Buck Bay Flatwoods
Cox & Moore
05/16/12

Project Score:	**6.87 of 10.00**	
Size:	460 +/- acres	
Parcel Number:	07872-016-000 (220+/- ac) 07873-000-000 (240+/- ac)	
S-T-R:	14 & 15-9S-20E	
Buildings:	None	
Just Value:	$ 874,100	$1,900/acre
Total: Just+bld+misc	$ 874,100	$1,900/acre

Natural Communities	**Condition**
Wet Flatwoods	Good
Mesic Flatwoods	Good - Excellent
Dome Swamp	Fair - Good
Floodplain Swamp	Good
Bottomland Forest	Good
Blackwater Stream	Good
Successional Hardwood Forest	Fair
Other: Remnant Upland Pine Forest species observed within Mesic Flatwoods	

REPA Score: 6.58 of 9.44 Buck Bay Flatwoods Project

Overall Description:

The Buck Bay Flatwoods Cox & Moore property is located on NE 38th Street (County Road 225), north of NE 53rd Avenue (CR 1470), and approximately one-half mile west of Waldo Road (Map 1). The property consists of two parcels which are managed for timber production and as leased hunting land (Map 2). Rayonier Forest Resources owns two large parcels immediately adjacent to the west Cox & Moore parcel. The Rayonier parcels separate the Cox & Moore property from the Plum Creek Timber – Murphree Well Field Conservation Easement land to the west. The City of Gainesville Murphree Water Plant is adjacent to the southwest corner of the west Cox& Moore parcel, and the Murphree Solar Park Conservation Easement is located along the southern boundary of the west Cox & Moore Parcel. The Cox & Moore parcels lie within the primary and secondary protection zone of the Murphree well field, and are located within one-quarter mile of existing production wells (Map 3). Acquisition of the parcels would expand protection of the well field, and would protect approximately 4082 feet of Hatchet Creek.

The property consists primarily of pine flatwoods interspersed with forested wetlands. The pine flatwoods are primarily mesic, with limited areas of wet flatwoods located adjacent to wetland areas. The flatwoods are in good to excellent condition, in spite of decades of past timber management. Most of the stands are planted slash pine, and therefore are evenly aged rows of trees on raised beds, however past timber thinning, light bedding, and minimal ground disturbance has encouraged the persistence of abundant and diverse native groundcover including wiregrass. Longleaf pine are scattered throughout the property, and are naturally regenerating. Several wildlife feed plots are located within the pine flatwoods throughout the property. Some are mowed areas of native groundcover vegetation, while others are seasonally cultivated with non-native forage plants. One mowed area within the wet flatwoods natural community contains numerous hooded pitcher plants, listed as threatened in Florida. Active gopher tortoise burrows are also located within the mesic flatwoods community.

Other upland forest communities present on the property include a small area of successional hardwood forest located within the west parcel, and remnant species characteristic of upland pine forest are persisting within the mesic flatwoods on the east parcel.

Wetlands on the property consist of floodplain swamp and bottomland forest associated with Hatchet Creek, and several isolated dome swamps. The floodplain swamp and bottomland forest have been logged in the past, but are currently in good condition, with mature trees and intact ground cover. The dome swamps vary from fair to good condition – all have been logged in the past, and are regenerating naturally. Rooting by feral hogs was evident within the floodplain swamp and dome swamps during the April 25 site visit.

Hatchet Creek is a blackwater stream which enters the property at the west boundary, flows across the west parcel for approximately 4082 feet, exiting at the north property boundary. Hatchet Creek eventually flows into Newnan's Lake. 2001 and 2009 BioRecon surveys of Hatchet Creek at CR 225 indicated the macroinvertebrate assemblage in this reach of the creek is "Exceptional."

Besides pasture grasses, non-native plant species observed on the property during the April 2012 site visit were Chinese tallow and mimosa tree – these were very few and scattered near the main entrance on CR 225. It is likely that more of these species and additional non-native plants exist on the site. Signs of recent feral hog activity were evident on the property during the site visit, including rooting in Hatchet Creek and isolated wetlands. A large hog pen was observed on the property, and the owner's representative indicated it is used by hunters who lease the property.

No cultural or historic resources are currently documented for the property, however analysis of historic aerial photographs and topographic maps indicates a road dating to at least 1890 may exist on the eastern parcel. In addition, abundant pitch pot sherds were observed throughout the site, and one feed plot contained numerous chert flakes observed during the April 25 site visit.

The property is composed of two parcels totaling approximately 460 acres. The western parcel (07873-000-000) is approximately 240 acres, has a land use designation of Rural/Agriculture and a zoning of Agricultural, and lies outside of the Urban Cluster. The eastern parcel (07872-016-000) is approximately 220 acres and is split by the Urban Cluster line. The western 120 acres of parcel 07872-016-000 lies outside of the Urban Cluster and has a land use designation of Rural/Agriculture and a zoning of Agricultural. The eastern 100 acres of parcel 07872-016-000 lies within the Urban Cluster and has a land use designation of Light Industrial (Map 4). Of these 100 acres, however, the easternmost 40 acres are zoned "MP" (Industrial Manufacturing) while the remaining 60 acres are zoned Agricultural. The Agricultural zoning classification is inconsistent with the Light Industrial land use designation.

Both parcels lie entirely within the Buck Bay Flatwoods Strategic Ecosystem, and both are within the "Fairbanks Special Construction Criteria Area" (see Chapter 40C-3, F.A.C. regarding water wells). The eastern parcel (07872-016-000) lies, in part, within the Fairbanks "delineated" area (see Chapter 62-524, F.A.C. regarding potable water well permitting in delineated areas).

The eastern parcel (07872-016-000) has approximately 2,300 feet of frontage on CR 225, a paved, publicly-maintained road.

The following conservation resources are present:

100-year Floodplain

total	=	145 acres
outside urban cluster	=	136 acres
inside urban cluster	=	9 acres

Surface Waters / Wetlands

total	=	77 acres
outside urban cluster	=	60 acres
inside urban cluster	=	17 acres

Strategic Ecosystem

total	= 460 acres
outside urban cluster	= 360 acres
inside urban cluster	= 100 acres

Development Scenario (Outside of Urban Cluster): If the owner/developer paved all internal subdivision roads to county standards, and provided paved access to CR 225, the maximum development scenario for the property might be as a Rural/Agriculture Clustered Subdivision. All wetlands, required wetland buffers, and up to 50% of uplands would be required to be protected in perpetuity and could not be included within lot boundaries. All lots would need to have sufficient buildable area outside of 100-year flood zones. Wetland buffers and non-wetland flood zones would count toward the upland conservation requirement. As a result, such clustered subdivision likely would consist of 95 lots on 150 acres of developable uplands.

Development Scenario (Inside of Urban Cluster): Of the 100 acres lying within the Urban Cluster, 60 acres have conflicting land use and zoning classifications. No development can proceed on these 60 acres until such time as the land use and zoning are reconciled. A subset of the remaining 40 acres (fronting on CR 225) can be developed at any time for industrial uses consistent with the Light Industrial land use classification. All wetlands, required wetland buffers, and up to 50% of uplands would be required to be protected in perpetuity as common open space. All developed tracts would need to have sufficient buildable area outside of 100-year flood zones. Wetland buffers and non-wetland flood zones would count toward the upland conservation requirement.

This development analysis is based on a limited desk-top review and is founded upon current Land Development Regulations and Comprehensive Plan policies. Scenarios may be oversimplified, and are meant only to convey a general sense of the range of development intensities that would be possible.

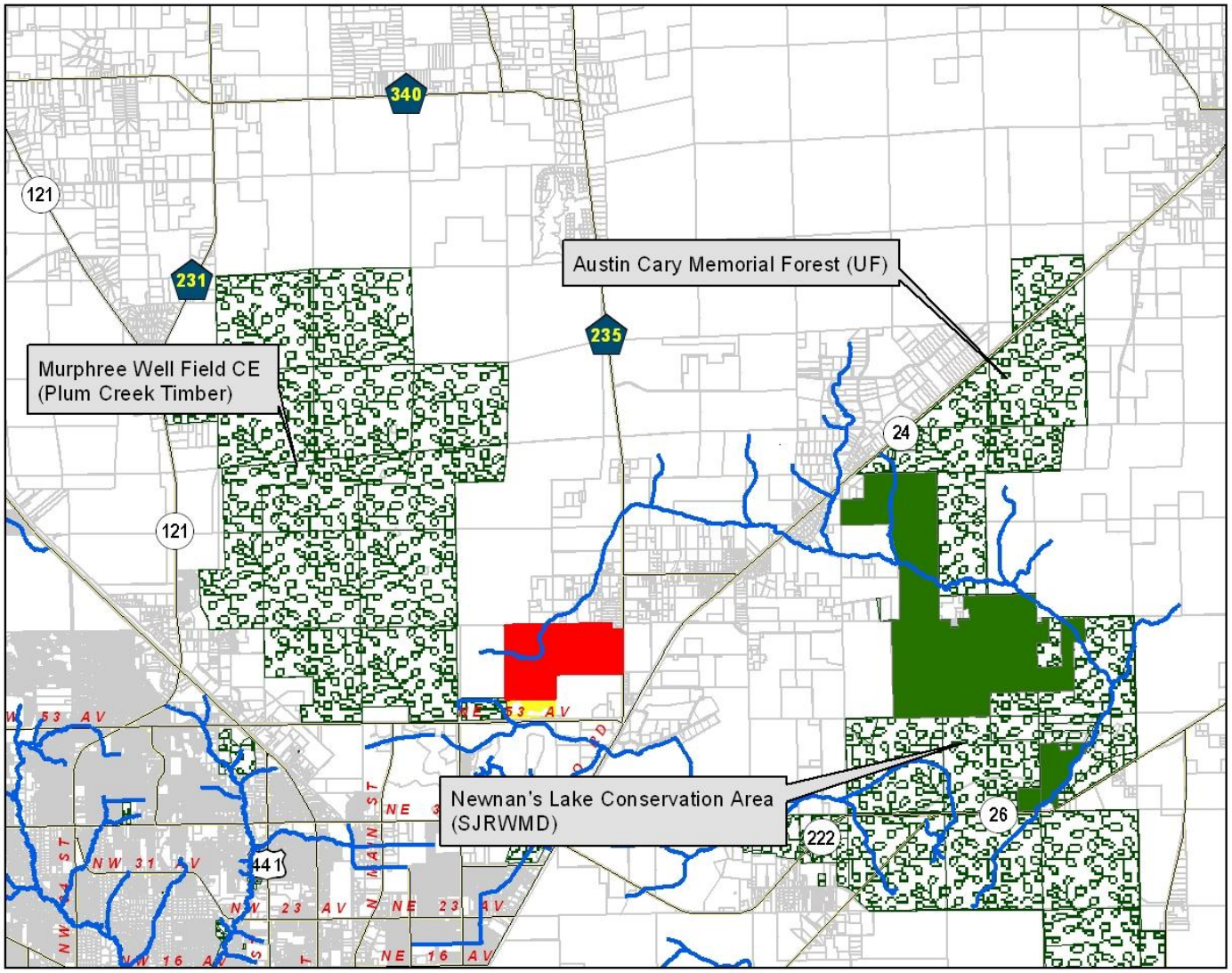
The property possesses good public recreation potential for nature trails and education related to protecting groundwater and surface water.

Buck Bay Flatwoods - Cox & Moore — May 2012

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;		4		
	B. Whether the property serves an important groundwater recharge function;		5		
	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;		3		
	D. Whether the property serves an important flood management function.		3		
(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;		4		
	E. Whether the property is adjacent to properties that are in public ownership or have other environmental protections such as conservation easements;		3		
	F. Whether the property is large enough to contribute substantially to conservation efforts;		4		
	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.		4		
(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;		3		
	B. Whether the property serves as documented or potential habitat for species with large home ranges;		4		
	C. Whether the property contains plants or animals that are endemic or near-endemic to Florida or Alachua County;		2		
	D. Whether the property serves as a special wildlife migration or aggregation site for activities such as breeding, roosting, colonial nesting, or over-wintering;		4		
	E. Whether the property offers high vegetation quality and species diversity;		3		
	F. Whether the property has low incidence of non-native invasive species.		5		
(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.		5		
	AVERAGE FOR ENVIRONMENTAL AND HUMAN VALUES			3.55	
	RELATIVE IMPORTANCE OF THIS CRITERIA SET IN THE OVERALL SCORE	1.3333			4.73
(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);		4		
	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;		1		
	B. Whether the overall resource values justifies the potential cost of acquisition;		4		
	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		3		
	AVERAGE FOR ACQUISITION AND MANAGEMENT VALUES			3.20	
	RELATIVE IMPORTANCE OF THIS CRITERIA SET IN THE OVERALL SCORE	0.6667			2.14
	TOTAL SCORE				6.87

Buck Bay Flatwoods - Cox & Moore Location

Map 1



Alachua County, Florida
Environmental Protection

- Cox & Moore Parcels
- Conservation Lands
- ACF Acquisitions
- Murphree Solar Park CE
- Gainesville Creeks
- Parcels
- Major Roads

Alachua County FOREVER

0 0.5 1 2 3 4 5 Miles

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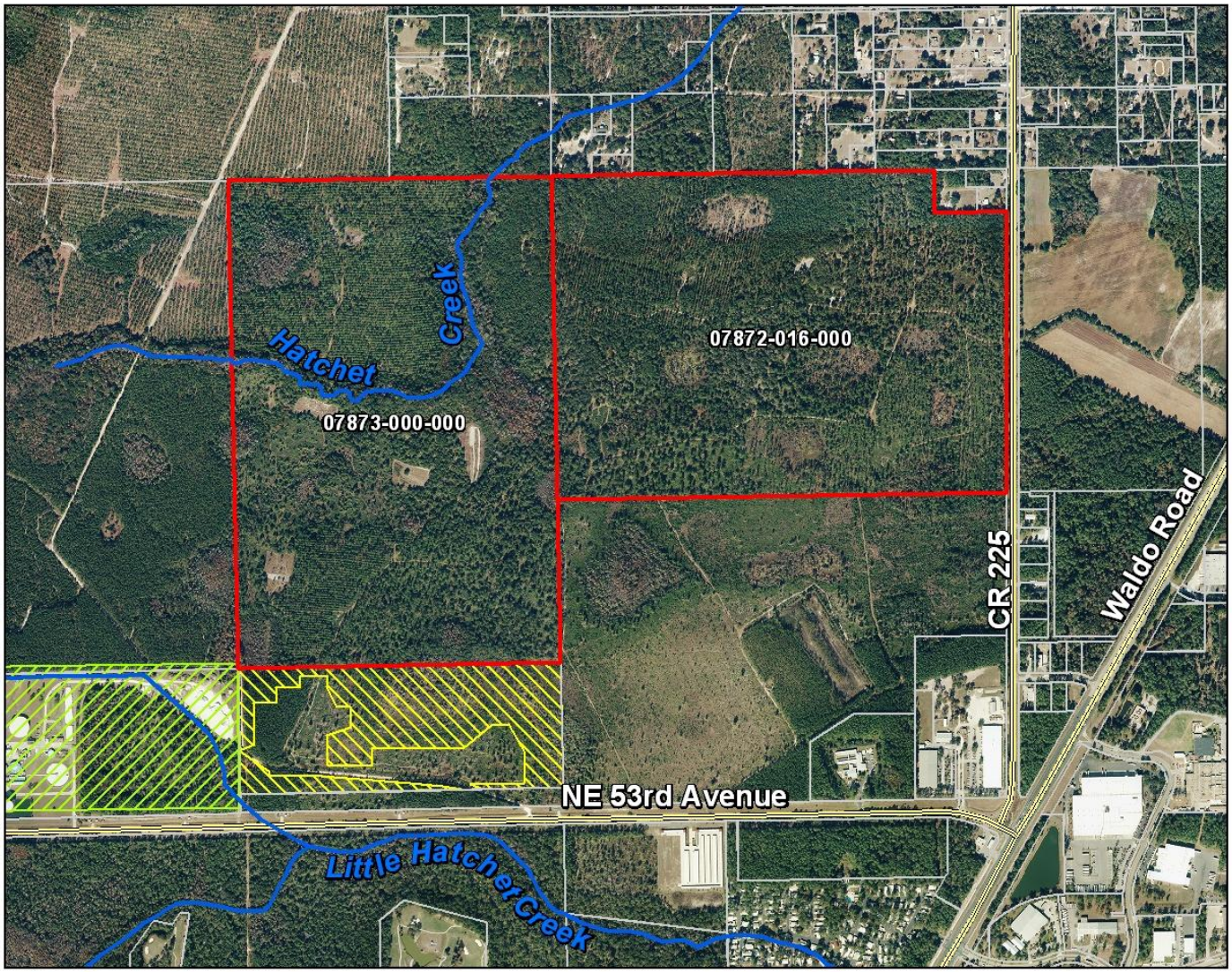
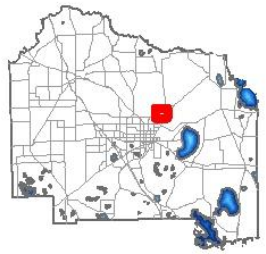
Buck Bay Flatwoods - Cox & Moore Aerial Map

Map 2



Alachua County, Florida
Environmental Protection

- Cox & Moore Parcels
- Conservation Lands
- Murphree Solar Park CE
- Gainesville Creeks
- Parcels
- Major Roads



Alachua County FOREVER

N W E S

0 0.25 0.5 Miles

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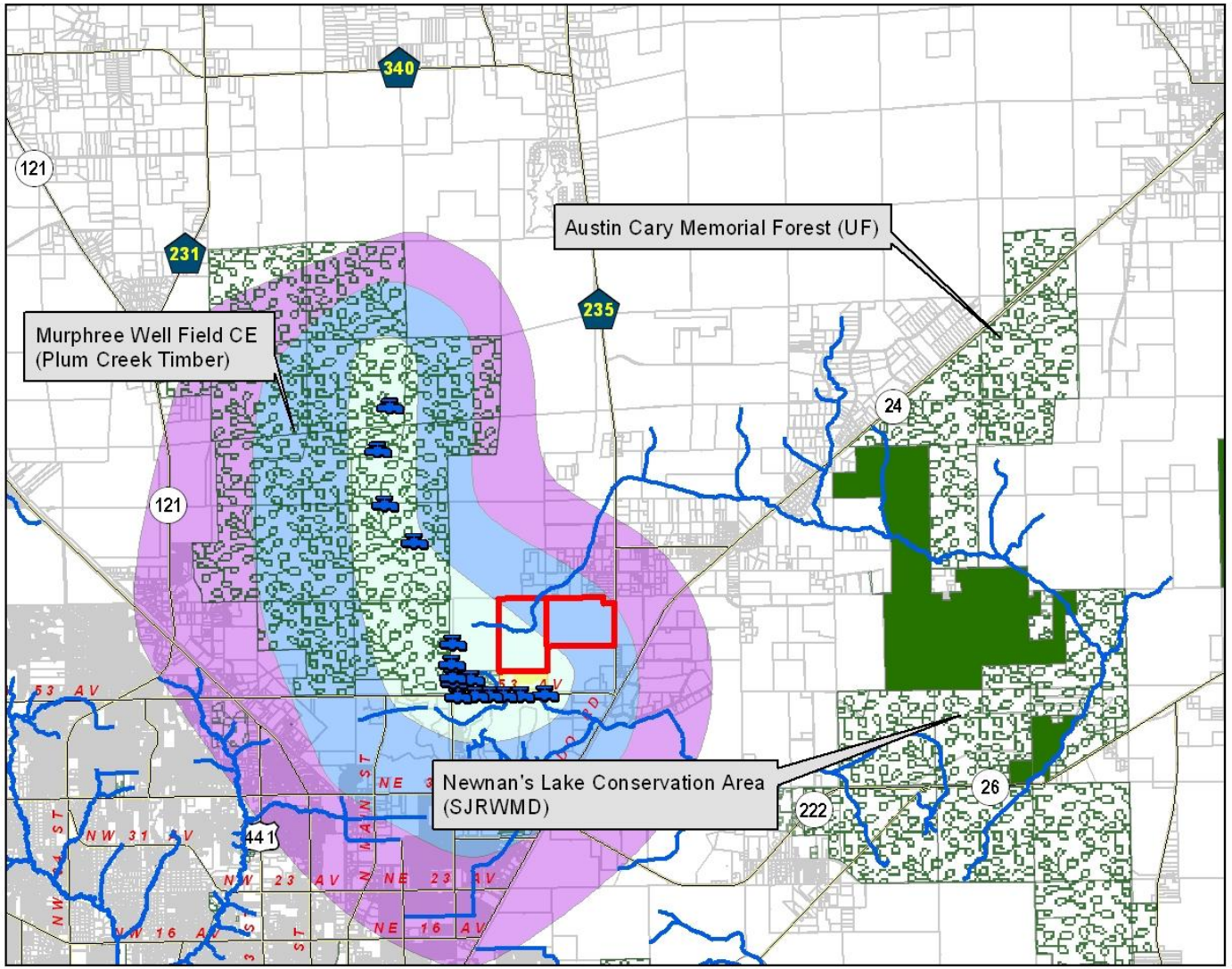
Buck Bay Flatwoods Cox & Moore - Murphree Well Field Protection Zones Map

Map 3



Alachua County, Florida
Environmental Protection

- Cox & Moore Parcels
- Conservation Lands
- ACF Acquisitions
- Murphree Solar Park CE
- Gainesville Creeks
- Parcels
- Major Roads
- Murphree Wells

Murphree Well Field Protection Zones

- Primary Zone (2-yr)
- Secondary Zone (10-yr)
- Tertiary Zone (25-yr)

Alachua County FOREVER

0 0.5 1 2 3 4 5 Miles

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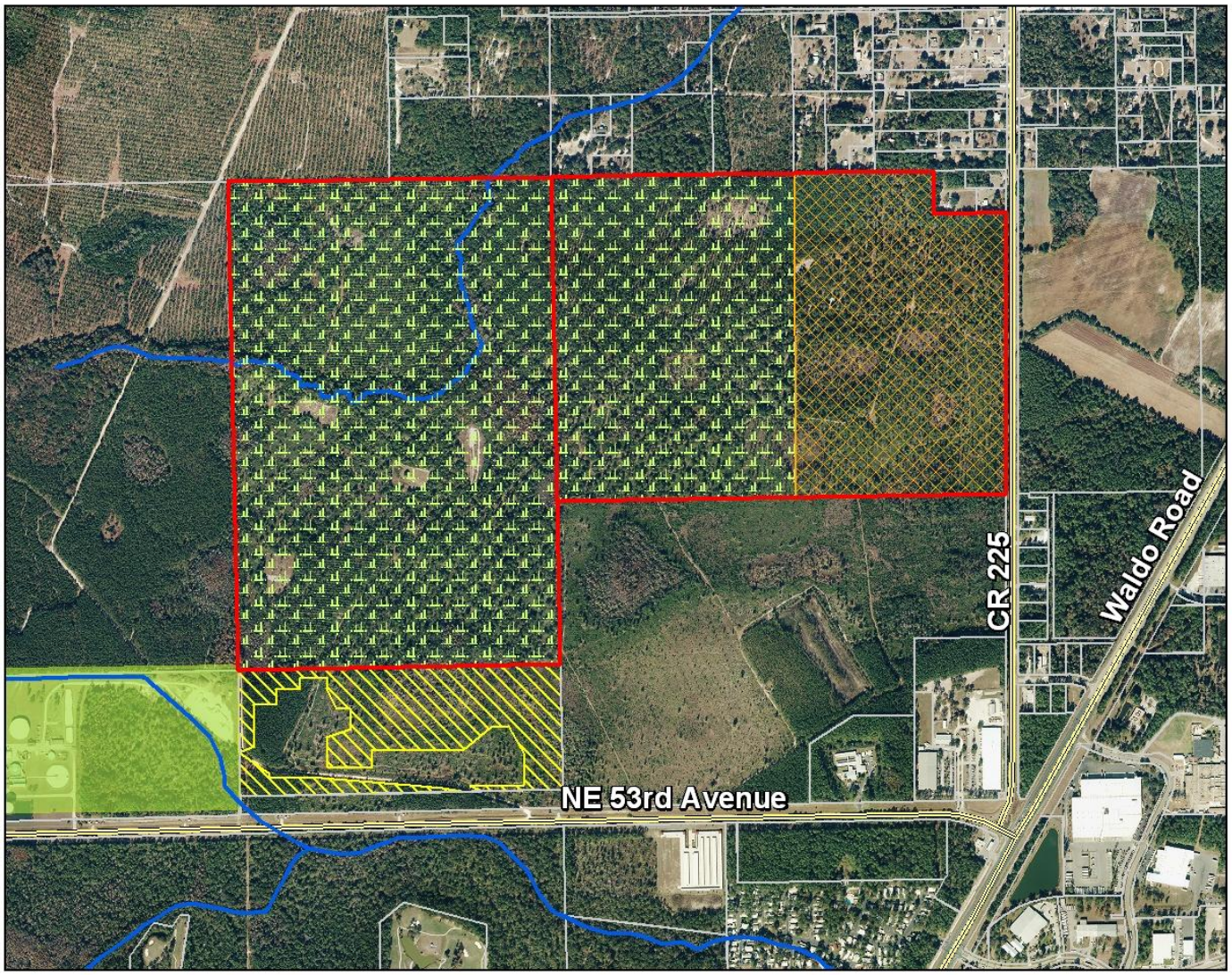
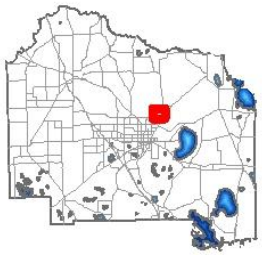
Buck Bay Flatwoods - Cox and Moore Future Land Use Map

Map 4



Alachua County, Florida
Environmental Protection

- Cox & Moore Parcels
- Light Industrial FLU
- Rural/Agricultural FLU
- Conservation Lands
- Murphree Solar Park CE
- Gainesville Creeks
- Parcels
- Major Roads



Alachua County FOREVER

0 0.25 0.5 Miles

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