



Natural Surroundings LLC

Environmental Consulting
17951 Devore Lane
Ft. Myers, FL 33913

Wetland and Listed Species Report for:

19341 Slater Rd, North Fort Myers, FL, 33917
Strap # 07 43 25 00 00006 0040

Prepared for:

July 24, 2006

Wetland Delineation Permitting Threatened and Endangered Species
Phone (239) 433-1585
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July 24, 2006

Re: 19341 Slater Rd Wetland and Listed Species Report

Dear :

Enclosed please find the wetland and listed species report for 19341 Slater Road, North Fort Myers, Florida. The property contains wetlands, but over half is upland and has good potential for low density residential development. The creeks and mature trees are very scenic. No listed species were observed, but the site is suitable bald eagle habitat, and should be re-examined before finalizing plans and applying for permits.

I would be happy to assist you with any permitting or listed species needs in the future. Please call with any questions.

Sincerely,

Glenn Vaters

Ecologist/Owner
Natural Surroundings, LLC

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Introduction

On July 9th and 14th, 2006, Glenn Vaters of Natural Surroundings, LLC inspected 19341 Slater Road, North Fort Myers, Florida, 39317 (Figure 1). The purpose of the inspection was to complete a wetland determination and listed species survey of the 37.57± acre property (Aerial 1).

The existing land use types and natural vegetative communities were classified using Level IV of the Florida Land Use, Cover and Forms Classification System (FLUCCS) (Florida Department of Transportation, 1999). Level IV was utilized to denote infestation by exotic/nuisance species.

Mapping and acreage calculations were completed using ExpertGPS and PlanimeterAnything software.

Vegetation

The property contains three abandoned residences. Daughtrey Creek and a smaller creek run from north to south through the property. The property contains both wetland and upland forests and areas of both wetland and upland transitional rangeland. Cattle range throughout the property. Wetlands and other surface waters make up 5.35± acres of the 37.57± acre property (Diagram 1). A total of twelve classifications were mapped on the property (Diagram 2)(Aerial 2). A description of these is provided.

Single family residences and mobile homes (FLUCCS Codes 111 and 112)

This land use comprises 0.46± acres of the property. It includes an abandoned home adjacent to Daughtrey Creek and another in the western corner of the property. An old mobile home is adjacent to the smaller creek.

Bamboo (FLUCCS Code 243)

A stand of large bamboo (*Gigantochloa* spp.) can be found on the west side of Daughtrey Creek. It comprises 0.05± acres.

Rangeland (FLUCCS Code 300)

This habitat includes all unforested upland areas of the property. It is dominated by pasture grasses such as bahia (*Paspalum notatum*) and disturbed site species such as Caesar weed (*Urena lobata*), crabgrass (*Digitaria* spp.) and blackberry (*Rubus* spp.). It comprises 15.10± acres of the property.

Brazilian pepper (FLUCCS Code 422)

Two large areas of the exotic Brazilian pepper (*Schinus terebinthifolius*) are located on the west side of the property. They comprise 2.59± acres of the property. These areas are so dense with pepper that almost no other species are found within.

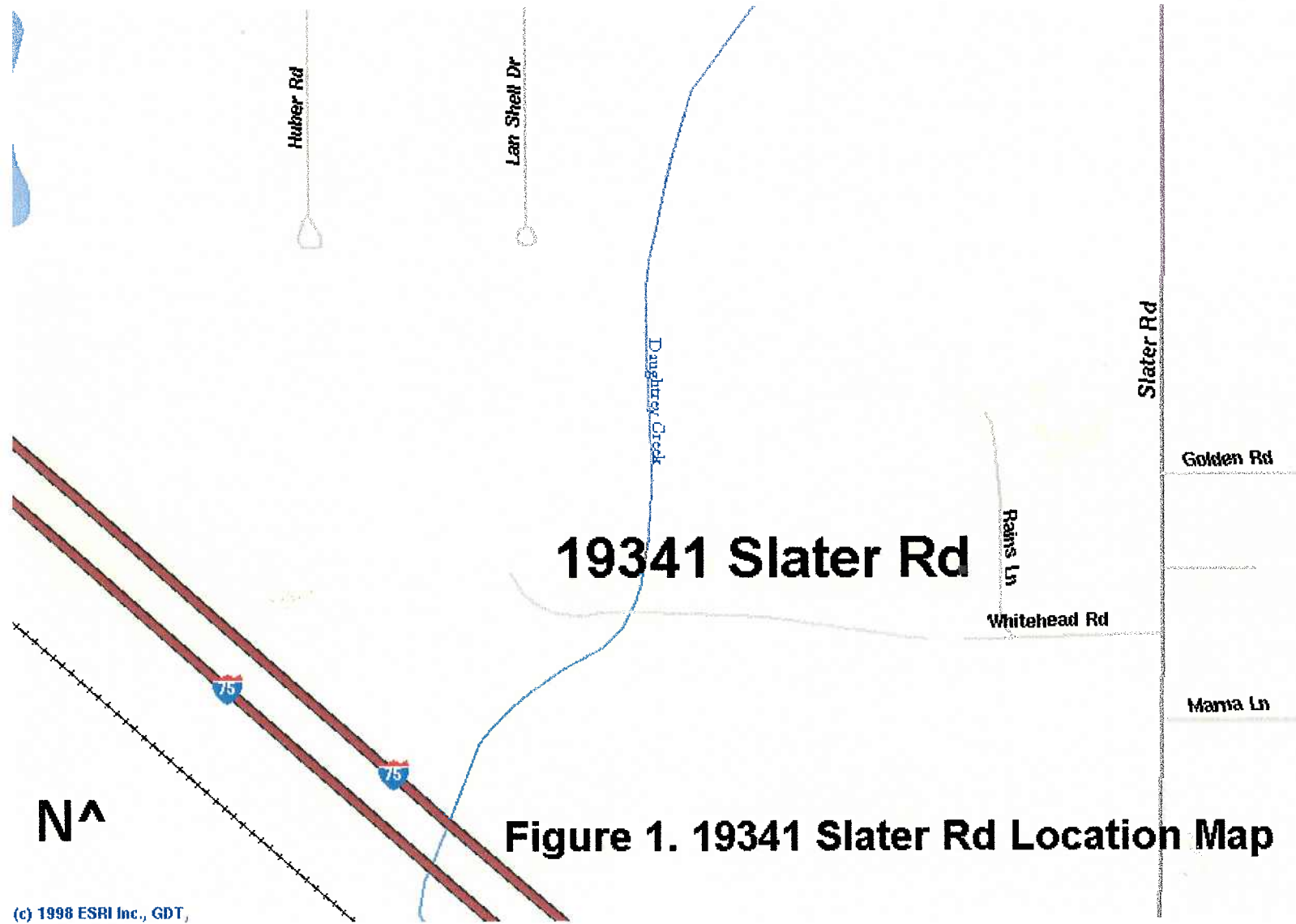


Figure 1. 19341 Slater Rd Location Map

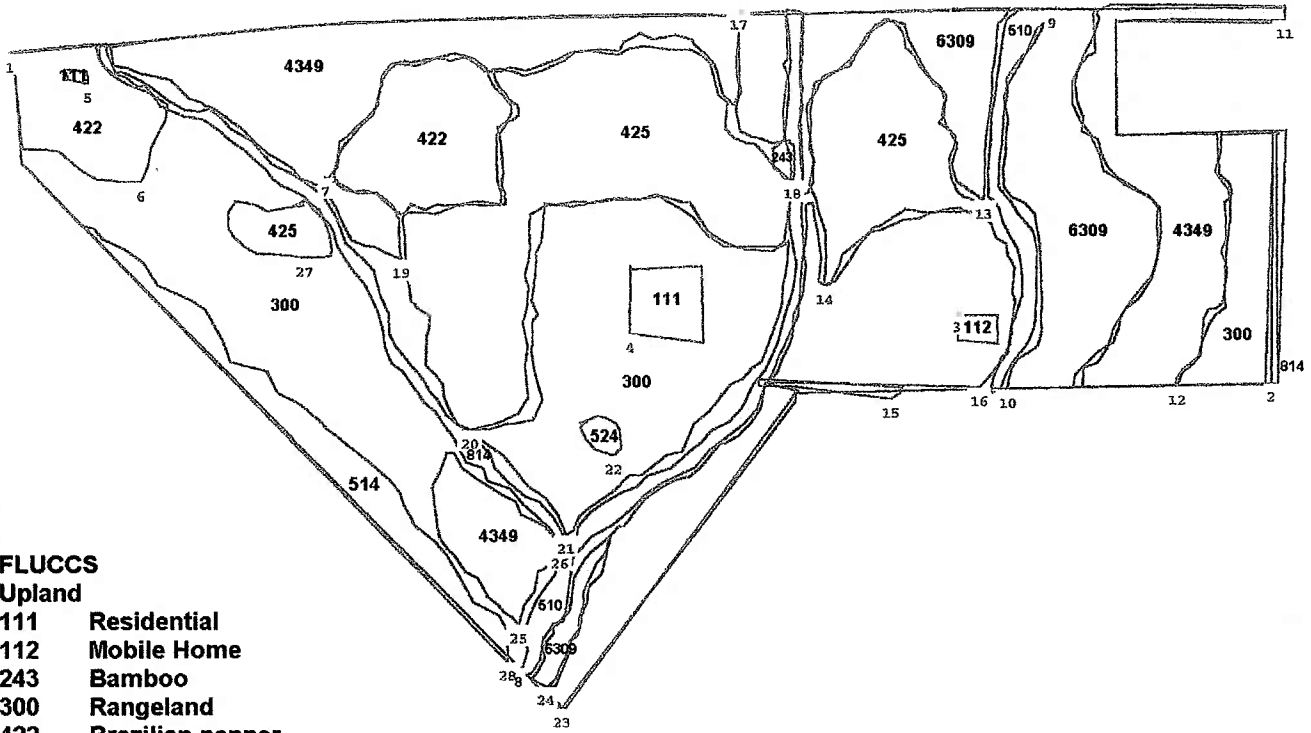


Aerial 1: 19341 Slater Rd

N^

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2006 7 24



**FLUCCS
Upland**

- 111 Residential
- 112 Mobile Home
- 243 Bamboo
- 300 Rangeland
- 422 Brazilian pepper
- 425 Hardwoods
- 4349 Hardwood-conifer, mixed
- 814 Road

Wetland and other surface waters

- 510 Creek
- 514 Swale
- 524 Pond
- 6309 Wetland forested, mixed

N^

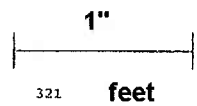
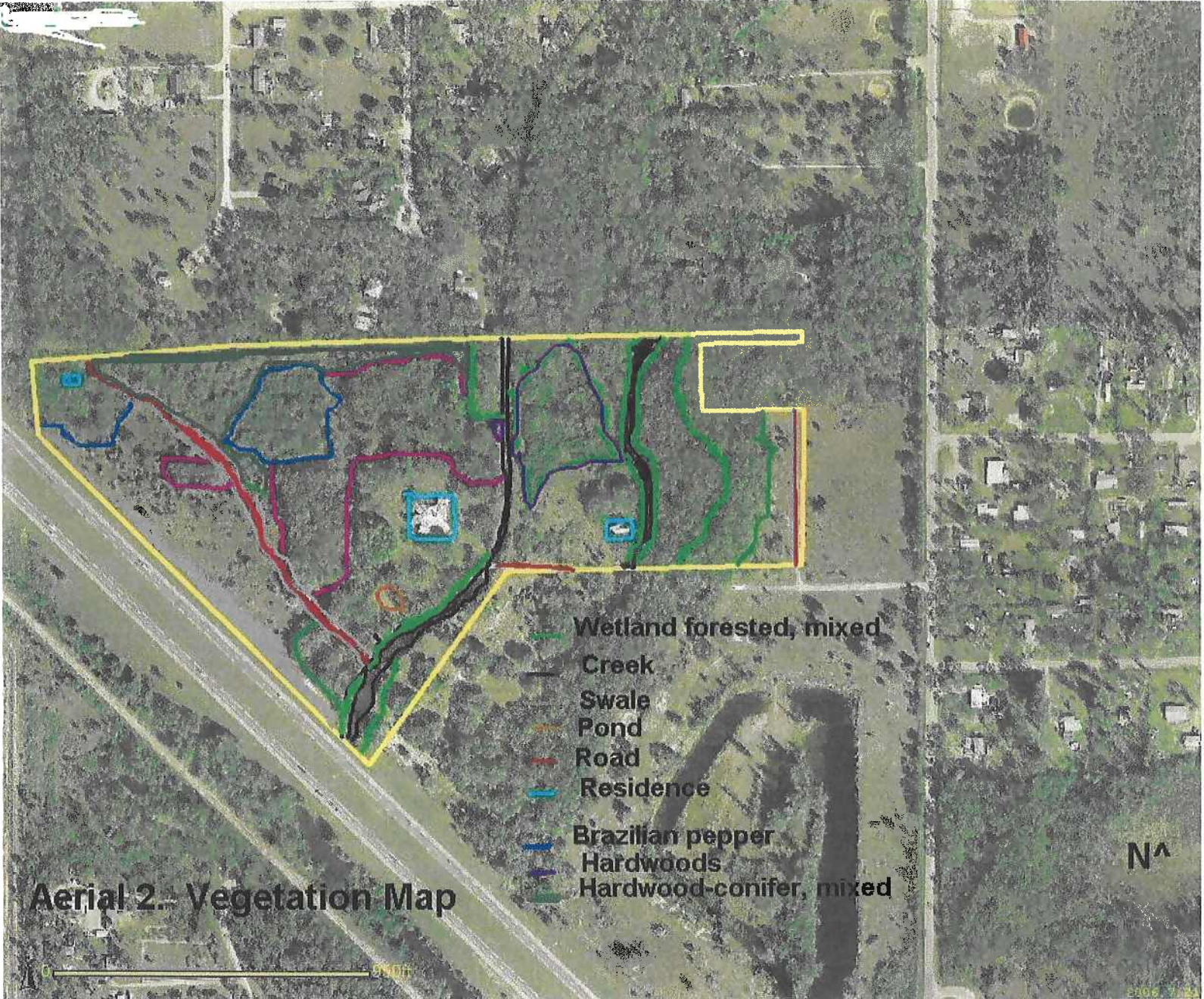


Diagram 2. FLUCCS Map



Aerial 2... Vegetation Map

Temperate Hardwoods (FLUCCS Code 425)

This upland habitat comprises 6.65± acres of the property. Dominant native vegetation includes live oak (*Quercus virginiana*) and laurel oak with cabbage palm.

Hardwood-Conifer, Mixed, Disturbed (FLUCCS Code 4349)

This upland habitat comprises approximately 6.00± acres of the property. It is dominated by live oak, laurel oak, slash pine (*Pinus elliottii*) and cabbage palm. Wax myrtle is a common shrub. Ground cover includes air potato, muscadine grape (*Vitis rotundifolia*), and Caesar weed.

Streams and Waterways (FLUCCS Code 510)

This habitat includes Daughtrey Creek and a smaller creek to the east. They comprise 1.26± acres of the property.

Ditches/ Swales (FLUCCS Code 514)

This "other surface waters" habitat includes the swales adjacent to I-75 and the dirt roads on the property. They comprise 1.13± acres of the property.

Pond (FLUCCS Code 524)

There is a 0.08± acre cow pond south of the main house and west of Daughtrey Creek.

Wetland Forested, Mixed, Disturbed (FLUCCS Code 6309)

This wetland habitat comprises 4.01± acres of the property. Dominant native vegetation includes slash pine (*Pinus elliottii*), laurel oak (*Quercus laurifolia*) and cabbage palm (*Sabal palmetto*). Java plum (*Syzygium* spp.) and air potato (*Dioscorea bulbifera*) are abundant exotics. Other ground cover includes yellow-eyed grass (*Xyris* spp.), swamp fern (*Blechnum serrulatum*), shield fern (*Thelypteris* spp.), maidencane (*Panicum hemitomon*), and rushes (*Juncus* spp.) (see wetland photos).

Roads (FLUCCS Code 814)

There are dirt roads running along the eastern and southern boundaries of the property, and one running through the west central portion of the property to the western tip. They comprise 0.26± acres of the property.

Soils

The property contains four soil types (Figure 2). These are described below.

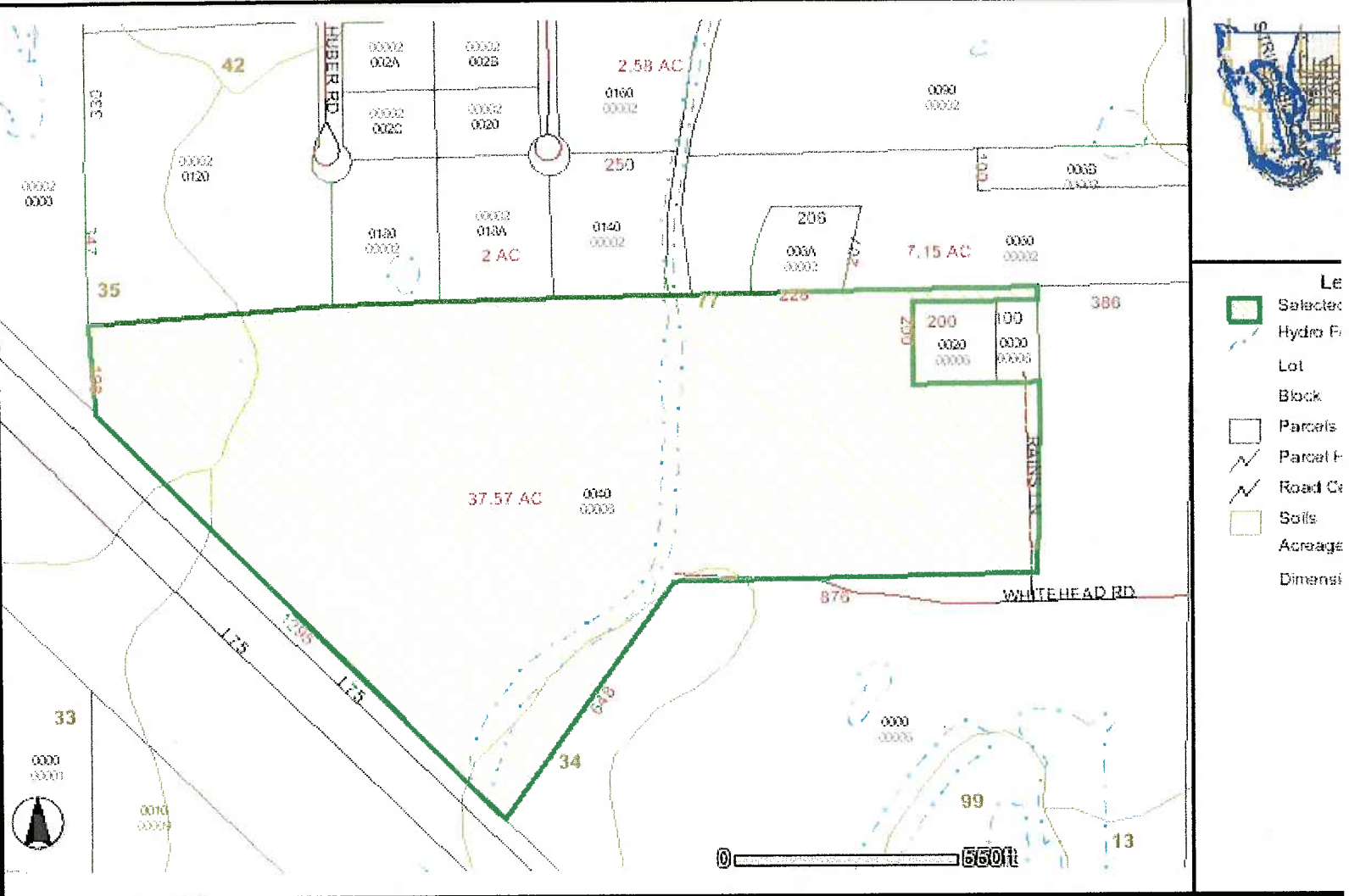
Pineda fine sand, limestone substratum (soil #77)

This soil is poorly drained and found in sloughs. It comprises 88.24% of the property. Natural vegetation consists of maidencane (*Panicum hemitomon*), saw palmetto (*Serenoa repens*), wax myrtle (*Myrica cerifera*), wiregrass (*Aristida stricta*), sedges and slash pine.

Wabasso sand (soil # 35)

This soil is poorly drained and found on flatwoods. It comprises 7.45% of the property. The natural vegetation consists of saw palmetto, cabbage palm, slash pine, and wiregrass.

Figure 2. Soils Map



Malabar fine sand (soil # 34)

This wetland soil is poorly drained and often found in sloughs. It comprises 3.79% of the property. The natural vegetation consists of wiregrass, saw palmetto, slash pine and maidencane.

Oldsmar sand (soil # 33)

This soil is poorly drained and often found on flatwoods. It comprises 0.52% of the property. The natural vegetation consists of wiregrass, saw palmetto, and slash pine.

Listed species

A search for listed species was conducted during the site visit. This consisted of walking parallel transects across the property, and actively examining areas that appear to be suitable habitats (e.g. scanning large pine trees for bald eagle (*Haliaeetus leucocephalus*) nests.

No protected species were observed during the site inspection.

It is possible that the property is utilized by the following listed species:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>	<u>Agency</u>
Bald eagle	<i>Haliaeetus leucocephalus</i>	T	(GFC,FWS)
Florida panther	<i>Felis concolor coryi</i>	E	(GFC,FWS)
Florida black bear	<i>Ursus americanus floridanus</i>	T	(GFC)
Eastern indigo snake	<i>Drymarchon corais couperi</i>	T	(FWS)
Big Cypress fox squirrel	<i>Sciurus niger avicennia</i>	T	(GFC)
Red-cockaded woodpecker	<i>Picoides borealis</i>	T,E	(GFC,FWS)
Wood stork	<i>Mycteria Americana</i>	E	(FWS)
Little blue heron	<i>Egretta caerulea</i>	SSC	(GFC)
Snowy egret	<i>Egretta thula</i>	SSC	(GFC)
White ibis	<i>Eudocimus albus</i>	SSC	(GFC)

- GFC = Florida Fish and Wildlife Conservation Commission
- FDA = Florida Department of Agriculture and Consumer Services
- FWS = United States Fish and Wildlife Service
- E = Endangered
- T = Threatened
- T(S/A) = Threatened/Similarity of Appearance
- T(E/P) = Threatened/Experimental Population
- SSC = Species of Special Concern
- C = Commercially Exploited

A search of the FWCC database for bald eagle (*Haliaeetus leucocephalus*) nests indicated that none are known in the area. It is possible that eagles would nest on the property due to the fact that there are large open water areas nearby and suitable large slash pine trees. A search for eagles by a qualified ecologist should be undertaken before applying for an Environmental Resource Permit (ERP).

The FWCC Florida's Breeding Bird Atlas indicated no known breeding colonies on the property, and no indications of nesting were observed.

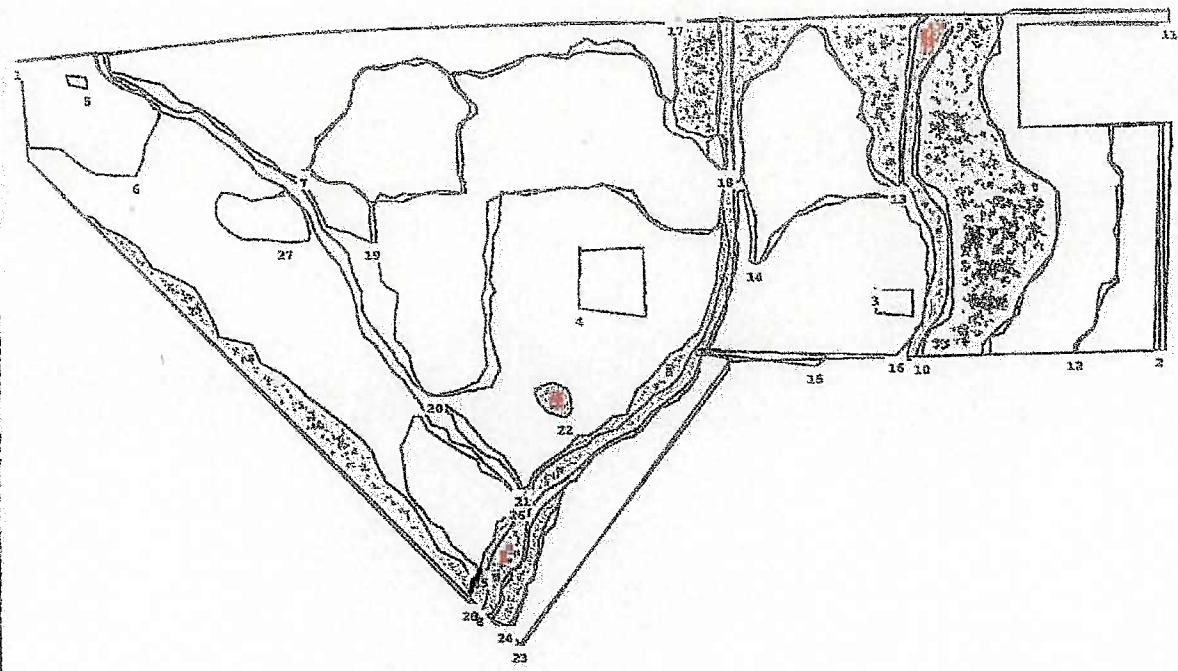
Environmental Permitting Issues and Recommendations

Wetlands and "other surface waters" comprise 5.35+ acres of the property and would be considered jurisdictional by both the state South Florida Water Management District (SFWMD) and the federal U.S. Army Corps of Engineers (COE). Any development in these areas would therefore require a state Environmental Resource Permit (ERP), and a federal Dredge and Fill Permit and associated mitigation. The infestation of Brazilian pepper, java plum and other exotics throughout the property has reduced the quality of the wetlands and therefore would reduce the costs of mitigation required as compared to higher quality wetlands.

Any development plan adjacent to the creeks would require at least a 25 foot buffer zone. On-site mitigation is an alternative to purchasing mitigation credits for on-site impacts. The removal and regular re-treatment of the Brazilian pepper and other exotics combined with the planting of native wetland species would result in wetland restoration credit to offset impacts elsewhere on the property. Preservation of some wetlands and the creek buffers through a conservation easement could be incorporated into a development plan.

A development plan would have to address the potential impacts to listed species such as the Florida panther.

Natural Surroundings LLC would be happy to assist with permitting any development or in creating a mitigation plan for the property.



Jul 22, 2006 Planiseter Anything The Logic Group

Diagram 1. Wetland Map

REFERENCES

- Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. 3rd Ed.
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Appendix A
Digital Photographs

**Rangeland
FLUCCS 300**



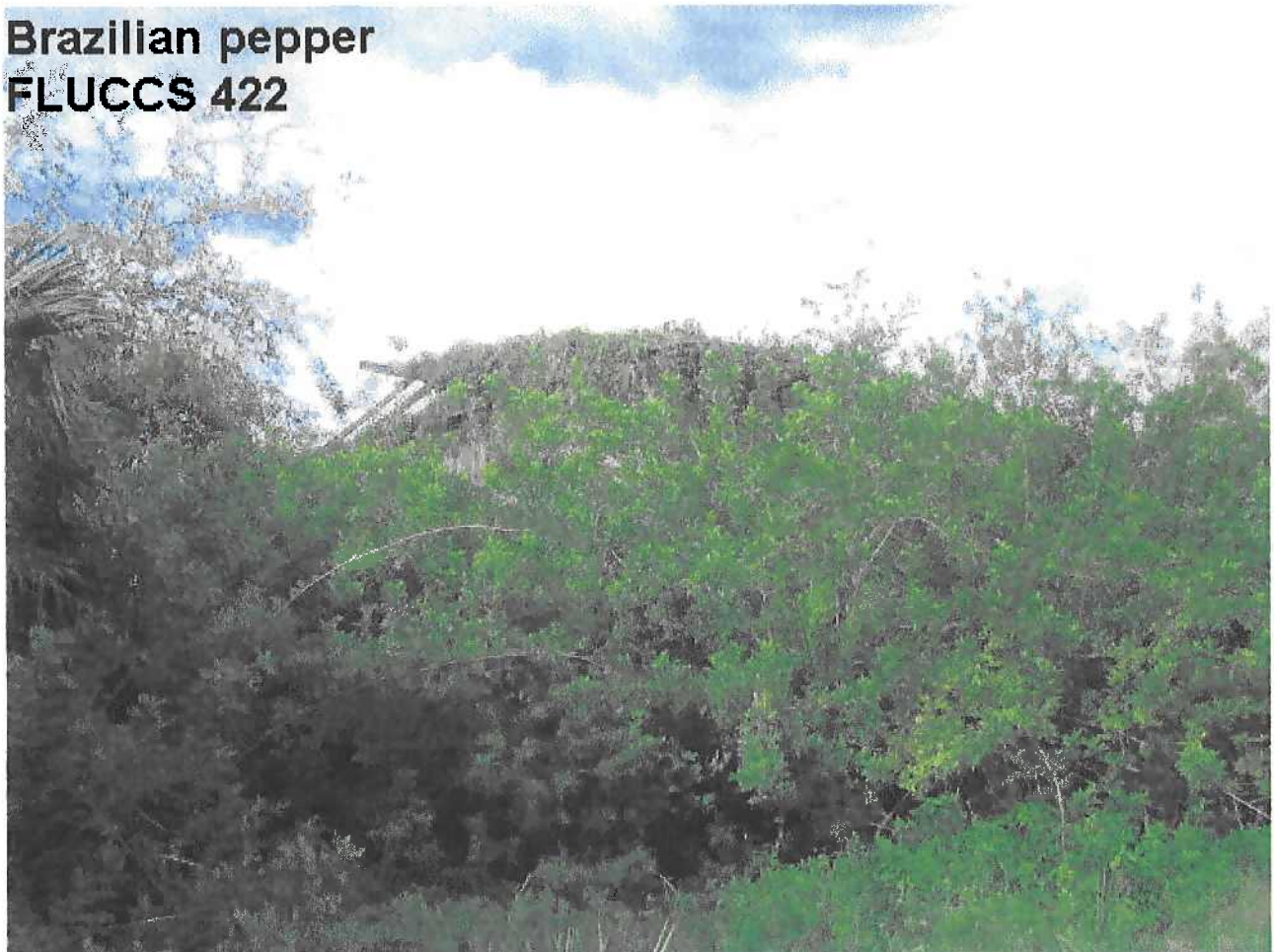
Hardwood-conifer, mixed
FLUCCS 4349



Temperate Hardwoods
FLUCCS 425



Brazilian pepper
FLUCCS 422



**Pond
FLUCCS 524**



**Wetland forested, mixed
FLUCCS 6309**



**Daughtrey Creek
FLUCCS 510**



Bamboo
FLUCCS 243

