

# **Big Pine Preserve**

## **Marion County**

Fee simple

# **Florida Forever Project Evaluation Report**

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

*Submitted to the Acquisition and Restoration Council*  
*April 9, 2021*



*Proposed Land Manager: Florida Forest Service*  
*Acres: 541*  
*Just Value: \$6,502,861*  
*Application Date: October 30, 2020*  
*Project Sponsor: North Florida Land Trust*

## Executive Summary

The Big Pine Preserve project consists of multiple parcels on the north and west shore of Lake Kerr; within the unincorporated community of Salt Springs and seated in the Ocala National Forest (ONF) . The properties contain and are within the footprint of the historic, abandoned community of Kerr City. All parcels within the project are owned by the familial descendants of the Swan and Smiley families. The lands lie south of county road 316 and east of forest road 88. According to Marion County tax records, the project area contains 541 acres and has a tax assessed value of is \$6,502,861. The North Florida Land Trust (NFLT) has an agreed upon sale price with the landowners at a value less than tax appraised. The project is proposed as a fee simple acquisition; however, the owner is willing to consider less-than-fee acquisition.

The project's most unique feature is the existence of unpreserved large stands of old-growth and mature longleaf pine. This includes individual specimens of longleaf pine on the northern parcels documented to be more than 300 years old. Despite years of fire exclusion, a significant portion of the project area could be identified as sandhill as evidenced by remnant oaks and wiregrass groundcover. Once restored these areas of sandhill could be ideal habitat for the red-cockaded woodpecker [(RCW) *Picoides borealis*; Federally designated Endangered]. RCWs have been observed foraging on the area and active nesting clusters are within sight of the property. If acquired, these properties could play a critical role in connecting existing active RCW clusters within the ONF.

The properties are the legacy of the Swan/Smiley families, which acquired the lands in the 1880s to create a citrus plantation, stagecoach stop, and snowbird destination on the shores of Lake Kerr. The property was sited along the stagecoach line which ran from Fort Gates on the St. Johns, to the city of Ocala. Kerr City is recognized as a Historic District on the National Register of Historic Places and marks the site one of Florida's first planned communities. This unique history is what has made possible the preservation of significant stands of old-growth and mature longleaf pine. Portions of the property appear to not have been clear cut or significantly timbered prior to the purchase by the Smiley Brothers, and other areas allowed to revert to longleaf immediately after the great citrus freezes in the 1890s. According to the application, the NFLT has been working with the property owners towards documenting and preserving these resources.

According to the application, the landowners and NFLT are open to either a fee-simple, or less-than-fee acquisition of the project. Additionally, according to the NFLT, if the state is unwilling to go forward with a fee-simple acquisition, they would request the State consider a conservation easement purchase which would assist them in closing the total funding gap, and would make the State the conservation easement holder.

An interagency team conducted a site visit to Big Pine Preserve on January 27, 2021. The information included in this report is a result of this site visit.

The Florida Forest Service is the recommended manager if acquired as a fee-simple project. If approved for addition to the 2022 Florida Forever Priority List, it would ideally be considered as an amendment to the Longleaf Pine Ecosystem Florida Forever project boundary. The parcels on the northern shore of Lake Kerr would be designated as essential, due to the natural and historical resources documented on the property.

## **PURPOSE FOR ACQUISITION**

If acquired, the Big Pine Preserve will provide protection of an unique remnant of Florida's old-growth longleaf pine ecosystem, wildlife habitat for imperiled species, significant cultural resources, and additional public recreation opportunities (if acquired fee simple).

Acquisition of this project would serve to:

- conserve, protect, manage, or restore important ecosystems, landscapes, and forests, to enhance or protect significant surface water, recreational, timber, and fish and wildlife resources;
- conserve, protect and provide wildlife corridors for rare and imperiled species;
- increase linkages and conservation corridors between public land in the region;
- provide surface and groundwater protection, and protect natural floodplain functions;
- provide opportunities for resource-based public outdoor recreation.

### **LOCATION AND PROXIMITY TO OTHER MANAGED AREAS**

The Big Pine Preserve proposal encompasses 541 acres (522 acres per GIS) in three separate tracts along the northern and western edges of Lake Kerr (embedded within ONF). The property is being offered as fee simple or less-than-fee acquisition to restore and preserve significant acreage of old-growth longleaf pine that contains many >25-inch diameter trees. County Road 316 separates the two northern tracts from ONF. The western tract shares approximately half of its non-shoreline boundary with ONF.

### **RESOURCE DESCRIPTION**

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

This evaluation is based on information gathered from the proposal, high resolution aerial imagery, U.S. Geologic Survey (USGS) 7.5' topographic maps, Florida Natural Areas Inventory (FNAI) Cooperative Land Cover data (FNAI, Florida Cooperative Land Cover Map, version 3.4), and information in the FNAI database. A field survey was conducted on January 27, 2021, by FNAI biologists Katy NeSmith and Kim Alexander, along with the Acquisition and Restoration Council (ARC) liaison staff. The proposal property is situated at the northern end of the Ocala Scrub Province of the Central Lake District (Brooks 1981), which is an area of deep sands over limestone with high input into the Florida aquifer. The site is included within the area generally referred to as the Mt. Dora Ridge, which essentially encompasses the ONF. Elevations on the proposal property range from 30 feet above mean sea level (msl) along the Lake Kerr shoreline to 135 feet above msl on the west side of the southwestern parcels. Upland soils are mostly excessively drained sands and dominated by the Astatula series, with some Paola and Orlando.

The Big Pine Preserve, situated adjacent to Lake Kerr, has a long history of use by modern humans. The former town of Kerr City developed in the late 19<sup>th</sup> century on the north side of Lake Kerr, is partly on the proposal property but primarily on the intervening land between the disjunct northern parcels. The old stagecoach trail that once provided access to the town runs across these parcels, and other portions of the site are described as having citrus close to the turn of the century. These areas were left fallow after the freezes in the 1890s collapsed the local citrus industry, allowing the recruitment of longleaf pines. Today, the parcels contain older mature (80-120-year-old) to old growth (150-300-year-old) longleaf pines, depending on the land use history.

Prior to settlement, just over 400 acres of the property was sandhill with an open canopy of longleaf pines (*Pinus palustris*) and scattered deciduous turkey oaks (*Quercus laevis*) and bluejack oaks (*Quercus incana*) over a low herbaceous groundcover of predominantly wiregrass (*Aristida stricta*). The proposal contains portions of two longleaf pine islands on the Ocala National Forest, the large Riverside Island that stretches to the north and a smaller one to the west from Lake Kerr. In the late 19<sup>th</sup> century, a combination of clearing for citrus production and selective longleaf pine logging created an initial disturbance. Subsequent fire exclusion since the 1990s has altered all the historic sandhill to some degree, and all of the proposal has a high cover of weedy oaks, primarily laurel oak (*Quercus hemisphaerica*), forming a subcanopy and shrub layers. Clearings and old vehicle trails through the pine stands, while mostly vegetated with pasture grasses and weeds, do allow for more light penetration along the edges, so patches of wiregrass and other natives such as pineywoods dropseed

(*Sporobolus junceus*), dogtongue wild buckwheat (*Eriogonum tomentosum*), fragrant eryngo (*Eryngium aromaticum*), roundleaf bluet (*Houstonia procumbens*), and narrowleaf silkgrass (*Pityopsis graminifolia*) remain despite the lack of fire. Enormous longleaf pines tower over the oak understory. As described in the application, these pines have been aged from 80 to over 300 years old, and reports from a forester and a dendrochronologist estimate 80 acres of old growth stands (those that include trees over 150 years old) on the proposal. At least one tree seen during the site visit had an abandoned red-cockaded woodpecker cavity. Dead pines have been left as standing snags, providing important wildlife habitat.

Although longleaf pines occur throughout the remnant sandhills, the southwestern parcels also have a large component of mature sand pines (*Pinus clausa*) that often outnumber the longleaf. Areas with a more open understory have a diverse mix of wiregrass, Elliott's bluestem (*Andropogon gyrans*), Florida rosemary (*Ceratiola ericoides*), needleleaf witchgrass (*Dichantherium aciculare*), garberia (*Garberia heterophylla*), gopher apple (*Geobalanus oblongifolius*), skyblue lupine (*Lupinus diffusus*), pricklypear (*Opuntia humifusa*), sand live oak (*Quercus geminata*), lopsided indiagrass (*Sorghastrum secundum*), and Adam's needle (*Yucca filamentosa*).

About half of the historic longleaf community on the proposal could still be described as sandhill due to the high number of remaining longleaf pines, younger oaks, and remnant herbaceous groundcover. Roughly one third, however, has a denser, more shaded understory of oaks, fewer pines, and very little groundcover remaining. According to the applicant, this area located on the southwestern parcels was selectively timbered in the 1950s. Because these acres would require more intensive restoration efforts to return fire to the landscape, they are described here as successional hardwood forest.

The remainder of the original longleaf habitat, just over 40 acres, is now a semi-improved pasture and a few acres of developed land and unpaved roads. The pasture, although planted with bahiagrass (*Paspalum notatum*), has a nice stand of mature longleaf pines with regeneration and patches of remnant native groundcover. Pocket gophers are common. The old, unpaved stagecoach trail across the northern parcels is a wide path and connects to several other trails and clearings. Two small camphor trees (*Cinnamomum camphora*; FLEPPC Category I) were the only invasive exotic plants observed during the site visit, growing on an old log pile in one clearing.

A small patch of scrub (11.3 acres) is present on the southern parcels. This is a corner of a huge block of scrub on the ONF. Species are typical shrubby xeric oaks Chapman's oak (*Quercus chapmanii*), sand live oak (*Quercus geminata*), and myrtle oak (*Quercus myrtifolia*) forming a 15-foot tall thicket along with a mostly woody understory of species such as rusty staggerbush (*Lyonia ferruginea*) and scrub palmetto (*Sabal etonia*) and almost no herbs. A few mature sand pines (*Pinus clausa*) form an open overstory. Shrubby lichens are common on the white sand.

The lake shore forms a natural barrier to fire, allowing the development of a fringing mesic hammock community. Spreading oak branches form a closed canopy over a mostly shrubby understory. The hammock consists of typical hammock species such as live oak (*Quercus virginiana*), laurel oak (*Quercus hemisphaerica*), cabbage palm (*Sabal palmetto*), saw palmetto (*Serenoa repens*), American beautyberry (*Callicarpa americana*), southern magnolia (*Magnolia grandiflora*). The ecotone to sandhill is more scrub-like with myrtle oak (*Quercus myrtifolia*), sand holly (*Ilex ambigua*), and sandyfield beaksedge (*Rhynchospora megalocarpa*). Near the lake, historic clearing for water access has created a more open understory, but overall, the community is in good condition with abundant epiphytes of resurrection fern (*Pleopeltis michauxiana*) and Spanish moss (*Tillandsia usneoides*) festooning the live oaks.

The proposal includes about a half a mile of the Lake Kerr shoreline fringed with a basin marsh community of emergent herbs and shrubs including common buttonbush (*Cephalanthus occidentalis*), sawgrass (*Cladium jamaicense*), dogfennel (*Eupatorium capillifolium*), bulltongue arrowhead (*Sagittaria lancifolia*), sand cordgrass (*Spartina bakeri*), and broadleaf cattail (*Typha latifolia*). This marsh

community also extends into low lying pockets just off the lake which are also mainly herbaceous with sawgrass, spikerush (*Eleocharis* sp.), and maidencane (*Panicum hemitomon*), but also contain inclusions of woody vegetation with red maple (*Acer rubrum*) and southern bayberry (*Morella cerifera*). The lakeshore vegetation transitions to a shorter hydroperiod ecotone with bluestem (*Andropogon* spp.), dahoon (*Ilex cassine*), large gallberry (*Ilex coriacea*), and gallberry (*Ilex glabra*), before oak hammock vegetation becomes dominant.

A small isolated depression marsh in good condition occurs on the northern parcels, embedded in a sandhill community. The vegetation is mainly herbaceous with the deepest, inundated portions of the marsh containing watershield (*Brasenia schreberi*), floating bladderwort (*Utricularia inflata*), and white waterlily (*Nymphaea odorata*). Maidencane (*Panicum hemitomon*) is the dominant emergent grass, while the outer saturated soils of the marsh harbor dwarf sundew (*Drosera brevifolia*), warty panicgrass (*Kellochloa verrucosa*), bogbutton (*Lachnocaulon* sp.), southern club-moss (*Lycopodiella appressa*), beaksedge (*Rhynchospora* sp.), and yellow-eyed grass (*Xyris* sp.). Woody vegetation around the edge of the marsh has likely increased in recent years due to fire exclusion but is still relatively open. Dahoon (*Ilex cassine*), southern magnolia (*Magnolia grandiflora*), red bay (*Persea borbonia*), laurel oak (*Quercus hemisphaerica*), and shiny blueberry (*Vaccinium myrsinites*) are common.

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

Community or Landcover	Acres	Percent of Proposal
Sandhill	224.4	43
mesic hammock	46.1	9
basin marsh	43.9	8
scrub	11.3	2
depression marsh	2.7	1
successional hardwood forest	143.7	28
semi-improved pasture	34.0	7
developed	7.4	1
road	4.4	1
Total	518	100

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

This summary provides a resource assessment of the Big Pine Preserve Florida Forever proposal based on field observations during the January 27, 2021 site tour and results of the GIS analysis. The project area consists of an area of inholdings within the Ocala National Forest on the north and west shore of Lake Kerr, within the community of Salt Springs. The area contains approximately 541 acres that lie south of County Road 316 and east of Forest Road 88 and is part of the Florida Wildlife Corridor, connecting the Ocala and Osceola National Forests.

The property is being offered as either a fee or less-than-fee (i.e., conservation easement) with the North Florida Land Trust providing financial resources as match funding towards the acquisition. The property contains many acres of unpreserved mature longleaf pine forest in need of management. With the bulk of the property surveyed, 80 acres were classified as old growth, using the definition of trees more than 150 years old and multi-age class stands. The property is thought to be the largest unpreserved stand of old-growth longleaf in peninsular Florida. The consulting forester found more than 40 longleaf with diameters greater than 25 inches and documented trees over 300 years in age. The area has a history of frequent fire application up until the 1990s. With additional habitat restoration, the Big Pine Preserve provides a move-in ready site for several threatened and endangered species documented in and around the project area.

The red-cockaded woodpecker [(RCW) *Picoides borealis*; Federally designated Endangered] is one example of a species that will benefit from the acquisition of the Big Pine Preserve. This is evidenced by observed foraging on the area and active nesting clusters within sight of the property. On the site tour, once active cavity trees could be seen to be abandoned due to the lack of prescribed fire in the

last 25 years. With remnant wiregrass and a good seedbank present, the understory is thought to be restorable. The Big Pine Preserve could play a critical role in connecting existing active RCW clusters in the adjacent Riverside Island Complex already managed by the Ocala National Forest and in turn improving genetic transfer within the populations. The large-diameter, old-growth pines offer an ideal expansion area for the birds.

Active gopher tortoise (*Gopherus polyphemus*; State designated Threatened) burrows were also observed on site during the visit and are another example of a species that would benefit from the return of frequent fire to the property. A substantial gopher tortoise population is known to occur in the surrounding area. Acquisition of the property would align with FWC's Gopher Tortoise Management Plan to increase the amount of protected habitat for this species as well as commensal species including the eastern indigo snake (*Drymarchon couperi*; Federally designated Threatened), Florida pine snake (*Pituophis melanoleucus mugitus*; State designated Threatened) and gopher frog (*Lithobates capito*). The property also includes approximately 22 acres of scrub habitat, with a Florida scrub-jay (*Aphelocoma coerulescens*; Federally designated Threatened) population immediately adjacent on area managed by the U.S. Forest Service.

The Florida Natural Areas Inventory (FNAI) Element Occurrence database shows records for wildlife and plant species including eastern diamondback rattlesnake (*Crotalus adamanteus*), eastern indigo snake, Florida black bear (*Ursus americanus floridanus*), Florida hypotrachia scarab beetle (*Hypotrachia spissipes*), gopher frog, narrowleaf naiad (*Najas filifolia*), Ocala deepdigger scarab beetle (*Peltotrupes youngi*), red-cockaded woodpecker, round-necked romulus long-horned beetle (*Romulus globosus*), scrub palmetto flower scarab beetle (*Trigonopeltastes floridana*), scrub stylisma (*Stylisma abdita*), and three spotted pleasing fungus beetle (*Ischyryus dunedinensis*) on the property. Species with known occurrences within one mile include Florida scrub-jay, sand skink (*Neoseps Reynolds*; Federally designated Threatened), and striped newt (*Notophthalmus perstriatus*). The property has a high likelihood of occurrence of other sandhill and scrub associated species known to occur in the Ocala National Forest.

The Florida Cooperative Land Cover version 3.3 lists numerous natural communities occurring on The Big Pine Preserve including mixed hardwood-coniferous (44%), sandhill (33%), and sand pine scrub (4%). For a complete list, see the attached FWC GIS Environmental Resources Analysis.

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 FLAM score for this property is 8.5. Approximately 99.9% of the area is identified as Priority 1 or 2 (of 5) for the Critical Lands and Waters Identification Project.

Approximately 81% of the area lies within a designated FWC Strategic Habitat Conservation Area (SHCA) for species including Cooper's hawk (*Accipiter cooperii*), American swallow-tailed kite (*Elanoides forficatus*), sand skink, Florida black bear, Florida mouse (*Podomys floridanus*), striped newt, and Florida scrub-jay. The GIS analysis contains more detailed information.

The project area acts as a buffer to Lake Kerr, which is listed as impaired for mercury in fish tissue and nutrients. FWC is currently managing hydrilla on the lake, but there are limited invasive species occurrences on the property. There are also 53 acres of natural wetlands on the area.

In summary, the proposal offers an opportunity to protect the largest unpreserved stand of old-growth longleaf pine forest in peninsular Florida and provide connectivity to existing conservation lands that will benefit numerous fish and wildlife species. The Big Pine Preserve would be a significant addition to the multi-agency conserved lands around the Ocala National Forest. The management of the property by the Florida Forest Service will restore wildlife habitat and allow for the expansion of listed species in the area.

**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, 541 acres would contribute to the enhancement of essential natural resources, ecosystem service parcels, and connecting linkage corridors such as the Florida Wildlife Corridor.

**Measure A2:**

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

The site is proposed for fee simple 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.*

The North Florida Land Trust is raising funds to assist with acquisition of the properties.

**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.*

According to the Florida Forever Measure Evaluation (FFME), approximately 411 acres of the proposed project is within priority 2 and 3 Strategic Habitat Conservation Areas.

**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 Big Pine Preserve proposal. Overall, the site contains approximately 521 acres (100% of site) of rare species habitat. The habitat is mostly divided between Priority 3 (49% of site) and Priority 1 (29% of site), with the remainder in Priorities 2, 5, 4 and 6 (18%, 2%, < 1% and <1%, respectively).

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 of habitat for all species is more than the total acreage of the priority conservation areas.

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

Scientific Name	Common Name	Global Rank	Acres
<i>Najas filifolia</i>	narrowleaf naiad	G3	180
<i>Plestiodon reynoldsi</i>	sand skink	G3	14
<i>Drymarchon couperi</i>	eastern indigo snake	G3	509
<i>Aphelocoma coerulescens</i>	Florida scrub-jay	G2?	23
<i>Picoides borealis</i>	red-cockaded woodpecker	G3	68
<i>Ursus americanus floridanus</i>	Florida black bear	G5T4	519

**Measure B3:**

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

According to the FFME, approximately 514 acres of the proposed project is within priority 5 for protection of ecological greenways.

**Measure B4:**

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

The Florida Forever natural community analysis includes only those communities that are under-represented on existing conservation lands. This analysis provides a conservative estimate of the extent of these communities, because it identifies only relatively undisturbed portions of these communities that occur within their historic range. The FFME table lists the acreages of under-represented natural communities found on the site. Based on this analysis, the Big Pine Preserve proposal contains 224 acres of sandhill (43% of site) and 11 acres of scrub (2% of site).

**Measure B5:**

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

The Big Pine Preserve proposal, along with adjacent conservation lands that include Ocala National Forest, Seminole State Forest, and Tiger Bay State Forest, would contribute to a contiguous landscape-sized protection area of >1,080,000 acres.

**Measure B6:**

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

The Big Pine Preserve is within an area identified by the Florida Fish and Wildlife Conservation Commission where Florida black bear is considered abundant. The FNAI database includes no other records of rare species on site; however, the proposal states that red-cockaded woodpeckers have been observed foraging on site, and that old cavities are present. The surrounding sandhill (including the well-known Riverside [sandhill] Island) supports the largest population of red-cockaded woodpeckers in peninsular Florida. Restoration of the former sandhill on site would further bolster this population by filling in additional habitat to help connect sub-populations. A large, active gopher tortoise burrow was noted during the site visit and a substantial gopher tortoise population is known to occur in the surrounding sandhill. Two relatively recent observations of eastern diamondback rattlesnakes were described by members of the site visit team. Additional species are possible.

**Table 3. Rare plants and animals documented or reported to occur within the Big Pine Preserve Florida Forever proposal.**

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Status
<b>Rare plants documented on site</b>					
none					
<b>Additional rare plants reported on site by applicant</b>					
none					
<b>Rare animals documented on site</b>					
Crotalus adamanteus	eastern diamondback rattlesnake	G3	S3	N	N
Gopherus polyphemus	gopher tortoise	G3	S3	N	ST

Ursus americanus floridanus	Florida black bear	G5T4	S4	N	N
<b>Additional rare animals reported on site by applicant</b>					
Dryobates borealis	red-cockaded woodpecker	G3	S2	E	E

**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.*

Approximately 379 acres of the proposed area could be considered as extremely fire-suppressed sandhill, successional hardwood forest, and scrub in need of restoration. Another 34 acres is former pasture but with a mature longleaf pine overstory and groundcover components of sandhill. As acknowledged by the applicant and proposed partners and managers, the old longleaf pines have a considerable duff layer built up around them and will require long-term, potentially difficult restoration protocols. These would involve the careful mechanical removal of oaks with the long-term goal of training longleaf pine roots into deeper soil layers before fire can be re-introduced into the system without great risk to the old growth trees. The successional hardwood forest developed on former sandhill, has an even greater abundance of oaks, some mature, that would require more intensive mechanical removal.

**Measure C2:**

*The percentage of water segments that fully meet, partially meet, or do not meet their designated uses as reported in the Department of Environmental Protection’s State Water Quality Assessment 305(b) report.*

The proposed project is not located in a restoration plan area, but acquisition of the properties would provide surface and ground water protection.

**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.*

Lake Kerr is a sub basin of the Lake George Basin and is located in Marion County. The Lake George Basin was added to the Lower St. Johns SWIM (Surface Water Improvement and Management Plan) plan in 2008. Although Lake Kerr has no established outlet for surface-water outflow and considered an isolated lake, the SWIM plan identifies several management projects critical to the improvement of the Lake George basin. While most of the identified SWIM projects are primarily associated with the direct improvement of Lake George and not necessarily Lake Kerr, numerous projects have been completed. Roughly 50% of the Lake George projects have been completed. It should be noted that Lake Kerr is identified as an Outstanding Florida Water (OFW) in the 2008 SWIM plan. A primary issue highlighted in the plan is the deterioration of natural systems within the basin. Subsequently the strategy for addressing the issue is the cooperation on conservation land identification and acquisition with local governments and the Florida Forever program. Ostensibly, the proposed Florida Forever Big Pine Preserve (Lake Kerr) would help to sustain the OFW designation by minimizing shoreline development and impacts to the lake.

**Measure C4:**

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

According to the FFME, approximately 63 acres of the proposed project is within priority 3 for protection of natural floodplain function.

**Measure C5:**

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

According to the FFME, approximately 504 acres of the proposed project will protect surface waters of the State.

**Measure C8:**

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

According to the FFME, approximately 43 acres of the proposed project is within priority 3 for protecting functional wetland systems.

**Measure C11:**

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

At the present time, there are no known significant infestations of invasive/exotic plants known or identified on the 497-acre property. As such, no maintenance or control has taken place by the current owners. There are a few scattered specimens of small camphor trees in the understory which would require only a minimal effort to treat.

**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.*

According to the St. Johns River Water Management District [Water Supply Plan](#) (2005), approximately 56 acres would provide retention and storage of surface water in naturally occurring storage areas.

**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.*

According to the St. Johns River Water Management District [Water Supply Plan](#) (2005), zero gallons of water would be made available through the water resource development.

**Measure D3:**

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

According to the FFME, 519 acres proposed for acquisition would contribute to aquifer recharge, with the majority of acres categorized as priorities 1-3.

**Table 4. 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	4
FDEP Florida Aquifer Vulnerability (FAVA)	4,7,10	10
FDEP Special Nutrient Impaired WBIDs	9	0
FDEP Distance to Major Lakes (100, 500, 1000 meters)	8,7,6	8
FDEP Springsheds or within 5 miles	10, 7	7

FDEP BMAPs	10	0
FDEP Distance to Major Rivers (100, 500, 1000 meters)	6,5,4	0
Total Possible	101	29

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**

**Measure E1:**

*The number of acres acquired that are available for natural resource-based public recreation or education.*  
Almost the entirety of the property is accessible. There are no impassable areas and there is an informal network of unimproved roads or trails on the tracts fronting CR 316. All parts of each tract are within ¼ mile of some form of access – either paved/maintained road, two-trail, powerline easement, or informal grass road. There are several small wetland areas that are interspersed across the different tracts where the edges would be accessible but not the interior portions.

**Measure E2:**

*The miles of trails that are available for public recreation, giving priority to those that provide significant connections including those that will assist in completing the Florida National Scenic Trail.*  
The Big Pine Preserve project, located in Marion County, is within Florida Greenways and Trails Opportunity Network. The southern portion of the project is adjacent to the Florida National Scenic Trail Opportunity Corridor. This project also falls within Priority 6 of the 2013 Florida Ecological Greenways Network. According to the FFME, the project would benefit approximately 1.5 miles of trail priorities.

**Measure E3:**

*The number of new resource-based recreation facilities, by type, made available on public land.*  
There are no actual recreation facilities currently on the property. The western tract of the potential purchase is bisected by a road leading to a public boat ramp on Lake Kerr. The road and ramp are Marion County facilities. If acquired, the property would be able to provide additional public access to Lake Kerr for launching watercraft.

**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 project would increase the number of historic properties listed in both the Florida Master Site File and the National Register of Historic Places which are protected. There has yet to be a comprehensive cultural resource assessment survey of the entire property however, it is highly likely that additional as-yet-unrecorded archaeological sites do exist on Big Pine Preserve. Therefore, such assessment is recommended if the property is acquired. See map in Appendix E.

**Measure F2:**

*The increase in the number and percentage of historic and archaeological properties that are in state ownership.*  
If acquired as a fee-simple acquisition the project would increase the number of historic properties in state ownership.

**CULTURAL RESOURCES:**

Kerr City, recognized as a Historic District on the National Register of Historic Places, marks the site of the Quaker settlement started in 1884. One of Florida's first planned communities, Kerr City was established as both a retreat and agricultural community by Ben Swan and Robert Henley, two northern investors and active members of the Society of Friends (Quakers).

Swan and Henley purchased land on the northern bank of Lake Kerr that had once been part of the Williamson sugar cane plantation and began advertising to attract migrants from the North with the promise of pleasing climate and the healthy lifestyle of citrus farming. By the late 1880's Kerr City boasted a population of about 100 residents. After a devastating freeze in the winter of 1894-95 decimated much of Kerr City's orange groves, many residents sold their properties to George Smiley, a Kerr City resident and resort owner from New York. The Smiley family became the custodians of Kerr City, maintaining the former residents' houses as a lakeside resort.

Today, the historic houses and several other structures remain preserved as the Kerr City Historic District, which comprises 40.5 of the original 205 acres of the original settlement. In total there are 18 structures that contribute to the District and 7 non-contributing structures. The Big Pine Preserve Florida Forever Project proposal overlaps a portion of the Kerr City Historic District and includes two of the structures associated with the District. These are the Joseph Stanley House, or Campforrest (8MR1403), and the George Smiley Garage (8MR2380).

Joseph Stanley House, also known as Campforrest (8MR1403) is a two-story, frame vernacular residence built circa 1885. It was purchased by Joseph Stanley in 1893. It is one of the largest homes in Kerr City and served as the stopping place for the stagecoach, which provided mail and passenger service to Ocala, Norwalk, and Fort Gates.

The George Smiley Garage (8MR2380) was built in 1912, reportedly for one the first automobiles in Florida, and features a rectangular plan and corrugated metal exterior walls and metal gable roof.

There are no archaeological sites recorded on the Big Pine Preserve Florida Forever; however, no archaeological survey of the property has ever been conducted. Given the characteristics of the landscape, it is likely that additional as-yet-unrecorded sites are present.

**FIELD OBSERVATIONS:**

Due to Department of State travel 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.*

According to the FFME, approximately 238 acres would be available for sustainable forest management.

**Measure G2:**

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

The numbers and information below are based on the cruise/stand data provided by Ralph Jowett, forestry consultant.

- Old Growth Longleaf, 79.9 acres – This stand is the “keystone” of the potential purchase and is only on the north-central tract area. Economic return here will be based solely on possible harvest of encroaching hardwoods and possibly some minor thinning of lesser quality Longleaf. This will be done to promote and sustain the long term old-growth status.
- Mature Longleaf, 136.7 acres – This is the largest stand by acreage and is found on all three of the tract areas. The most likely source of any harvesting revenue will come from thinning of some pine areas that are overstocked, or removal of lesser hardwoods as part of the overall restoration process. Both of these activities may occur in association with improving habitat for Red Cockaded Woodpeckers.
- Mature Longleaf/Hardwood, 151.4 acres – As with the Mature Longleaf stand, the greatest potential for revenue will come from hardwood removals and possibly some Longleaf thinning. There are also some Sand Pine on parts of the western tract that may be chosen for removal under restoration management.
- Hardwood, 26 acres – The parts that make up this stand all border Lake Kerr or wetland/marsh directly connected to the Lake. These are more suited for restoration work associated with wildlife habitat, aesthetics, and recreation.
- Wet Prairie/Marsh, 2.5 acres and Water, 4.2 acres – These wetland areas are non-forested and would impact any harvest decisions in accordance with BMPs.
- There is an additional 39.1-acre section that was not formally cruised. Some of it would likely fall into Hardwood stand acres or possibly the Mature Longleaf/Hardwood stand acres. Portions of the un-cruised section would end up in the Wet Prairie/Marsh stand.

**Measure G3:**

*The number of acres of forestland acquired that will serve to maintain natural groundwater recharge functions.* According to the FFME, approximately 186 acres would serve to maintain natural groundwater recharge functions.

**Measure G4:**

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

As noted above, there have been no reforestation activities on the property because there have been no harvest or deforestation practices in the known history.

**FLORIDA FOREVER CRITERIA**

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

- The project meets multiple goals described in subsection (4).
- The project enhances or facilitates management of properties already under public ownership.
- The project has significant archaeological or historic value.
- The project has a significant portion of its land area in imminent danger of development, in imminent danger of losing its significant natural attributes or recreational open space, or in imminent danger of subdivision which would result in multiple ownership and make acquisition of the project costly or less likely to be accomplished.
- The project may be purchased at 80 percent of appraised value.
- The project is a joint acquisition, either among public agencies, nonprofit organizations, or private entities, or by a public-private partnership.

The Acquisition and Restoration Council shall give increased priority to:

- Projects that contribute to improving the quality and quantity of surface water and groundwater

## **MANAGEMENT**

The proposed manager for this project is the Florida Forest Service. The management prospectus is provided in Appendix D.

## **FUNDING SOURCES**

Florida Forever, North Florida Land Trust

## **FUNDING FOR MAPPING, APPRAISAL, NEGOTIATIONS & CLOSING**

## **OWNERSHIP PATTERN AND ACQUISITION PLANNING**

### **Title and Legal Access Issues**

Big Pine Preserve is in Sections 10, 11, 17 and 20-13S-25E. The Board of Trustees holds title to the lands lying below the Ordinary High Water Line (OHWL) of Lake Kerr within the project area. No BOT title interest within the uplands on the property.

### **Estimated Cost of Appraisal and Mapping**

DEP's Bureau of Appraisal estimates \$12,000 to \$20,000 in appraisal fees.

### **Acquisition Phases**

Due to the small size of the proposed project, no acquisition phasing would be necessary.

## **GOVERNMENT PLANNING and DEVELOPMENT**

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

The proposed project has a high potential for contribution to recreation and open space needs. The project provides lake front access to Lake Kerr and could support camping, hiking and a variety of water recreational activities. Additionally, the project area is adjacent to the Florida Scenic Trail and could act as a trailhead, spur trail, or trail amenity.

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

The property has significant natural attributes. Its location makes it part of the Ocala-to-Osceola Wildlife Corridor which connects the two large, North Florida National Forests. Additionally, the location of the subject area sits on the physiographic feature of the Mt. Dora Ridge, an ancient dune ridge which runs the length of the ONF and the reason for the forest's natural features, including the "big scrub", the pine islands, and springs. The project area is adjacent to several "pine islands" that house large populations of RCWs and the project area is an ideal expansion area for this species. In addition to RCW habitat the project area contains known and potential habitat for multiple imperiled wildlife species that have all been identified on or immediately adjacent to the subject property.

*High Potential:* There is a high potential for losing significant natural attributes located on the property due to urban development. The subject property sits on an ancient dune ridge overlooking scenic Lake Kerr and is highly attractive for development.

### **Potential for Being Subdivided**

*Low Potential:* The subject property has low potential for being subdivided. The future land use designation is Rural Land which allows residential use at a density of one dwelling unit per ten acres. Additionally, the application reports that the subject property is located within the U. S. Navy's Range Air Installations Compatible Use Zones study for the Pinecastle Bombing Range Complex which is ranked as a Priority 3 area of concern for residential development. According to the application, the Navy would support the acquisition for conservation of the project area.

**Development Potential**

Based on the Marion County Comprehensive Plan future land use designation (Rural Land), the subject property has a development potential of 54 residential dwelling units.

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

*Existing Land Uses:* The subject property is classified with mostly upland pine forest (unknown acreage); floodplain areas (70 acres); wetland (53 acres). The subject area sits on the shores of Lake Kerr which is currently under management by the Florida Fish and Wildlife Conservation Commission for hydrilla management. The current use of the property includes outdoor recreational enjoyment, with the exclusion of 37 acres of cattle pasture.

*Future Land Uses:* The subject area is designated as Rural Land on the 2045 Marion County Future Land Use Map. The Rural Land future land use category allows the following: residential density at one dwelling unit per ten gross acres, agriculture use (horticulture; floriculture; viticulture; forestry; dairy; livestock; poultry; bee; pisciculture, if the land is used principally for the production of tropical fish; aquaculture, including algaculture; sod farming), associated housing related to farms and agricultural-related commercial and industrial uses. Based on the allowable density standard, the subject property has a residential development potential of 54 residential dwelling units (541 acres with a density of one dwelling unit per ten gross acres).

**Transportation Planning Issues**

Located in Marion County in FDOT's District 5, this proposed project area lies approximately 3 miles west of SR 19 along Lake Kerr. FDOT finds no adverse impacts from this proposal.

**ACKNOWLEDGEMENTS**

Staff in DEP's Division of State Lands (DSL) and the Florida Natural Areas Inventory determined the final project recommendations. Deborah Burr and Sine Murray in DSL's Office of Environmental Services were 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 Greg Barton
- Department of Economic Opportunity - Dan Evans
- DSL Bureau of Appraisal – Jay Scott
- Florida Fish and Wildlife Conservation Commission – Laramie Ferry and Lauren Akins
- Florida Natural Areas Inventory - Katy NeSmith and Kimberly Alexander
- DEP Division of Environmental Assessment and Restoration - Kevin Coyne
- Florida Department of Transportation –Jennifer Carver
- Southwest Florida Water Management District – Brian Emanuel and Ramesh Bush

**APPENDICES**

**Appendix A: Florida Forever Measure Evaluation (FFME)**

Big Pine Preserve: Florida Forever Measure Evaluation 20210211

GIS ACRES = 522

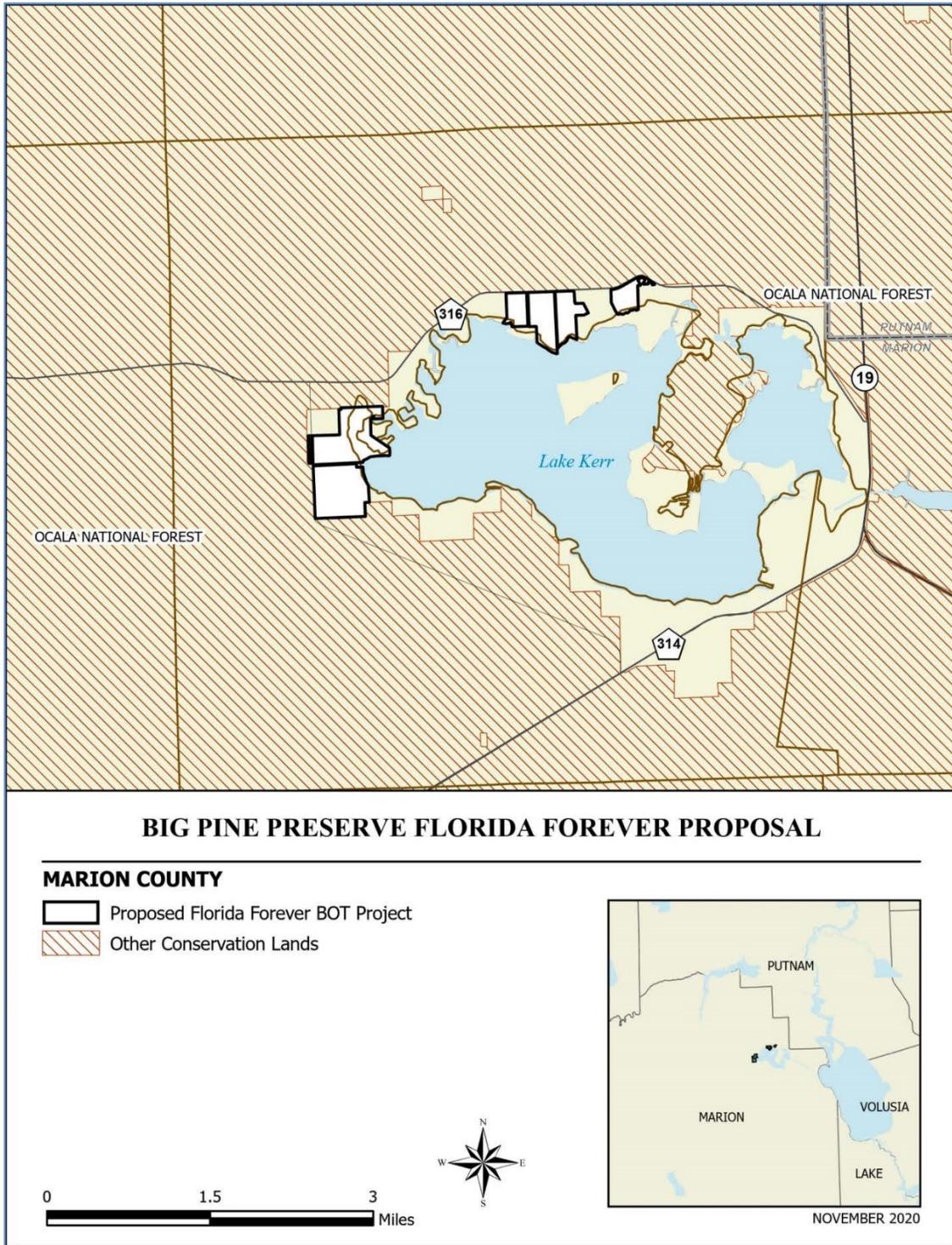
MEASURES	Resource Acres <sup>a</sup>	% of project
<b>B1: Strategic Habitat Conservation Areas</b>		
Priority 1	0	0%
Priority 2	361	69%
Priority 3	49	9%
Priority 4	0	0%
Priority 5	1	< 1%
Total Acres	411	79%
<b>B2: FNAI Habitat Conservation Priorities</b>		
Priority 1	154	29%
Priority 2	95	18%
Priority 3	258	49%
Priority 4	1	< 1%
Priority 5	12	2%
Priority 6	0.4	< 1%
Total Acres	521	100%
<b>B3: Ecological Greenways</b>		
Priority 1	7	1%
Priority 2	0	0%
Priority 3	0	0%
Priority 4	0	0%
Priority 5	514	98%
Priority 6	0	0%
Total Acres	521	100%
<b>B4: Under-represented Natural Communities</b>		
Upland Glade (G1)	0	0%
Pine Rockland (G1)	0	0%
Scrub and Scrubby Flatwoods (G2)	11	2%
Rockland Hammock (G2)	0	0%
Dry Prairie (G2)	0	0%
Seepage Slope (G2)	0	0%
Sandhill (G3)	224	43%
Sandhill Upland Lake (G3)	0	0%
Upland Pine (G3)	0	0%
Mesic/Wet Flatwoods (G4)	0	0%
Upland Hardwood Forest (G5)	0	0%
Total Acres	235	45%
<b>B6: Occurrences of FNAI Tracked Species</b>		
G1	0	
G2	0	
G3	2	
G4	1	
G5	0	
Total	3	
<b>C4: Natural Floodplain Function</b>		
Priority 1	0	0%
Priority 2	7	1%
Priority 3	63	12%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	71	14%

MEASURES (continued)	Resource Acres <sup>a</sup>	% of project
<b>C5: Surface Water Protection</b>		
Priority 1	0	0%
Priority 2	19	4%
Priority 3	0	0%
Priority 4	183	35%
Priority 5	0	0%
Priority 6	302	58%
Priority 7	0	0%
Total Acres	504	97%
<b>C7: Fragile Coastal Resources</b>		
Fragile Coastal Uplands	0	0%
Imperiled Coastal Lakes	0	0%
Coastal Wetlands	0	0%
Total Acres	0	0%
<b>C8: Functional Wetlands</b>		
Priority 1	0	0%
Priority 2	4	< 1%
Priority 3	43	8%
Priority 4	0	0%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	48	9%
<b>D3: Aquifer Recharge</b>		
Priority 1	190	36%
Priority 2	173	33%
Priority 3	115	22%
Priority 4	41	8%
Priority 5	0	0%
Priority 6	0	0%
Total Acres	519	99%
<b>E2: Recreational Trails (miles)</b> <small>(prioritized trail opportunities from Office of Greenways and Trails &amp; Univ. Florida)</small>		
Land Trail Priorities	1.5	
Land Trail Opportunities	0.0	
Total Miles	1.5	
<b>F2: Arch. &amp; Historical Sites (number)</b>		
	0 sites	
<b>G1: Sustainable Forestry</b>		
Priority 1	0.3	< 1%
Priority 2	197	38%
Priority 3	7	1%
Priority 4	0	0%
Priority 5 - Potential Pinelands	33	6%
Total Acres	238	45%
<b>G3: Forestland for Recharge</b>		
	186	36%

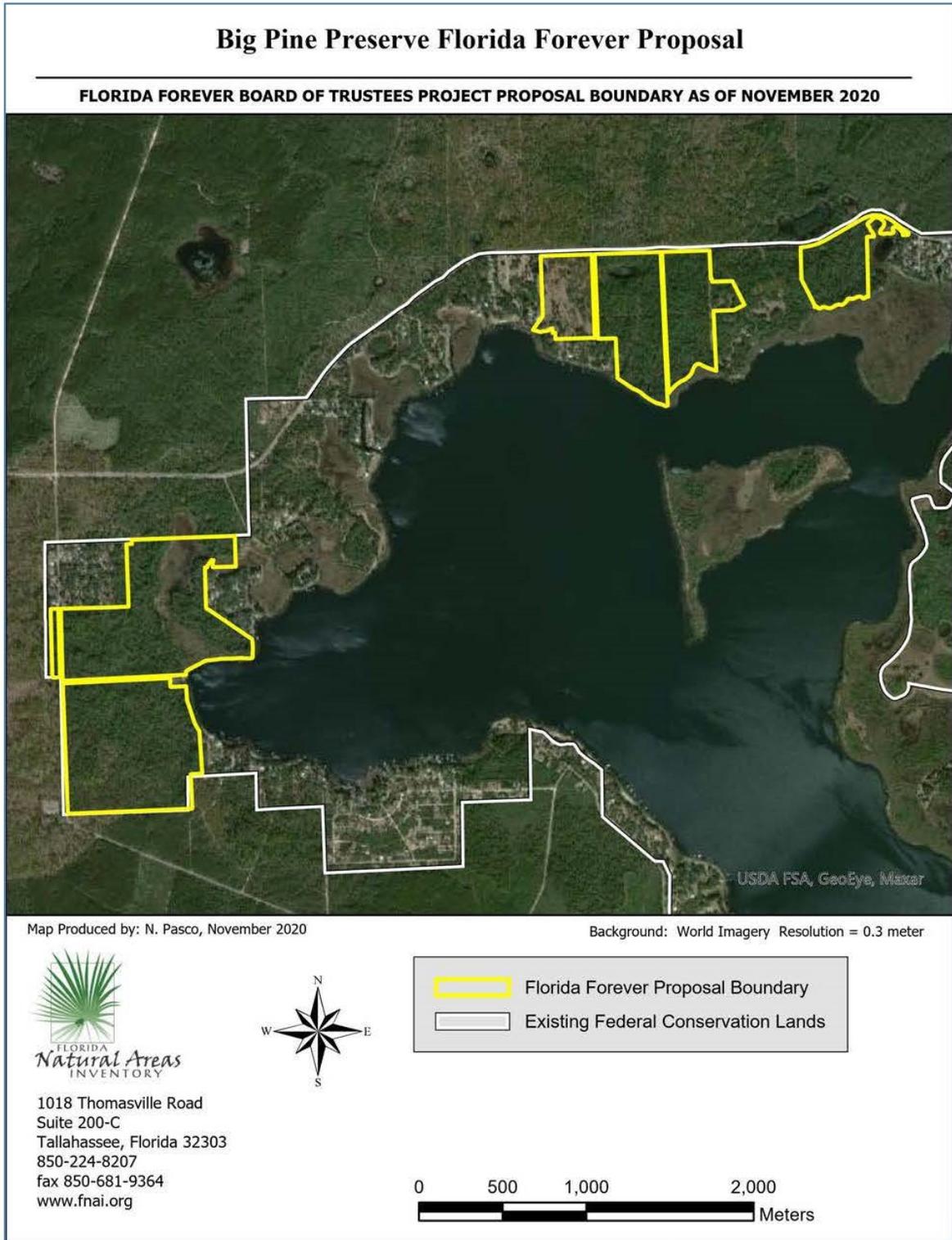
<sup>a</sup>Acres of each resource in the project and percentage of project represented by each resource are listed except where noted. This analysis converts site boundary into pixels, which causes slight differences from GIS acres; this effect is most noticeable on small sites.

Appendix B: Florida Forever proposal boundary maps

B1: Florida Forever map



B2: Aerial map



**Appendix C: Property IDs for Final Recommended Boundary**

County	Parcel ID	Owner	Acres	Assessed Value	Just (Market) Value
Marion	10542-000-00	Swan Smiley Preserve LLC	48.15	\$6,500	\$400,464
Marion	10537-001-00	Alfred and Ann Smiley	9.66	\$80,830	\$109,321
Marion	10528-000-00	Swan Smiley Preserve LLC	90	\$11,887	\$1,800,394
Marion	10528-001-00	Swan Smiley Preserve LLC	25	\$96,277	\$782,719
Marion	10528-002-00	Swan Smiley Preserve LLC	22	\$1,870	\$577,958
Marion	10533-002-00	Benjamin Brennan	17.55	\$257,015	\$257,015
Marion	10533-005-00	Benjamin Brennan	2.5	\$11,602	\$11,602
Marion	10533-003-00	Benjamin Brennan	17.4	\$401,167	\$401,167
Marion	11297-000-00	Swan Smiley Preserve LLC	60.53	\$473,446	\$473,446
Marion	11303-000-00	Swan Smiley Preserve LLC	242.30	\$20,420	\$1,424,748
Marion	11316-000-00	Swan Smiley Preserve LLC	6.25	\$531	\$264,027
		Totals	541.34	\$1,361,545	\$6,502,861

## **Appendix D: Management Prospectus for Big Pine Preserve, a fee simple proposal**

### ***Big Pine Preserve Management Prospectus.***

#### **Florida Forest Service**

##### **March 10, 2021**

The 541-acre Big Pine Preserve (BPP) is located along the northern and western shores of Lake Kerr in Marion County. BPP is dominated by mature longleaf pine forests, with some trees over 300-years old. The purpose of this Management Prospectus is to provide a brief outline of management activities suitable for the preserve.

#### **Administration**

Due to the property's location within the Ocala National Forest (ONF), it is the intention of the Florida Forest Service (FFS) to partner with the US Forest Service (USFS) for management of the property. The USFS "Good Neighbor" policy is applicable for possible funding and shared practices. In the event FFS remains the lead manager, the property will be managed as a tract of Indian Lake State Forest, located 15 miles to the west. The Indian Lake Forester, Marion County FAS, and Marion County Forest Rangers will provide on the ground management and security for BPP with support from the Recreation Coordinator, District Biologist, and Forestry Resource Administrator. As with all FFS-managed properties, volunteers will be utilized as appropriate. While no additional staff would be required, an additional \$5,000 per year would be required over and above the current budget for Indian Lake State Forest. The existing residential structure onsite may be utilized in a variety of ways including as office space, a resource center for outreach and interpretation, or as an Operation Outdoor Freedom (OOF) event host facility.

#### **Management Goals and Objectives**

The forest will be managed under the multiple-use concept. Management activities will include restoration, maintenance, and protection of all native ecosystems (prescribed burning, silvicultural management, wildlife management, soil, and water resources protection, etc.); integration of compatible human uses (recreation management); and ensuring long-term viability of populations and species considered endangered, threatened, or of special concern. Due to the vulnerability of the mature longleaf pine forest to intensive management and the lack of past significant disturbance to the site, overall management intensity could be classified as low.

#### **Specific management goals may include:**

- Protection of surface and groundwater resources.
- Maintenance/improvement of the health of the mature longleaf pine forest.
- Reintroduction of prescribed fire to gradually reduce accumulated fuel load.
- Improvement of habitat for rare, threatened, and endangered wildlife species.
- Provide opportunities for passive recreation activities.
- Protection of cultural resources.

#### **Soil and Water Protection**

BPP has over half a mile of lakeshore along the 2,800-acre Lake Kerr. The property serves as an important aquifer recharge area as it is situated approximately three miles from Salt Springs, a second magnitude spring. Management activities will be executed in a manner to minimize soil erosion and impacts to both surface and groundwater. All silvicultural activities will be conducted in compliance with the most recent edition of the Silviculture Best Management Practices (BMPs) Manual.

#### **Fire Management**

Ideally, prescribed fire will be the primary tool utilized for resource management on BPP. The long-term goal of prescribed burning will be healthy forest ecosystem development which will include both

dormant and growing season burns. Natural fire frequencies will be implemented when possible for each community once in maintenance status. Due to the absence of fire from BPP in the recent past, fuel loads on the property are high in most areas. Therefore, fire must be carefully reintroduced in a way that prevents/minimizes damage to the mature longleaf pines. As such, initial burns should be confined to the dormant season on days with lower temperatures and within a few days following a rain event. Areas with particularly heavy fuel loads may require mechanical treatment, such as mowing or roller chopping, prior to the reintroduction of fire. If appropriate, old growth longleaf pines including the state champion, its contenders, and the RCW cavity trees onsite may initially need individual raking and pre-burning treatments.

### **Silvicultural Operations**

BPP will be managed to promote and improve overall forest health. Timber is a valuable economic resource, and timber harvesting for the purposes of biological restoration and forest health improvement, are recognized silvicultural objectives on BPP. Proposed silvicultural activities include both commercial timber harvests and timber stand improvement activities. Commercial timber harvests shall focus on removal of unwanted sand pine and hardwoods in order to promote the health and vigor of the longleaf pine overstory and to promote natural regeneration of longleaf pine. This one-time timber sale would result in an approximate \$35,000 in revenue. Timber stand improvement projects may include both mechanical and chemical control of unwanted vegetation to promote healthy forests and habitat in both the sandhill and scrub natural communities.

### **Wildlife Management**

Management of the wildlife resource on BPP will largely focus on the rare species found in and around the property. BPP has the potential to provide habitat for the red-cockaded woodpecker (RCW), as the ONF's Riverside Island RCW sub-population is nearby, and two inactive RCW cavity trees have been observed on the property. Furthermore, BPP additionally may provide habitat for other species of interest including Florida scrub-jay, sand skink, Lewtons polygala, Florida bonamia, Florida sandhill crane, Sherman's fox squirrel, wood stork, striped newt, gopher tortoise, and Florida black bear. Management of the scrub can improve habitat for scrub jay and sand skink, while the reintroduction of fire into the sandhill natural community will improve habitat for gopher tortoises and the commensal wildlife that use its burrows. It will be imperative to evaluate the effects management may have on the habitat of these and other rare species when conducting management operations on BPP.

### **Non-Native Invasive Species**

Prevention should be the focus of non-native invasive species management. When such species are discovered, an eradication plan will be developed and implemented based upon the severity of the infestation and the availability of personnel and funding. At present, the only observed non-native species on-site are a few scattered seedling-sized camphor trees.

### **Recreation**

BPP is located near existing recreation facilities on the ONF and will provide a great opportunity for nature-based recreation. Potential recreational activities may include hiking, wildlife viewing, nature study, camping, hunting in cooperation with FWC, USFS or in regard to an OOF event. Additionally, canoeing/kayaking and fishing are potential recreational activities, as an improved boat ramp, managed by Marion County, exists on the western-most parcels. BPP also offers a unique opportunity to conduct environmental education/interpretive outreach to highlight the 300-year-old longleaf pines and the restoration of the sandhill ecosystem. Moreover, a variety of public educational and interpretational opportunities may be considered once inventory of onsite cultural, historical, and archaeological resources are established.

### **Research Projects**

The mature longleaf pine forests on BPP provide an opportunity for scientific study for the purpose of obtaining information which expands the knowledge of and assists in management of this ecosystem.

Research should be conducted through cooperation with other governmental agencies, non-profit organizations, and educational institutions where feasible.

### **Cultural Resources**

Efforts should be made to locate and document historical and archaeological resources on BPP. Known historical resources include evidence of past use regarding the naval store industry and remains from historic Kerr City. Portions of the old carriage road from Kerr City to Ocala pass through some of the parcels. Once historic resources have been located, care should be taken to ensure their protection. Known cultural resources will be visited annually to ensure protection.

### **Proposed Management Timeline**

#### *Year 1*

- Mark boundaries to FFS standards.
- Install firelines as needed.
- Evaluate site for recreation potential.
- Compose five-year silviculture, recreation, prescribed fire, ecology, boundary marking, and road. plans.
- Review cultural resource survey from Division of Historical Resources.

#### *Year 2*

- Conduct sand pine and hardwood timber harvest as appropriate.
- Conduct mechanical fuel reduction treatments as appropriate.
- Begin gradual reintroduction of prescribed fire.
- Install recreation infrastructure (trails, interpretive signs) as outlined in the five-year recreation plan. Open to public.
- Monitor known ecological resources.
- Monitor known cultural, historical, and archaeological resources.

#### *Year 3*

- Initiate scrub habitat restoration.
- Continue fuel reduction and prescribed fire as appropriate.
- Maintain recreation infrastructure.
- Monitor known ecological resources.
- Monitor known cultural, historical, and archaeological resources.

#### *Year 4*

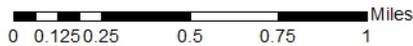
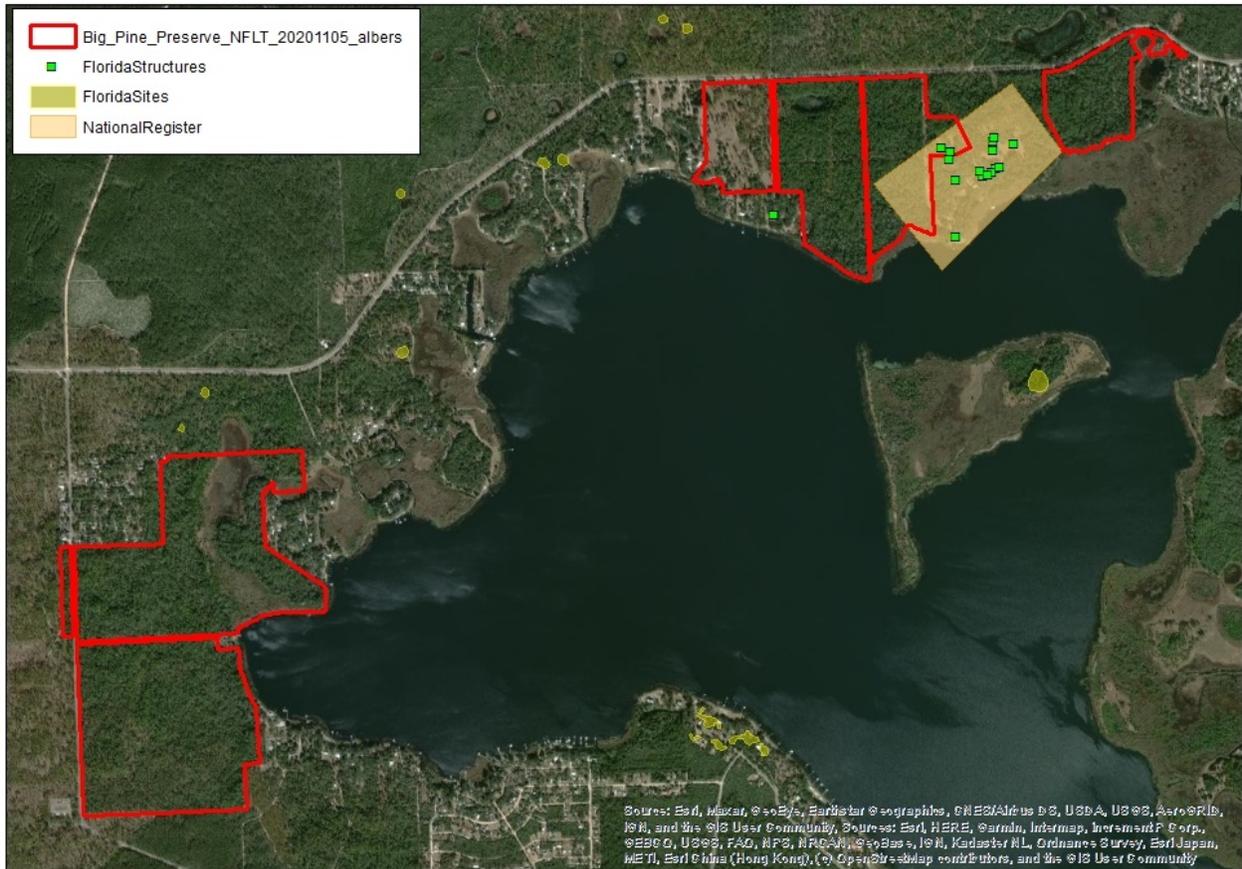
- Continue fuel reduction and prescribed fire as appropriate.
- Maintain recreation infrastructure.
- Monitor known ecological resources.
- Monitor known cultural, historical, and archaeological resources.

#### *Year 5*

- Continue fuel reduction and prescribed fire as appropriate.
- Maintain recreation infrastructure.
- Monitor known ecological resources.
- Monitor known cultural, historical, and archaeological resources.

### Appendix E: Map of Historical Resources from the Florida Department of State, Division of Historical Resources

#### Historical Resources Recorded on Big Pine Preserve Florida Forever Project



FLORIDA DEPARTMENT OF STATE  
DIVISION OF  
*Historical Resources*

**Appendix F: Map of recreational trail corridors from DEP's Greenways and Trails**

