# **Upper Shoal River**

Critical Natural Lands Walton

Year Added to Priority List	2003
Project Acres	12,035
Acquired Acres	0
Cost of Acquired Acres	\$0
Remaining Project Acres	12,035
2020 Assessed Value of Remaining Acres	\$19,431,833

#### Purpose for State Acquisition

The Upper Shoal River project will protect timber resources, surface waters and the Upper Shoal River watershed, rare plant and animal species, and support connectivity of conservation lands. The two parcels that comprise this project have been managed for silviculture in a less obtrusive manner than is often found on commercial timberlands. The resulting scatter of intact groundcover provides good opportunity for restoration of habitat and attendant biota. Four rare plants and two rare animals have been documented on the property such as the Florida black bear and Gopher tortoise. Drainages and creeks on the sites appear to be unaltered and intact. Both of these sites within the project boundary have potential to provide quality outdoor recreational opportunities. Portions of these parcels lie within the Eglin to Blackwater Critical Ecological Linkage area and the Northwest Florida initiative combining the protection of buffer lands surrounding Eglin Air Force Base and the connection of conservation lands in the Florida Panhandle.

### **General Description**

The Upper Shoal River proposal does not include the river or its floodplain; however, it is comprised of two tracts of land that are within the river's watershed. The first of the two tracts, the Pine Log Creek tract (PLC), is about 3.5 miles north of the river and abuts the Okaloosa County line. The PLC contains 9,727 acres. The remaining 2,300 acres are included in the Gum Creek tract (GC), which is about five miles southeast of the Pine Log Creek tract. Both tracts are characterized by high, rolling sandy hills that drain downward through former mesic flatwoods, wet flatwoods, and slope forests into bottomland and floodplain forests. Combined, the two tracts contain approximately 20 miles of headwater tributary streams. Most of the site's original pinelands have been disturbed by conversion to pine plantations that comprise the majority of the proposal. Some of this acreage includes natural understory and ground cover vegetation that may be sufficient for reclassification as appropriate natural communities.

# **FNAI Element Occurrence Summary**

FNAI Elements	Score
Gopher tortoise	G3/S3
Florida black bear	G5T4/S4
Arkansas oak	G3/S3
Wherry's redflower pitcherplant	G3T3/S3
Pine barrens treefrog	G4/S3
mountain laurel	G5/S3

#### **Public Use**

The Upper Shoal River has the potential to provide a diverse resource-based recreational experience. Both parcels have good boundary configurations that will enhance management efforts and they are easily accessible from paved and unpaved public roads. Both tracts can support a diversity of resource-based outdoor recreational opportunities. Greater effort will be required to enhance PLC tract than will be needed for the GC tract. Hiking, off-road bicycling and horseback riding can be accommodated on both tracts.

Horseback riding may be more appropriate for the larger PLC. Depending on management emphasis, hunting would be suitable on the PLC tract. The smaller GC tract is closer to residential areas and would not be as suitable for this activity. However, both tracts could support camping, natural resource appreciation, and educational activities.

#### **Acquisition Planning**

This project is planned for fee-simple acquisition. This project consists of two owners with multiple parcels totaling 12,035 acres.

#### 2003

On December 5, 2003, the ARC placed this project on the Florida Forever project list.

#### 2011

On December 9, 2011, the ARC placed this project in the Critical Natural Lands category of projects.

#### Coordination

TNC and DOD are acquisition partners for this project.

#### Management Policy Statement

The primary land management goal for FFS is to restore, maintain and protect in perpetuity all native ecosystems; to integrate compatible human use; and to ensure long-term viability of populations and species considered rare. This ecosystem approach will guide FFS's management activities on this project.

#### Manager(s)

FWC and FFS will be co-managers. DRP will manage the Gum Creek tract.



#### **Management Prospectus**

FFS and FWC are prepared to share all management responsibilities for Upper Shoal River under the unified management concept that both agencies are currently developing. The project has the capability to provide important fish and wildlife habitat in a manner that is compatible with sound silvicultural practices. Since the project goals include protecting biodiversity and providing natural resource-based public recreational and educational opportunities, programs would be developed that serve to manage ecosystems for multiple use. Conservation and protection of environmentally unique native habitats and imperiled or rare species should be an important management goal for the project. Particular attention should be directed to the protection of upstream riparian systems that are an important habitat for imperiled fish and invertebrates. Under the unified management approach, timber stands would be managed using even aged and/or uneven aged methods to maintain a broad diversity of age classes ranging from young stands to areas with old growth characteristics. This would provide habitat for the full spectrum of species that would be found in the natural environment and enhance and maintain biodiversity. The project area is near many users that enjoy fishing, hiking, hunting, and wildlife viewing. Additionally, the Department of Environmental Protection and University of Florida Statewide Greenways System Planning Project shows that 9 percent (1,322 acres) of the project area is suitable for either priority 1 or priority 3 recreational trails. This project contributes to the following goals in accordance with the lettered measures in the Florida Forever Act (See 259.105(4), F.S.):

- a) Increase the protection of Florida's biodiversity at the species, natural community, and landscape levels;
- b) Protect, restore, and maintain the quality and natural functions of land, water, and wetland systems of the state;
- c) Ensure that sufficient quantities of water are available to meet the current and future needs of natural systems and the citizens of the state;
- d) Increase natural resource-based public recreational and educational opportunities;
- e) Increase the amount of forestland available for sustainable management of natural resources.

#### Qualifications for state designation

The project area consists of two separate tracts and ownerships situated in the Northern Highlands physiographic province, where some of Florida's highest elevations occur. The two ownerships include headwater streams and creeks connected to the Shoal River system and are entirely within its watershed. DRP has expressed a strong interest in managing the Gum Creek tract. FFS and FWC will enter into discussions with DRP to manage these 2,300 acres as a State Park. The project is located about 10 miles northeast of Crestview, where the Pine Log Creek tract borders the Okaloosa County line. The project area is distributed across about 15 miles because of the two tracts. Other conservation lands near the project include those on nearby Eglin Air Force Base, and the Yellow River Water Management Area and Upper Yellow River Florida Forever project. This project is significant for ecological greenways, with 99 percent of the project area qualifying as priorities 6 and 7 in potential importance, according to FNAI's Florida Forever Measures Evaluation. Approximately 75 percent of the project area has been converted to silviculture. Water drains through rolling sandy hills downward through mesic or wet



flatwoods, and through slope forests into bottomland and floodplain forests along the seepage streams that are tributaries of the Shoal River. Upland communities include approximately 750 acres of sandhill, and 300 acres of upland hardwood forest or slope forest. Approximately 100 acres of mesic and wet flatwoods are interspersed around these other natural community types. The sandhill communities are in moderately good condition with an intact diverse indigenous groundcover including wiregrass. Forested wetlands have 1,550 acres of baygall, floodplain or bottomland forest. The actual seepage stream communities are about 10 acres.

About 75 acres have been classified as disturbed. FNAI indicates that 22 percent (3,202 acres) of the project area are under-represented natural communities. Functional wetlands comprise 8 percent (1,216 acres) of the project area and help conserve areas for aquifer recharge (35 percent, or 5,148 acres of project area), provide fish and wildlife habitat, and provide for natural floodplain function (13 percent, or 1,895 acres of project area). The FNAI Florida Forever Measures Evaluation also indicates that the entire project area (100 percent, or 14,483 acres) provides surface-water protection. Both tracts have been managed for silviculture operations. Neither tract shows evidence of intensive management activities. Scattered longleaf pine regeneration is present on both tracts. Most of the pine stands are planted in evenly aged compartments, with some compartments including uneven-aged stands, and a greater diversity of pine species. Past thinning of stands of loblolly pine, longleaf pine, and slash pine has occurred throughout both parcels. Fire has not occurred on the tracts for several years, resulting in increased fuel loads. Ecotones adjacent to forested wetlands and seepage streams appear intact and undisturbed. Imperiled or rare animal species either occurring or likely to occur within the project, include the blackmouth shiner, eastern diamondback rattlesnake, eastern indigo snake, Florida black bear, gopher frog, gopher tortoise, little blue heron, pine barrens treefrog, Sherman's fox squirrel, southern pine snake, and white ibis. Gopher tortoise burrows are of particular importance, because they often provide refugia for a suite of declining wildlife species, including the eastern indigo snake and gopher frog. Available groundcover may provide a sufficient forage base for the gopher tortoise population. Slope forests, forested wetlands and seepage streams may support several listed plant and animal species, such as the pine barrens tree frog, which has been documented to occur in the project area. Game species observed, or for which sign was available in the project area, included mourning dove, white-tailed deer, and wild turkey. Both tracts appear to have recently been used for hunting and fishing. Access to both sites is good. Imperiled or rare plant species documented to occur in the proposed project include Arkansas oak, mountain laurel, red pitcher plant, and white-top pitcher plant. Other imperiled or rare plant species known to occur nearby that may occur in the proposed project include bog button, Florida flame azalea, hairy wild indigo, Harper's yellow-eyed grass, panhandle lily, sandhill sedge, silky camellia, umbrella magnolia, and yellow fringeless orchid. According to the FWC, approximately 349 acres (2 percent) of the Upper Shoal River project is classified as a Strategic Habitat Conservation Area (SHCA). However, a large portion of the project provides habitat for many focal species, which according to the FWC, are indicators of natural communities and suitable habitat conditions for many other species of wildlife. Approximately 65 percent (9,512 acres) of the project



includes at least seven focal species. Another 6 percent (849 acres) of the project is a habitat conservation priority for rare species with the greatest conservation need, according to the FNAI. Management goals for this site should take into account habitat management to protect and enhance focal species habitat. Additionally, large tracts of habitat are important to conserve widely ranging species such as the eastern indigo snake and the Florida black bear. Bears have been documented to use riparian corridors of the Shoal River and its tributaries in Okaloosa County, and to occur in Walton County. These are likely migratory routes for the Florida black bear.

#### Conditions affecting intensity of management

Upper Shoal River is a medium-need tract that will require up-front implementation of resource management activities, including the frequent use of prescribed fire where appropriate. Approximately, 75 percent of the project area has been subjected to ground cover disturbance from past silvicultural activity, consequently additional effort will be required to accomplish objectives for restoration to a desired future condition. FFS and FWC propose to work cooperatively to assess site management needs and develop the conceptual management plan (CMP) for the site. Examples of situations that may require cooperative effort include restoration of mesic and wet flatwoods previously managed for timber production, removal or thinning of off-site timber species to promote the regeneration of native ground covers and appropriate tree species, and reforestation of recently harvested areas. As part of the unified management approach, the managing agencies will conduct a historic vegetation analysis to assist in determining appropriate desired future conditions and identify appropriate restoration methods and tools. This effort will help facilitate conservation of habitats and populations of imperiled or rare species.

Other unified management priorities will include protection and restoration of sensitive wetlands, and the identification, control, and follow-up monitoring of exotic species. Restoration methods will also include thinning of dense pine stands to decrease canopy cover and facilitate the restoration of native groundcovers. An adequate road system exists on both sites to assist with prescribed burning operations. Because many imperiled or rare species are expected to occur in the project, biotic surveys would be conducted as part of early unified management activities. Environmentally sensitive areas such as erosion-prone sites, listed species habitats, outstanding natural areas, and wetlands, are to be identified during the initial resource inventory to implement appropriate protective measures for each specific area.

#### Management implementation, Public access, Site security and Protection of infrastructure

It is anticipated that during the first year after acquisition, both agencies will emphasize on site security, posting boundaries, public access for low-intensity outdoor recreation, fire management, resource inventory, and removing refuse. The managing agencies will meet frequently to coordinate task assignments, and cooperate with, and seek the assistance of other state agencies, local governments, and other appropriate participants as it affects management of the project site. Both managing agencies will participate in the joint development of a CMP specifying area management goals and objectives.



Goals intended for long-term implementation would emphasize management and the conservation of the site's natural resources including timber, fish and wildlife, and water. These goals would include restoring habitat and hydrology and conserving and protecting listed species of flora and fauna.

Following completion of plant community inventory and historic vegetation analysis, quantified vegetation management objectives would be developed pursuant to an objective-based vegetation management process. Where practical, disturbed sites would be restored to conditions expected to occur in naturally functioning ecosystems, including re-establishment of species expected to occur naturally on specific sites. Management would emphasize enhancement of abundance and spatial distribution of imperiled or rare species. Essential roads would be stabilized to provide all-weather public access and management operations. Programs providing multiple recreational uses would also be implemented.

Both agencies will work towards the development of a fire management plan that will apply prescribed burning in a manner that maximizes natural resource protection and enhancement. Whenever possible, existing roads, black lines, foam lines and natural breaks will be utilized to contain, and control prescribed and natural fires. Growing season prescribed burning would be used where appropriate to best achieve management objectives. Where appropriate, practical, and in pursuit of natural resource management objectives, timber resources will be managed using acceptable silvicultural practices.

Archaeological and historic sites would be managed in coordination with the Department of State's Division of Historical Resources. Both agencies will work to develop a plan identifying road for vehicular access by the public, and roads required for administrative use. Unnecessary roads, fire lanes and hydrological disturbances would be abandoned or restored as practical. Other existing infrastructure necessary for management would be protected to the extent possible. Infrastructure development would be the minimum required to serve needs of the public, including provisions for facilities necessary for the security and management of the project area.

#### **Revenue-generating potential**

Timber sales would be conducted as needed to improve or maintain desirable ecosystem conditions. FNAI indicates that 76 percent (11,054 acres) of the project area is available as priorities 1, 2, 3, and 5 for sustainable forestry, and that 19 percent (2,829 acres) of the project serves as forestland for aquifer recharge. However, management would seek to improve the other revenue-generating potential of areas currently serving for forest products production by improving wildlife diversity and resource-based recreation in such areas. Additional revenue would be from sales of hunting licenses, fishing licenses, wildlife management area permits and other special hunting permits. Some revenues might come from recreational user fees and ecotourism activities, if such projects can be economically developed. Fifteen percent (15 percent) of all gross revenues will be returned to the county from which funds were generated. Both agencies have agreed to a unified management framework whereby all CARL management funds, site generated revenues, and management expenditures are to be evenly divided between the FFS and the FWC.



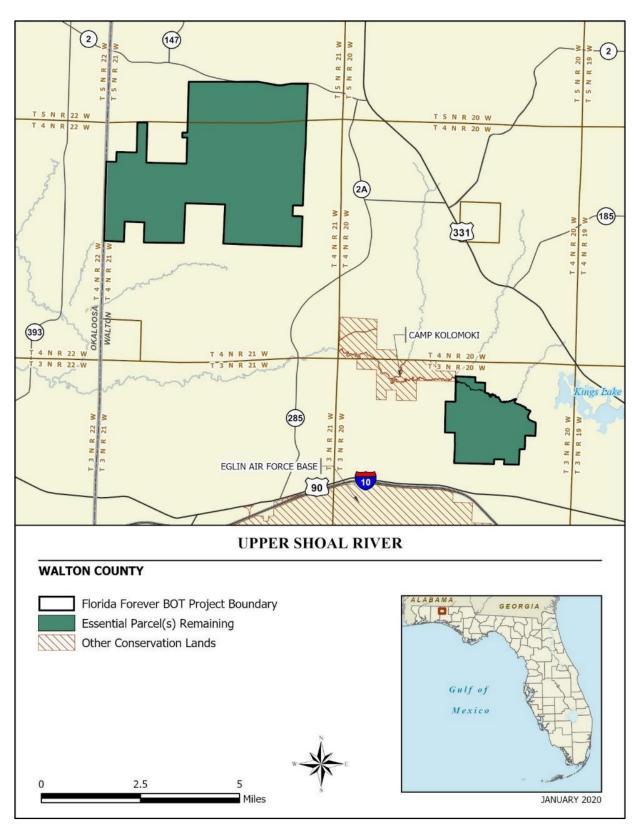
# Cooperators in management activities

The unified managers (FFS and FWC) should cooperate with other state and local governmental agencies, including NWFWMD, to manage the project area. The project should be designated as a state forest and wildlife management area.

# Management Cost Summary

FFS and FWC	Startup	Recurring
Source of Funds	CARL	CARL
Resource Management	\$212,891	\$244,479
Administration	\$82,345	\$33,072
Support	\$149,080	\$31,566
Capital Improvements	\$2,187,189	\$58,179
Visitor Services/Recreation	\$10,191	\$10,191
TOTAL	\$2,643,331	\$377,628

Source: Management Prospectus as originally submitted



Map 1: FNAI, January 2020