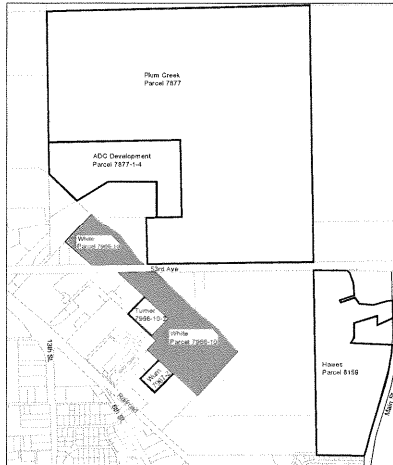


**Petition 42ZON – Ecological Overlay**

**Parcel: 07966-010-000**

**Taxpayer: TRUSTEE: HEIRS OF LUTHER M. WHITE**



**Exclusion Criteria Demonstration Worksheet**

If at least 4 of the criteria do not exist, the parcel should be excluded.

CRITERIA	PARCEL VALUE	STANDARD	EXISTS?
Rarity – City	Common	Rare	NO
Rarity - State	S4	S1	NO
Exemplary	49-54	80	NO
Vulnerability	4-7	10	NO
High Water Quality	5-9	10	NO
Connectedness	2-6	10	NO
Viability	9	20	NO
Manageability	4	10	NO
Nature-Oriented Human Use	Severely Limited	High Potential	NO

## **Background**

The City's Code includes Section 30-309 - Significant ecological communities district, and Section 30-309.1 - Rezoning to significant ecological communities district. Section 30-309 provides information on the ecological overlay and includes detailed definitions of important terms. The ordinance deals with natural communities on undeveloped parcels.

30-309.1 describes the process for the City to apply the overlay to parcels, self-initiated by the City. It also includes a very specific, and prescriptive, process for parcel owners to request exclusion from the overlay. This packet of information deals with a request for exclusion for the parcel.

Section 30-309.1(b) is called "Exclusion from rezoning criteria". It states that "Should the owner believe that the property should not be rezoned to this classification, the property owner has the burden of demonstrating to the city commission, at the time of rezoning, that at least four of the following seven criteria do not exist on the parcel:

- ❑ Rarity or exemplary;
- ❑ Vulnerability;
- ❑ High water quality
- ❑ Connectedness;
- ❑ Viability
- ❑ Manageability; and
- ❑ Nature-oriented human use potential.

You will see on the Exclusion Criteria Demonstration Worksheet that I have used 9 criteria...this results from splitting "rarity or exemplary" into individual criteria, and further splitting rarity into rarity in Gainesville and rarity in Florida.

## **Parcel Information**

Parcel 07966-010-000 (7966-10) is divided by 53<sup>rd</sup> Avenue. The parcel exhibits 3 natural communities<sup>1</sup>:

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<sup>1</sup> St. Johns River Water Management District, Land Use and Land Cover, 2000.

- Mesic Flatwoods (Pine Flatwoods)
- Hydric Hammock
- Dome Swamp

## **Demonstration that Criteria Do Not Exist on Parcel**

The worksheet summarizes the information included in this section. The City's Code has clear definitions for each of the exclusion criteria. Various references, including City Staff and City Consultant reports, are used to demonstrate that the criteria do not exist on the parcel.

### ***Rarity***

Rarity has two parts, the frequency of occurrence of a natural community or features in the state or within the City of Gainesville.

### **Rarity in Gainesville**

Rankings at the city level are based on the number of known occurrences within the city limits. The natural communities listed above are quite common in Gainesville. This is best shown graphically in Figure 1. The figure shows all of Gainesville, with only these 3 natural communities shown in color.

Mesic flatwoods are shown in purple, hydric hammocks are shown in orange, and dome swamps are shown in yellow. These natural communities are not rare in Gainesville.

### **Rarity in the State**

State rankings come from the Florida Natural Areas Inventory's (FNAI) Guide to the Natural Communities of Florida (1990), Tracking List of Rare, Threatened, and Endangered Plants, Animals and Natural Communities of Florida (FNAI 2000).

Definition of State (S) element ranks:

S1 = Critically imperiled in state because of extreme rarity (5 or fewer occurrences or very little remaining area) or because of some factor(s) making it especially vulnerable to extinction;

S2 = Imperiled in state because of rarity (6-20 occurrences or little remaining area) or because of some factor(s) making it very vulnerable to extinction throughout its range;

S3 = Rare or uncommon in state (on the order of 21 to 100 occurrences);

S4 = Apparently secure in state, although it may be rare in some parts of its state range;

S5 = Demonstrably secure in state and essentially ineradicable under present conditions;

The 3 natural communities are all ranked S4. The natural communities are not rare in the state.

### **Exemplary**

Exemplary is defined as a parcel having species composition and structure characteristic of an unusually high quality example of the natural community type in question.

The City's Environmental Resource Report from 2001 further defines exemplary communities as those parcels with an ecological score of greater than 80<sup>2</sup>.

This parcel has been scored by City Staff as either 49 or 54; and the score was reviewed by the City's consultant with a score of 51. As these scores are much less than 80, exemplary communities do not exist on the parcel.

### **Vulnerability**

Vulnerability is defined as a parcel facing the likelihood of degradation of natural values in the absence of protection or active management or likelihood of destruction due to human influence.

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<sup>2</sup> Environmental Resource Report, City of Gainesville, Recreation and Parks Department, Nature Operations Division, January 2001, Figure 5 Legend.

This criterion is addressed to some degree by the “Ecological Processes” parameter in the ecological scoring, and also by the rarity and manageability criteria in this exclusion demonstration.

The scoring criteria for this criterion are as follows:

Ecological Processes: Typically fire, hydrology, species interactions, and human disturbance.

<u>Condition</u>	<u>Score</u>
Intact	10
Intact, some restoration needed	7
Moderately altered, major restoration needed	4
Highly altered, some restoration possible	2
Highly altered, restoration impossible	0

The parcel’s vulnerability, as related to ecological processes, was ranked by City Staff as 4, and the ranking was reviewed by the City’s Consultant, who suggested that 7 was more appropriate.

**High water quality**

High water quality is defined as a parcel contributing to aquifer recharge, water filtration, or flood control; or lacking substantial inputs of pollutants; or a combination of these.

This parameter was addressed in the ecological scoring conducted for the parcel by City Staff and the City’s consultant.

Water Quality Protection Score = Parts (A +B)/2		
Part A Recharge	Karst watershed, stream to sink	10
	High recharge, some karst features	8
	Moderate recharge	4
	Low recharge	2
Part B Surface water Quality = size, storage, ecology	High quality wetlands or surface water	10
	Moderate quality wetlands or surface water	6
	Low quality wetlands or surface water	3

The parcel was scored 9 by City Staff without detail as to basis, and the City's Consultant suggested that 5 was a more appropriate score, based on moderate recharge and moderate quality wetlands  $[(4+6)/2 = 5]$ .

### Connectedness

Connectivity or connectedness is defined as the extent to which a parcel is adjacent to or near protected lands, and the degree to which intervening properties could hinder wildlife movement or other ecological processes that contribute to the overall health of the ecological community.

The parcel is nearby, but not connected to, the Murphree Wellfield Conservation area. As the parcel is split by 53<sup>rd</sup> Avenue, its connectedness is related to the more distant portion.

This parameter was addressed in the ecological scoring conducted for the parcel by City Staff and the City's consultant.

Connectedness		
Score = Parts (A +B+C)/3		
Part A Adjacent Public Conservation Land within one mile	1001 acres or greater	10
	501-1000 acres	8
	101-500 acres	5
	11-100 acres	3
	1-10 acres	1
Part B Distance or barriers to Public Conservation Land	Widely contiguous (½ mile or greater)	10
	Narrowly contiguous (< ½ mile)	8
	Separated by two-lane road	5
	Separated by four-lane road	3
	Less than one half mile	2
	Greater than one half mile	1
Part C Intervening matrix	High quality natural areas	10
	Low quality natural areas	8
	Agriculture with natural areas or corridors	6
	Agriculture	4
	Rural or Agriculture/Residential	2
	Urban	1

The parcel's connectedness was ranked by City Staff as 2.33, and the ranking was reviewed by the City's Consultant, who suggested that 6 was more appropriate  $[(10+2+6)/3 = 6]$ .

### Viability

Viability is defined as the extent to which ecological processes necessary to maintaining the natural values of the site can persist over time.

This parameter is addressed to some degree in the ecological scoring conducted for the parcel by City Staff and the City's consultant, as typical species and invasive species. This parameter is also related to vulnerability and manageability.

Typical Species Use Guide to Nat. Coms. Of Fla. Plants and animals in all n.cs.	Most typical species present	10
	Some typical species present	5
	Few typical species present	1
Invasive Non-native Species (INS)	No INS, not conducive for introduction	10
	No INS, conducive for introduction	8
	Moderate INS, control needed	4
	Many INS, extensive control needed	1

The parcel's viability, as related to species, was ranked by City Staff as 9, and the ranking was reviewed by the City's Consultant, who concurred.

### Manageability

Manageability is defined as the feasibility of carrying out any active management, which is necessary to maintain the natural values of the site.

For the 3 natural communities onsite, periodic fires are critical to active management<sup>3</sup>. As the parcel is located within the city limits, in a highly developed area, prescribed fire would be extremely difficult, if not impossible, to manage.

<sup>3</sup> Guide to the Natural Communities of Florida, Florida Natural Areas Inventory, February 1990.

This parameter is in the ecological scoring conducted for the parcel by City Staff and the City's consultant.

Management Potential	High	10
	Moderate	7
	Low	4
	Too small or degraded, little hope	1

The parcel's manageability was ranked by City Staff as 4, and the ranking was reviewed by the City's Consultant, who concurred.

### **Nature-oriented human use potential**

Nature-oriented human use potential is defined as the extent to which amenities necessary for passive recreation (access, parking areas, trails, boardwalks) are present or can feasibly be developed on a site.

None of these amenities are present on the parcel. The soil types present on the parcel are rated according to restrictive soil features for recreational development in the Soil Survey of Alachua County. For paths and trails, all of the soil types have "severe" limitations, because of wetness, too sandy, or ponding. Camp areas and picnic areas also have severe limitations based on the soil types<sup>4</sup>.

In addition, this parcel is surrounded by high-traffic roadways and industrial development, further limitations on the potential for nature-oriented human uses.

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<sup>4</sup> Soil Survey of Alachua County, USDA/SCS, August 1985, Table 8.