

*Welannee Watershed Forest*  
*(Upper Yellow River)*  
(Okaloosa County)

Less-than-Fee

*Florida Forever Project Evaluation Report*

*Prepared by:*  
*Division of State Lands*  
*Office of Environmental Services*

*Submitted to the Acquisition and Restoration Council*  
*October 2020*



Proposed Land Manager: Landowners (monitoring by DEP)  
Acres: 8,370  
Just Value: \$10,669,747  
Application Date: May 16, 2020  
Project Sponsor: Conservation Florida, Inc.

## ***Executive Summary***

The Welanee Watershed Forest is proposed as a less-than-fee acquisition and is comprised of two ownerships containing approximately 8,370 acres along the eastern and western banks of the Upper Yellow River, ranging from the north boundary of the Yellow River Water Management Area (16,500 acres managed by the Northwest Florida Water Management District), northward to the Florida-Alabama border and east of Blackwater River State Forest. The proposed project contains two large timber tracts: the first is approximately 7,193 acres owned by H.T.L. Family Limited Partnership (HTL) that stretches along both sides of the Yellow River from the north boundary of the Yellow River Water Management Area (YRWMA) to the Alabama state line. The second tract contains approximately 1,177 acres owned by U.I.L. Family Limited Partnership (UIL) that is located on the east side of the Yellow River which it borders for 3.6 miles. A Florida Forever project proposal site assessment team toured the property on July 15, 2020.

In 2002, the Upper Yellow River project was added to the Florida Forever Priority List as a fee simple acquisition proposal. Formerly owned by Rayonier, most of the Upper Yellow River property was purchased by the current owners in 2005. In 2011, the Upper Yellow River project was removed from the Florida Forever priority list as the land was no longer available for acquisition. The current proposed project, Welanee Watershed Forest includes the same properties as the original Upper Yellow River project boundary and is now proposed as less-than-fee. Therefore, this proposed project would ideally be re-named as the “Upper Yellow River” Florida Forever project upon addition to the Florida Forever list and for project ranking purposes. Re-naming the proposed project will minimize confusion and be more consistent with typical Florida Forever project nomenclature.

The project’s 8,370 acres are comprised of approximately 30% floodplain forest and wetlands, and 70% uplands, most of which is planted pine plantation that has been historically planted with loblolly pine. The project contains more than 500 acres of longleaf pine and, as loblolly pine is harvested, the owners are transitioning suitable uplands to longleaf pine. The project is managed under a very active prescribed fire regime, with the longleaf burned on a two-year rotation and other upland areas burned on a three-year rotation. The facilities and equipment for the management of the project’s forest resources are located on-site. The project is managed not only for its timber resources, but also with the purpose of restoring longleaf pine habitat, particularly groundcover for wildlife. The property is managed to promote healthy populations of game wildlife such as whitetail deer and turkey.

Additional funding to assist with acquisition has been secured through federal grants from the Forest Legacy Program and the Regional Conservation Partnership Program. The Forest Legacy Program requires a non-federal match of 25% which could be met with Florida Forever funds, if acquired.

If acquired as less-than-fee, the properties would continue to be managed by the landowners, with periodic monitoring by the Division of State Lands. These properties would be designated as essential and appropriate as a stand-alone project in the Partnerships and Regional Incentives category if approved for addition to the 2021 Priority List.

## ***Purpose for Acquisition***

Protection of this upper stretch of the Yellow River is critical to various plans associated with the protection of the major rivers in panhandle Florida. Additionally, this project will benefit important freshwater species like the Gulf sturgeon. The southern boundary of the property is adjacent to the northern limits of the YRWMA, which provides a landscape linkage with Eglin Air Force Base. The north boundary of the project is adjacent to the currently authorized boundary for the Conecuh National Forest.

## ***Location and Proximity to Other Managed Areas***

The Welannee Watershed Forest proposal includes approximately 8,370 acres (8,375 GIS acres) of floodplain and adjacent upland habitat along the Yellow River, from the Florida-Alabama state line extending downstream for approximately 11.5 straight-line miles (estimated 15–16 river miles). The proposal consists of northern and southern tracts; there is a small discontinuity within the northern tract at highway SR-2. Blackwater River State Forest lies generally 0.5 to 2 miles west of the northern tract, which encompasses both banks of the river, although the Forest and proposal share a small common border. The Yellow River Water Management Area lies immediately downstream of the northern tract (sharing a short common border) and directly across the river from the southern tract, which itself is restricted to the eastern side of the river.

## ***Resource Description***

### ***Florida Natural Areas Inventory (FNAI)***

This evaluation is based on information gathered from the proposal, Florida Cooperative Land Cover data version 3.2, and information in the Florida Natural Areas Inventory (FNAI) database. A field survey was conducted on July 15, 2020 by FNAI staff Dan Hipes, along with the Acquisition and Restoration Council (ARC) liaison staff and representatives for the landowner.

The upper Yellow River region encompasses some of the highest elevations in Florida. Erosive dissection of the uplands by the river and its tributaries has produced dramatic physiographic relief, with a resulting transition from relatively high uplands through forested/seepage slopes to floodplain communities. In general, a band of floodplain and hardwood communities along the river retains natural characteristics. Most of the site's uplands, as well as much of the seepage habitat, have been converted to pine plantation. Efforts toward restoration of longleaf pine in the former upland pine community have been implemented; however, a large percentage remains in loblolly pine plantation. The dominant landcover types are described below based on the field assessment.

Bottomland Forest is extensive throughout the floodplain of the Yellow River, the backbone of the Welannee Watershed Forest. There is considerable variation in vegetation associations along the river and smaller tributaries. A generalized description is presented here. The diverse canopy is dominated by several oak species including live oak (*Quercus virginiana*), water oak (*Q. nigra*), swamp chestnut oak (*Q. michauxii*), and overcup oak (*Q. lyrata*). Other canopy trees include sweetbay (*Magnolia virginiana*), sweetgum (*Liquidambar styraciflua*), eastern cottonwood (*Populus deltoides*), yellow

poplar (*Liriodendron tulipifera*), and green ash (*Fraxinus pennsylvanica*). Midstory trees include American holly (*Ilex opaca*), American hornbeam (*Carpinus caroliniana*), American elm (*Ulmus americana*), American beech (*Fagus grandifolia*), Carolina laurelcherry (*Prunus caroliniana*), and southern catalpa (*Catalpa bignonioides*). The shrub layer is also diverse. Dominant species are southern arrowwood (*Viburnum dentatum*), highbush blueberry (*Vaccinium corymbosum*), Sebastian bush (*Ditrysinia fruticosa*), common pawpaw (*Asimina triloba*), and American beautyberry (*Callicarpa americana*). Coastal doghobble (*Leucothoe axillaris*) and Florida anise (*Illicium floridanum*) were common in upper reaches of smaller streams. Herbaceous cover was variable but generally sparse. Common species are switchcane (*Arundinaria gigantea*), longleaf woodoats (*Chasmanthium sessiliflorum*), Indian woodoats (*Chasmanthium latifolium*), and witchgrass (*Dichanthelium* sp.). Woody vines include peppervine (*Ampelopsis arborea*), saw greenbrier (*Smilax bona-nox*), and eastern poison ivy (*Toxicodendron radicans*).

Floodplain swamp is present as both small inclusions in the bottomland forest and as extensive areas within the floodplain of the river. The well-developed canopy is dominated by either bald cypress (*Taxodium distichum*) or swamp tupelo (*Nyssa sylvatica* var. *biflora*). Red maple (*Acer rubrum*) and sweetbay are common. The shrub layer includes coastal sweetpepperbush (*Clethra alnifolia*), titi (*Cyrilla racemiflora*), wax myrtle (*Morella cerifera*), and fetterbush (*Lyonia lucida*). Herbaceous species were not documented during the field assessment but likely include a variety of sedges (*Carex* and *Rhynchospora*) and ferns (*Osmunda*, *Onoclea*, and *Woodwardia*).

Upland hardwood forest lies upslope of bottomland forest in the upper reaches of streams where there is considerable topographic relief. The extent of this community is difficult to estimate because of its similar aerial signature to bottomland forest and the gradation into pine plantation upslope. One site was visited during the field assessment. It had a nearly closed canopy dominated by water oak, white oak (*Quercus alba*), swamp laurel oak (*Q. laurifolia*), American beech, sweetgum, American holly, southern magnolia (*Magnolia grandiflora*), and mockernut hickory (*Carya alba*). Midstory trees included American hornbeam, mountain laurel (*Calmia latifolia*), Florida anise, and Elliott's blueberry (*Vaccinium elliotii*). Herb cover was limited to a few patches of *Carex*, witchgrass, and sparse longleaf woodoats.

Wet flatwoods, basin marsh, and dome swamp combined represent approximately one percent of the proposal. These communities were not visited during the field assessment.

Altered landcover types are dominated by pine plantation, which covers approximately half of the proposal. The majority of the stands are planted in loblolly pine and are at various stages of the cutting cycle, from recently cut to mature stands. The owner is interested in restoring longleaf pine and improving wildlife habitat. He has been planting longleaf pine following cutting of loblolly stands with the intent of restoring longleaf to a large proportion of the former upland pine and sandhill communities. At the time of the field assessment, longleaf pine had been planted on more than 500 acres. Prescribed fire is used to control hardwoods and improve wildlife habitat in both the longleaf and loblolly stands.

The many large agricultural fields and food plots account for approximately two percent of the area. Other altered landcover types include a network of well-maintained unpaved roads, utility corridors,

artificial ponds, facilities (barn/shop/bunkhouse), and a peripheral area of successional hardwood forest. The combined acreage of these accounts for less than one percent of the proposal area.

The following table lists, in approximate order of areal extent, natural communities and altered landcover types within Welannee Watershed Forest.

**Natural communities and landcover types within the Welannee Watershed Forest Florida Forever proposal.**

Community or Landcover	Acres	Percent of Proposal
bottomland forest	2177	26%
floodplain swamp	1322	16%
upland hardwood forest	170	2%
wet flatwoods	117	1%
basin marsh	31	0%
dome swamp	2	0%
pine plantation	4210	50%
pasture - improved/food plot	166	2%
road	101	1%
utility corridor	27	0%
clearing	20	0%
artificial pond	11	0%
developed	10	0%
successional hardwood forest	5	0%

**Florida Fish and Wildlife Conservation Commission (FWC)**

This summary provides a resource assessment of the Welannee Watershed Forest (Welanee) Florida Forever proposal based on field observations during the July 15, 2020 tour and results of the GIS analysis. The property consists of two parcels in Okaloosa County totaling 8,370 acres. The first parcel contains 7,193 acres located along both sides of the Yellow River from the Alabama state line south to the Yellow River Water Management Area (YRWMA), which is managed by the Northwest Florida Water Management District. The second parcel is located less than a mile south of the first and contains 1,177 acres along the east side of the Yellow River. YRWMA connects the two parcels. Due to its connectivity with YRWMA, the project presents a significant opportunity to protect the Yellow River along its entirety from the state line to the Gulf of Mexico.

The project is proposed as a less-than-fee acquisition, with the landowner continuing to use the property for sustainable timber management, longleaf pine (*Pinus palustris*) restoration, and outdoor recreation that includes hunting. Approximately 70% of the property consists of pine plantations that were planted mainly with loblolly pine (*P. taeda*) by the previous landowner; however, the current owner is converting suitable stands to longleaf pine as they are harvested. To date, 600 acres have been converted to longleaf pine, with an additional 200 acres currently clear cut and scheduled for planting. The owner maintains a two-year fire rotation in the longleaf stands and a three to four-year rotation in the loblolly stands. This frequent use of prescribed fire creates an open midstory that is beneficial to many wildlife species. While the groundcover contains many native species indicative of natural pine communities, some characteristic species are lacking, most notably wiregrass (*Aristida stricta*).

The gopher tortoise (*Gopherus polyphemus*; State-designated Threatened) is an example of a species that benefits from the landowner's use of frequent prescribed fire to maintain an open midstory and

promote abundant groundcover. A juvenile tortoise burrow was observed during the field tour in one of the longleaf pine stands and several adult burrows were observed along the property fence line near this stand. Based on the amount of suitable soil types, Welanee could potentially support a viable population of tortoises. Establishing the area as a conservation easement would align with objectives in FWC's Gopher Tortoise Management Plan to increase the amount of protected habitat for this species.

Acquiring a conservation easement would protect and buffer approximately 14 miles of the upper Yellow River, thus benefitting the many imperiled fish and wildlife species that inhabit and forage in the river. Species documented in the portion of the Yellow River within the project boundary include the Gulf sturgeon (*Acipenser oxyrinchus desotoi*; Federally-designated Threatened), several species of federally listed mussels, and the alligator snapping turtle (*Macrochelys temminckii*; federal status under review). The alligator snapping turtle is included in FWC's Imperiled Species Management Plan and greater protection of lands along the upper Yellow River is identified as a conservation measure to benefit the species. Additionally, the property provides potential habitat for state and federally listed wading birds and the bluenose shiner (*Pteronotropis welaka*; State-designated Threatened).

Blackwater River State Forest is an important area for conservation of the Florida pine snake (*Pituophis melanoleucus mugitus*; State-designated Threatened) and it is possible that the species occurs on Welanee given its close proximity to Blackwater (less than five miles). Blackwater is also important for conservation of the Pine Barrens treefrog (*Hyla andersonii*), which is included in FWC's Imperiled Species Management Plan. There is a 1978 record of this species on Welanee, and it is possible that Pine Barrens treefrogs still occur along the area's seepage streams. Establishing Welanee as a conservation easement could potentially provide a protected corridor for Florida black bears (*Ursus americanus floridanus*) from Eglin Air Force Base on the coast to the state line, although bears are currently not common on Welanee and surrounding lands.

Game species occurring on the property include white-tailed deer (*Odocoileus virginianus*), wild turkey (*Meleagris gallopavo*), and waterfowl. Northern bobwhite (*Colinus virginianus*) are uncommon and the owner has made several attempts to reestablish a population over the past several years. In cooperation with FWC and the Florida Forest Service, the owner currently provides recreational opportunities to the public through youth hunts and Operation Outdoor Freedom hunts and plans to continue hosting these events in the future.

Feral hogs (*Sus scrofa*) are problematic on the area and the owner contracts with trappers to control them. A small amount of climbing fern (*Lygodium japonicum*) and Chinese tallow (*Triadica sebifera*) was observed on the tour, but invasive plants do not appear to be a major issue on the property.

The Florida Cooperative Land Cover version 3.3 lists numerous natural communities occurring on Welanee including tree plantations (48%), freshwater forested wetlands (20%), and floodplain swamp (16%). For a complete list, see the attached FWC GIS Environmental Resources Analysis.

The Florida Natural Areas Inventory (FNAI) Element Occurrence database shows 17 records for rare wildlife or plant species including a mayfly (*Asioplax dolani* and *Baetisca rogersi*), a stonefly (*Hydroperla phormidia*), alligator snapping turtle (*Macrochelys temminckii*), Choctaw bean (*Villosa*

*choctawensis*), eastern chipmunk (*Tamias striatus*), eastern river cooter (*Pseudemys concinna*), Escambia map turtle (*Graptemys ernsti*), gopher tortoise, gulf lilliput (*Toxolasma* sp.), Gulf sturgeon, little brown jug (*Asarum arifolium*), panhandle lily (*Lilium iridollae*), Pescador's bottle-cased caddisfly (*Oxyethira pescadori*), Pine Barrens treefrog (*Hyla andersonii*), southeastern weasel (*Mustela frenata olivacea*), and spiny softshell (*Apalone spinifera*). The GIS model shows the property as Potential Habitat for Gulf sturgeon, Escambia map turtle, narrow pigtoe (*Fusconaia escambia*), red-cockaded woodpecker (*Picoides borealis*), and Chotaw bean.

The FWC Florida Landscape Assessment Model (FLAM) is a GIS model that determines the landscape value based on natural resources and fish and wildlife habitat. The FLAM ranks habitat from a 0-10; a rank of 10 being of greatest value. The mean FLAM score for this property is 7.1. Approximately 67% is identified as Priority 1 or 2 (of 5) for the Critical Lands and Waters Identification Project. The National Wetlands Inventory data shows 30% classified as wetlands.

Approximately 40% lies within a designated FWC Strategic Habitat Conservation Area (SHCA) for species including Cooper's hawk (*Accipiter cooperii*), Florida black bear, and Pine Barrens treefrog. Welanee includes Rare Fish Imperiled Waters for the following species: Alabama shad (*Alosa alabamae*), blacktip shiner (*Lythrurus atrapiculus*), ironcolor shiner (*Notropis chalybaeus*), and speckled chub (*Macrhybopsis* sp. cf. *aestivalis*). The GIS analysis contains more detailed information.

In summary, the proposal presents an opportunity to protect a significant portion of the Yellow River and provide connectivity to existing conservation lands that will benefit numerous fish and wildlife species. The landowner is currently implementing management practices that will improve wildlife habitat on the area and establishing the property as an easement would support the continuation of these practices.

## ***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.*

Acquisition of the properties in the project proposal would expand protection of the Yellow River north over 12 miles beyond the 16,500-acre Yellow River Water Management Area and connect to the 211,000-acre Blackwater River State Forest to the west, and to the boundary of Conecuh National Forest in Alabama at the state line.

#### **Measure A2:**

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

Approximately 8,370 acres would be protected through less-than-fee acquisition.

**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.*

Additional funding to assist with acquisition has been secured through federal grants from the Forest Legacy Program and the Regional Conservation Partnership Program. The Forest Legacy Program requires a non-federal match of 25% which could be met with Florida Forever funds, if acquired.

**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.*

This project will provide a total of 3,348 acres (40%) of Strategic Habitat Conservation Area (SHCA), as noted in the FFME table provided by FNAI (see appendix for more detail).

**Measure B2:**

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

An analysis of priority conservation areas based on Florida Forever Conservation Needs Assessment data may be found in the Florida Forever Measures table. Habitat conservation priorities for 281 of Florida's rarest species were mapped and divided into six priority classes. The Florida Forever Measures table shows the acres for each priority class found on the Welannee Watershed Forest proposal. Overall, the site contains approximately 4,312 acres (51% of site) of rare species habitat. Most of the habitat is Priority 1 (35% of site), Priority 2 (8%), and Priority 5 (6%), with the remainder in Priority 4 (2%), Priority 3 (< 1%) and Priority 6 (< 1%).

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

**Rare species habitat based on FNAI Habitat Conservation Priorities for 281 species with the greatest conservation need.**

Scientific Name	Common Name	Global Rank	Acres
<i>Fusconaia escambia</i>	narrow pigtoe	G2	3,790
<i>Villosa choctawensis</i>	Choctaw bean	G2G3	2,364
<i>Acipenser oxyrinchus desotoi</i>	Gulf sturgeon	G3T2	3,790
<i>Graptemys ernsti</i>	Escambia map turtle	G2	3,721
<i>Ursus americanus floridanus</i>	Florida black bear	G5T4	690

**Measure B3:**

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

Approximately 8,298 acres (99%) of the proposal contributes to the acquisition of significant landscapes, linkages, and corridors, as noted in the FFME table provided by FNAI (see appendix for more detail).

**Measure B4:**

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



The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The Florida Forever Measures table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Welanee Watershed Forest proposal contains 287 acres of under-represented natural communities, including 170 acres of upland hardwood forest and 117 acres of wet flatwoods.

**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.*

Welanee Watershed Forest contributes to a contiguous landscape-sized protection area of more than 799,000 acres, although there are gaps within the landscape that remain to be filled.

**Measure B6:**

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

The Florida Natural Areas Inventory database includes records for several rare species of animals on site, including within the river (see table below). Of especially high importance from a conservation standpoint is the occurrence of the federally threatened Gulf sturgeon (*Acipenser oxyrinchus desotoi*), which traverses the river from the Gulf upstream into Alabama, and which may spawn within the region. Other animals documented near the site and which may occur on site or within the river corridor include the Florida floater (*Utterbackia peggyae*, a mussel; G3, S3, N, N), blacktip shiner (*Lythrurus atrapiculus*; G4, S2, N, N), eastern copperhead (*Agkistrodon contortrix*; G5, S2, N, N), southeastern American kestrel (*Falco sparverius paulus*; G5T4, S3, N, ST), Louisiana waterthrush (*Parkesia motacilla*; G5, S2, N, N), and southeastern weasel (*Mustela frenata olivacea*; G5T4, S3?, N, N). Rare plants documented near the site and which may occur on site include the panhandle lily (*Lilium iridollae*; G2, S2, N, E) and primrose-flowered butterwort (*Pinguicula primuliflora*; G3G4, S3, N, E). Potential exists for other rare species as well. Rarity rankings listed above are in the following order: FNAI global (G, T) and state (S) ranks, federal status, state status. Species ranks and conservation status are described at <https://www.fnai.org/ranks.cfm>.

The Florida Forever Measures Evaluation table 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 proposed site, or b) some species observed on site lack sufficient data to justify addition to the FNAI database at this time. The table below contains species falling into any of these observational categories, as well as species gleaned from other sources (e.g., Florida Breeding Bird Atlas) with different degrees of locational precision.

**Rare plants and animals documented or reported to occur within the Welanee Watershed Florida Forever proposal.**

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
<b>Rare plants documented on site</b>					
Asarum arifolium	little brown jug	G5	S3	N	T
<b>Additional rare plants reported on site by applicant</b>					

none					
Rare animals documented on site					
Fusconaia escambia	narrow pigtoe (mussel)	G2	S1S2	T	T
Toxolasma sp. 1	Gulf lilliput	G2	S2	N	N
Villosa choctawensis	Choctaw bean (mussel)	G2G3	S1S2	E	E
Acipenser oxyrinchus desotoi	Gulf sturgeon	G3T2T3	S2?	T	T
Hyla andersonii	pine barrens treefrog	G4	S3	N	N
Apalone spinifera	spiny softshell	G5	S3	N	N
Gopherus polyphemus	gopher tortoise	G3	S3	C	T
Graptemys ernsti	Escambia map turtle	G2	S2	N	N
Macrochelys temminckii	alligator snapping turtle	G3G4	S3	N	N
Pseudemys concinna concinna	eastern river cooter	G5T5	S3	N	N
Tamias striatus	eastern chipmunk	G5	S2	N	N
Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N
<b>Additional rare animals reported on site by applicant</b>					
none					

**GOAL C:**

*Protect, restore and maintain the quality of natural functions of land, water, and wetland systems of the state*

**Measure C1:**

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

The owner is interested in restoring longleaf pine and improving wildlife habitat. He has been planting longleaf pine following cutting of loblolly stands with the intent of restoring longleaf to a large proportion of the former upland pine and sandhill communities. At the time of the field assessment, longleaf pine had been planted on more than 500 acres. There remain more than 3,000 acres of plantation suitable for restoration of longleaf pine. Prescribed fire is used to control hardwoods and improve wildlife habitat in both longleaf and loblolly stands.

**Measure C4:**

*The number of acres acquired that protect natural floodplain functions.*

Approximately 4,349 acres (52%) provides for the protection of natural floodplain functions, as noted in the FFME table prepared by FNAI (see appendix for more detail).

**Measure C5:**

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

Approximately 8,171 acres (98%) provides for the protection of surface waters, as noted in the FFME table prepared by FNAI (see appendix for more detail).

**Measure C8:**

*The number of acres of functional wetland systems protected.*

Approximately 3,555 acres (42%) provides for the protection of functional wetlands, as noted in the FFME table prepared by FNAI (see appendix for more detail).

**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 D3:**

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

Approximately 8,305 acres (99%) provides protection for groundwater recharge areas, as noted in the FFME table prepared by FNAI (See appendix for more detail).

**Spatial Analysis for Potential Water Quality Benefits**

Categories	Scoring Criteria	Project Score
FDEP High Profile Springs (in 1,2,3, or > spring sheds)	12, 24, 36	0
FDEP Select Agricultural Land Use (0-30%, >30-65%, >65%)	4,8,12	0
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	7
FDEP Special Nutrient Impaired WBIDs	9	0
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	6
FDEP Springsheds or within 5 miles	10, 7	0
FDEP BMAPs	10	0
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	6
Total Possible	101	19

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

**FINAL DEAR SCORE = 1** (low Water Quality Protection Benefits)

**GOAL E:**

*Increase natural resource-based public recreational and educational opportunities*

The Florida Forest Service could provide Operation Outdoor Freedom events, utilizing the bunk house if needed.

**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.*

The proposed less-than-fee project proposal offers protection for recorded archaeological sites; however, these sites are not preserved for public use.

**CULTURAL RESOURCES:**

There are three Archaeological Sites currently listed in the Florida Master Site File. These are EH & A Okaloosa 1 (OK132), Site 2 (OK647), and Site 4 (OK648). All three sites were recorded during utilities surveys as small, surface lithic scatters that have been heavily disturbed. OK132 has been evaluated by the SHPO as Ineligible for the National Register of Historic Places. OK647 and OK648 have not been evaluated by the SHPO but were considered Ineligible by the site recorder.

The southernmost parcel of the project has been subject to five cultural resource assessment surveys in response to utility and road projects. These resulted in the three sites currently recorded within the project boundaries. The remainder of the project area has not been surveyed. The site file shows 65 historic structures, 51 archaeological sites, and 2 resource groups as being located within a five-mile radius of this property.

Given the tract's location along the Yellow River, it has a high probability of holding any potentially significant archaeological or historical sites.

*FIELD OBSERVATIONS:*

Due to restrictions imposed by Covid-19, DHR did not participate in a field review for this project.

**GOAL G:**

*Increase the amount of forestland available for sustainable management of natural resources*

**Measure G1:**

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

Approximately 4,434 acres (53%) are available for sustainable forest management, as noted in Appendix A.

**Measure G2:**

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

Silvicultural activities onsite were observed to follow best management practices and timber harvesting operations were observed as set back away from any streams onsite.

***Management***

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

***Funding Sources***

Florida Forever

***Funding for Mapping, Appraisal, Negotiations and Closing***

Florida Forever

***Ownership Pattern and Acquisition Planning***

This project has two owners. HTL Family Limited Partnership owns 7,193 and UIL Family Limited Partnership owns 1,177 acres.

## ***Government Planning and Development***

### ***Contribution to Recreation and Open Space Needs***

The project proposes less-than-fee acquisition. The site will not be entirely open to the public for recreational use. The owner has hosted Operation Outdoor Freedom hunts for the country's veterans on the property. The site has a bunk house which can host up to 10 individuals. The site is also located at some distance from any major urban areas such as Ft. Walton Beach or Pensacola.

### ***Potential for Losing Significant Natural Attributes or Recreational Open Spaces***

The potential for losing significant natural attributes is moderate due to the moderate growth rate of Okaloosa County and Laurel Hill, the appeal of the Yellow River watershed, and the proximity to the northern edge of the Eglin Reservation. The property includes more than 14 miles of shoreline of the Yellow River.

The project sites are located within a relatively rural area at a distance from any major population center. The project sites are comprised of 30 percent floodplain and 70 percent uplands. The property has significant populations of wildlife such as whitetail deer and turkey. The protection of the upper reaches of the Yellow River Basin and will help protect important freshwater species such as the gulf sturgeon, eastern indigo snake, gopher tortoise, American alligator, and the Florida pine snake. The tract contains 12 percent (14.7 miles) of the Yellow River as it flows south to the Gulf. The preservation of the site will help to preserve an area ranked as 1 and 2 for biodiversity according to FNAI models. The project will help to restore the natural function of longleaf pine forest on the site. The site includes many aesthetic features such as oxbows and bluffs that reach up to 50 feet.

### ***Potential for Being Subdivided***

The subject property has a low to moderate potential for being subdivided. The future land use designation is Agriculture, which allows residential use at a density of one dwelling unit per ten acres. An amendment to the comprehensive plan would be required to develop the site. Okaloosa County currently has a moderate rate of population growth in recent years (1.22-1.76 percent annually). The only town nearby is Laurel Hill with a population of 537 residents. The town has had a moderate rate of growth averaging a population growth rate of 1.62 percent annually. Between the last two censuses the population growth of the County has increased by 17.13 percent. Laurel Hill has had no recent land use amendments to the comprehensive plan within the last 10 years. Some of the property surrounding Laurel Hill appears to be designated as Rural Residential in the comprehensive plan which allows development at up to 2 units/acre. The southern edge of the project site is relatively close to the northern part of the Eglin Reservation, a major economic engine within Okaloosa County. The application identifies that Yellow River Plantation, a 160-unit residential development, has been completed recently within three miles of the southern boundary of the project site. The property does not appear to be located within an urban services district for the provision of sewer or water services. A study of aerials indicates that the property is generally not directly serviced by paved roads. The closest paved roadway appears to be SR 85 which runs at the closest approach about 1.5 miles east of the property.

## ***Zoning and Densities within the Project Boundaries***

### **Zoning**

The north and south tracts are within Agriculture (AA) zoning category. This district is for production of plants and animals for human use by sale which includes aquaculture, horticulture, floriculture, viticulture, silviculture, dairy, livestock, poultry, bees, and any and all forms of farm production and products. This district is also suitable for preservation of green spaces, conservation uses, outdoor recreation uses, very low-density residential uses, and public/institutional uses. General commercial uses that support agricultural activities are permitted on a State or County arterial or collector roadway (depth limited to 1,000 feet).

The RCPP tract has two zoning categories; 1,150 acres is within the Agriculture (AA) category and 25 acres is within the Rural Residential (RR) category.

The Rural Residential district is intended for low density residential living and may include a hobby farm, ranchettes, or estate lots.

### **Future Land Use**

The future land uses are Agriculture and Rural Residential. This is consistent with the zoning categories for the subject parcels.

### ***Maximum Density/Intensity***

Agriculture: The density is 1 dwelling unit per 10 acres. Wetlands are not developable, but the density may be transferred to suitable areas on the same parcel. The lot size is generally 10 acres.

Based on the following conditions, 1 dwelling unit per 1 acre may be allowed:

- Access to each lot is from an existing state- or county-maintained road
- Frontage on the state/county road is at least 50 feet;
- In situations where two or less 1 acre lots are created, access may be from a recorded easement
- This does not apply to areas classified as prime farmland by the USDA.

Note: The north and south tracts have frontage on existing county-maintained roads. The RCPP tract does not have frontage on a county-maintained road. McDonald Street is the closest and appears provide access to (or almost to) the property.

Rural Residential: the density is 1 dwelling unit per 5 acres.

## ***Existing Land Use within the Project Boundaries***

One parcel consisting of 615 acres has a current use of improved agriculture. The remaining parcels are timberland.

### ***Estimated Cost of the Appraisals***

The cost of two appraisals and an appraisal review for the subject is estimated to range from about \$15,000 to \$25,000.

***Development Potential***

The north and south tracts appear to be surrounded by timber parcels with very few residences in the area. The RCPP tract is about 2.5 miles north of Crestview. It appears to be in the path of future development. Based on the current future land use designation, the subject's estimated maximum residential potential is 840 units.

***Existing Land Uses and Future Land Use Designations***

Existing Land Uses: The largest land uses are classified with the following land use/land cover; Bottom Land (2090 acres), Mesic Flatwoods (155 acres), Planted Pine (3740 acres), Floodplain Swamp (1323 acres), upland hardwood forest (170 acres), Clear-cut Pine Plantation (456 acres), Pasture (163 acres) and Roads (101. acres)

Future Land Uses: The subject property is designated as "Agriculture" on the Okaloosa County Comprehensive Plan Future Land Use Map. The Agriculture future land use category allows the following: aquaculture, horticulture, floriculture, viticulture, silviculture, dairy, livestock, poultry, bees, and all forms of farm products and farm production. The land use will allow residential development at up to 837 dwelling units on the subject property.

***Surrounding Zoning and Land Use***

Land uses for the subject area are estimated to be 63% agriculture and 30% conservation uses. The north and south tracts are farther from developed areas than the RCPP tract.

***Proposed Developments in the Vicinity***

Because of the COVID-19 situation, I do not have confirmation of proposed developments. My research located seven subdivisions within a one-mile radius of this tract. Heritage Plantation is 300-lot subdivision and golf course located about 3 miles east of the south tract and RCPP tract. It is on the west side of Highway 85. The developer entered bankruptcy years ago. Within the last two years, there have been sales activity involving the privately owned parcels. Currently, about five homes have been built.

***Proximity of the Subject to Developed Urban Areas***

The nearest municipality east of the Yellow River is Laurel Hill. As a crow flies, it is about 3 miles east of the north tract. The driving distance is about 7.5 miles via Highway 85 to County Road 2, at which point both the north and south tracts are located. The City of Crestview is about 15 miles south, via Highway 85 to County Road 2.

The west side of Yellow River is nearest the town of Baker. It is about a 15-mile drive to the same location on County Road 2 at both the north and south tracts.

The RCPP tract is just 2.5 miles north of Crestview and within a mile of several subdivisions.

***Transportation Issues***

Located in FDOT's District 3 in Okaloosa County, the proposed project is located approximately 3 miles west of SR 85 and 3 miles east of SR 189. Also, CR 2 bisects the proposed project area. All three of these roadways are evacuation routes.

There should be coordination with the appropriate FDOT District staff during the acquisition process to ensure that any issues related to the transportation facilities are addressed and incorporated into the management plan as appropriate.

### ***ACKNOWLEDGEMENTS***

Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Deborah Burr, with assistance from Keith Singleton, in DSL's Office of Environmental Services was responsible for the overall coordination of this report, with contributions from the following:

Florida Department of State, Division of Historical Resources - Joshua Goodwin

Florida Forest Service - Cat Ingram and Wes Woodham

Department of Economic Opportunity - Dan Evans

Florida Fish and Wildlife Conservation Commission – Larame Ferry and Diana Pepe

Florida Natural Areas Inventory – Dan Hipes

DEP Division of Environmental Assessment and Restoration - Kevin Coyne and Janis Morrow

Florida Department of Transportation - Jennifer Carver



**APPENDICES**

**Appendix A:**

Final FF measures table: Report requirement 259.105 (15)d, prepared by Florida Natural Areas Inventory

**Welanee Watershed Forest: Florida Forever Measure Evaluation 20200820**

GIS ACRES = 8,375

MEASURES	Resource Acres <sup>a</sup>	% of project
<b>B1: Strategic Habitat Conservation Areas</b>		
Priority 1	0	0%
Priority 2	141	2%
Priority 3	0	0%
Priority 4	2,681	32%
Priority 5	526	6%
<b>Total Acres</b>	<b>3,348</b>	<b>40%</b>
<b>B2: FNAI Habitat Conservation Priorities</b>		
Priority 1	2,972	35%
Priority 2	666	8%
Priority 3	67	< 1%
Priority 4	128	2%
Priority 5	469	6%
Priority 6	9	< 1%
<b>Total Acres</b>	<b>4,312</b>	<b>51%</b>
<b>B3: Ecological Greenways</b>		
Priority 1	0	< 1%
Priority 2	8,298	99%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%
<b>Total Acres</b>	<b>8,298</b>	<b>99%</b>
<b>B4: Under-represented Natural Communities</b>		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (G2)	0	0%
Rockland Hammock (G2)	0	0%
Dry Prairie (G2)	0	0%
Seepage Slope (G2)	0	0%
Sandhill (G3)	0	0%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	117	2%
Upland Hardwood Forest (G5)	170	1%
<b>Total Acres</b>	<b>287</b>	<b>3%</b>
<b>B6: Occurrences of FNAI Tracked Species</b>		
G1	0	
G2	5	
G3	2	
G4	3	
G5	4	
<b>Total</b>	<b>14</b>	
<b>C4: Natural Floodplain Function</b>		
Priority 1	61	< 1%
Priority 2	2,075	25%
Priority 3	1,880	22%
Priority 4	333	4%
Priority 5	0	0%
Priority 6	0	0%
<b>Total Acres</b>	<b>4,349</b>	<b>52%</b>

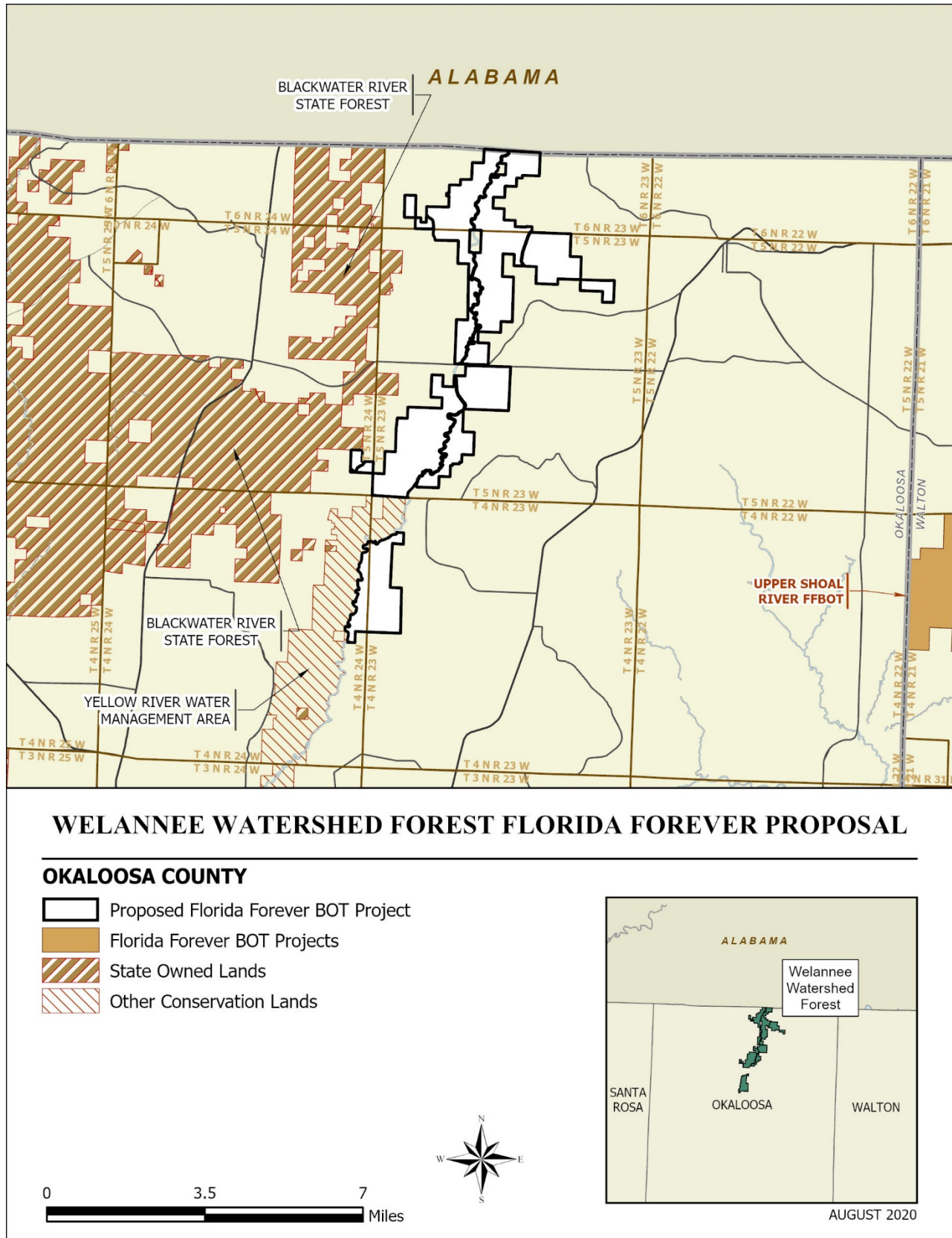
MEASURES (continued)	Resource Acres <sup>a</sup>	% of project
<b>C5: Surface Water Protection</b>		
Priority 1	0	0%
Priority 2	4,536	54%
Priority 3	1,235	15%
Priority 4	1,955	23%
Priority 5	445	5%
Priority 6	0	0%
Priority 7	0	0%
<b>Total Acres</b>	<b>8,171</b>	<b>98%</b>
<b>C7: Fragile Coastal Resources</b>		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
<b>Total Acres</b>	<b>0</b>	<b>0%</b>
<b>C8: Functional Wetlands</b>		
Priority 1	61	< 1%
Priority 2	1,675	20%
Priority 3	1,587	19%
Priority 4	232	3%
Priority 5	0	0%
Priority 6	0	0%
<b>Total Acres</b>	<b>3,555</b>	<b>42%</b>
<b>D3: Aquifer Recharge</b>		
Priority 1	0	0%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	8,305	99%
<b>Total Acres</b>	<b>8,305</b>	<b>99%</b>
<b>E2: Recreational Trails (miles)</b>		
<small>(prioritized trail opportunities from Office of Greenways and Trails &amp; Univ. Florida)</small>		
Land Trail Priorities	0.0	
Land Trail Opportunities	0.0	
<b>Total Miles</b>	<b>0.0</b>	
<b>F2: Arch. &amp; Historical Sites (number)</b>		
	3 sites	
<b>G1: Sustainable Forestry</b>		
Priority 1	0	0%
Priority 2	293	3%
Priority 3	3,865	46%
Priority 4	0	0%
Priority 5 - Potential Pinelands	277	3%
<b>Total Acres</b>	<b>4,434</b>	<b>53%</b>
<b>G3: Forestland for Recharge</b>		
	0	0%

<sup>a</sup>Acres of each resource in the project and percentage of project represented by each resource are listed except where noted. This analysis converts site boundary into pixels, which causes slight differences from GIS acres; this effect is greatest on small sites.

**Appendix B:**

Final FF proposal boundary maps prepared by Florida Natural Areas Inventory (report requirement 259.105 (15)k)

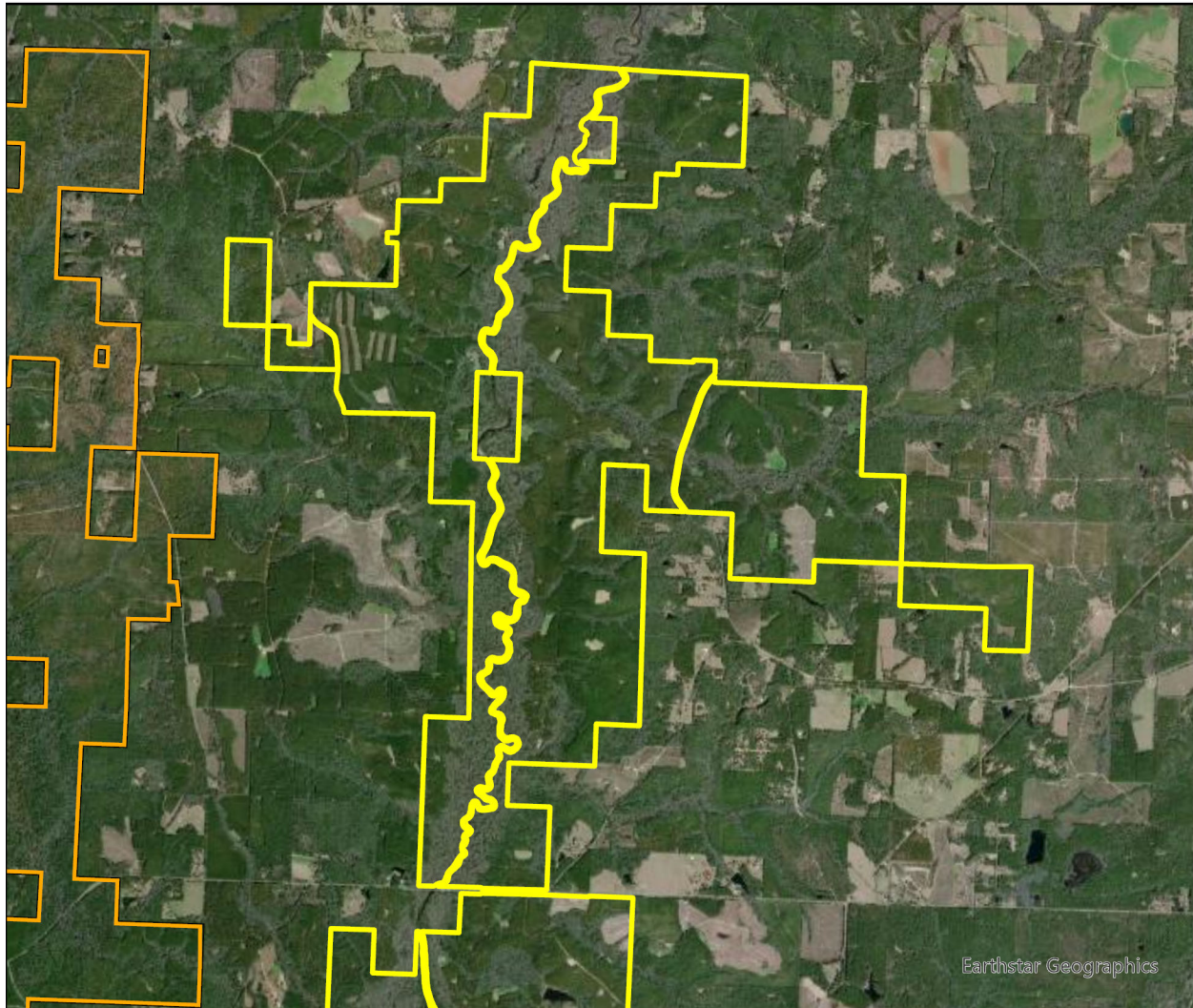
**B1: Florida Forever map**



**B2: Aerial map 1 of 2**

**Welmanee Watershed Forest Florida Forever Proposal  
Map 1 of 2**

**FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF AUGUST 2020**

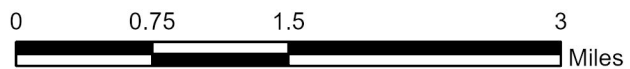


Map Produced by: N. Pasco, August 2020

Background: World Imagery Resolution = 0.3 meter



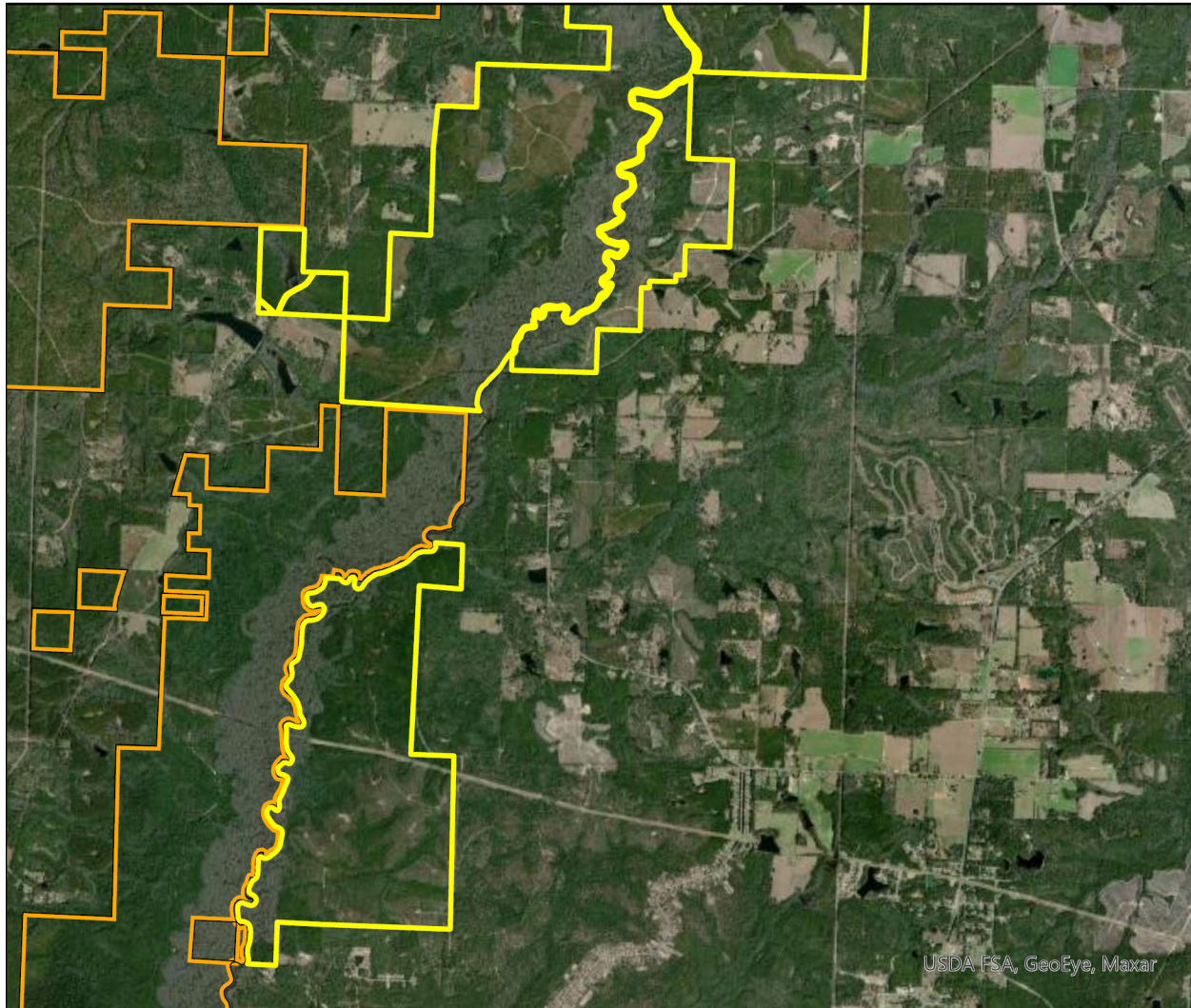
1018 Thomasville Road  
Suite 200-C  
Tallahassee, Florida 32303  
850-224-8207  
fax 850-681-9364  
www.fnai.org



**B2: Aerial map 2 of 2**

**Welannee Watershed Forest Florida Forever Proposal  
Map 2 of 2**

**FLORIDA FOREVER BOARD OF TRUSTEES PROJECT PROPOSAL BOUNDARY AS OF AUGUST 2020**



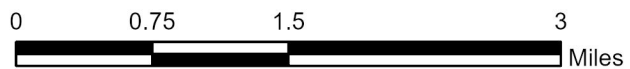
Map Produced by: N. Pasco, August 2020

Background: World Imagery Resolution = 0.3 meter



	Florida Forever Proposal Boundary
	Existing State Conservation Lands

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



**Appendix C:****Summary of property tax I.D. owner, size and value.**

County	Parcel ID	Owner	Acres	Just (Market) Value
Okaloosa	28-6N-23-0000-0001-00	The H.T.L. Family Ltd Partnership	1,475.01	\$1,763,095
Okaloosa	27-6N-23-0000-0002-00	The H.T.L. Family Ltd Partnership	2,913.15	\$3,058,807
Okaloosa	21-5N-23-0000-0010-00	The H.T.L. Family Ltd Partnership	617.53	\$1,241,236
Okaloosa	20-5N-23-0000-0001-00	The H.T.L. Family Ltd Partnership	1,715.81	\$1,403,482
Okaloosa	28-5N-23-0000-0006-00	The H.T.L. Family Ltd Partnership	471.99	\$707,985
Okaloosa	06-4N-23-0000-0005-00	UIL Family Ltd Partnership	54.67	\$136,675
Okaloosa	12-4N-24-0000-0002-00	UIL Family Ltd Partnership	104.88	\$262,200
Okaloosa	07-4N-23-0000-0003-00	UIL Family Ltd Partnership	312.62	\$625,240
Okaloosa	13-4N-24-0000-0002-00	UIL Family Ltd Partnership	197.19	\$492,975
Okaloosa	18-4N-23-0000-0002-00	UIL Family Ltd Partnership	481.53	\$963,060
Okaloosa	24-4N-24-0000-0006-00	UIL Family Ltd Partnership	25.71	\$44,992
		Total	8,370.09	\$10,699,747