Lochloosa Creek Flatwoods
Little Orange Creek Tract-Plum Creek Timberlands
3/2/04

Inspection Date:	March 2, 2004
Parcel Number:	Nine parcels 19074-000-000, 19143-000-000, 19201-000-000, 19208-000-000, 19214-000-000, 19297-000-000, 19311-000-000, 19315-000-000, 19622-000-000
Size:	2,551.45 acres
# Owners:	1
Buildings:	0
Section-Township-Range:	Sections 2, 11, 13, 14, 15, 23, 25, 25, 26 of Township 10, Range 22
Just Value:	$2,002,700 or $785 per acre
Matrix Score:	6.31 of 10.0

Overall Description:

The 2,551-acre Little Orange Creek Tract, owned by Plum Creek Timberlands LP, lies within the Lochloosa Creek Flatwoods Alachua County Forever (ACF) Project. It is located to the east of SR 301, north of SR 20 and south of CR 1474 northeast of Hawthorne.

The Lochloosa Creek Flatwoods project scored 7.87 out of 9.44 on the Rapid Ecological Project Assessment (REPA), and is the fourth ranked project to date. The Little Orange Creek Tract was initially included in the Lochloosa Creek Flatwoods project because at the time of the REPA these parcels were connected to those to the west of SR 301 according to the ACPA 2003 database. Since that time, the parcels have been split to reflect the disjunct spatial distribution of these properties. The Lochloosa Creek Flatwoods REPA focused on those properties west of SR 301, because they are the most ecologically significant, primarily due to their connectivity to other natural areas as well as the potential corridor they comprise. The Little Orange Creek Tract, east of SR 301, lacks that connectivity, and was only included in the Lochloosa Creek project due to the parcel data situation at the time of the REPA evaluation.

The Little Orange Creek Tract comprises the vast majority of the Little Orange Creek, Alachua County Ecological Inventory Project (KBN Study), which was the 39th ranked project and described as below average. The KBN Study summarizes the Little Orange Creek project as, "This area is mostly wetlands that is in fairly good condition. Basin swamps, shrub swamps, and basin marshes all occupy large areas. Most of the upland is degraded sandhill that has either been greatly altered by lack of burning or by intense site preparation followed by pine planting or both. There is a little flatwoods, including a small portion that has not been converted to pine plantation" (KBN 1996).

The property contains a mosaic of upland and wetland natural communities. However most of the uplands, about half the property, have been converted to pine plantation and are no longer functioning as a natural community. The wetlands are in good condition and are extensive throughout the site.

Plum Creek Timberlands LP is the largest landowner in Alachua County, and the Little Orange Creek Tract is the first area that they are looking to protect through the ACF program.

Natural Communities:	**Quality**
Baygall	Good
Basin Marsh	Good
Depression Marsh	Good
Basin Swamp	Excellent

Dome Swamp	Good
Shrub Swamp	Good
Upland Pine	Fair
Other:	
Former Sandhill	Poor
Pine Plantation	Poor

Key Species:

The wetland communities on the site provide good habitat for wildlife. Wood storks (endangered), white ibis and little blue heron (species of special concern) were observed in these wetlands. Many other species of birds and amphibians were heard or seen during the site visit. The uplands do not provide good habitat for listed species, although a few gopher tortoise burrows were observed.

Royal fern (commercially exploited) was found in the basin swamp community.

Key Features:

Protection of water resources is the key feature of the Little Orange Creek Tract. Little Orange Creek is one of the streams used by the Florida Department of Environmental Protection (FDEP) as a "best attainable condition" reference site for comparison with other streams in this portion of the state (Denson 2000). The watershed is described as, "one of the tributaries of Orange Creek…Little Orange Creek begins near Beckhamtown in Alachua County as a series of interconnected marshes, eventually flowing into and out of Little Orange Lake near Hawthorne…it flows generally south and east to join Orange Creek at the town of Orange Springs approximately a mile upstream of its confluence with the Ocklawaha" (Denson 2000). The FDEP report states, "the health of Little Orange Creek remains very good. Biodiversity is high within this watershed due to relatively minimal human disturbance. Additional development in the watershed, however, could negatively affect the health of this stream, and the larger Ocklawaha River basin, of which it is part" (Denson 2000). The report recommends, "to help preserve the ecological health and vitality of this system, additional agricultural, residential, or other development in the watershed-especially in close proximity to the stream-should be discouraged" (Denson 2000).

Acquisition of the site would aid in protecting water quality in this watershed. This would include eliminating industrial timber practices from the property including herbicide application and harvesting around wetland boundaries. Cattle grazing on the site would also be reduced or eliminated.

This property is within the Orange Creek Basin which was designated by the St. Johns River Water Management District as a Surface Water Management and Improvement (SWIM program) area in September 2003. This designation affords a high funding priority for improving surface water quality.

Little Orange Creek begins on the north end of the property as a basin swamp. Dominant plants include mature tupelo, maple, cypress, and sweetbay. The understory consists of hydrophytic species including fetterbush, chain fern, royal fern, St. John's Wort, dollarweed, arrow arum, and blackberry.

Little Orange Creek then flows though Stanley and Fowlers prairie. These high quality marshes consist of herbaceous plants such as maidencane, pickerlweed, and frogs bit. They are surrounded by basin swamp containing water tupelo, cypress, slash pine, sweet bay, maple, and sweetgum.

In addition to these interconnected wetlands, the property also contains small depression marshes and dome swamps.

The upland portions of the site, comprising approximately half of the property, are heavily impacted. The majority of the uplands were historically sandhill as evident by remnant vegetation,

which included small patches of wiregrass, and sandy soil. The KBN report and the Alachua County Soil Survey also depict much of this area as sandhill. The property has been converted to pine plantation with slash pine stands of various ages. Intensive site preparation including bedding and herbicide application has reduced or even eliminated native groundcover throughout much of the site. Dominant groundcover of these pine plantations includes centipede grass, bahia grass, grapevine, sand blackberry, and dogfennel. Some portions of the pine plantation have more intact understory species, primarily saw palmetto, and could probably be restored. There is one small area of upland pine forest located on a hill characterized by mature slash pines and some native groundcover species including saw palmetto, prickly pear cactus, and *Andropogon* spp. However centipede grass is also the dominant groundcover in this area.

Management:

The wetlands on the site are in good to excellent condition. The basin marsh and depression marsh habitats are fire dependant and would benefit from prescribed burns. Although no invasive plants were observed in the wetlands, monitoring for invasive plants is necessary.

The uplands, however, will require extensive restoration in order to become good quality natural communities. The site has undergone intensive site preparation activities with the majority of the uplands planted in pine plantation that has been bedded and treated with herbicide. This has resulted in little to no desirable groundcover in many areas. Restoration would involve thinning of pines at appropriate intervals, replanting with longleaf pines, removal of non-native grasses and planting or seeding of groundcover species. However much of this restoration is dependent on implementation of prescribed fire, which may be difficult to accomplish in areas severely lacking in groundcover. A small infestation of Japanese climbing fern and camphor were found on the site; monitoring and treatment of invasive plants is necessary.

Recreation:

The Little Orange Creek Tract is appropriate for low impact nature based recreation such as nature study and hiking trails. Access to the site is excellent as it is located directly off of two state highways and existing forestry roads could readily become hiking trails.

Parcel Data:

Parcel	Owner	Acreage	Just Value
19074-000-000	PLUM CREEK TIMBERLANDS L P	52.00	$25,400
19143-000-000	PLUM CREEK TIMBERLANDS L P	360.00	$115,700
19201-000-000	PLUM CREEK TIMBERLANDS L P	198.04	$225,800
19208-000-000	PLUM CREEK TIMBERLANDS L P	513.00	$380,700
19214-000-000	PLUM CREEK TIMBERLANDS L P	129.77	$165,300
19297-000-000	PLUM CREEK TIMBERLANDS L P	346.00	$311,400
19311-000-000	PLUM CREEK TIMBERLANDS L P	540.00	$385,000
19315-000-000	PLUM CREEK TIMBERLANDS L P	356.00	$308,400
19622-000-000	PLUM CREEK TIMBERLANDS L P	56.64	$85,000

The total 2004 Alachua County Property Appraisers (ACPA) just or land value for the subject property is $ 2,002,700 or $785 an acre. The parcels have development potential for single-family detached (including manufactured or mobile home) residential use, however, approximately 1/3 lies within the 100-year flood plain (FEMA). The natural features (flood prone area, forested wetlands, and marshes) appear to significantly constrain development potential for approximately 1/2 of the project area. However, the proximity of the project to the city of Hawthorne would be expected to increase development pressure in the foreseeable future, particularly for the upland portions of the

project area. The site is accessible from the south by SR 20 and from the west by Hwy 301 and CR 219A.

The County will seek partners to acquire the Putnam County portion of Fowler's Prairie.

Other:

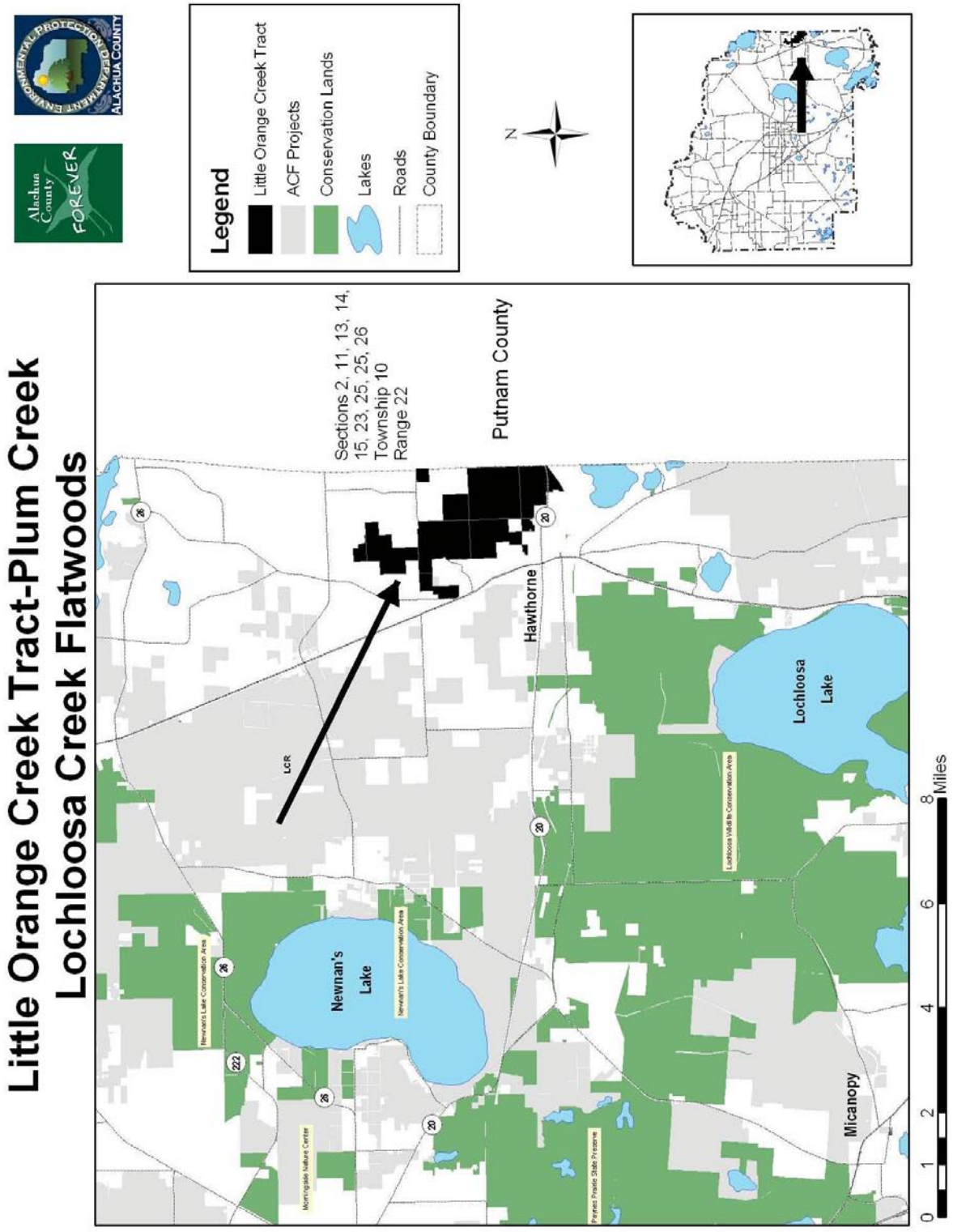
There are no Florida Division of Historical Resources Master Site File listings for the subject property.

Citations

Denson, Dana R. "EcoSummary, Little Orange Creek at CR 21 near Orange Springs," Florida Department of Environmental Protection, http://www.dep.state.fl.us/water/bioassess/index.htm, August 15, 2000.

KBN, A Golder Associates Company. 1996. Alachua County Ecological Inventory Project.

Lochloosa Creek Flatwoods - Plum Creek, Little Orange Creek Tract (Draft 4/4/04)					
CATEGORY	Criterion	WEIGHTING	Enter Criteria Value Based on Site Inspection	Average Criteria Score	Average Criteria Score Multiplied by Relative Importance
(I-1) PROTECTION OF WATER RESOURCES	A. Whether the property has geologic/hydrologic conditions that would easily enable contamination of vulnerable aquifers that have value as drinking water sources;		3		
	B. Whether the property serves an important groundwater recharge function;		4		
	C. Whether the property contains or has direct connections to lakes, creeks, rivers, springs, sinkholes, or wetlands for which conservation of the property will protect or improve surface water quality;		4		
	D. Whether the property serves an important flood management function.		4		
(I-2) PROTECTION OF NATURAL COMMUNITIES AND LANDSCAPES	A. Whether the property contains a diversity of natural communities;		3		
	B. Whether the natural communities present on the property are rare;		3		
	C. Whether there is ecological quality in the communities present on the property;		3		
	D. Whether the property is functionally connected to other natural communities;		2		
	E. Whether the property is adjacent to properties that are in public ownership or have other environmental protections such as conservation easements;		2		
	F. Whether the property is large enough to contribute substantially to conservation efforts;		5		
	G. Whether the property contains important, Florida-specific geologic features such as caves or springs;		2		
	H. Whether the property is relatively free from internal fragmentation from roads, power lines, and other features that create barriers and edge effects.		2		
(I-3) PROTECTION OF PLANT AND ANIMAL SPECIES	A. Whether the property serves as documented or potential habitat for rare, threatened, or endangered species or species of special concern;		4		
	B. Whether the property serves as documented or potential habitat for species with large home ranges;		3		
	C. Whether the property contains plants or animals that are endemic or near-endemic to Florida or Alachua County;		3		
	D. Whether the property serves as a special wildlife migration or aggregation site for activities such as breeding, roosting, colonial nesting, or over-wintering;		3		
	E. Whether the property offers high vegetation quality and species diversity;		2		
	F. Whether the property has low incidence of non-native invasive species.		3		
(I-4) SOCIAL AND HUMAN VALUES	A. Whether the property offers opportunities for compatible resource-based recreation, if appropriate;		4		
	B. Whether the property contributes to urban green space, provides a municipal defining greenbelt, provides scenic vistas, or has other value from an urban and regional planning perspective.		4		
	AVERAGE FOR ENVIRONMENTAL AND HUMAN VALUES			3.15	
	RELATIVE IMPORTANCE OF THIS CRITERIA SET IN THE OVERALL SCORE	1.3333			4.20
(II-1) MANAGEMENT ISSUES	A. Whether it will be practical to manage the property to protect its environmental, social and other values (examples include controlled burning, exotics removal, maintaining hydro-period, and so on);		2		
	B. Whether this management can be completed in a cost-effective manner.		4		
(II-2) ECONOMIC AND ACQUISITION ISSUES	A. Whether there is potential for purchasing the property with matching funds from municipal, state, federal, or private contributions;		3		
	B. Whether the overall resource values justifies the potential cost of acquisition;		5		
	C. Whether there is imminent threat of losing the environmental, social or other values of the property through development and/or lack of sufficient legislative protections (this requires analysis of current land use, zoning, owner intent, location and		4		
	D. `Whether there is an opportunity to protect the environmental, social or other values of the property through an economically attractive less-than-fee mechanism such as a conservation easement.		1		
	AVERAGE FOR ACQUISITION AND MANAGEMENT VALUES			3.17	
	RELATIVE IMPORTANCE OF THIS CRITERIA SET IN THE OVERALL SCORE	0.6667			2.11
	TOTAL SCORE				6.31


Little Orange Creek Tract-Plum Creek
Lochloosa Creek Flatwoods
Legend
Little Orange Creek Tract
ACF Projects
Conservation Lands
Lakes
Roads
County Boundary
N
Sections 2, 11, 13, 14, 15, 23, 25, 25, 26
Township 10
Range 22
Putnam County
LCR
Hawthorne
Newnan's Lake
Lochloosa Lake
Micanopy
Newnan's Lake Conservation Area
Lochloosa Wildlife Conservation Area
Morningside Nature Center
Paynes Prairie State Preserve
0 1 2 4 6 8 Miles

Little Orange Creek Tract-Plum Creek
Lochlossa Creek Flatwoods