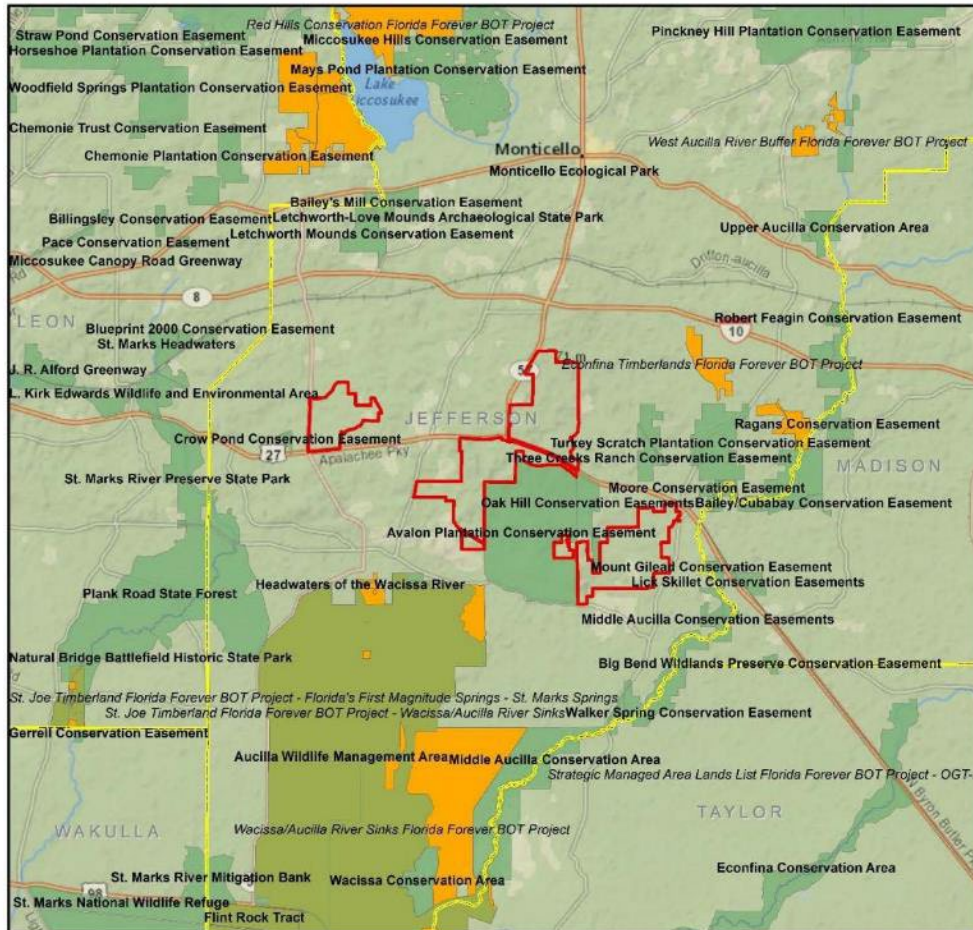
The FWC Florida Landscape Assessment Model (FLAM)¹ is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from a 0-10; a rank of 10 being of greatest value.


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

- FWC-FNAI Florida Cooperative Land Cover
- FWC Strategic Habitat Conservation Areas 2009² - Priority and Species
- Critical Lands and Waters Identification Project (CLIP)- Priority 1 and 2 - Terrestrial and Water
- CLIP - Landscape, Biodiversity, and Floodplain Resources
- Panther Location
- Panther Mortality
- Florida Panther Priority Habitat (Primary, Secondary, and Dispersal)
- Black Bear Range
- Rare Fish Locations/ Imperiled Waters


- Southern Bald Eagle Nest
- FWC Imperiled Species Richness
- FNAI Element Occurrences
- FNAI Potential Habitat 2008
- Florida Department of Environmental Protection Surface Water Classification
- U.S. Fish and Wildlife Service (USFWS) - National Wetlands Inventory
- USFWS Critical Habitat
- Florida Geological Survey Springs
- Outstanding Florida Waters
- Areas of Critical State Concern
- Natural Resources Conservation Service Soil Series and Depth to Water Table

FWC Data Analysis page 1





**Rosewood Avalon
Florida Forever
Project Proposal**
Jefferson County
13,287 Acres

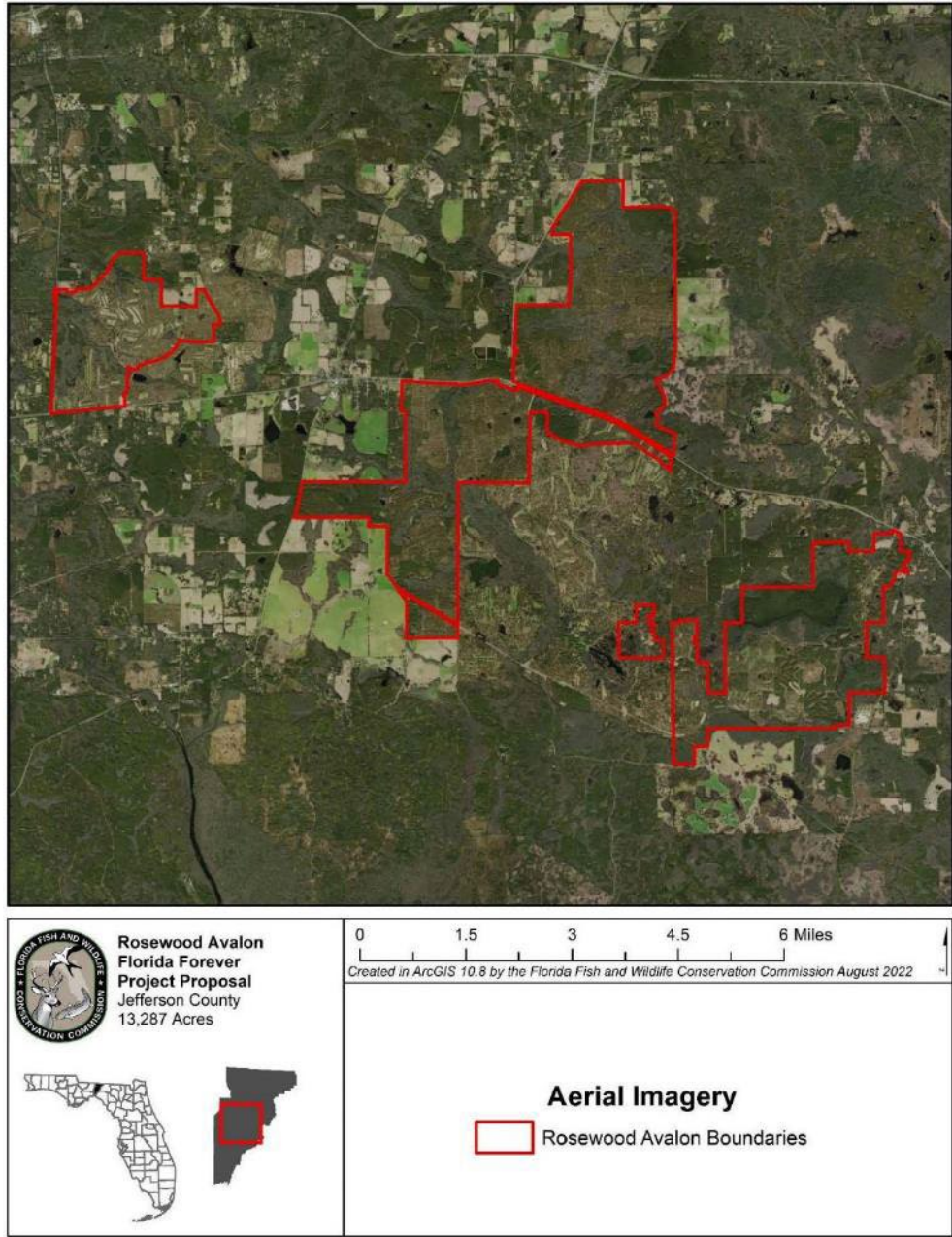


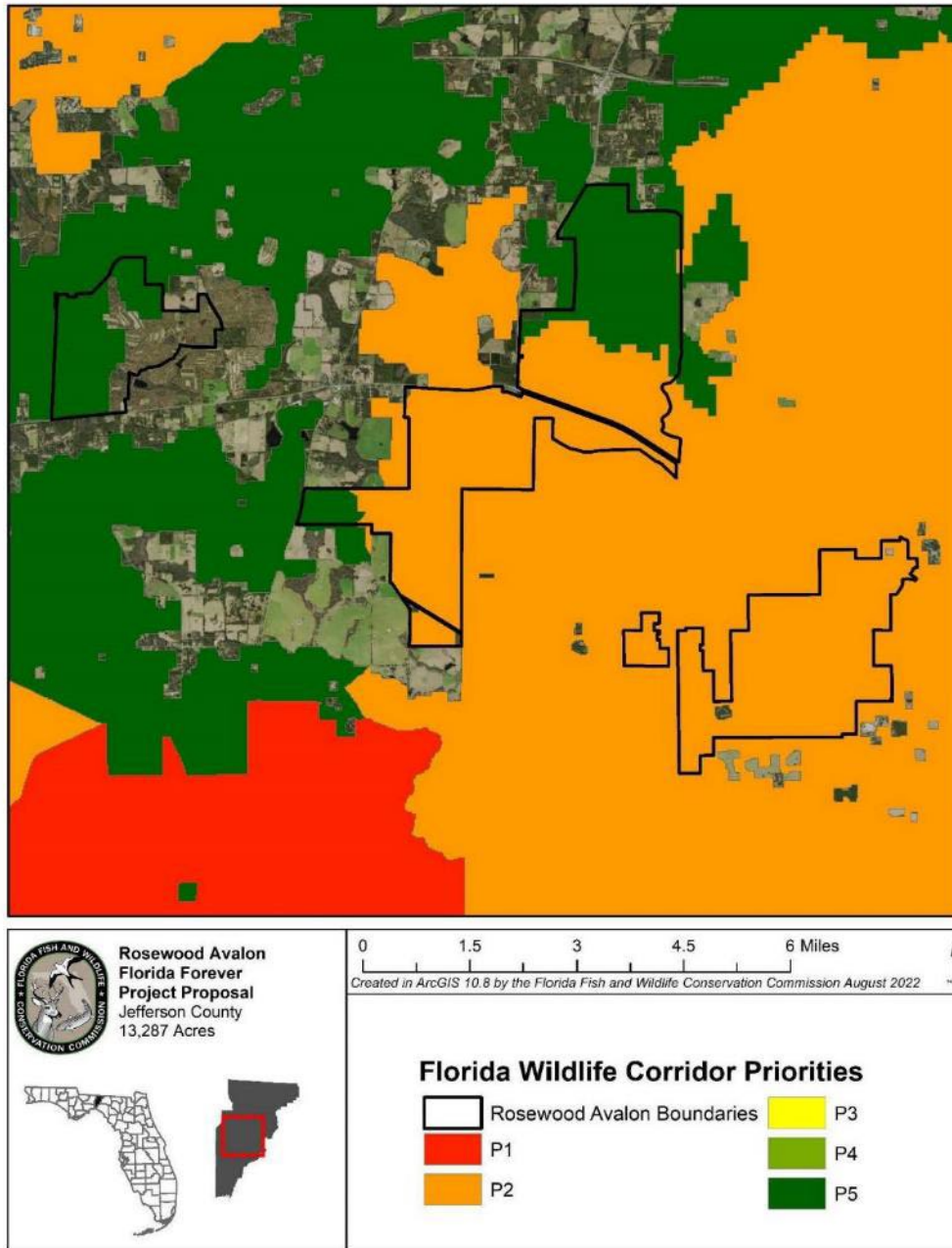
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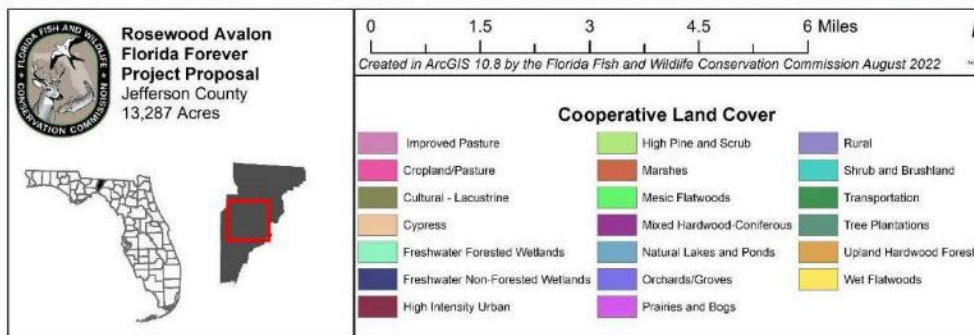
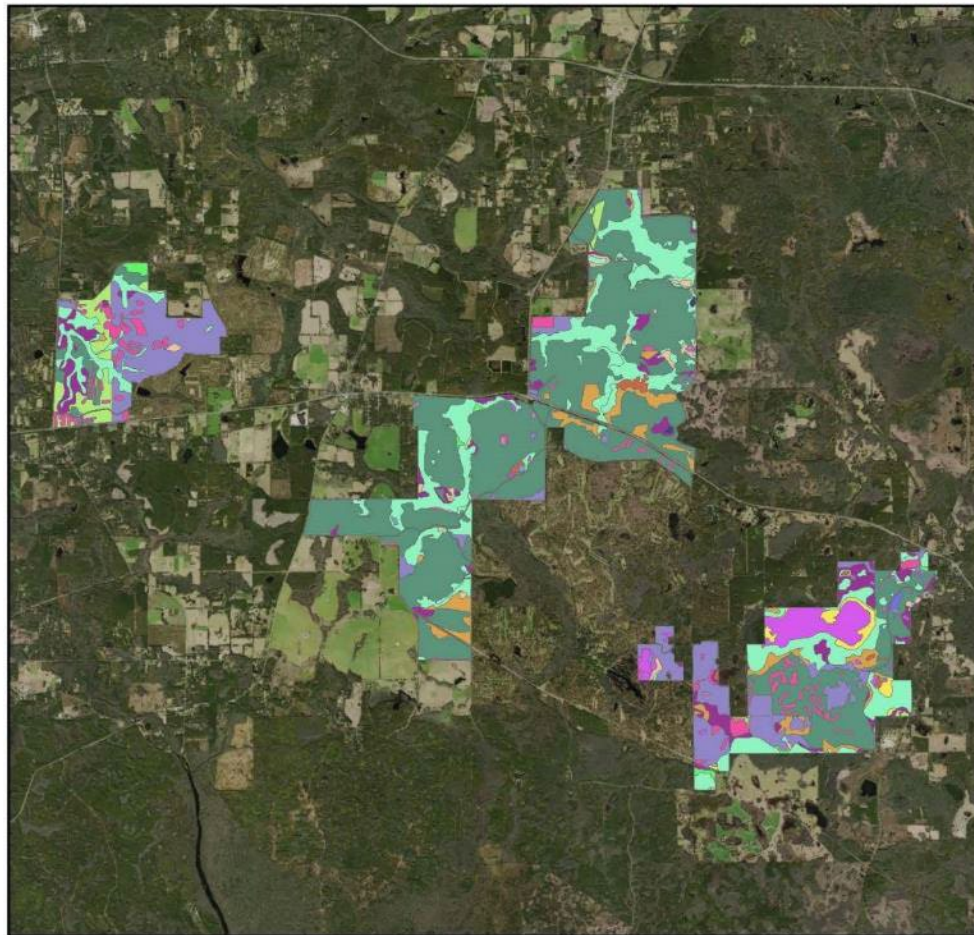
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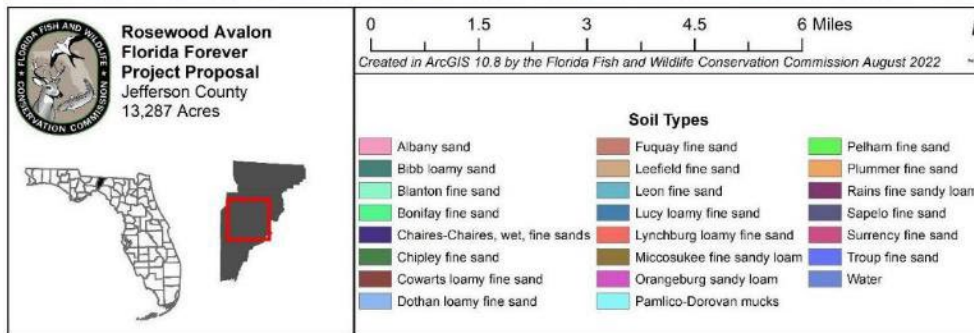
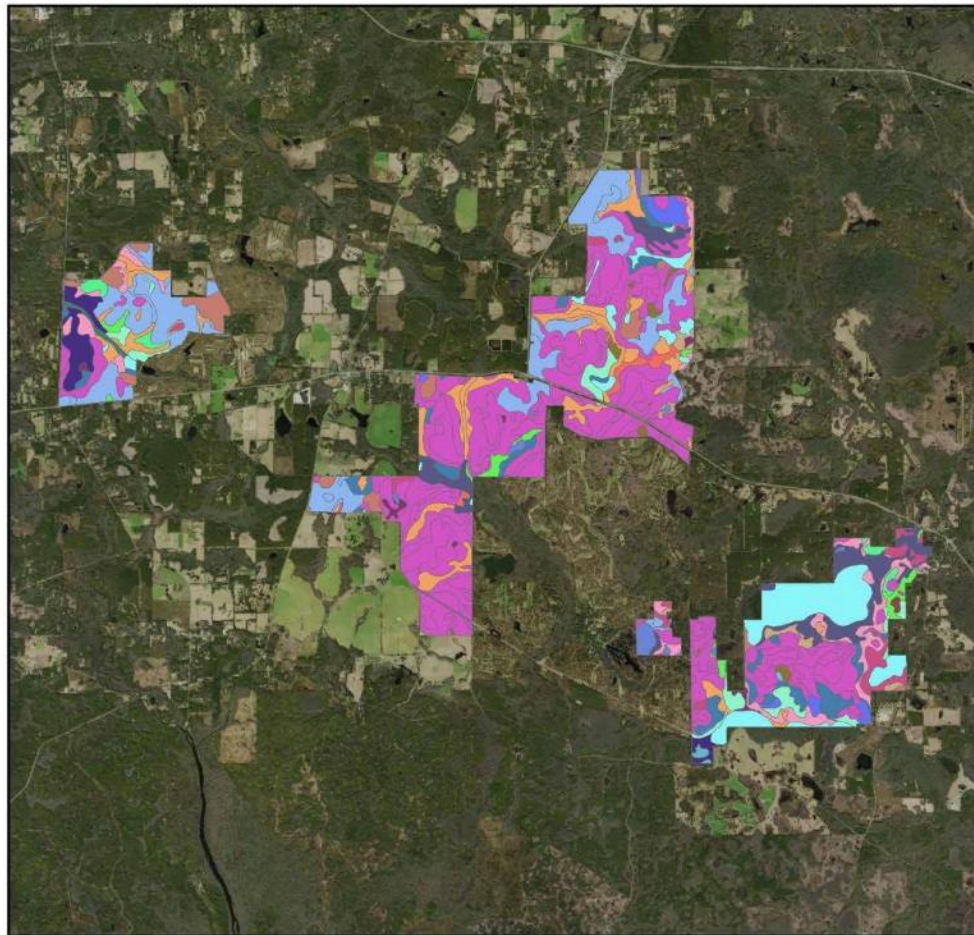
General Location

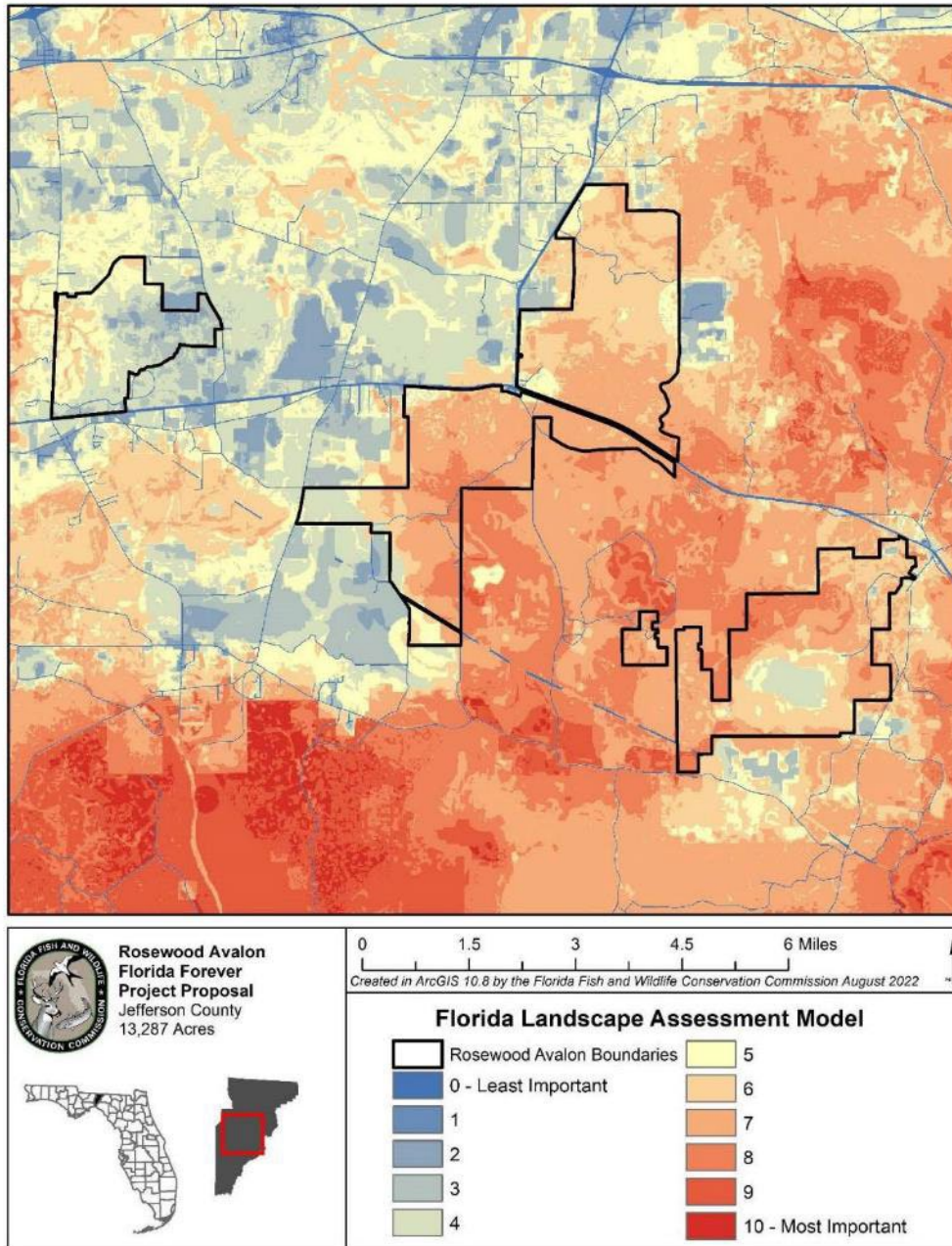
- Rosewood Avalon Boundaries
- County
- Conservation Lands
- Florida Forever Projects











FWC Florida Landscape Assessment Model 2020		
	Value	Acres
	0	158.7
	1	7.3
	2	413.2
	3	742.9
	4	1149.2
	5	1908.3
	6	4690.7
	7	3590.2
	8	586.2
	9	0.0
	10	0.0
Mean FLAM value =	5.7	

¹ FWC has developed a GIS-based assessment tool that incorporates a wide variety of land cover and wildlife species data. These wildlife species include imperiled species and locally important species. Application of this model assists in the identification and conservation of important wildlife habitats. The FLAM ranks the Florida landscape based upon important natural resources and habitat needs of wildlife as a way to identify ecologically significant lands in the state, and to assess the potential impacts of land development projects on wildlife populations. The FLAM is provided as part of the FWC’s continuing technical assistance to various local, regional, state, and federal agencies, and entities interested in wildlife needs and conservation in order to: (1) determine ways to avoid or minimize project impacts by evaluating alternative placements, alignments, and transportation corridors during early planning stages, (2) assess direct, secondary, and cumulative impacts to habitat and wildlife resources, and (3) help identify appropriate parcels for land conservation, and for wetland and upland habitat mitigation.

Environmental Resource Analysis

FWC Land Conservation and Planning

Analysis Shape Type: Polygon

Analysis Timestamp: 08222022 03:30:17

Shape Name: Unnamed polygon centered at -83.918969 °, 30.392715 °

Boundary Area: 13271.77 acres

Buffer Area: 0 acres

Total Area: 13271.77 acres

FWC Wildlife Data and Models						
Cooperative Land Cover v3.5						
Name - State	Code - State	Name - Site	Code - Site	Total Area (acres)	Percent of Area	
High Intensity Urban	1822	Commercial and Services	18223	0.02	0 %	
High Intensity Urban	1822	Industrial	18224	0.64	0 %	
Orchards/Groves	18332	Orchards/Groves	18332	16.54	0.12 %	
High Intensity Urban	1822	Residential, Med. Density - 2-5 Dwelling Units/AC	18221	0.18	0 %	
Freshwater Forested Wetlands	2200	Mixed Hardwood-Coniferous Swamps	2240	2,190.65	16.51 %	
Natural Lakes and Ponds	3100	Natural Lakes and Ponds	3100	14.43	0.11 %	
Cultural - Lacustrine	3200	Artificial Impoundment/Reservoir	3220	1.46	0.01 %	
Tree Plantations	18333	Coniferous plantation	183332	5,919.36	44.6 %	
Tree Plantations	18333	Wet plantation	1833321	9.15	0.07 %	
Transportation	1840	Transportation	1840	158.65	1.2 %	
Rural	1830	Unimproved/Woodland Pasture	183314	1,494.27	11.26 %	
Wet Flatwoods	2221	Hydric Pine Flatwoods	22211	122.19	0.92 %	
Cropland/Pasture	18331	Field Crops	183312	447.34	3.37 %	
Improved Pasture	183313	Improved Pasture	183313	22.90	0.17 %	
Shrub and Brushland	1500	Shrub and Brushland	1500	1.46	0.01 %	
Rural	1830	Rural Open	1831	257.01	1.94 %	
Rural	1830	Rural Structures	1832	5.54	0.04 %	
Mixed Hardwood-Coniferous	1400	Mixed Hardwood-Coniferous	1400	695.53	5.24 %	
Upland Hardwood Forest	1110	Upland Hardwood Forest	1110	549.11	4.14 %	
High Pine and Scrub	1200	Upland Coniferous	1230	341.96	2.58 %	
Mesic Flatwoods	1311	Mesic Flatwoods	1311	64.69	0.49 %	
Cypress	2211	Cypress	2211	114.53	0.86 %	
Wet Flatwoods	2221	Wet Flatwoods	2221	8.21	0.06 %	
Freshwater Forested Wetlands	2200	Mixed Wetland Hardwoods	2233	294.21	2.22 %	
Freshwater Non-Forested Wetlands	2100	Floating/Emergent Aquatic Vegetation	2140	13.10	0.1 %	
Prairies and Bogs	2110	Wet Prairie	2111	59.39	0.45 %	
Prairies and Bogs	2110	Mixed Scrub-Shrub Wetland	2112	398.39	3 %	
Marshes	2120	Marshes	2120	70.87	0.53 %	
				TOTAL:	13,271.77	100 %
Critical Lands and Waters Identification Project (CLIP) Priority 1 and 2 - Terrestrial and Waters						
CLIP Priority			Total Area (acres)	Percent of Area		
All other cells			9,155.18	68.98 %		
CLIP P1 in submerged lands/state waters			2.19	0.02 %		
CLIP P1 in terrestrial			3,124.11	23.54 %		
CLIP P2 in terrestrial			954.62	7.19 %		
TOTAL:			13,236.09	99.73 %		
CLIP- Landscape Category						
Priority			Total Area (acres)	Percent of Area		
0			63.59	0.48 %		
1			126.45	0.95 %		
2			3,234.29	24.37 %		
3			9,636.92	72.61 %		
4			210.53	1.59 %		
TOTAL:			13,271.77	100 %		
CLIP- Biodiversity Category						
Priority			Total Area (acres)	Percent of Area		
0			41.19	0.31 %		
1			37.15	0.28 %		
2			3,054.72	23.02 %		
3			9,918.54	74.73 %		
4			220.17	1.66 %		

TOTAL:	13,271.77	100 %							
Priority FWC Strategic Habitat Conservation Areas 2021									
Priority	Total Area (acres)	Percent of Area							
0	5,175.96	39 %							
2	26.29	0.2 %							
3	6,717.82	50.62 %							
5	1,351.70	10.18 %							
TOTAL:	13,271.77	100 %							
FWC Strategic Habitat Conservation Areas 2009									
Species 1	Species 2	Species 3 Species 4 Species 5 Species 6 Total Area (acres) Percent of Area							
American swallow-tailed kite		4,593.91 34.61 %							
Cooper's hawk		1,368.90 10.31 %							
Cooper's hawk	American swallow-tailed kite	2,056.95 15.5 %							
		TOTAL: 8,019.77 60.43 %							
Panther location									
No Records Found									
Panther mortality									
No Records Found									
Panther Priority Habitat									
No Records Found									
Bear Range									
Bear Range	Total Area (acres)	Percent of Area							
Common	1,825.95	13.76 %							
Frequent	11,445.82	86.24 %							
TOTAL:	13,271.77	100 %							
Rare Fish									
COMMON NAME	SCIENTIFIC NAME	# Features							
Eastern mudminnow	Umbra pygmaea	1							
TOTAL:		1							
Rare Fish Imperiled Waters									
COMMON NAME	SCIENTIFIC NAME	Total Area (acres)	Percent of Area						
Eastern mudminnow	Umbra pygmaea	3,131.07	23.59 %						
Ironcolor shiner	Notropis chalybaeus	3,131.07	23.59 %						
Mountain mullet	Agonostomus monticola	155.27	1.17 %						
Suwannee Bass	Micropterus notius	155.27	1.17 %						
TOTAL:		6,572.68	49.52 %						
Southern bald eagle nest									
No Records Found									
Imperiled Species Richness									
Number of Species	Total Area (acres)	Percent of Area							
0	1,478.77	11.14 %							
1	967.34	7.29 %							
2	0.44	0 %							
3	98.56	0.74 %							
4	2.96	0.02 %							
5	8,251.52	62.17 %							
6	906.36	6.83 %							
7	576.07	4.34 %							
8	989.74	7.46 %							
TOTAL:	13,271.77	100 %							
Florida Natural Areas Inventory Data									
Element Occurrences									
COMMON NAME	SCIENTIFIC NAME	GLOBAL RANK	STATE RANK	FWC STATUS	FEDERAL STATUS	EO Rank	Last Observation	Total Area (acres)	Percent of Area
Bailey's Pocket Gopher Aphodius Beetle	Aphodius baileyi	G2G3	S2	N	N	E	1997-01-20 -- 1997-01-26	0.79	0.01 %
Bald Eagle	Haliaeetus leucocephalus	G5	S3	N	N	E	2001	11.13	0.08 %
Eastern Diamondback Rattlesnake	Crotalus adamanteus	G3	S3	N	N	E	1970-04-30	279.37	2.11 %
Florida mountain-mint	Pycnanthemum floridanum	G3	S3	T	N	BC	2009-12-04	1.44	0.01 %
Hubbell's Pocket Gopher Aphodius Beetle	Aphodius hubbelli	GNR	S3?	N	N	E	1997-01-20 -- 1997-01-26	0.79	0.01 %
One-toed Amphiuma	Amphiuma pholeter	G3	S3	N	N	AB	1983-10-11	725.13	5.46 %
Red-cockaded Woodpecker	Dryobates borealis	G3	S2	FE	E, PT	BD	2018	2.51	0.02 %
TOTAL:								1,021.16	7.69 %

Potential Habitat			
COMMON NAME	SCIENTIFIC NAME	Total Area (acres)	Percent of Area
Wood Stork	Mycteria americana	836.42	6.3 %
Florida Black Bear	Ursus americanus floridanus	13,152.36	99.1 %
Red-cockaded Woodpecker	Picoides borealis	425.20	3.2 %
TOTAL:		14,413.98	108.61 %

USFWS	
Critical Habitat	
No Records Found	

Water Resources					
FDEP Surface Water Classification					
Name	Type	Basin	Classification	Total Area (acres)	Percent of Area
ANDERSON BAY DRAIN	STREAM	ANDERSON BAY DRAIN	3F	1,903.23	14.34 %
AUCILLA RIVER	STREAM	AUCILLA RIVER	3F	1,222.38	9.21 %
BAILEY MILL CREEK	STREAM	BAILEY MILL CREEK	3F	2,431.12	18.32 %
BEASLEY CREEK	STREAM	BEASLEY CREEK	3F	1,213.59	9.14 %
BURNT MILL CREEK	STREAM	BURNT MILL CREEK	3F	1,114.34	8.4 %
CUBA BRANCH	STREAM	CUBA BRANCH	3F	0.29	0 %
LITTLE RIVER	STREAM	LITTLE RIVER	3F	76.14	0.57 %
LLOYD CREEK	STREAM	LLOYD CREEK	3F	158.10	1.19 %
POLAR MILL BRANCH	STREAM	POLAR MILL BRANCH	3F	430.61	3.24 %
UNNAMED BRANCH	STREAM	UNNAMED BRANCH	3F	381.60	2.88 %
UNNAMED DRAIN	STREAM	UNNAMED DRAIN	3F	3,566.40	26.87 %
WACISSA RIVER	STREAM	WACISSA RIVER	3F	68.99	0.52 %
WELAUNEE CREEK	STREAM	WELAUNEE CREEK	3F	704.97	5.31 %
TOTAL:				13,271.77	100 %

Outstanding Florida Waters			
Name	OFW Type	Total Area (acres)	Percent of Area
Aucilla River	Special	19.78	0.15 %
TOTAL:		19.78	0.15 %

Florida Geological Survey Springs	
No Records Found	

National Wetlands Inventory			
Wetland Type	Wetland Code	Total Area (acres)	Percent of Area
FRESHWATER EMERGENT WETLAND	PEM1/AB3G	4.45	0.03 %
FRESHWATER EMERGENT WETLAND	PEM1A	6.19	0.05 %
FRESHWATER EMERGENT WETLAND	PEM1C	6.23	0.05 %
FRESHWATER EMERGENT WETLAND	PEM1F	62.98	0.47 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1A	75.35	0.57 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO1C	717.52	5.41 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO3/4B	139.24	1.05 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO3/6B	29.59	0.22 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO3B	97.47	0.73 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO4/6A	14.22	0.11 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO4C	1.55	0.01 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6/3F	2.56	0.02 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6/4A	149.63	1.13 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6/4C	59.66	0.45 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6C	369.66	2.79 %
FRESHWATER FORESTED/SHRUB WETLAND	PFO6F	691.62	5.21 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS3/EM1F	357.40	2.69 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS3B	14.56	0.11 %
FRESHWATER FORESTED/SHRUB WETLAND	PSS6F	0.46	0 %
FRESHWATER POND	PAB3/EM1H	12.32	0.09 %
FRESHWATER POND	PAB3H	1.21	0.01 %
FRESHWATER POND	PAB4H	15.85	0.12 %
FRESHWATER POND	PUB/AB3H	15.16	0.11 %
FRESHWATER POND	PUBH	15.41	0.12 %
FRESHWATER POND	PUBHx	2.56	0.02 %
LAKE	L2AB3H	57.88	0.44 %
TOTAL:		2,920.73	22.01 %

Priority Floodplain Resources		
Priority	Total Area (acres)	Percent of Area
0	9,917.34	74.73 %
1	211.48	1.59 %
2	1,504.97	11.34 %
3	1,195.30	9.01 %

4	440.21	3.32 %
5	2.46	0.02 %
TOTAL:	13,271.77	100 %
Area of Critical State Concern		
Apalachicola		
No Records Found		
Big Cypress		
No Records Found		
Green Swamp		
No Records Found		
Key West		
No Records Found		
Lower Keys		
No Records Found		
Upper Keys		
No Records Found		