

# Hidden Cypress Preserve



*Land Stewardship Plan 2013*

# Hidden Cypress Preserve Land Stewardship Plan

Wellfield Road and Liberty Youth Ranch Way  
Bonita Springs, Florida 34135



Prepared by the Land Stewardship Section  
Lee County Department of Parks and Recreation

Approved by the Lee County Board of County Commissioners: 1/8/2013

## **Acknowledgements**

We would like to thank the following for their assistance in the development of this document: The Conservation 20/20 Land Acquisition and Stewardship Advisory Committee, Cathy Olson, and other Lee County staff for carefully reviewing the Hidden Cypress Preserve Land Stewardship Plan. Also, we thank the Bird Patrol members who have helped and continue to help with our wildlife list for this Preserve.

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## List of Acronyms

ATV	all-terrain vehicle
BSU	Bonita Springs Utilities, Inc.
C20/20	Conservation 20/20
CLASAC	Conservation Lands Acquisition and Stewardship Advisory Committee
CREW	Corkscrew Regional Ecosystem Watershed
DHR	Department of State Division of Historical Resources
DRGR	Density Reduction Groundwater Recharge
ESA	Environmental Site Assessment
FDACS	Florida Department of Agriculture and Consumer Services
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FFS	Florida Forest Service
FGCU	Florida Gulf Coast University
FLEPPC	Florida Exotic Pest Plant Council
FLU	future land use
FNAI	Florida Natural Areas Inventory
FPL	Florida Power & Light
FWC	Florida Fish and Wildlife Conservation Commission
HCP	Hidden Cypress Preserve
IRC	Institute for Regional Conservation
LCDCD	Lee County Department of Community Development
LCDOT	Lee County Department of Transportation
LCPR	Lee County Parks and Recreation
LSOM	Land Stewardship Operations Manual
LSP	Land Stewardship Plan
LiDAR	Light Detecting and Ranging
MU	Management Unit
SFWMD	South Florida Water Management District
STRAP	Section-Township-Range-Area-Block.Lot (Parcel)
USACOE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

## *Vision Statement*

*It is the vision of the Lee County Parks and Recreation Department and the Conservation 20/20 Program to conserve, protect, and restore Hidden Cypress Preserve to a productive, functional, and viable ecosystem. The primary stewardship objective for Hidden Cypress will be to improve the Preserve's ecosystems with exotic plant and animal removal. Implementation of stewardship activities will protect the site's hydrologic features and enhance habitat and foraging opportunities for wildlife while advancing the property's ability to recharge the groundwater aquifer.*

## **I. EXECUTIVE SUMMARY**

Hidden Cypress Preserve (HCP) is located in southern Lee County within Section 13, Township 47 South, Range 25 East, within the northern boundary of the City of Bonita Springs. The Preserve consists of STRAP # 13-47-25-B1-00001.0030 and 13-47-25-B3-00001.0020. The Preserve is accessed from the intersection of Wellfield Road and Liberty Youth Ranch Way (both non-county maintained roads).

Nomination 249-2, now known as Hidden Cypress Preserve, was acquired through the C20/20 Program for a cost of \$6.5 million for 429 acres. This equates to approximately \$15,151 per acre. Nomination 249-2 was purchased in two stages. On November 20, 2009 292.45 acres were closed upon for \$4,435,000 and the final 136 acres closed on March 10, 2010 for \$2,065,000. The Conservation 20/20 Program was established in 1996 after Lee County voters approved a referendum that increased property taxes by up to 0.5 mil for the purpose of purchasing and protecting environmentally sensitive lands.

This Conservation 20/20 Preserve totals approximately 429 acres. A portion of the Preserve's western boundary is adjacent to Interstate 75. The remaining western boundary is bordered by Liberty Youth Ranch, a long-term residential children's home. The northern boundary is adjacent to Edison Farms, a privately owned property which is currently undeveloped property. The east boundary is also adjacent to undeveloped land owned by Bonita Springs Utilities, although residential housing is less than a quarter mile further to the east. The southern boundary is adjacent to additional land owned and used by Bonita Springs Utilities, providing water for residents of Bonita Springs.

The natural elevations range from 16.4 feet above sea level along the eastern edge and slope in a general westerly direction to 8.7 feet above sea level at an interior centralized pond.

There are seven different soil types found at the Preserve. The soils within the Preserve have all been identified as having severe physical limitations; either wetness or being too sandy. Boca Fine Sand and Felda Fine Sand, Depressional each cover 20% of HCP, with the remaining five types covering 60% of the Preserve.

HCP is within the Imperial River West sub basin of the South Florida Water Management District's Lower West Coast Region. The Preserve lies in the Estero Bay Watershed.

Hydrological alterations have been made on and directly adjacent to HCP that affect the natural sheet flow across the lands. The existing ditches, berms, swales, borrow pond and cattle wells all influence the water flow on the site by

either interrupting sheet flow or holding water for extended periods in some areas, while excessively draining other areas.

HCP contains a combination of wetland and upland communities that serve as important habitat for a variety of birds, mammals, reptiles and amphibians. The Preserve consists of fourteen natural or altered plant communities described by the Florida Natural Areas Inventory. While disturbed strand swamp and disturbed wet flatwoods are the most common plant communities; approximately 19% of the plant communities are altered landcover types which are typically created by previous land clearing activities, invasive exotic plant infestations resulting in monocultures and/or man-made ditches, roads or cow wells. Another 60% of the Preserve has been categorized as disturbed communities, primarily due to an abundance of invasive exotic species, lack of fire or hydrologic changes. Nearly 95% of HCP is classified as wetlands.

The Preserve remained relatively unchanged through 1968 when ditches were created across it. As time went on, more jeep trails and land clearing occurred on and adjacent to the Preserve. By 1986 Interstate 75 and related borrow ponds were built. Between 2006 and 2007 a wildfire burned across substantial portions of Hidden Cypress Preserve and Division of Forestry (now known as Florida Forest Service) installed multiple plowlines in an attempt to contain the fire.

The Preserve remains covered in water for over 8 months of the year. This, along with limited access, sensitive wetlands, relative proximity to other natural areas and public safety concerns, means no public amenities will be provided. As with all Conservation 20/20 preserves, groups requesting guided walks will be accommodated by staff as time and site conditions allow.

The goal of this land stewardship plan is to identify Preserve resources, develop strategies to protect the resources and implement restoration activities to restore HCP to a productive, functional and viable ecosystem while ensuring that the Preserve will be managed in accordance with Lee County Parks and Recreation's Land Stewardship Operations Manual.

Restoration and management activities at HCP will focus on controlling invasive exotic plant and animal species, protecting listed species, reducing pine density, removing debris, and enhancing wildlife habitat. A Management Action Plan outlines restoration and stewardship goals. This plan outlines these goals and strategies, explains how the goals will be accomplished, and provides a timetable for completion. Any future additions to the Preserve will be managed similarly to this land stewardship plan. This plan will be revised in ten years (2022).

## II. INTRODUCTION

Nomination 249-2, now known as Hidden Cypress Preserve, was acquired through the C20/20 Program for a cost of \$6.5 million for 428 acres. This equates to approximately \$15,151 per acre. Nomination 249-2 was purchased in two stages. On November 20, 2009 292.45 acres were closed upon for \$4,435,000 and the final 136 acres closed on March 10, 2010 for \$2,065,000. The Preserve is located in southern Lee County within Section 13, Township 47 South, Range 25 East, within the northern boundary of the City of Bonita Springs. The Preserve consists of STRAP # 13-47-25-B1-00001.0030 and 13-47-25-B3-00001.0020. The preserve is accessed from the intersection of Wellfield Road and Liberty Youth Ranch Way (both non-county maintained roads).

HCP contains a combination of wetland and upland communities that serve as important habitat for a variety of birds, mammals, reptiles and amphibians. The Preserve consists of fourteen natural or altered plant communities described by the Florida Natural Areas Inventory. Strand swamp and wet flatwoods are the most common plant communities. Nearly 95% of HCP is classified as wetlands.

HCP contains diverse wetland communities that serve as important habitat for a variety of wildlife. Several listed species utilize the Preserve, including limpkin (*Aramus guarauna*), roseate spoonbills (*Ajaia ajaja*) and state and federally endangered wood storks (*Mycteria americana*). The wildlife and overall ecosystem will benefit from enhancement of plant communities through invasive exotic plant removal/control, pine tree thinning and restoration of an essential fire interval with prescribed fire management.

The purpose of this stewardship plan is to define conservation goals for HCP that will address the above concerns. It will serve as a guide for Lee County's Department of Parks and Recreation (LCPR) to use best management practices to ensure proper stewardship and protection of the Preserve. It also serves as a reference guide because of the extensive field studies and research of scientific literature and historic records conducted by C20/20 staff that help to explain the Preserve's ecosystem functions, its natural history and its influences from human use.

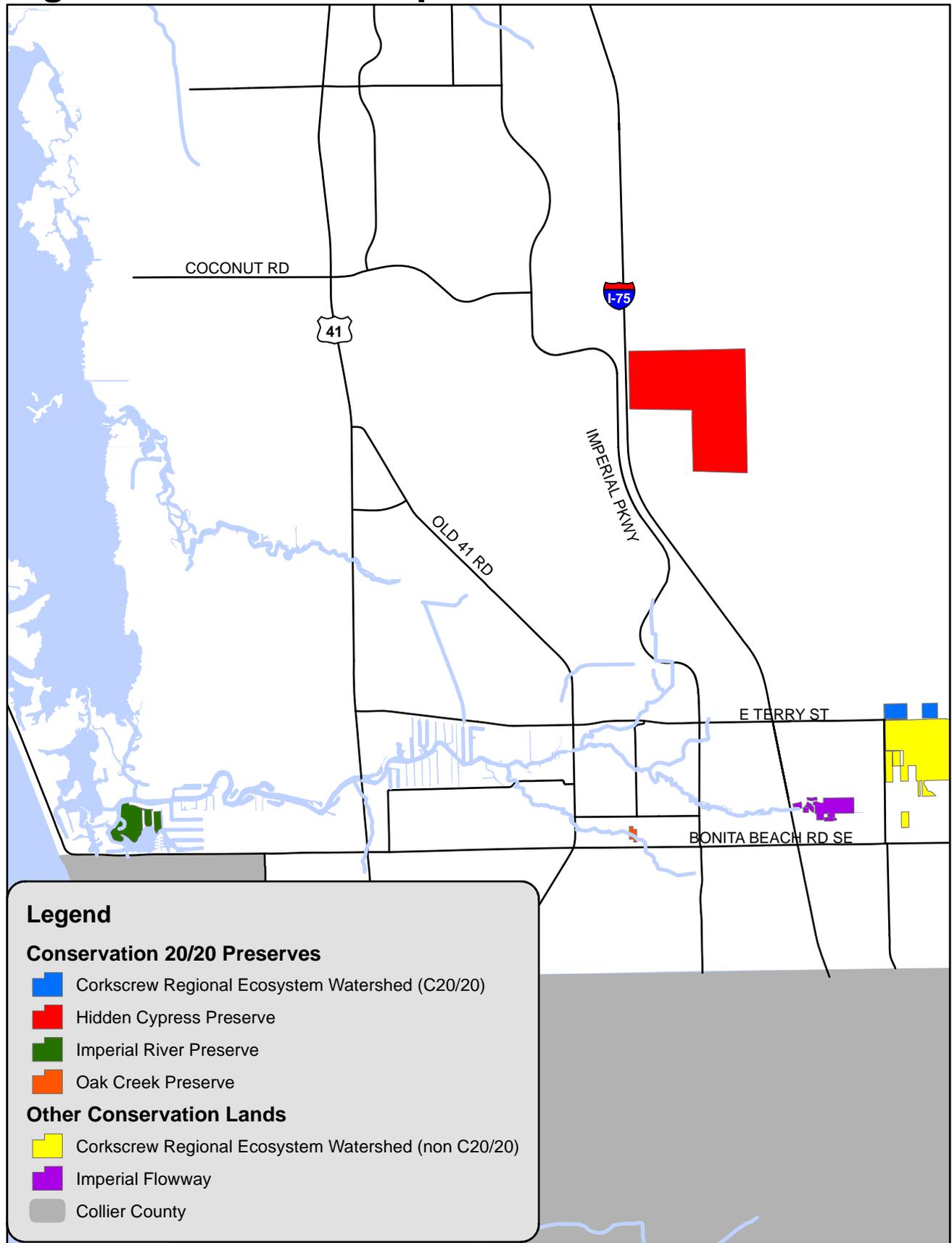
## III. LOCATION AND SITE DESCRIPTION

HCP is located in southern Lee County within Section 13, Township 47 South, Range 25 East, on the northern boundary of the City of Bonita Springs. The Preserve consists of STRAP # 13-47-25-B1-00001.0030 and 13-47-25-B3-00001.0020. HCP is accessed from the intersection of Wellfield Road and Liberty Youth Ranch Way (both non-county maintained roads).

A portion of the Preserve's western boundary is adjacent to Interstate 75. The remaining western boundary is bordered by Liberty Youth Ranch, a long-term residential children's home. The northern boundary is adjacent to Edison Farms, a privately owned property which is currently undeveloped property. The east boundary is also adjacent to undeveloped land owned by Bonita Springs Utilities, although residential housing is less than a quarter mile further to the east. The southern boundary is adjacent to additional land owned and used by Bonita Springs Utilities, providing water for residents of Bonita Springs.

The Preserve is approximately 430 acres in size. It contains 14 plant communities, a mosaic of both human-altered and natural plant communities; dominant areas are cypress and wet flatwoods. Approximately 19% of the plant communities are designated as "disturbed," typically due to land clearing activities, invasive exotic plant infestations and/or changes in the natural drainage patterns. Figure 1 shows HCP's location in Lee County while Figure 2 identifies the boundaries of BTP in a 2012 aerial photograph.

# Figure 1: Location Map



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

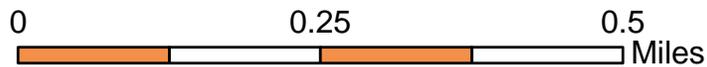
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Map Prepared on: 04/03/2012, by ljewell@leegov.com

# Figure 2: 2012 Aerial



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 04/03/2012, by ljewell@leegov.com

## **IV. NATURAL RESOURCES DESCRIPTION**

### **A. Physical Resources**

#### *i. Climate*

General information on the climate of southwest Florida is located in the Land Stewardship Operations Manual's (LSOM) Land Stewardship Plan Development and Supplemental Information section.

#### *ii. Geology*

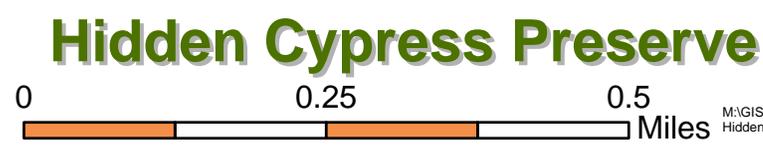
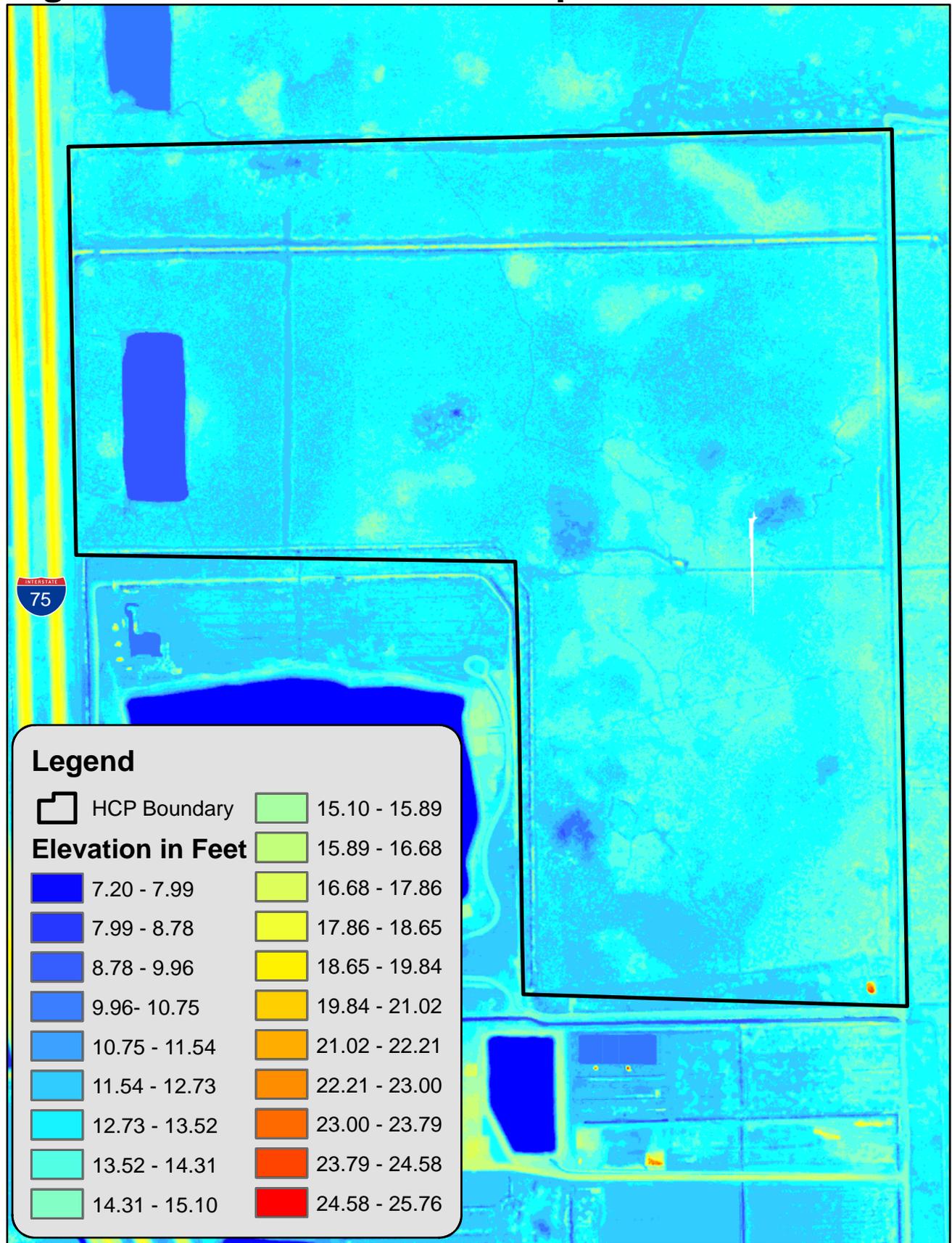
Specific information on the geologic features such as physiographic regions, formations and maps can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

#### *iii. Topography*

Natural elevations at HCP range from 16.4' above sea level along the eastern edge and slope in a general westerly direction to 8.7' above sea level at an interior centralized pond. Man-made features at HCP are scattered and include ditches, berms, a borrow pond, cow wells, and trails associated with historic hunting activities. Man-made elevation ranges from the large excavated pond (west) at 9.6' above sea level (at the surface), to an interior berm (northern location, running west-to-east) at 17.3' above sea level, and to a spoil pile at 25.1' in the southeast corner. The general elevation for the entire Preserve ranges from 11'-14' and it typically stays wet for eight-to-ten months of the year. Exterior topographic features include I-75 (west), Liberty Youth Ranch Way, and an improved dirt road (east) which act as elevated berms that obstruct storm water flow way direction.

The following topographic map (Figure 3) uses light detecting and ranging (LiDAR) data, which is an optical remote sensing technology that measures properties of scattered light to find range and/or other information of a distant target. This data was flown in 2007 and represents the published 5 foot digital elevation model.

# Figure 3: LiDAR Elevation Map



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

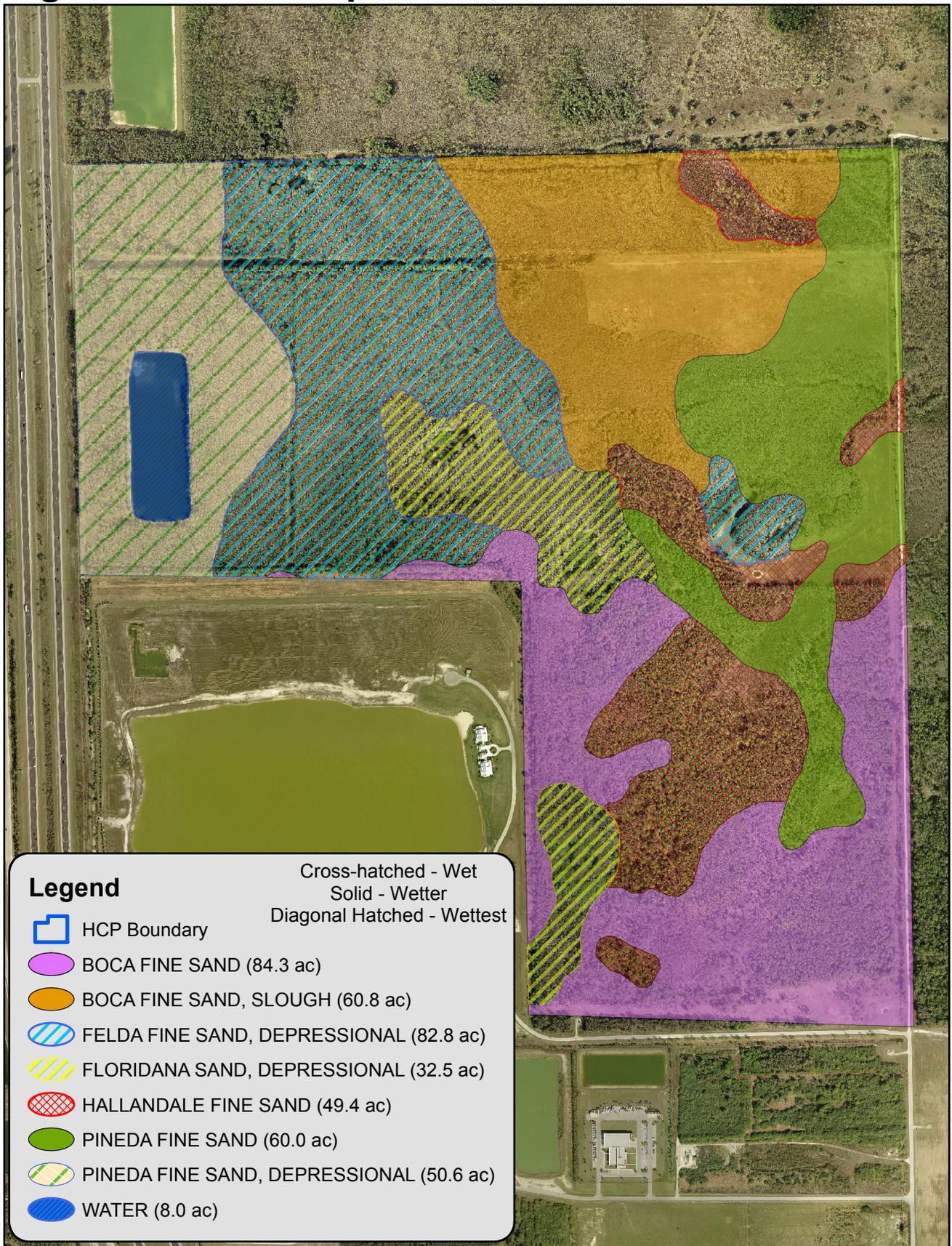
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Map Prepared on: 02/22/2012, by sfumari@leegov.com

#### *iv. Soils*

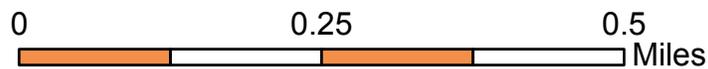
HCP contains a total of seven different soils (Appendix A and Figure 4). Soils play an important role in dictating the location and types of recreation that the Preserve can provide.

Refer to the LSOM's Land Stewardship Plan Development and Supplemental Information section for additional information on soil types and limitation.

# Figure 4: Soils Map



## Hidden Cypress Preserve



This is not a survey.  
 Land Stewardship Staff has prepared this map  
 for informational and planning purposes.

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Map Prepared on: 02/16/2012, by sfurnari@leegov.com

## **v. Hydrologic Components and Watershed**

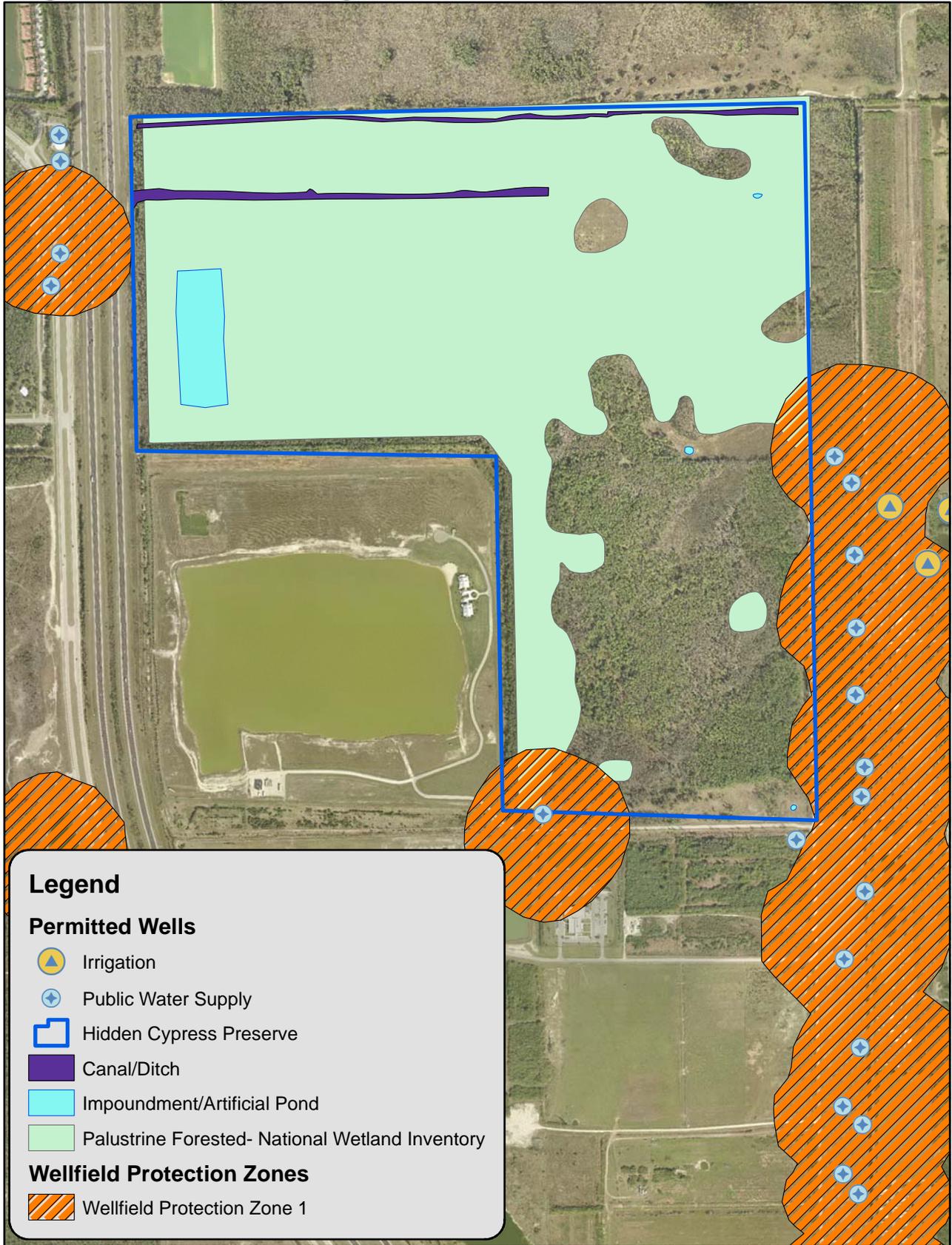
HCP is within the Imperial River West subbasin of the South Florida Water Management District's (SFWMD) Lower West Coast Region (Figure 6). The Preserve lies in the Estero Bay Watershed of both the SFWMD and LCDNR.

Figure 5 shows wellfield protection zones which staff will need to be aware of when planning exotic plant treatments or contracted work. Further information on wellfield protection zones can be found in the Other Legal Constraints section of this LSP.

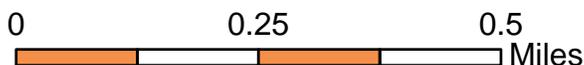
Figure 5 also shows several ditches identified during fieldwork for this LSP. Multiple two-track trails traverse the site and act as shallow ditches. Some ditching may be related to plow line installation in areas where past wildfire activity occurred. The unnatural features will be discussed more fully in the Internal Influences section of this plan.

In 1974 the United States Fish and Wildlife Service (USFWS) directed its Office of Biological Services to conduct an inventory of the nation's wetlands. Wetlands were identified on aerial photography by vegetation, visible water features and geography, and subsequently classified in general accordance with the Classification of Wetlands and Deep Water Habitats of the United States (Cowardin et al. 1979). More information about the different classifications can be found there, or in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

# Figure 5: Hydrologic Features Map



## Hidden Cypress Preserve

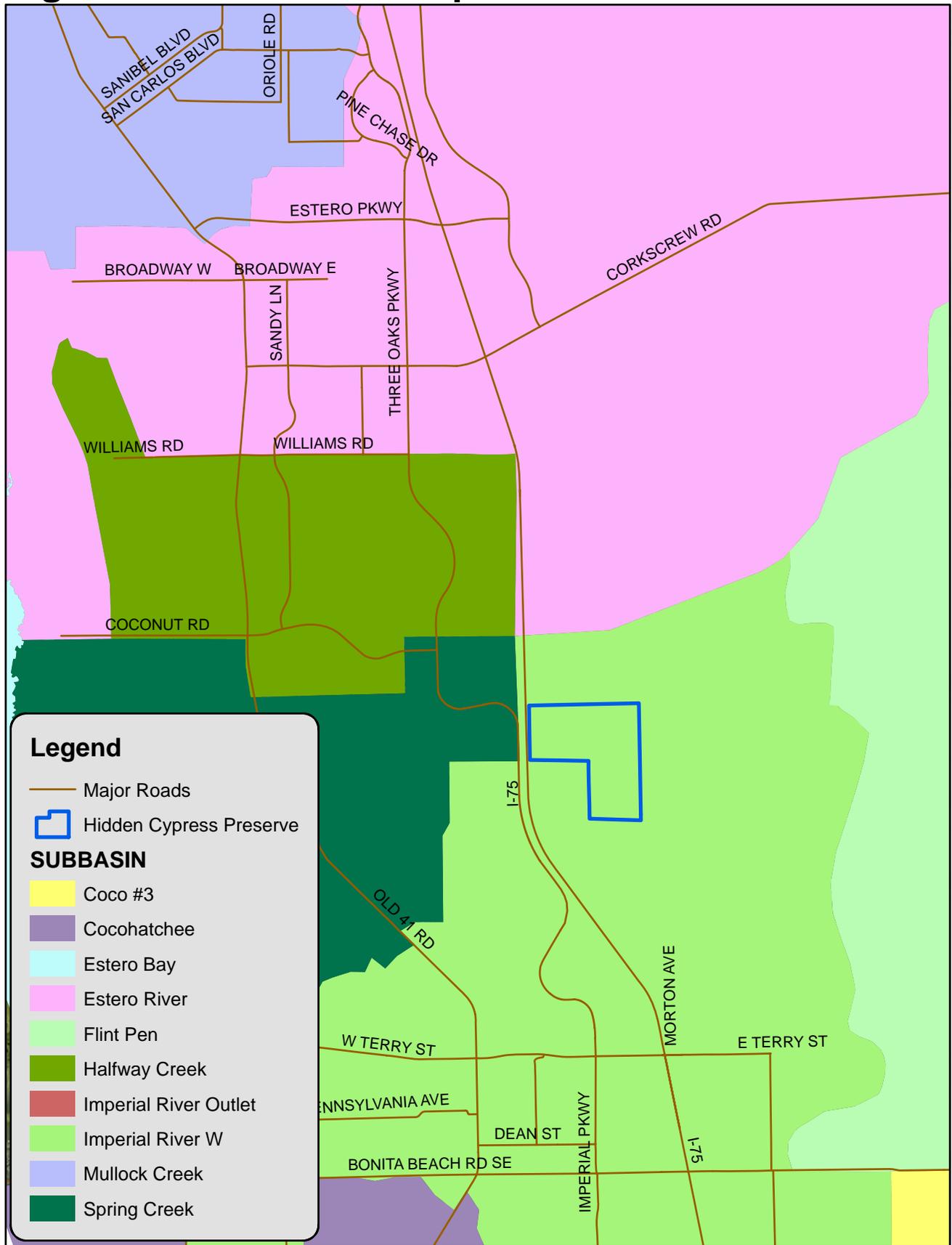


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Map Prepared on: 02/29/2012, by lgreeno@leegov.com

# Figure 6: Watershed Map



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 02/2/2012, by lgreeno@leegov.com

## **B. Biological Resources**

### *i. Ecosystem Function*

Lee County's preserves contain a diversity of plant communities that provide habitat for numerous plant and animal species. The majority of the preserves are not islands of habitat, but are pieces of a larger conservation effort striving to create or maintain a healthy and viable ecosystem.

Refer to the LSOM's Land Stewardship Plan Development section for additional information.

### *ii. Natural Plant Communities*

HCP consists of 14 natural or altered plant communities (Figure 7); the majority of which consists of disturbed strand swamp and disturbed wet flatwoods. Approximately 19% of the plant communities are designated by Florida Natural Areas Inventory (FNAI) as altered landcover types which are typically created by previous land clearing activities, invasive exotic plant infestations resulting in monocultures, and/or man-made ditches, roads, impoundment/artificial ponds or cow wells. Approximately 60% of HCP has been categorized as disturbed communities, primarily due to an abundance of invasive exotic species, lack of fire or hydrologic alterations. The remaining 21% of the HCP plant communities are in an unaltered natural state. Nearly 95% of the site falls into a wetland category. Figure 8 shows the location of the plant communities found at HCP. The plant communities are defined using the Guide to the Natural Communities of Florida (2010) prepared by FNAI.

Acreages and percent of cover for each community are listed below. Descriptions of the plant communities and characteristic animals found within each community, as well as management suggestions can be found in the LSOM. The percent cover is slightly under 100% due to rounding off values. A complete list of plant species identified during site inspections to HCP can be found in Appendix B. This list will be updated on a seasonal basis to identify plants in their inflorescence phase.

**Mesic Hammock** – 1.3 acres, 0.30% coverage of HCP

The disturbance to this community is encroaching invasive exotic plants.

**Wet Flatwoods (Disturbed)** – 76.0 acres, 17.73% coverage of HCP

The disturbance to this community is caused by the hydrological changes that have taken place across the Preserve and invasive exotic plants. Melaleuca (*Melaleuca quinquenervia*), Brazilian pepper (*Schinus terebinthifolius*) and Java

plum (*Syzygium cumini*) are the primary invasive exotic plants causing disturbance. It is a remnant of a larger historical wetland system and a few locations are beginning to transition into mesic flatwoods.

**Mesic Flatwoods (Disturbed) – 3.2 acres, 0.74% coverage of HCP**

This community will need a burn regime established with a 3-5 year rotation to discourage succession into a hardwood-dominated forest, ensuring an open canopy to allow herbs and forbs to thrive as groundcover. Melaleuca and Brazilian pepper are the primary invasive exotic plants causing disturbance and will need to be removed before a burn regime can begin or additional acres of this plant community will be lost.

**Slough Marsh – 1.6 acres, 0.37% coverage of HCP**

There are several small marshes within cypress dome communities. Some invasive plants exist (melaleuca, Brazilian pepper and West Indian marsh grass (*Hymenachne amplexicaulis*)), but these areas also include many native plants such as alligatorflag (*Thalia geniculata*), pickerelweed (*Pontederia cordata*), pond-apple (*Annona glabra*), pop ash (*Fraxinus caroliniana*), Carolina willow (*Salix caroliniana*), and several ferns.

**Slough – 2.7 acres, 0.63% coverage of HCP**

One pop ash slough community is hidden and survives amongst another cypress dominated wetland area. Monstrous alligator scat was noted here and many types of bird groups (raptors, wading, and songbirds) played well together and shared their oasis peacefully. A few scattered exotic plants were noted.

**Dome Swamp – 24.1 acres, 5.62% coverage of HCP**

Several cypress dominated dome swamp communities occur throughout the Preserve and only a few exotic plants have invaded their space.

**Strand Swamp – 60.8 acres, 14.18% coverage of HCP**

Once the highly disturbed areas of strand swamp community are rid of invasive exotic plants, this will be the largest community type on the Preserve. Nearly all areas of this community have some level of exotic plant infestation.

**Strand Swamp (Disturbed) – 178.5 acres, 41.65% coverage of HCP**

The disturbance to this community is invasive exotic plants, a couple of miles of old FFS plow lines, and past wildfires that have allowed the melaleuca tree to gain a stronger foothold. Brazilian pepper, Java plum, caesarweed (*Urena*

*lobata*), and cogongrass (*Imperata cylindrica*) were noted in patches along the old plow line.

**Swamp Lake** - 0.9 acres, 0.21% coverage of HCP

One small swamp lake remains and is located within a dome swamp community near the center of the Preserve. Only during a drought does the water disappear from all areas of the lake. The deepest part appears to be at its north end.

**Altered Landcover Types:**

**Clearing** – 46.1 acres, 10.75% coverage of HCP

There are several areas on the Preserve that are considered clearings associated with past uses and/or management goals. Besides melaleuca infestation and one linear area being used as a trail, most of the locations are showing signs of transitioning into wet prairies.

**Spoil Area** – 15.2 acres, 3.54% coverage of HCP

Spoil areas on this Preserve are remnant berms created from past adjacent agricultural ditching, roadway or linear ditch construction. Melaleuca and Brazilian pepper are the dominant exotic vegetation. Since there are many existing breaches along these berms, it may not be an essential component to completely remove these features, if hydrological restoration becomes warranted for the area in the future.

**Impoundment/Artificial Pond** – 8.0 acres, 1.86% coverage of HCP

This disturbed plant community contains one large extraction pond (a.k.a. borrow pond) associated with the construction of I-75 and three small cattle ponds (a.k.a. cow wells) along the eastern boundary of the Preserve. A few wading birds, fish and alligators have been noted in the larger pond, while the smaller ponds have amphibians, smaller fish and an occasional wading bird.

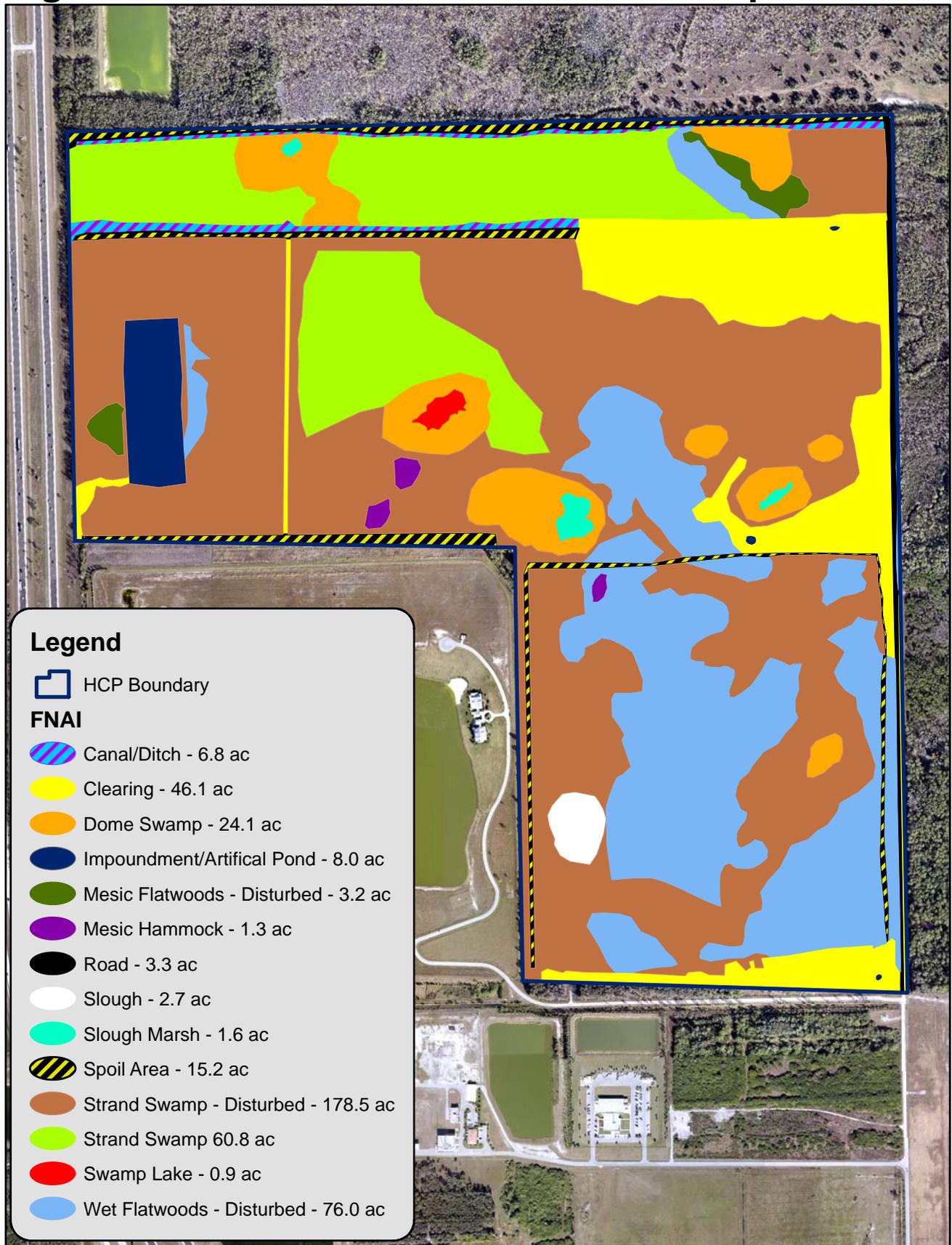
**Canal/Ditch** – 6.8 acres, 1.58% coverage of HCP

Within the Preserve there are a couple of ditches (created for unknown reasons) that run horizontally east-to-west. Besides exotic plants, a couple of locations are deep enough to contain pickerelweed, willow, Jamaica swamp sawgrass (*Cladium jamaicense*), West Indian marsh grass, and other sedges and grasses.

**Road** – 3.3 acres, 0.77% coverage of HCP

The improved dirt road on HCP runs the entire length of the eastern boundary. Besides C20/20 staff, the road is being used by the northern landowner and their representatives (Edison Farms) and Bonita Springs Utilities staff to maintain their water wells along the eastern boundary (off property).

# Figure 7: Natural Plant Communities Map



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 06/12/2012, by sfurnari@leegov.com

### *iii. Fauna*

HCP provides a variety of habitats for wildlife including those that are state and federally listed. Five exotic wildlife species have been documented at the Preserve. Appendix C has the complete list of wildlife documented on the Preserve at the time of writing this LSP; as recorded through staff field work and site inspections as well as the volunteers in Bird Patrol.

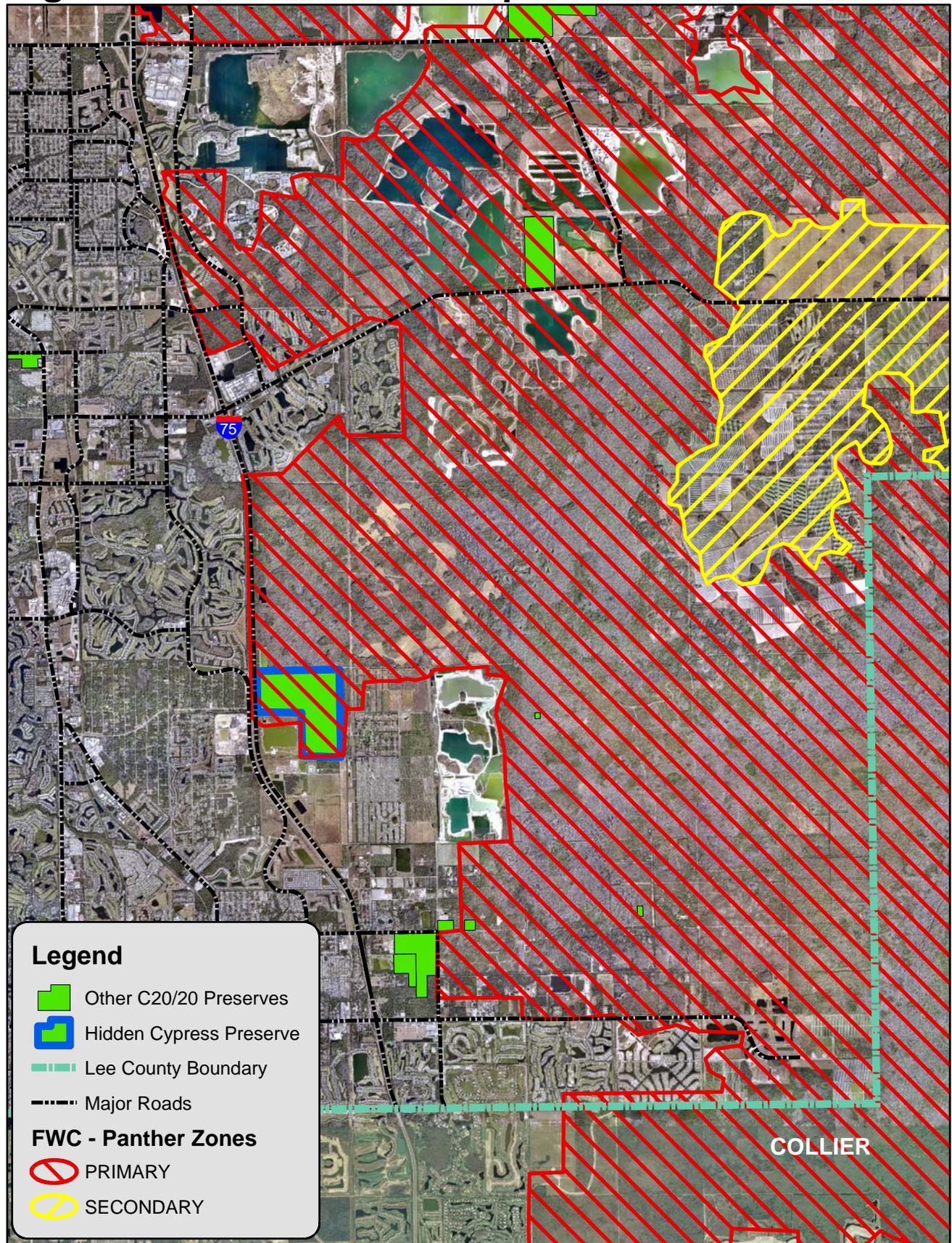
Additional general information about fauna on all C20/20 preserves can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

### *iv. Designated Species*

There are a variety of designated animal and plant species found at HCP. Although all native plant and animal species found on the Preserve have some protection due to the preservation of this property, certain species need additional attention. For stewardship purposes, all plants and animals listed by the USFWS, Florida Fish and Wildlife Conservation Commission (FWC), Florida Department of Agriculture and Consumer Services (FDACS), the Institute for Regional conservation (IRC) and FNAI will be given special consideration when considering recreation and hydrological projects. If additional listed species are documented on the Preserve, they will be added to the lists in Appendices B or C. Additional natural history on these species and stewardship measures to protect them can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

Figure 8 illustrates that HCP falls within the primary zone (designated by FWC) for the Florida panther (*Puma concolor coryi*) and Appendix D shows that radio collared panthers have recently visited the Preserve.

# Figure 8: Panther Zone Map



**Legend**

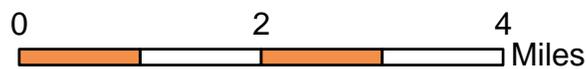
- Other C20/20 Preserves
- Hidden Cypress Preserve
- Lee County Boundary
- Major Roads

**FWC - Panther Zones**

- PRIMARY
- SECONDARY



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 04/25/2012, by sfurnari@leegov.com

*v. Biological Diversity*

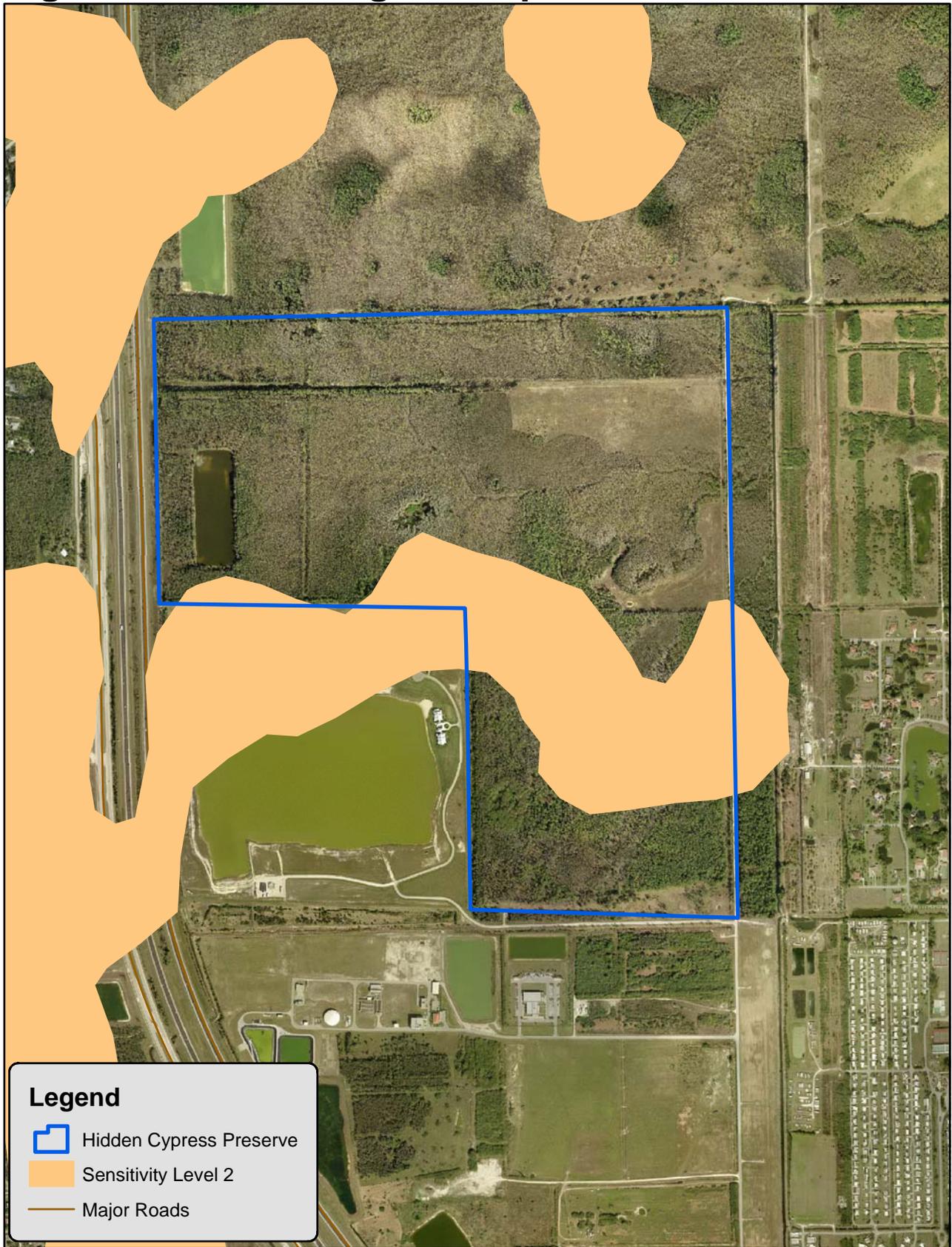
General information on biological diversity and measures used to help promote biological diversity can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

**C. Cultural Resources**

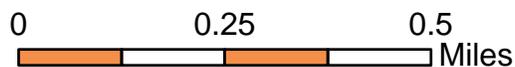
*i. Archaeological Features*

Figure 10 shows the approximately 88 acres (20%) of HCP that falls into Sensitivity Level 2. Staff reviewed three survey documents from the Florida Department of State Division of Historical Resources (DHR) pertaining to the Bonita Springs area and did not find any specific references to the land which makes up HCP. General information on archeological features in Lee County can be found in the LSOM.

**Figure 9: Archaeological Map**



# Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 4/10/2012, by Igreeno@leegov.com

## *ii. Land Use History*

C2020 staff has reviewed available historical aerials; however, only a few representative ones are placed within this Land Stewardship Plan (LSP).

According to interpretations based on aerial photography dating back to 1944 and 1953 (Figure 11 and Figure 12), the property was largely left untouched by humans with just one or two jeep trails crossing through the Preserve's boundaries.

By 1968 (Figure 13), four ditches were installed running east to west and another ditch or trail runs north south across the entire western portion of the property. The western property lines had also been cleared. In the southern portion of the Preserve, a strip of land had been cleared with heavy soil disturbance. The property to the south of the Preserve was cleared in 1968 and drainage ditches and rows of crops have been installed. The existing jeep trails from the 1944 and 1953 aerials continue to run across the property.

The 1972 aerial (Figure 14) shows additional jeep trails in the southern half of the Preserve with some lighter trails traveling up through the cypress to the north. The property to the south and west that is now owned by the Liberty Youth Ranch, had been cleared and ditched by 1972 and is likely being used to grow crops.

The road along the eastern property line shows on the 1979 aerial (Figure 15). This aerial also shows that roads have been installed to the west property boundary while the white dots within the western property boundary show what could be soil testing sites for the future borrow pond.

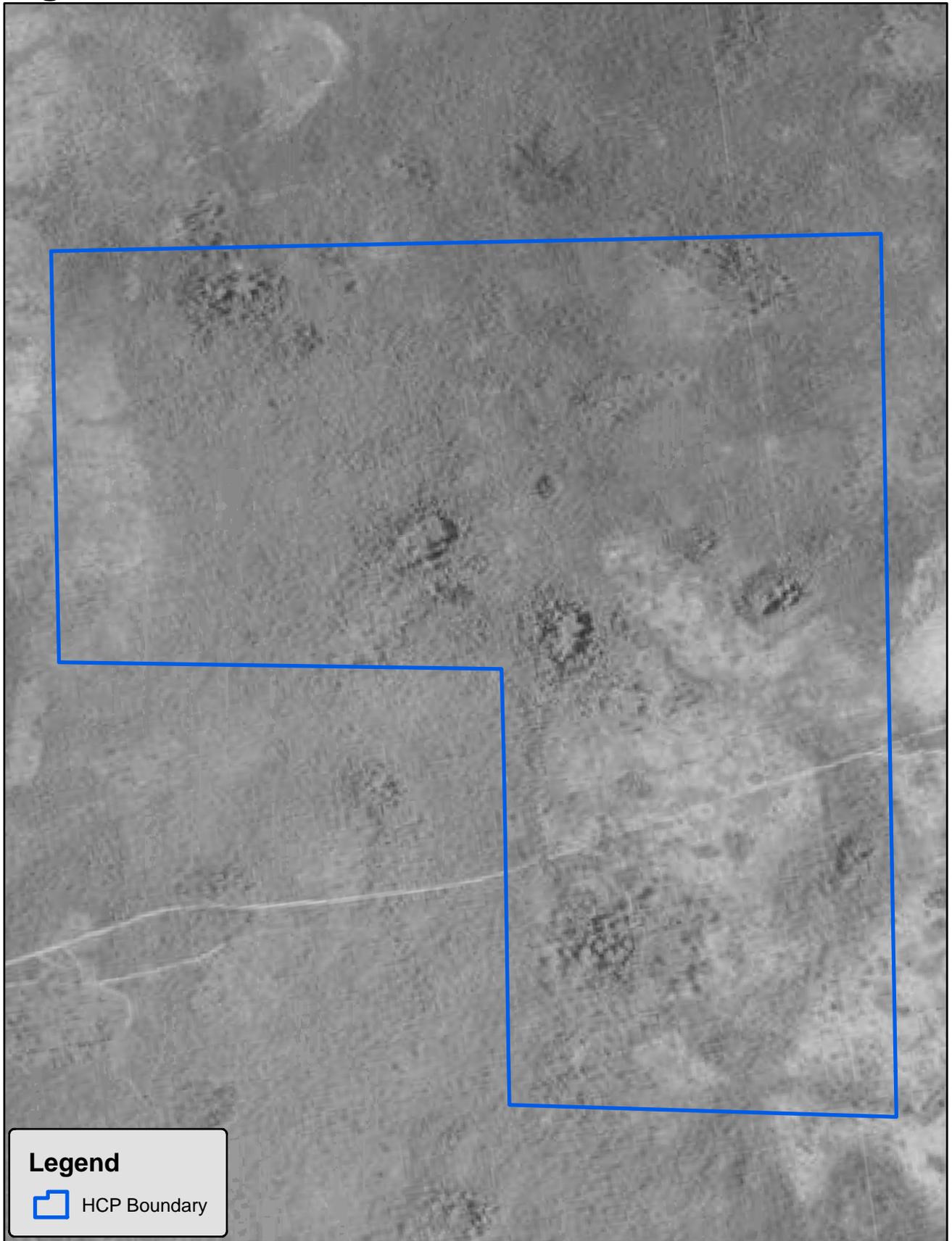
The 1986 aerial (Figure 16) shows Interstate-75 along the property's western boundary for the first time along with a large rectangular borrow pond on the western side of the property and two identical ponds just to the north and south of the property boundary parallel with the Interstate highway.

The most notable change in the 1998 aerials (Figure 17) is the expansion of the borrow pond on what will become the Liberty Youth Ranch as much of the property is excavated.

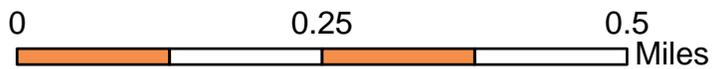
At some point between the 2006 and 2007 aerials (Figure 18), a wildfire burned across some substantial portions of the northern half of what is now the Preserve. The Florida Division of Forestry, now the Florida Forestry Service, put in a series of plow lines which are evident in the 2007 aerials as they attempted to contain the fire.

The 2008 aerial (Figure 19) shows the clearing and soil disturbance associated with creating the fields where the wildfire had recently burned. It is expected that the burned cypress trees were being harvested while creating areas for cattle to graze. Also, in the southeastern corner of the property, some areas that had filled in with vegetation were re-cleared and a cattle pond was installed.

# Figure 11: 1944 Aerial



## Hidden Cypress Preserve



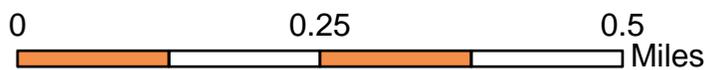
This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 5/11/2012, by jwaller@leegov.com

# Figure 11: 1953 Aerial



## Hidden Cypress Preserve



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Hidden Cypress\2012 LSP\1953\_Aerial.mxd

Map Prepared on: 5/11/2012, by jwaller@leegov.com

**Figure 12: 1968 Aerial**



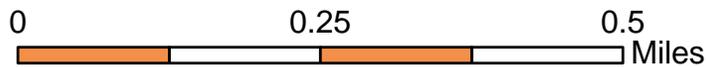
**Legend**

 HCP Boundary



# Hidden Cypress Preserve

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Hidden Cypress\2012 LSP\1968\_Aerial.mxd

Map Prepared on: 05/09/2012, by jwaller@leegov.com

**Figure 13: 1972 Aerial**



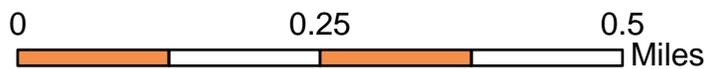
**Legend**

 HCP Boundary



## Hidden Cypress Preserve

This is not a survey.  
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Hidden Cypress\2012 LSP\1972\_Aerial.mxd

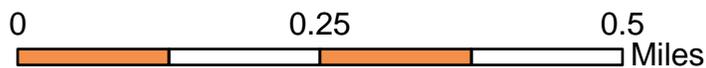
Map Prepared on: 05/09/2012, by jwaller@leegov.com

**Figure 14: 1979 Aerial**



# Hidden Cypress Preserve

This is not a survey.  
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for informational and planning purposes.



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Hidden Cypress\2012 LSP\1979\_Aerial.mxd

Map Prepared on: 05/09/2012, by jwaller@leegov.com

**Figure 15: 1986 Aerial**



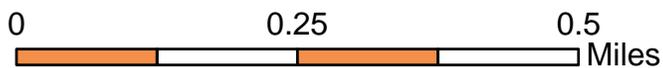
**Legend**

 HCP Boundary



# Hidden Cypress Preserve

This is not a survey.  
Land Stewardship Staff has prepared this map  
for informational and planning purposes.



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Hidden Cypress\2012 LSP\1986\_Aerial.mxd

Map Prepared on: 05/09/2012, by jwaller@leegov.com

Figure 16: 1998 Aerial

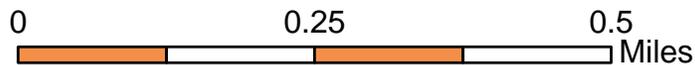


**Legend**

 HCP Boundary



# Hidden Cypress Preserve

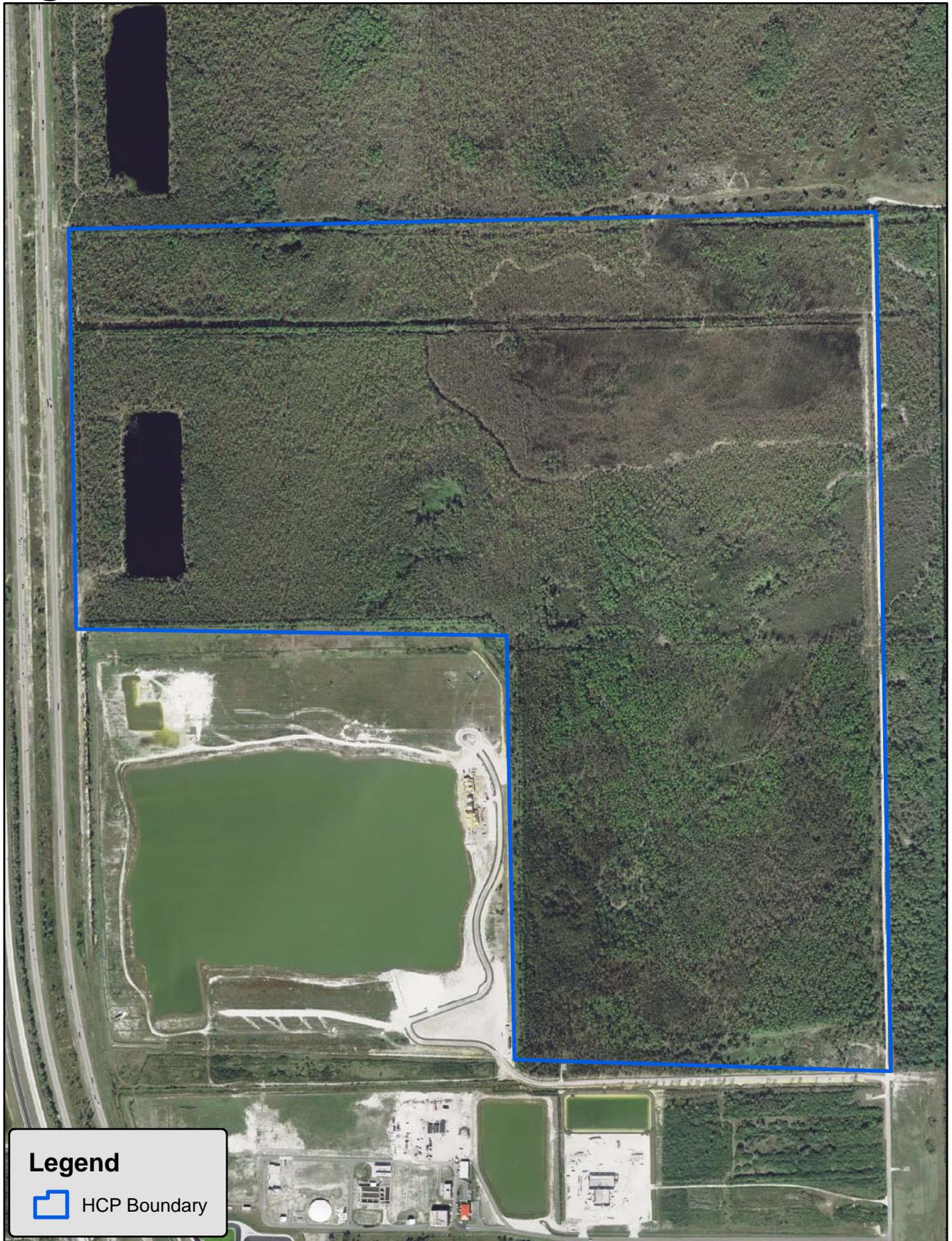


This is not a survey.  
Land Stewardship Staff has prepared this map  
for informational and planning purposes.

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Hidden Cypress\2012 LSP\1998\_Aerial.mxd

Map Prepared on: 04/27/2012, by jwaller@leegov.com

**Figure 17: 2007 Aerial**

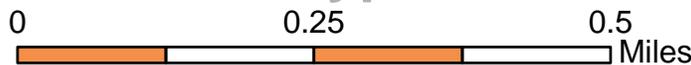


**Legend**

 HCP Boundary



# Hidden Cypress Preserve



This is not a survey.  
Land Stewardship Staff has prepared this map  
for informational and planning purposes.

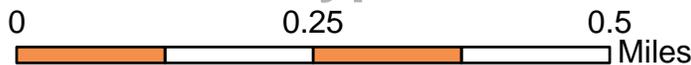
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Hidden Cypress\2012 LSP\2007\_Aerial.mxd

Map Prepared on: 04/27/2012, by jwaller@leegov.com

**Figure 18: 2008 Aerial**



## Hidden Cypress Preserve



This is not a survey.  
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Hidden Cypress\2012 LSP\2008\_Aerial.mxd

Map Prepared on: 04/27/2012, by jwaller@leegov.com

### *iii. Public Interest*

HCP was purchased for the preservation of environmentally sensitive lands, its high probability for listed species, and for the Preserve's groundwater recharging capability.

Staff has received limited requests from the public for access into the Preserve. Those requests were granted in the form of a birding group going onsite to enjoy the Preserve's avian population.

Information concerning this and all C20/20 preserves can be found on the web site along with copies of their associated stewardship plans when available ([www.conservation2020.org](http://www.conservation2020.org)). Staff may mail newsletters when activities are scheduled to take place that the Preserve neighbors may be interested in.

## **V. FACTORS INFLUENCING MANAGEMENT**

### **A. Natural Trends and Disturbances**

Natural trends and disturbances can include hurricanes, flooding, wildfires, occasional freezes, and the pattern of wet and dry seasons. Implementation of the Management Action Plan will take all of these factors and their influence on projects at HCP into consideration. General information on natural trends and disturbances influencing native communities and stewardship at HCP can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

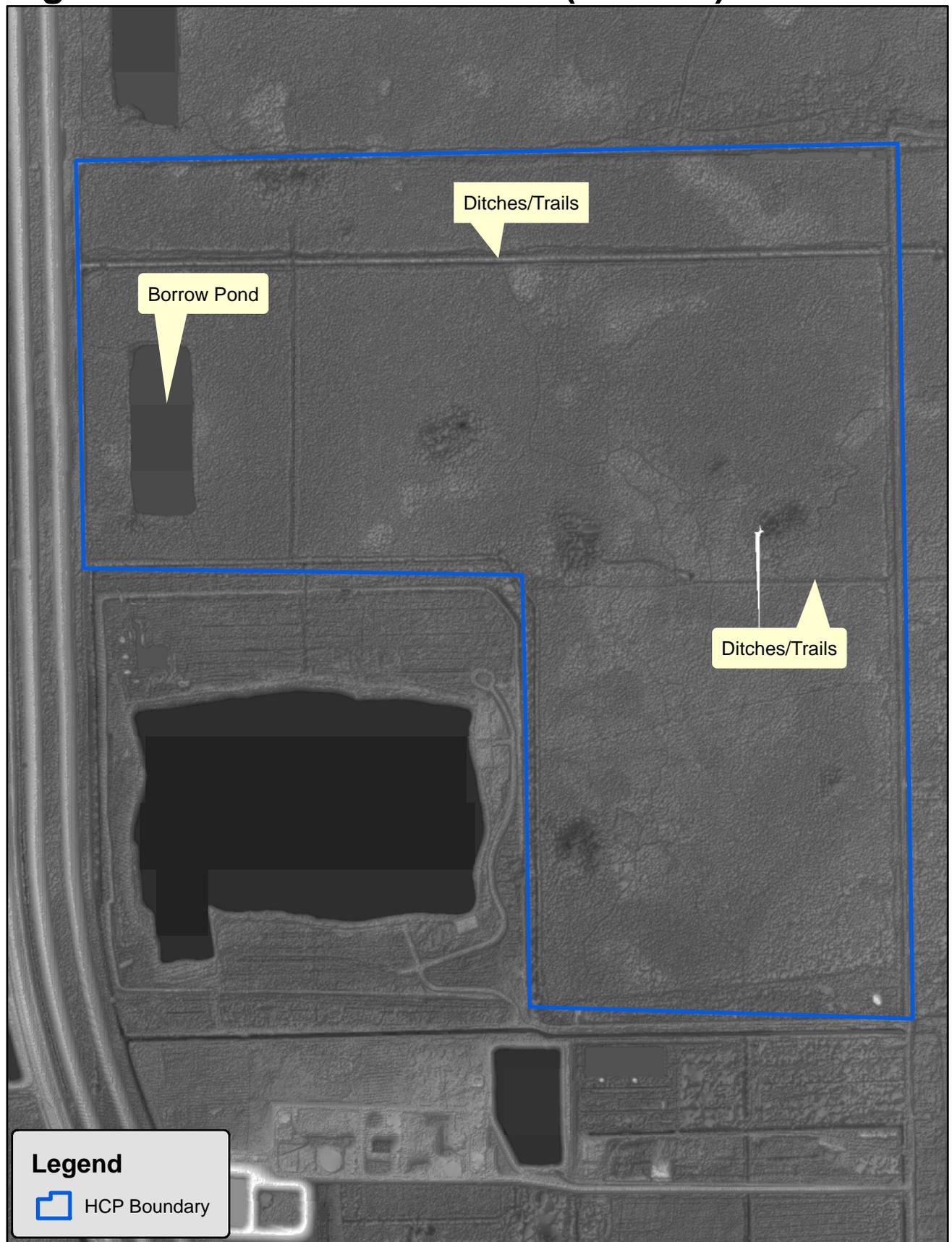
### **B. Internal Influences**

Several anthropogenic activities have impacted HCP. Shallow ditches and associated berms have been installed along many of the property boundaries as well as across the property several of which run in an east/west direction and others in a north/south direction. These shallow clearings seem to be used both for channeling water and for vehicular access, during the dry season, to portions of the property. During construction of I-75, an 8 acre rectangular borrow pond was created on the western side of the property. The fill taken was used to elevate the roadway, however, no culverts or ditching was ever put in place that would bring runoff from the roadway into the pond. Figure 20 is a LiDAR data map which shows the elevation of the ground through vegetation. This map clearly shows all of the berms and ditches as well as the natural wetlands onsite and surrounding the Preserve. The three cow wells also are shown on this map. They were installed, in late 2007, when the previous owner had a cattle lease on

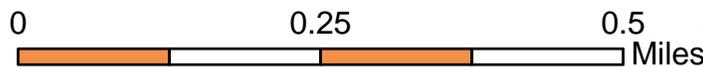
the property for just a few cows. All of the spoil from these wells was either removed or spread out over a portion of the site as no hills are evident nearby.

Figure 21 shows the other internal influences within the Preserve. Bonita Springs Utilities (BSU) has a monitoring well that they access occasionally on the eastern side of the property. All groundwater wells used to pull up drinking water are located to the east and south of the property boundary. A couple of other shallow wells made from PVC pipe are located in the southeastern corner of the property. BSU also has fiber optic cable, water pipes, and sewer pipes running through about 300 feet of the southwestern corner of the Preserve near the interstate. Several large pieces of metal had been dumped onsite many years ago and still remain. Parts of an old vehicle as well as some badly rusted portions of a metal culvert and some PVC pipes are noted on the map and will be removed and properly disposed of. A small cattle pen is located in the southwestern corner of the property near the entrance gate. The interior fencing associated with the pen will be removed. The access road onto the Preserve is also an easement for the Edison Farm's property to the north of the Preserve. This elevated road, which lies completely within the property boundary, runs close to the eastern property line and creates a barrier to sheet flow. Other barriers to proper water flow include the trails and firelines across the property. The firelines and plowlines installed by the Florida Department of Forestry, now the Florida Forestry Service, during the wildfire in an attempt to stop the fire's progression are low areas that channel water and are lined on at least one side with a row of piled up dirt and debris.

# Figure 19: Internal Influences (Ditches)



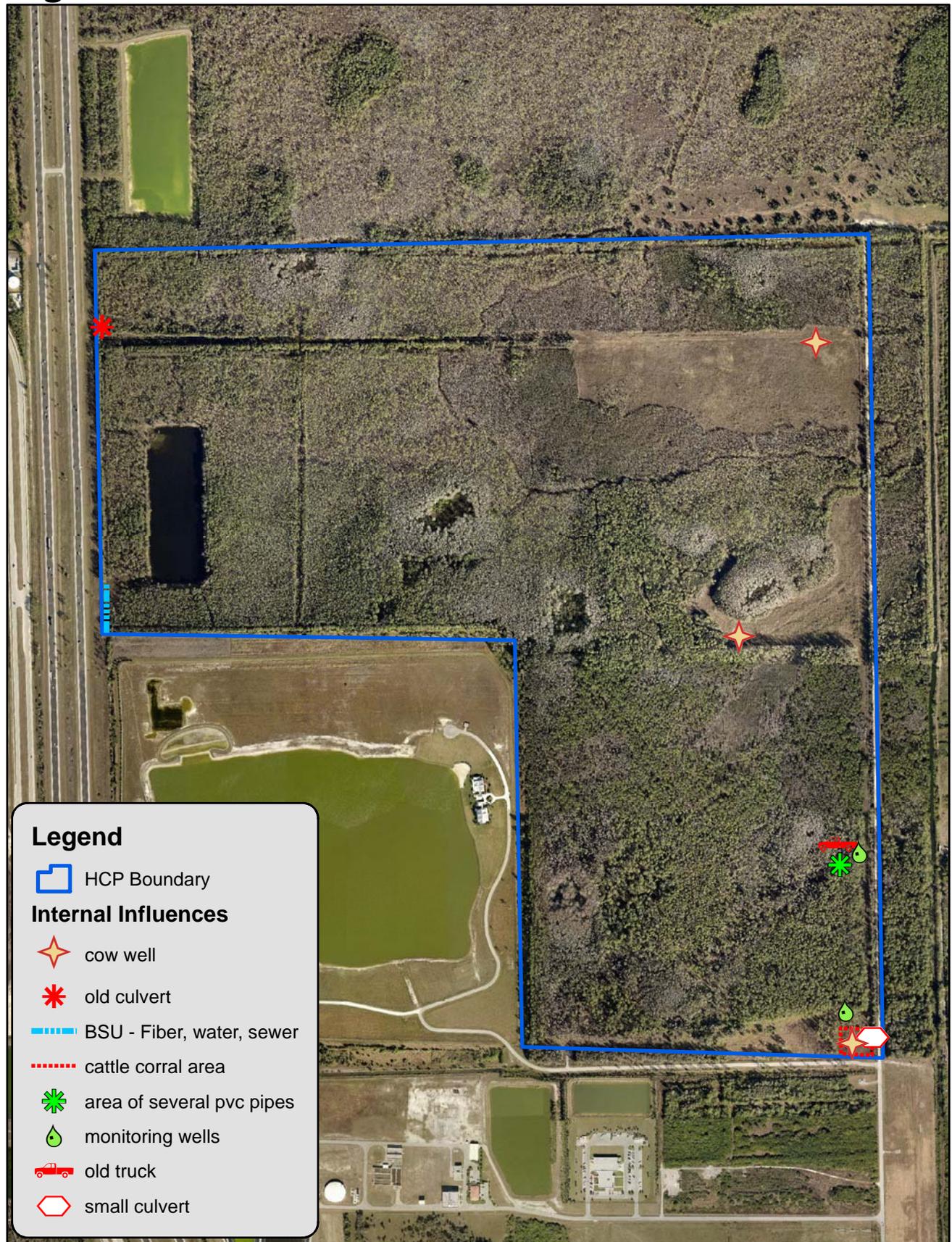
## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 06/13/2012, by jwaller@leegov.com

# Figure 20: Other Internal Influences



**Legend**

- HCP Boundary
- Internal Influences**
- cow well
- old culvert
- BSU - Fiber, water, sewer
- cattle corral area
- area of several pvc pipes
- monitoring wells
- old truck
- small culvert



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 06/13/2012, by jwaller@leegov.com

### **C. External Influences**

Edison Farms is located to the north of HCP. This large parcel has potential to be developed into a community or Development of Regional Impact. Increased growth will likely bring issues of illegal horticultural waste dumping, increased trash, increased demand for water and demand for access to the site. The close proximity of I-75 and other major roads, encroachment of development and infrastructure improvements, conducting ecological prescribed burns will become more of a challenge. Large scale developments also alter sheetflow and could further impact the hydrology of HCP.

Privately owned land surrounding HCP could be utilized in the future for mining of road base rock. Mining operations can be disruptive to wildlife and alter sheetflow and other hydrologic patterns on the Preserve. One mining operation currently exists 1 mile east of HCP.

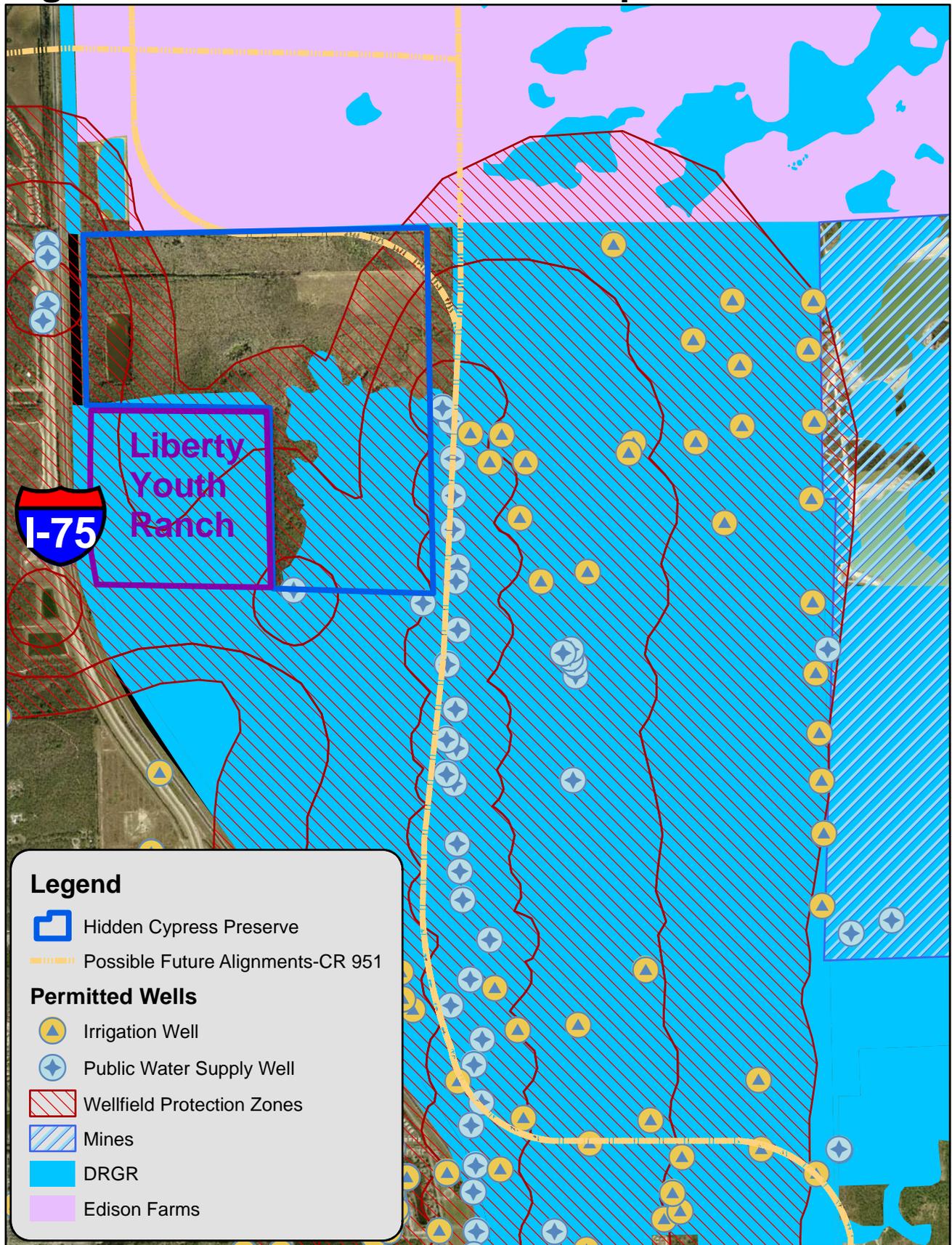
A wellfield for BSU lies adjacent to HCP. BSU's potable water is drawn from the lower Tamiami aquifer through pumps situated along the northern and eastern boundary of HCP. The pumps are accessed through our main gate. Due to the wellfield, portions of HCP fall into the wellfield protection zone which restricts use of certain chemicals. This is discussed in detail in the Legal Constraints section of this plan.

Existing and future roads influence water patterns, create difficulty for wildlife movement and increase wildlife mortality. I-75 runs along the western boundary of HCP and is currently six lanes. Future development and increased use could result in widening to 10 lanes. County Road 951 future alignments could bring it through the northeastern portion of HCP. This road currently is not funded or scheduled but the alignment proposals exist.

Liberty Youth Ranch shares two boundary lines with HCP. This organization should be contacted whenever large scale management activities are taking place.

The external influences that affect HCP are shown on Figure 22.

# Figure 21: External Influences Map



**Legend**

- Hidden Cypress Preserve
- Possible Future Alignments-CR 951

**Permitted Wells**

- Irrigation Well
- Public Water Supply Well
- Wellfield Protection Zones
- Mines
- DRGR
- Edison Farms



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 4/10/2012, by lgreeno@leegov.com

## **D. Legal Obligations and Constraints**

### *i. Permitting*

Land stewardship activities at HCP may involve obtaining permits from regulatory agencies. Any proposed hydrologic improvements to the site may require obtaining permits from the Florida Department of Environmental Protection (FDEP), the U.S. Army Corps of Engineers (USACOE) and SFWMD. Hydrological and/or habitat restoration projects requiring heavy equipment or tree removal will require notification to the Lee County Department of Community Development (LCDCD). Burn authorization from the Florida Forest Service (FFS) is required for all prescribed burns conducted on HCP.

### *ii. Other Legal Constraints*

Although not necessarily a constraint, HCP is located within the City of Bonita Springs. Other city ordinances, codes, permits, and/or plans may pertain to this property besides the usual restrictions staff is used to adhering to; therefore, contacting city staff to ask questions concerning restoration activities will be needed before beginning work.

Prior to the acquisition of the property, there was an active cattle lease. Before closing, staff reviewed the property and it was determined that the exceptionally wet site didn't warrant a cattle lease, so the lease was terminated at closing.

The legal description for the acquired parcels only identified easements to gain legal access onto the property. In researching the title documents and reviewing the boundary survey for HCP, staff discovered several other recorded easements that affect the Preserve.

There is a recorded 60' ingress/egress (roadway) easement along the east boundary that was granted for the Bonita Springs Utility, Inc. It stipulates, except for the Grantor (property owner) and Grantee (BSU), it ends 100' south of the north line and is not for public use.

Book 1300, Page 2137:

Grantor does further give and grant unto Grantee a non-exclusive easement for ingress and egress to such property, 60 feet in width which shall run North and South along the West side of such property; however, the North 100 feet of such easement shall be limited to the exclusive use of Grantor and Grantee, their heirs, successors and assigns, and may not be converted to a public use without written consent of Grantor.

Edison Farms' owners and their representatives regularly use this roadway without legal access. Appendix E is the letter requesting proof of their right to use the roadway. The response to this letter was that they held no such legal right. Therefore, Lee County and Conservation 20/20 staff have drafted a one

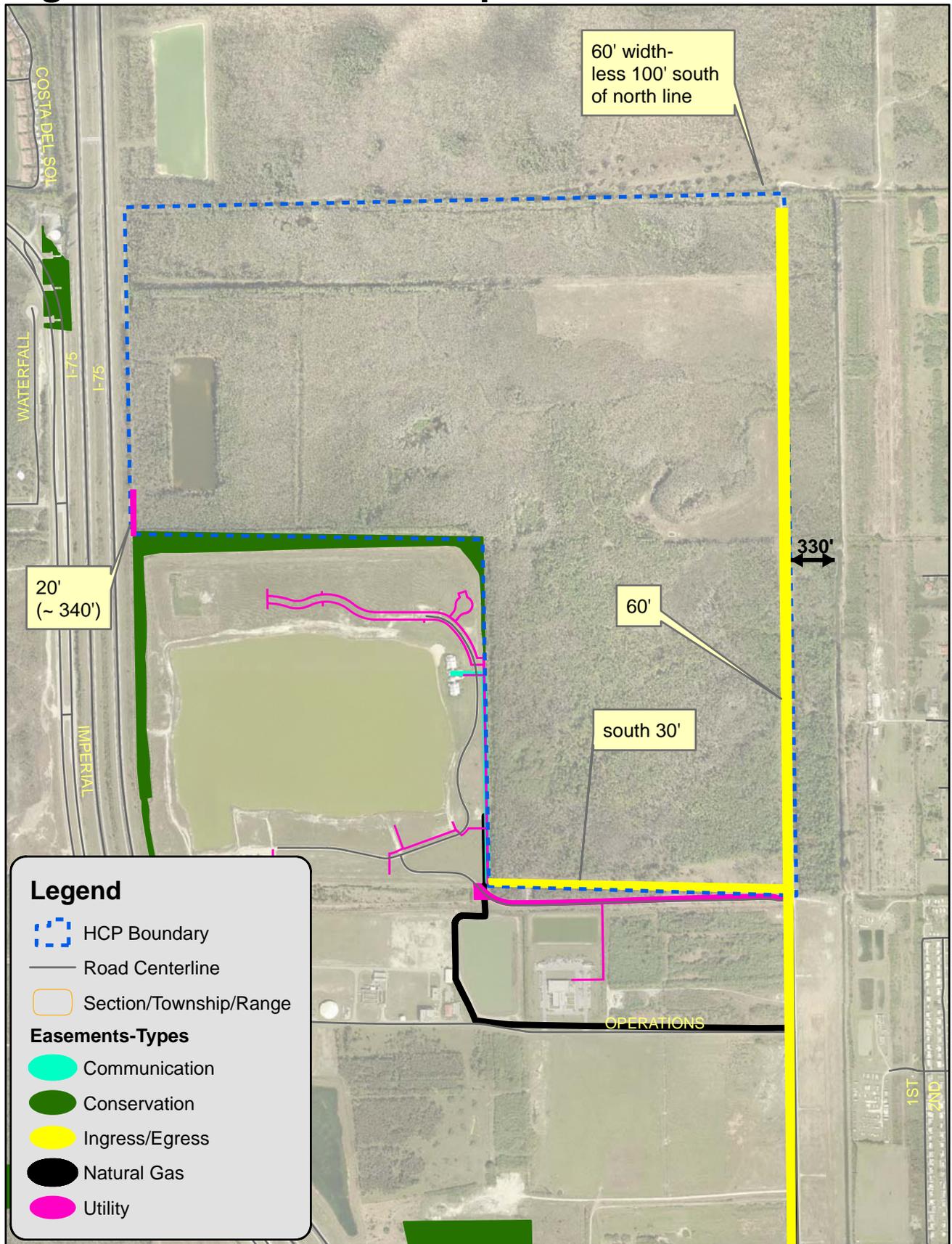
license that would allow Edison Farms' representatives to use this access. Staff feels that this will not be detrimental to the property and that it will not restrict the ability to conduct any land management on the Preserve. Conservation 20/20 staff will be able to void or not renew the license for any reason and at any time. As of the finalization of this edition of this land stewardship plan, the license is in the process of being approved and signed by the representatives of Edison Farms.

There is a 20' wide utility easement that was granted to Bonita Springs Utilities, Inc. in the southwest corner of the Preserve, next to I-75, that was granted by the former landowners. During field work for this plan, staff observed the installed/marked utilities (sewer, fiber optics, water) on the property. An easements map (Figure 23) illustrates known easements on and directly adjacent to the Preserve, which may influence future stewardship activities.

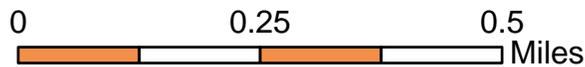
In 2004, a Cultural Resource Assessment Survey was performed for Florida Department of Transportation (FDOT, I-75) to review several locations along the interstate corridor for adding storm water drainage ponds. This site's existing pond was evaluated for the roadway expansion project to possibly create a conveyance easement, and it was not selected.

Lee County's Wellfield Protection Ordinance 07-35 (amended 95-01) establishes protection for the "existing public potable water supply wells from the potentially irreversible and adverse effects of bacterial and chemical contamination from abandoned wells and to control the storage, handling and use of hazardous or toxic substances within certain distance from wellfields." This ordinance applies to all abandoned wells and areas surrounding a wellfield and designated as wellfield protection zones. With the exception of extreme northern areas, the majority (72 percent) of the Preserve falls within the Wellfield Protection Zone (see Figure 22). Section 14-213 of Ordinance 07-35 delineates the specific regulated substances that are only to be used in limited quantities, if at all, in these protection zones and cannot be stored within these zones. It is unlikely that any of these chemicals (restricted use pesticides, petroleum-based products, etc.) would be used for stewardship activities at the Preserve. However, the Ordinance does provide a special exemption for the application of herbicides in recreation and aquatic weed control activities as long as certain guidelines (Section 14-209b) are followed. Contractors will be advised of the protection zone and will not be allowed to store any regulated substances (which includes petroleum based products) in the area.

# Figure 22: Easements Map



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

M:\GISLAYERS\Projects\Parks\_Rec\C2020\Hidden Cypress\2012 LSP\Easements.mxd

Map Prepared on: 04/18/2012, by sfurnari@leegov.com

### *iii. Relationship to Other Plans*

The Lee Plan, Lee County's comprehensive plan, is written to depict Lee County as it will appear in the year 2020. Several themes have been identified as having "great importance as Lee County approaches the planning horizon" (LCDCD 2010). These themes are:

- The growth patterns of the county will continue to be dictated by the Future Land Use map.
- The continued protection of the county's natural resource base.
- The diversification of the county's traditional economic base.
- The expansion of cultural, educational and recreational opportunities.
- A significant expansion in the county's physical and social infrastructure.

The entire Lee Plan can be found on the Internet at: [www.leegov.com/gov/dept/dcd/Planning/Documents/LeePlan/Leeplan.pdf](http://www.leegov.com/gov/dept/dcd/Planning/Documents/LeePlan/Leeplan.pdf). The sections of the Lee Plan which may pertain to Conservation 20/20 Preserves have been identified in the LSOM.

## **E. Management Constraints**

The principle stewardship constraints for HCP include the Preserve's exceptionally wet conditions, easement constraints and impacts, increasing urbanization pressures, and limited funding. Although C20/20 has a management fund, it is inadequate to fulfill the restoration activities for this and the other preserves. Efforts to obtain additional funding through grants and/or monies budgeted for mitigation of public infrastructure projects will be pursued to supplement the operations budget to meet the restoration goals in a timely manner.

Over 65 percent or 280 acres of HCP is comprised of wetland communities. The remaining plant communities are typically driest between February and May, so most stewardship activities will be conducted during these months. With the exception of wetland areas, if access is necessary for stewardship activities when water levels are high, vehicles such as an all-terrain vehicle (ATV) may be used; otherwise staff will travel on foot. Vehicles and other motorized equipment are prohibited from driving through wetland communities.

Urbanization pressures increasingly affect stewardship activities and boundary security. Fire management is a vital tool used to keep fuel loads down, to ensure biological diversity, and to maintain functional habitat value for wildlife. Smoke management will be one of the greatest factors in planning prescribed fires. Prescribed fire parameters become more restrictive with expanding residential

and commercial development, increased traffic on nearby roadways and surrounding airports.

When restoration activities and prescribed burns, which could be dangerous to visitors, are in progress, signs will be installed along at the main entrance gate to warn the public that the area is temporarily closed.

The dirt road running north and south just within the Eastern property boundary is on an access easement for the Edison Farms property just to the North of HCP. This roadway cannot be affected by stewardship activities without an agreement with the owners of Edison Farms.

Any utility maintenance or improvements projects conducted by other agencies (Lee County Department of Transportation (LCDOT), Florida Power and Light (FPL) or BSU) related to their various easements may affect future stewardship activities or potentially completely the Preserve to the public while work is being conducted.

## **F. Public Access and Resource-Based Recreation**

Historically, a minimal amount of activity has occurred at HCP, although most has been from off-road vehicles traveling through the property and the occasional person disposing of trash. In recent decades, the Preserve was utilized for cattle ranching and the associated fencing prevented most of the general public from entering. Since Lee County purchased the Preserve, evidence of both hunting and ORVs use has been documented. The Parks and Recreation Ordinance, 06-26 (<http://www.lee-county.com/gov/bocc/ordinances/Ordinances/06-26.pdf>) prohibits both of these activities.

In accordance with the LSOM, HCP is classified as a Category 4 Resource Protection & Restoration Preserve. As with all designated Category 4 preserves, “if there is a public interest, staff may provide guided field trips when there are no safety concerns and it is compatible with protecting the animals and plant communities found at the specific preserve.”

Many things are taken into consideration in determining resource-based activities which will be offered at C20/20 preserves, including but not limited to, acreage of the site, viable access, presence of similar facilities nearby, plant communities, listed species utilization, access points, soil constraints, hydrologic components, and archaeological/cultural resources. Restoration/stewardship activities can also impact resource-based activity offerings in designated areas of a preserve.

At HCP the main limiting factor, besides funding, is high water levels which cover the majority of the Preserve 8-10 months of the year. Water levels along with the sensitivity of plant communities, soil types, and limited emergency vehicle access

in the event of an injury, are the reasons that no recreational uses will be available at this site. Recreational uses such as hiking, nature study/photography are available at nearby properties such as Pine Lake Preserve, the Corkscrew Regional Ecosystem Watershed properties, and even Oak Creek Preserve all of which are located in Bonita Springs.

Recreational opportunities will be reexamined during the next revision of this plan (2022).

## G. Acquisition

Nomination 249-2, now known as Hidden Cypress Preserve, was acquired through the C20/20 Program for a cost of \$6.5 million for 429 acres. This equates to approximately \$15,151 per acre. Nomination 249-2 was purchased in two stages. On November 20, 2009 292.45 acres were closed upon for \$4,435,000 and the final 136 acres closed on March 10, 2010 for \$2,065,000. Nomination 249 was initially considered for purchase in 2004 but was withdrawn due to a third party contract. During a September 2009 Seminar on the Health of Estero Bay and its Watershed \$2255 was raised as a donation toward the acquisition cost of this preserve.

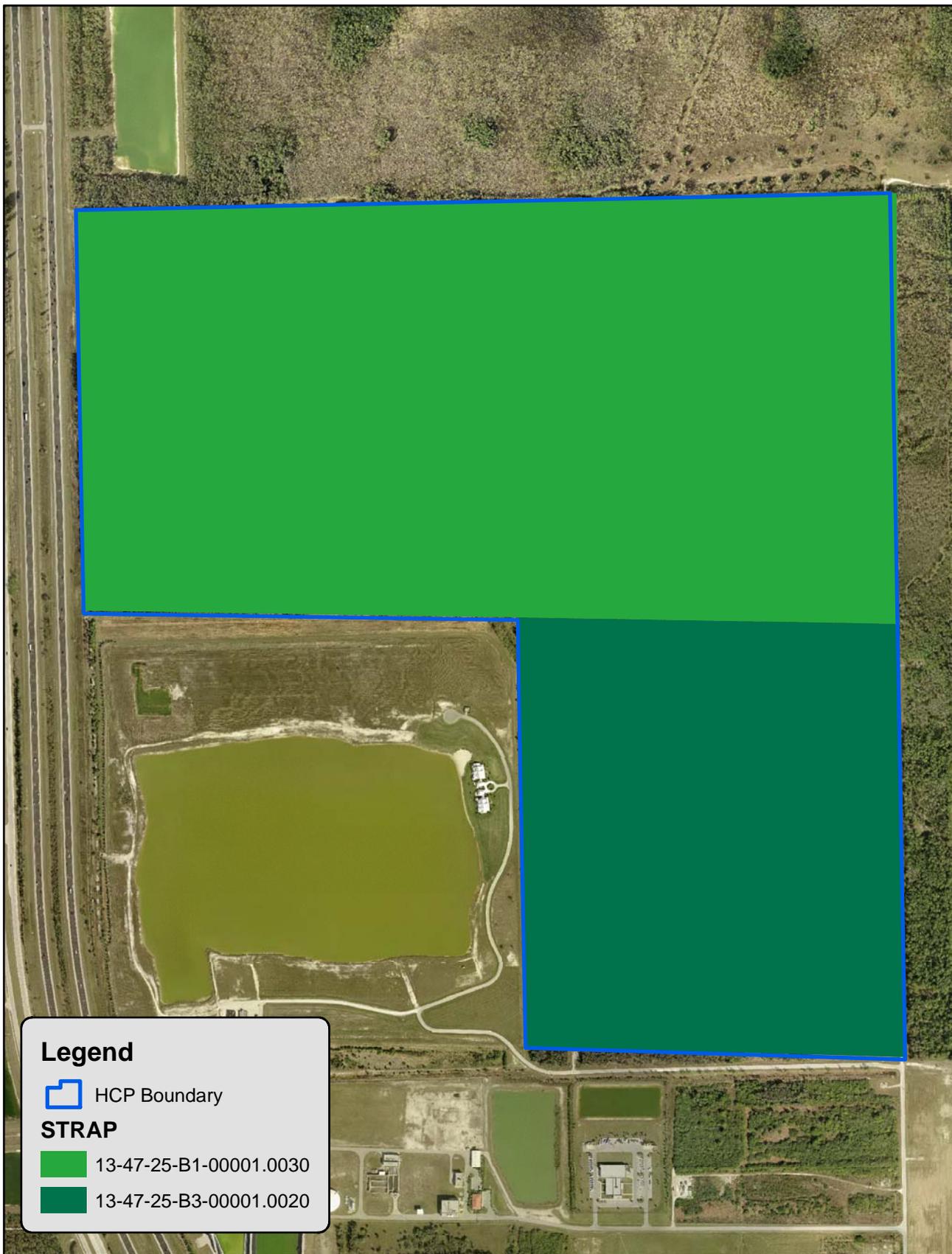
HCP consists of STRAP # 13-47-25-B1-00001.0030 and 13-47-25-B3-00001.0020. Figure 24 shows each piece of the property identified by STRAP number. The legal description is located in Appendix F.

Figure 25 illustrates the acquired and nominated parcels by the C20/20 Program located near the Preserve. The most recent, nomination 474, known as Edison Farms, was withdrawn by the owners from consideration for purchase in December of 2011. The north boundary of HCP abuts a portion of Edison Farms.

HCP has two Future Land Use (FLU) categories shown on Figure 26. Approximately 284 acres of the preserve is listed as Resource Protection with the remaining acreage listed as Density Reduction/Groundwater Resource (DRGR). Land Stewardship Staff will coordinate with Bonita Springs staff to change the FLU to "Conservation Lands."

Currently, all of HCP is zoned as agriculture "AG-2" (Figure 27). Land Stewardship staff will coordinate with LCDP to change the zoning to "Environmentally Critical."

**Figure 23: STRAP Map**



**Legend**

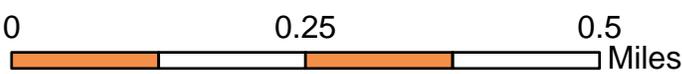
-  HCP Boundary

**STRAP**

-  13-47-25-B1-00001.0030
-  13-47-25-B3-00001.0020



# Hidden Cypress Preserve

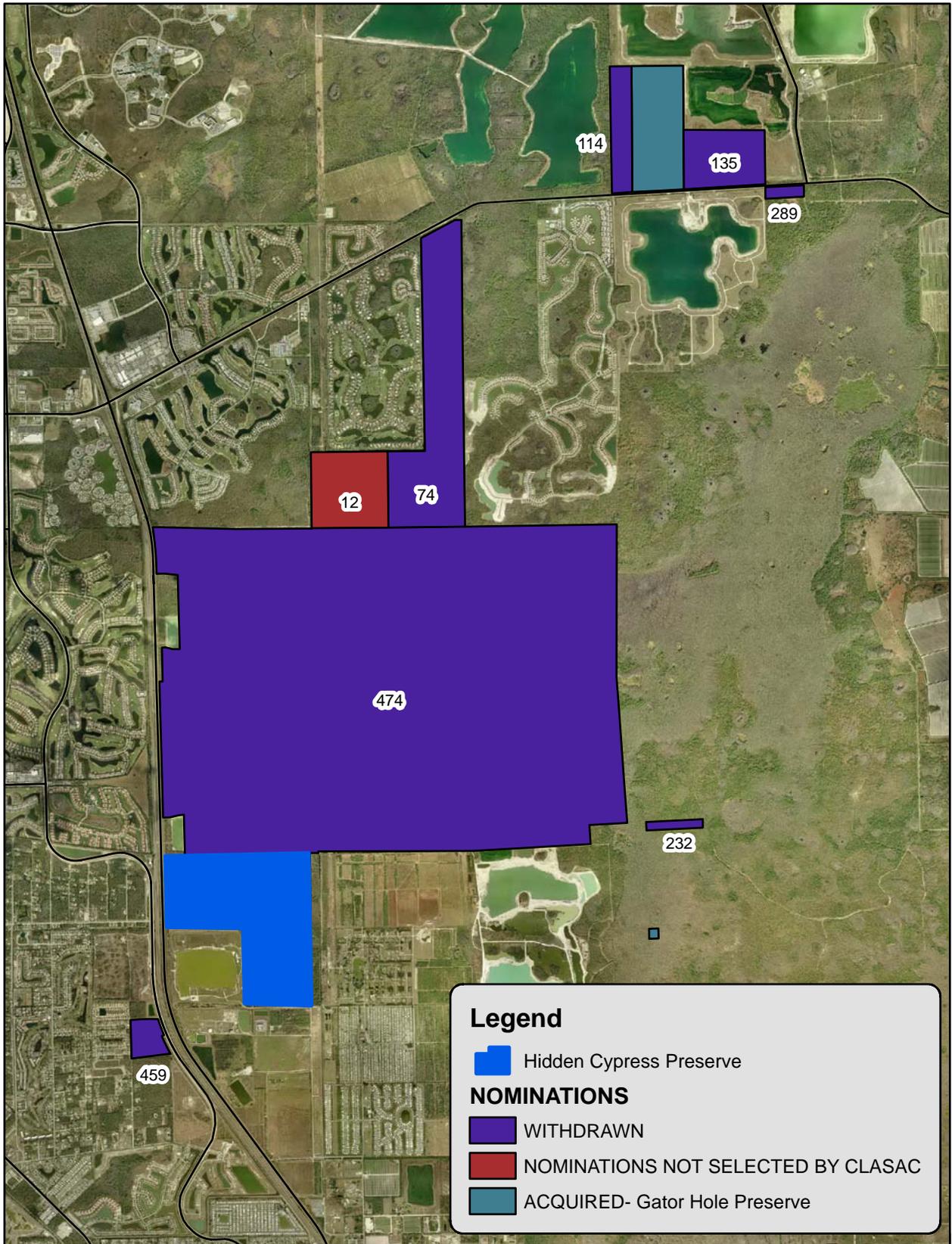


This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 04/04/2012, by lgreeno@leegov.com

# Figure 24: Acquisitions and Nominations Map



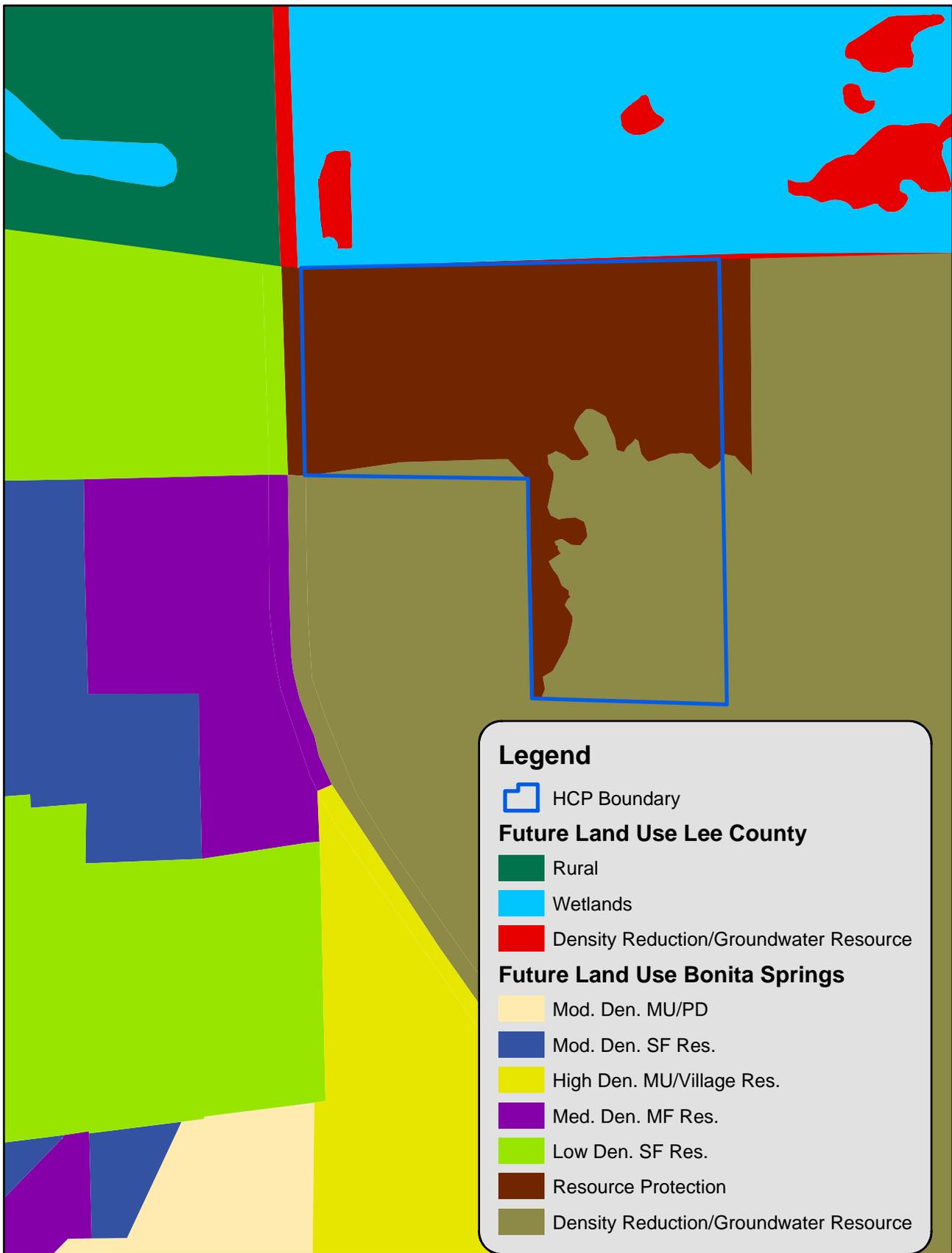
## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 04/04/2012, by Igreeno@leegov.com

# Figure 25: Future Land Use Map



**Legend**

- HCP Boundary

**Future Land Use Lee County**

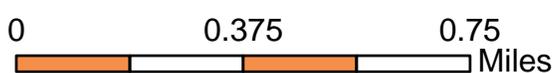
- Rural
- Wetlands
- Density Reduction/Groundwater Resource

**Future Land Use Bonita Springs**

- Mod. Den. MU/PD
- Mod. Den. SF Res.
- High Den. MU/Village Res.
- Med. Den. MF Res.
- Low Den. SF Res.
- Resource Protection
- Density Reduction/Groundwater Resource



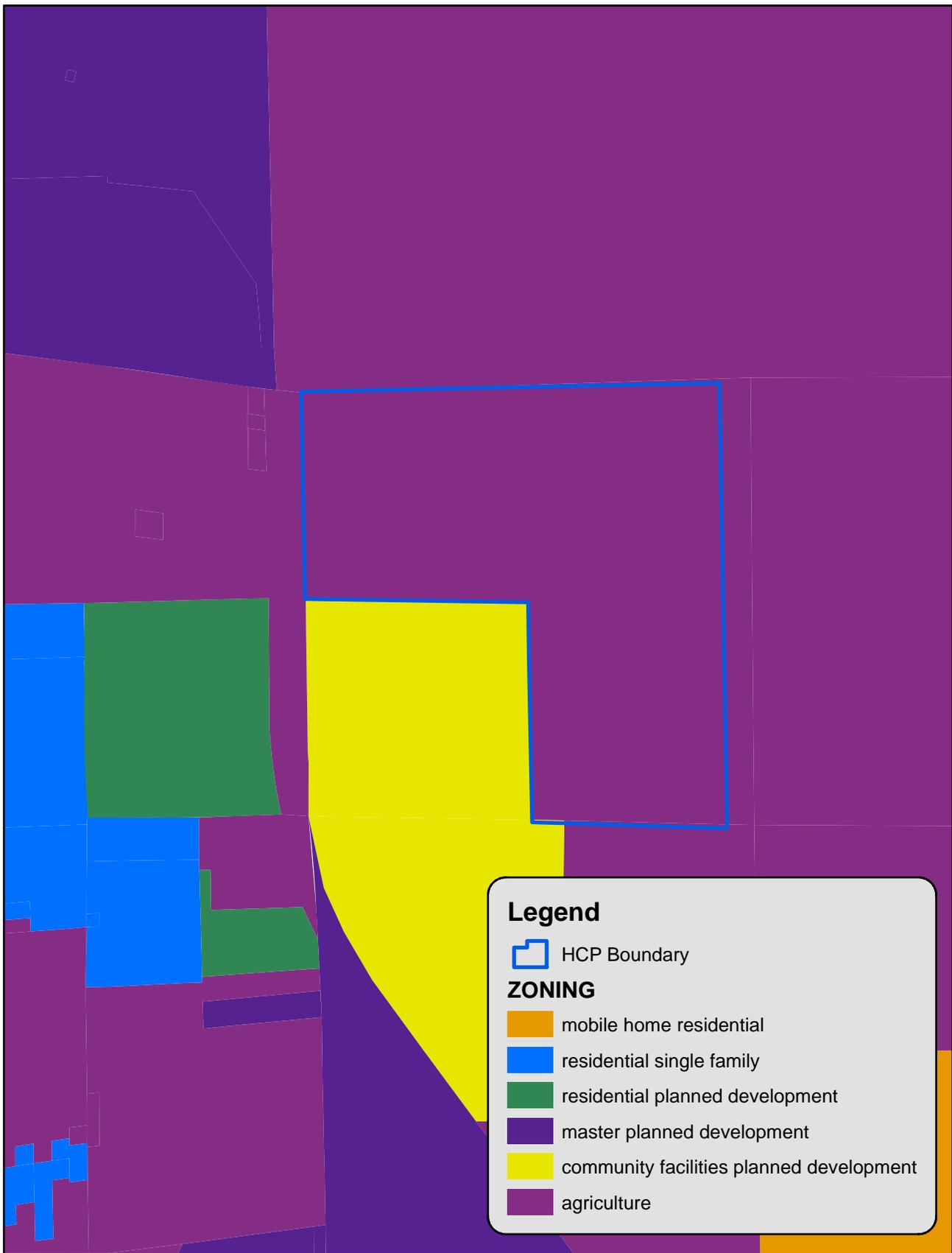
## Hidden Cypress Preserve



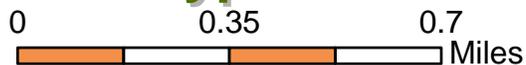
This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 04/04/2012, by lgreeno@leegov.com

# Figure 26: Zoning Map



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 04/04/2012, by lgreeno@leegov.com

## VI. MANAGEMENT ACTION PLAN

### A. Management Unit Descriptions

HCP has been divided into eight management units to better organize and achieve management goals. Figure 28 delineates the management units (MU) that were created based on existing trails, roads, ditches, berms, plow lines, and plant communities. Acreage for all units has been rounded to the nearest tenth of an acre.

- MU 1 (35.8 acres) is located on the northwestern corner of HCP, adjacent to Edison Farms (north) & I-75 (west), MU 2 to the east, and MUs 3 & 4 to the south. It contains ditches, berms, a 5-acre dome swamp, strand swamp and a small slough marsh.

Scattered levels of melaleuca have invaded the slash pine – cypress strand swamp community. Exotic control work, for this area, will include some Brazilian pepper and a couple of small patches of Old World climbing fern and West Indian marsh grass control. The berm (vegetated with large melaleuca trees, native pines and oaks) that runs the length of the entire northern boundary has several breaks in it which permits some hydrologic flow during the wet season.

- MU 2 (33.0 acres) is located northeastern corner of the Preserve. It is bordered by Edison Farms to the north, the roadway & private property to the east, MU 1 to the west and MU 5 to the south. It is made up strand swamp (nearly half of it is disturbed), a dome swamp and disturbed wet and mesic flatwoods.

The flatwoods areas within this MU were heavily impacted by the most recent severe wildfire (2007) in which a majority of the pines were killed and melaleuca has readily taken over. Since the FFS plow line meanders through this unit, it is recommended that the southern portion be kept and used as a fire break/trail and the northern section of the plow line be restored to natural grade. A fire break can easily be completed by staff to straighten out the line (~150 feet) for future prescribed fires. Heavy equipment may be required to remove larger melaleuca and Java plum trees from the berm, but hand crews may tackle the remaining exotics within the MU.

- MU 3 (55.5 acres) is located along the western boundary of HCP, adjacent to I-75, MU 1 to the north, MU 4 to the east, and Liberty Youth Ranch to the south. Eight acres of this MU are made up of the man-made

excavation pond while the rest of the unit is comprised of disturbed communities (strand swamp, clearing, berms, and flatwoods).

The man-made excavation pond was dug during construction of I-75 for fill dirt back in 1980. Portions of the unit may have larger melaleuca trees removed by logging equipment, while hand crews perform follow-up exotic plant control work. The berm (vegetated with large melaleuca trees, native pines and oaks) that runs the length of the northern and southern boundary of this MU has several breaks in them which allow for some hydrologic flow during the wet season.

- MU 4 (68.7 acres) is bordered by MU 3 to the west, MU 1 to the north, MU 5 & 6 to the east and the Liberty Youth Ranch and MUs 7 & 8 to the south. It is comprised of strand swamp (cypress and pines) with melaleuca heavy in some areas, two dome swamps, a couple patches of mesic hammocks, disturbed wet flatwoods, and a remnant swamp lake.

While the western perimeter line of the unit was created sometime during the '50s or '60s, the eastern line of the unit was created by a FFS plow during the 2007 wildfire. To ease management access through the Preserve, staff will keep the plow line to use as a trail/fire break. However, the small harrows created by the plow should be regraded to natural levels to improve sheet flow throughout the Preserve. Portions of the unit may have larger melaleuca trees removed by logging equipment, while hand crews perform follow-up exotic plant control work.

- MU 5 (52.0 acres) is bordered by MU 2 to the north, the roadway & private property to the east, MU 4 to the west, and MU 6 to the south. This unit is comprised of a highly disturbed strand swamp system, remnant pockets of surviving mesic flatwoods, a small cow well, and a 23-acre clearing that had burned dead pines, cypress and melaleuca trees removed after the wildfire. This MU also contains the main entry trail leading onto the Preserve.

This unit suffered greatly from the infestation of melaleuca and following wildfire which killed pines & cypress trees, and modified plant communities. The western and southern perimeter of this unit is created from old plow lines. While the clearing project removed most of the northern berm about 800 feet still remains in the northwest.

One small glimmer of hope for this unit; a dead snag with an active osprey nest. The clearing has young melaleuca springing up ready to overtake the area. The entire unit will need a combination of heavy equipment and hand crew exotic plant control work before it grows back into an exotic monoculture forest.

- MU 6 (46.1 acres) is located between MUs 4, 5 and 8 and is along the eastern boundary line and roadway. Its perimeter boundary is primarily made up from old FFS plow lines. The unit has cleared areas with young melaleuca springing up, a cow well, a few dome swamps, a slough marsh, highly disturbed wet flatwoods and strand swamp.

Although this unit didn't appear to have burned during the latest wildfire, it appears to have burned sometime between 2002-to-2005 based on the aerial photographs and on-the-ground fire scars. This explains why the southeastern area has 10 acres cleared. The entire unit will need a combination of heavy equipment and hand crew exotic plant work to remove melaleuca and other exotic plants.

- MU 7 (52.2 acres) is bordered by MU 4 to the north, MU 8 to the east, the Liberty Youth Ranch to the west, and directly adjacent to a Bonita Springs Utility well along Well Field Road to the south. This unit contains a unique, hidden pop ash slough area surrounded by cypress and melaleuca. A berm runs along the western perimeter associated with the then adjacent agricultural fields from the early 1970s. The disturbed strand swamp and wet flatwoods contain various sizes of melaleuca trees.

Some of the wet flatwoods appear to be transitioning into mesic flatwoods communities with a variety of other native plants growing. The entire unit will need a combination of heavy equipment and exotic plant hand crew workers to remove melaleuca and other exotic plants. The flatwoods will require some brush reduction (pine thinning) before conducting prescribed fires which will be used as a management tool.

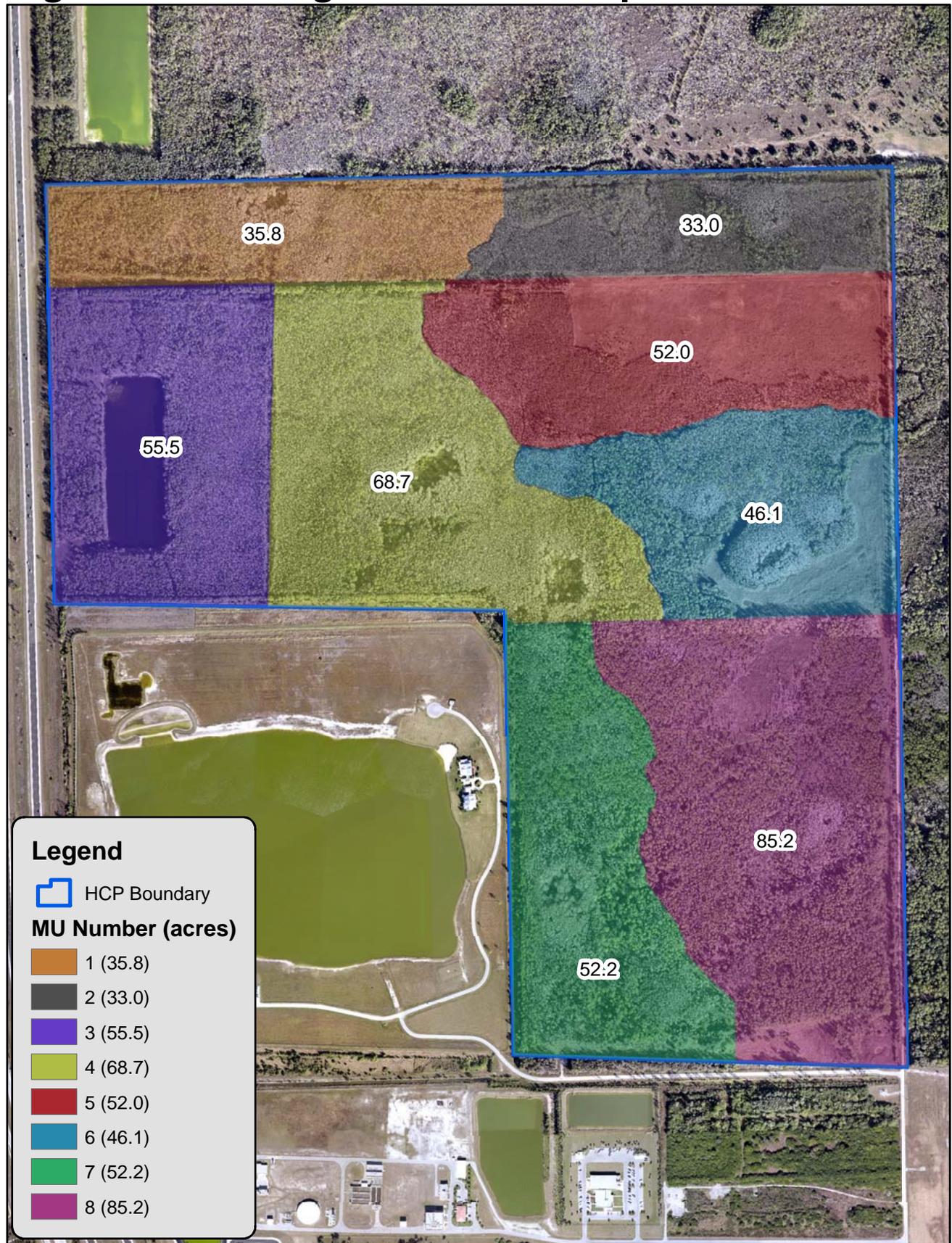
- MU 8 (85.2 acres) is located in the southeast corner of the Preserve along the dirt roadway and private property to the east, Well Field Road to the south, MU 7 to the west, and MU 5 & 6 to the north. The main entrance and access gate to the Preserve is in the southeast corner. The unit is nearly split between overgrown, heavily disturbed wet flatwoods and strand swamp. A small dome swamp exists along with cleared area to the south, a cow well and a small berm along the east.

Like MU 6, the north central part of this unit appears to have burned in a wildfire sometime between 2002-to-2005 based on aerial photographs and on-the-ground fire scars. A *melaleuca carpet* has regrown among dead pines and cypress. Similar to MU 7, the dense pine flatwoods will require some brush reduction (pine thinning) before it is ecologically safe to perform prescribed fires.

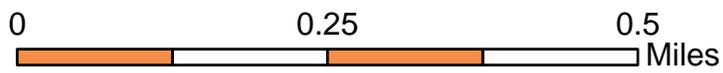
The entire unit will need a combination of heavy equipment and exotic plant hand crews to remove melaleuca and other exotic plants.

Internal fencing, a discarded vehicle and other trash will need to be removed from the site. Several large melaleuca, Java plum, and Australian pines (*Casuarina equisetifolia*) are found in this unit.

# Figure 27: Management Units Map



## Hidden Cypress Preserve



This is not a survey. Land Stewardship Staff has prepared this map for informational and planning purposes.

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Map Prepared on: 04/03/2012, by sfurnari@leegov.com

## **B. Goals and Strategies**

The primary management objectives for HCP are natural community improvements, removal and continued treatment of invasive exotic plants and prescribed burning. Although funding is currently not available to conduct all of these stewardship activities, tasks at HCP will be prioritized in order of importance and ease of accomplishment and include the following tasks. Grants and/or monies budgeted to mitigate public infrastructure projects will be used to supplement the operations budget to meet our goals in a timely manner.

### **Natural Resource Management**

- ✓ Exotic plant control/maintenance
- ✓ Prescribed fire management
- ✓ Mechanical brush reduction
- ✓ Monitor and protect listed species
- ✓ Exotic and feral animal removal

### **Overall Protection**

- ✓ Install/maintain fire breaks
- ✓ Boundary fence installation and interior fence removal
- ✓ Boundary sign maintenance
- ✓ Change Zoning and Future Land Use categories
- ✓ Prevent dumping

### **Volunteers**

- ✓ Assist volunteer group(s)

The following is a description of how each of these goals will be carried out, the success criteria used to measure accomplishment of each goal and a projected timetable outlining which units each activity will take place in and when.

### **Natural Resource Management**

#### **Exotic plant control and maintenance**

The most current Florida Exotic Pest Plant Council's (FLEPPC) List of Invasive Species will be consulted in determining the invasive exotic plants to be controlled in each management unit. The goal is to remove/control these exotic species, followed with treatments of resprouts and new seedlings as needed. This goal will bring the entire Preserve to a maintenance level, defined as less than 5% invasive exotic plant coverage.

Prior to each invasive exotic plant control project at HCP performed by contractors, a Prescription Form (located in the LSOM) will be filled out by the

contractor(s), reviewed & approved by the C20/20 staff. Final project information will be entered into the GIS database.

- Uplands with light to moderate infestations:

In areas where invasive plants are sporadic and below 50% of the vegetation cover, hand removal will be utilized for control, while heavy equipment may be used in more densely infested areas. Specific methodology will depend on stem size, plant type and season, but generally the stem will be cut near the ground and the stump will be sprayed with appropriate herbicide, or a foliar application will be applied to the entire plant. Hand pulling will be utilized when possible with appropriate species in order to minimize herbicide use. Basal bark treatment may be used at some locations. Areas that receive heavy equipment work will receive follow-up treatment that will include an application of an appropriate herbicide mixture to the foliage of any resprouts or seedlings. Cut stems may be piled to facilitate future potential burning, chipping or removal from site. No replanting will be needed due to significant presence of native vegetation and the native seed bank. No debris will be piled in such a way as to block established flowways.

- Uplands with moderate to heavy infestations:

In areas where the exotics occur as monotypic stands or comprise more than 50% of the vegetation cover, the use of heavy equipment will be utilized in appropriate communities and during suitable season. Heavy equipment will be chosen so that soil disturbance and compaction are minimized. In areas along ditches where the hydric soils may not be conducive for heavy equipment, hand crews will be used to cut down and remove these plants. Tree debris will then either be pile burned or mulched. Mulching equipment may be used. Follow-up treatment of these areas will include an application of an appropriate herbicide mixture to the foliage of any resprouts or seedlings.

- Wetlands with moderate to heavy infestations:

At suitable locations such as seasonal ponds, lightweight equipment may be utilized during dry, winter periods or hand crews will need to hike in on foot and either foliar, girdle, basal bark, or cut-stump the exotics with the appropriate herbicide. Follow-up treatments will need to be conducted on at least an annual basis and may eventually decrease to every two years. Where feasible or necessary, biomass may be removed from sites to be piled and burned and/or mulched.

- Wetlands with light to moderate infestations:

Hand crews will need to hike in and foliar, girdle, basal bark, or cut-stump treat the exotics with the appropriate herbicide. Follow-up treatments will need to be done on an annual basis and may eventually decrease to every two years. Where feasible or necessary, biomass may be removed from wetland sites to be piled and burned and/or mulched.

Since HCP is too wet during the majority of the year for mechanical work, staff must take advantage of every opportunity during dry season. HCP dried up more than staff has anticipated during early 2012 and the market allowed for free removal of melaleuca, so it was decided to begin melaleuca logging before the completion of this LSP since the site was so heavily infested.

### **Prescribed fire management**

A prescribed fire program will be implemented that closely mimics the natural fire regimes for the different plant communities to increase plant diversity and ensure tree canopies remain open. Once restoration projects are completed in management units that contain fire dependent communities, prescribed burns will be performed after the creation of appropriate fire lines/breaks. Prescribed fire may be utilized for exotic plant control of seedling/sapling in areas previously treated.

The timing of prescribed burning will be influenced by seasonal rain, staff and equipment availability, listed species requirements and wind patterns. The C20/20 Burn Team Coordinator has coordinated with the FFS and finalized the C20/20-wide Fire Management Plan that applies to all Preserves. C20/20 staff will inform adjacent neighbors of imminent burn plans.

### **Mechanical brush reduction**

Some areas of HCP may benefit from mechanical understory reduction to open areas for forbs to re-establish groundcover. Lack of fire and high density of exotic vegetation in some areas has allowed saw palmetto to become thick and high. When mechanical work is planned, some areas will be left as is for panther and black bear habitat. Stands of dense pines may be included in a future timber sale to open canopy and encourage establishment of an un-even age stand of pine.

### **Monitor and protect listed species**

There are several listed species that have been documented on the Preserve including ibis (*Eudocimus albus*), snowy egret (*Egretta thula*), American alligator (*Alligator mississippiensis*), and giant airplant (*Tillandsia utriculata*). These species will benefit from exotic plant control, prescribed burns, pasture and

hydrological restoration activities. During stewardship activities, efforts will be made to minimize negative impacts to listed species.

HCP is part of a countywide tri-annual site inspection program conducted for all C20/20 preserves. The site inspection spreadsheet is available on the LCPR's computer server ("S" drive). These inspections allow staff to monitor for impacts and/or changes to each preserve and includes lists of all animal sightings and plant species that are found. If, during these inspections, staff finds FNAI listed species, they will be reported using the appropriate forms.

### **Exotic and feral animal removal**

Seven exotic animal species have been recorded on HCP. Although melaleuca psyllids and weevils are non-native animals, they are beneficial biological control agents targeting the invasive melaleuca tree. C20/20 staff is primarily concerned with the feral hog (*Sus scrofa*). Currently, the only acceptable method of hog removal on C20/20 preserves is trapping, but more aggressive removal methods may be needed. Staff are exploring quota/management hunts in conjunction with FWC and hiring nuisance wildlife personal to shoot hogs at night. Removing all hogs is an unreasonable goal; therefore a control program will need to be continuous on a long-term basis. If practical, a methodology will be established and implemented against other unwanted exotic animal species.

This Preserve, like other C20/20 preserves, does not contain nor will it support feral cat colonies. FWC's Feral and Free Ranging Cats policy is *"To protect native wildlife from predation, disease, and other impacts presented by feral and free-ranging cats"* (FWC 2003). Any feral cats will be trapped and taken to Lee County Animal Services.

### **Overall Protection**

#### **Install/maintain fire breaks**

Perimeter and internal fire breaks need to be installed, where needed, to reduce the potential damage to areas outside the Preserve from a wildfire or prescribed fire. Wherever possible firebreaks will be installed on existing trails or other disturbed areas to minimize impact to plant communities or alter water flow. Once C20/20 staff has coordinated the installation of necessary fire breaks, staff will maintain these breaks on an annual basis by either mowing or disking.

#### **Boundary fence installation and interior fence removal**

The perimeter of the Preserve is fenced to prevent activities such as dumping and the illegal use of motorized vehicles. Staff will explore the feasibility of installing new fence along the roadway used by Edison Farm and BSU for

access. During fieldwork for this LSP, some interior fence was located and will need to be removed in the future.

### **Boundary sign maintenance**

Boundary signs have been installed along the entire perimeter boundary to further protect the Preserve. Missing or damaged signs will be replaced. C20/20 Rangers and staff will check for boundary signs during their patrols and replace them immediately. Boundary signs have been placed every 500 feet.

### **Change Zoning and Future Land Use categories**

Staff will coordinate with LCDP and Bonita Springs staff to change the zoning and future land use categories for HCP. All zoning designations will be changed to “Environmentally Critical” from “Agriculture” and future land use designations will be modified to either “Conservation Lands – Uplands” or “Conservation Lands - Wetlands.”

### **Prevent dumping**

During tri-annual site inspections, any smaller objects that are encountered will be removed. C20/20 Rangers will also assist with removing small items when they are on patrol at the Preserve.

## **Volunteers**

### **Assist volunteer group(s)**

The LSOM identifies the Land Stewardship Volunteer Program’s mission statement as:

*To aid in the management and preservation of Lee County resource-based public parks and preserves and to provide volunteers with rewarding experiences in nature.*

Since 2011, the Lee County Bird Patrol volunteer group has performed bird monitoring surveys at HCP on a monthly basis.

If there is interest from the community to form a volunteer group, staff will work with them to assist with the many diverse stewardship activities that will be associated with this Preserve, such as wildlife monitoring and other land stewardship projects.

The following “Prioritized Projected Timetable for Implementation” is based on obtaining necessary funding for numerous land stewardship projects. Implementation of these goals may be delayed due to changes in staff, extreme

weather conditions or a change in priorities on properties managed by Lee County.

**VII. PROJECTED TIMETABLE FOR IMPLEMENTATION**

Management Activity	July-12	Oct-12	Jan-13	April-13	July-13	Oct-13	Jan-14	April-14	July-14	Oct-14	Jan-15	April-15	July-15	Oct-15	Jan-16	April-16	July-16	Oct-16	Jan-17	April-17	July-17	Oct-17	2018 or later	
<b>Natural Resource Management</b>																								
<b>Mechanical tree and brush reduction</b>																								
Pine tree thinning							X	X																
<b>Prescribed fire management</b>																								
Install interior firelines							X																	
Conduct prescribed burning												On-going	→	→	→	→	→	→	→	→	→	→	→	→
<b>Exotic plant control/maintenance</b>																								
Logging of melaleuca	X	X																						
Initial treatment							X	X																
Follow-up treatment												X				X					X			→
<b>Habitat restoration</b>																								
Rehab wildfire plow lines							X																	
<b>Maintenance (On-going/Annual)</b>																								
Exotic animal removal																								X
Fire break mow/disk							X			X				X				X					X	X
<b>Overall Protection</b>																								
Trash removal			On-going	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→
Removal of interior fencing			X																					X
Install replacement fence			X																					
Change Zoning or Land Use (LU) categories									LU				Zoning											
<b>Volunteers</b>																								
Assist volunteer group	On-going	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→	→

## **VIII. FINANCIAL CONSIDERATIONS**

There is a management fund established in perpetuity for all C20/20 preserves. Monies from this fund primarily serve to meet the operational needs of the Management section of the C20/20 Program, but a certain amount of this fund will be set aside for planned restoration projects.

Other possible funding for exotic plant removal and restoration projects may be requested through grants from agencies such as SFWMD, FDEP, FWC, and USFWS or include additional mitigation opportunities. Projected costs and funding sources are listed in Appendix G.

## IX. LITERATURE CITED

[FNAI] Florida Natural Areas Inventory. Tallahassee (FL): Guide to the Natural Communities of Florida 2010 Update [cited 2010 Mar 2]. Available from: [http://www.fnai.org/natcomguide\\_update.cfm](http://www.fnai.org/natcomguide_update.cfm) .

[FWC] Florida Fish and Wildlife Conservation Commission. [Internet]. Tallahassee (FL): Review of Free Ranging Cats Policy; May 30, 2003. [cited 2006 Sept 9]. Available from: <http://myfwc.com/cats/review.htm>

Land Stewardship Staff of Lee County Parks and Recreation. (2012). Land Stewardship Operations Manual.

[LCDCD] Lee County Department of Community Development. The Lee Plan 2009 Codification As Amended through May 2011 [Internet]. [cited 2011 Mar 2]. Available from: <http://www3.leegov.com/dcd/ComprehensivePlanning/planningmain.htm#The%20Lee%20Plan>

## **X. APPENDICES**

Appendix A: HCP Soils Chart

Appendix B: Plant Species List

Appendix C: Wildlife Species List

Appendix D: FWC Radio-collared Panther Tracks

Appendix E: Letter to Edison Farms

Appendix F: Legal Description

Appendix G: Expended and Projected Costs and Funding Sources

## Appendix A: HCP Soils Chart

## Hidden Cypress Preserve Soils Chart

Soil Types	Map Symbol	Total Acres	% of Preserve	Physical Attributes			Biological Attributes				Limitations for Recreational Paths & Trails	
				Habitats (Range Site)	Wetland Class (1)	Hydrologic Group (2)	% Organic Matter	Potential as habitat for wildlife in--				
								Openland	Woodland	Wetland		Rangeland
Boca Fine Sand	13	84.3	20.1%	south Florida flatwoods		B/D	1-3%	fair	poor	fair	good	Severe: wetness, too sandy
Boca Fine Sand, Slough	74	60.8	14.5%	south Florida flatwoods	S	B/D	1-3%	poor	very poor	fair	fair	Severe: wetness, too sandy
Felda Fine Sand, Depressional	49	82.8	19.7%	freshwater marshes/ponds	P	B/D	1-4%	very poor	very poor	good	--	Severe: wetness, too sandy
Floridana Sand, Depressional	51	32.5	7.7%	freshwater marshes/ponds	P	D *	6-15%	very poor	very poor	good	--	Severe: ponding, too sandy
Hallandale Fine Sand	6	49.4	11.8%	south Florida flatwoods		B/D	2-5%	poor	poor	fair	poor	Severe: wetness, too sandy
Pineda Fine Sand	26	60.0	14.3%	slough	S	B/D	.5-6%	fair	poor	fair	--	Severe: wetness, too sandy
Pineda Fine Sand, Depressional	73	50.6	12.0%	freshwater marshes/ponds	P	D *	.5-6%	very poor	very poor	good	--	Severe: ponding, too sandy

Color Key:

Upland
Wetlands Rarely Present (Under 20%)
Wetlands Sometimes Present (20-40%)
Wetlands Often Present (75-95%)
Wetlands Very Often Present (100%)

- (1) F - Flooding: The temporary inundation of an area caused by overflowing streams, runoff from adjacent slopes or tides.  
 S - Slough (sheet flow): A broad nearly level, poorly defined drainage way that is subject to sheet-flow during the rainy season.  
 P - Ponding: Standing water on soils in closed depressions. The water can be removed only by percolation or evapotranspiration.
- (2) \* Water table is above the surface of soil  
 B - Soils having a moderate infiltration rate (low to moderate runoff potential) when thoroughly wet.  
 C - Soils having a slow infiltration rate (moderate to high runoff potential) when thoroughly wet.  
 D - Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.

## **Appendix B: Plant Species List**

## Appendix B: Plant Species List for Hidden Cypress Preserve

Common and scientific names for this list were obtained from Wunderlin Hansen, 2003

Scientific Name	Common Name	Native/Exotic	EPPC	FDACS	IRC	FNAI
<b>Family: Blechnaceae (min-sorus fern)</b>						
<i>Blechnum serrulatum</i>	swamp fern	native				
<i>Woodwardia virginica</i>	Virginia chain fern				R	
<b>Family: Nephrolepidaceae (sword fern)</b>						
<i>Nephrolepis exaltata</i>	wild Boston fern	native				
<i>Osmunda regalis</i>	royal fern	native				
<b>Family: Polypodiaceae (polypody)</b>						
<i>Campyloneurum phyllitidis</i>	long strap fern	native			R	
<i>Phlebodium aureum</i>	golden polypody	native				
<i>Pleopeltis polypodioides</i> var. <i>michauxiana</i>	resurrection fern	native				
<b>Family: Psilotaceae (whisk-fern)</b>						
<i>Psilotum nudum</i>	whisk-fern	native				
<b>Family: Pinaceae (pine)</b>						
<i>Pinus elliotii</i> var. <i>densa</i>	south Florida slash pine	native				
<b>Family: Thelypteridaceae (marsh fern)</b>						
<i>Thelypteris kunthii</i>	southern shield fern	native				
<b>Family: Alliaceae (garlic)</b>						
<i>Nothoscordum bivalve</i>	false-garlic, crowpoison	native			CI	
<b>Family: Arecaceae (palm)</b>						
<i>Sabal palmetto</i>	cabbage palm	native				
<i>Serenoa repens</i>	saw palmetto	native				
<b>Family: Bromeliaceae (pineapple)</b>						
<i>Tillandsia recurvata</i>	ballmoss	native				
<i>Tillandsia setacea</i>	southern needleleaf	native				
<i>Tillandsia usneoides</i>	Spanish moss	native				
<i>Tillandsia utriculata</i>	giant wild-pine, giant airplant	native		E		
<b>Family: Vittariaceae (shoestring fern)</b>						
<i>Vittaria lineata</i>	shoestring fern	native				
<b>Family: Cupressaceae (cedar)</b>						
<i>Taxodium ascendens</i>	pond cypress	native				
<i>Taxodium distichum</i>	bald cypress	native				
<b>Family: Cyperaceae (sedge)</b>						
<i>Cladium jamaicense</i>	Jamaica swamp sawgrass	native				
<i>Cyperus ligularis</i>	swamp flatsedge	native				
<i>Cyperus surinamensis</i>	tropical flatsedge	native				
<i>Fimbristylis puberula</i>	hairy fimbry	native			I	
<i>Fuirena scirpoidea</i>	southern umbrellasedge	native			R	
<i>Rhynchospora corniculata</i>	shortbristle horned	native			I	
<i>Rhynchospora latifolia</i>	giant whitetop	native			R	
<i>Rhynchospora tracyi</i>	Tracy's beaksedge	native			R	
<b>Family: Eriocaulaceae (pipewort)</b>						
<i>Lachnocaulon anceps</i>	whitehead bogbutton	native			R	
<b>Family: Juncaceae (rush)</b>						
<i>Juncus megacephalus</i>	bighead rush	native			R	
<b>Family: Pontederiaceae (pickerelweed)</b>						
<i>Pontederia cordata</i>	pickerelweed	native				
<b>Family: Smilacaceae (smilax)</b>						
<i>Smilax laurifolia</i>	laurel greenbrier	native				

## Appendix B: Plant Species List for Hidden Cypress Preserve

Common and scientific names for this list were obtained from Wunderlin Hansen, 2003

Scientific Name	Common Name	Native/Exotic	EPPC	FDACS	IRC	FNAI
<i>Smilax tamnoides</i>	bristly greenbrier, hogbrier	native			I	
<b>Family: Typhaceae (cattail)</b>						
<i>Typha latifolia</i>	broadleaf cattail	native			R	
<b>Family: Anacardiaceae (cashew)</b>						
<i>Schinus terebinthifolius</i>	Brazilian pepper	exotic	I			
<b>Family: Annonaceae (custard-apple)</b>						
<i>Annona glabra</i>	pond-apple	native				
<i>Asimina reticulata</i>	netted pawpaw	native				
<b>Family: Apiaceae (carrot)</b>						
<i>Eryngium baldwinii</i>	Baldwin's eryngo	native			R	
<b>Family: Apocynaceae (dogbane)</b>						
<i>Sarcostemma clausum</i>	white twinevine	native				
<b>Family: Aquifoliaceae (holly)</b>						
<i>Ilex glabra</i>	gallberry	native				
<b>Family: Araliaceae (ginseng)</b>						
<i>Centella asiatica</i>	spadeleaf	native				
<b>Family: Asteraceae (aster)</b>						
<i>Baccharis halimifolia</i>	groundsel tree	native				
<i>Bidens alba</i>	beggerticks	native				
<i>Coreopsis floridana</i>	Florida tickseed	native			I	
<i>Eupatorium capillifolium</i>	dogfennel	native				
<i>Hieracium megacephalon</i>	coastalplain hawkweed	native				
<i>Iva microcephala</i>	Piedmont marshelder	native				
<i>Mikania scandens</i>	climbing hempvine	native				
<i>Pluchea rosea</i>	rosy camphorweed	native				
<b>Family: Boraginaceae (borage)</b>						
<i>Heliotropium polyphyllum</i>	pineland heliotrope	native				
<b>Family: Casuarinaceae (sheoak)</b>						
<i>Casuarina equisetifolia</i>	Australian pine	exotic	I			
<b>Family: Clusiaceae (mangosteen)</b>						
<i>Hypericum brachyphyllum</i>	coastalplain St. John's-wort	native			R	
<i>Hypericum cistifolium</i>	roundpod St. John's-wort	native				
<i>Hypericum hypericoides</i>	St. Andrew's-cross	native				
<i>Hypericum mutilum</i>	dwarf St. John's-wort	native			I	
<i>Hypericum tetrapetalum</i>	fourpetal St. John's-wort	native				
<b>Family: Ericaceae (heath)</b>						
<i>Lyonia fruticosa</i>	coastalplain staggerbush	native				
<b>Family: Fabaceae (pea)</b>						
<i>Acacia auriculiformis</i>	earleaf acacia	exotic	I			
<i>Senna pendula</i>	valamuerto	exotic	I			
<i>Sesbania herbacea</i>	danglepod	native				
<b>Family: Fagaceae (beech)</b>						
<i>Quercus laurifolia</i>	laurel oak	native				
<i>Quercus virginiana</i>	live oak	native				
<b>Family: Lamiaceae (mint)</b>						
<i>Cassytha filiformis</i>	love vine	native				
<i>Hyptis alata</i>	musky mint, clustered	native				
<i>Persea palustris</i>	swamp bay	native				

## Appendix B: Plant Species List for Hidden Cypress Preserve

Common and scientific names for this list were obtained from Wunderlin Hansen, 2003

Scientific Name	Common Name	Native/Exotic	EPPC	FDACS	IRC	FNAI
<b>Family: Lentibulariaceae (bladderwort)</b>						
<i>Utricularia cornuta</i>	horned bladderwort	native			R	
<i>Utricularia subulata</i>	zigzag bladderwort	native			R	
<b>Family: Linaceae (flax)</b>						
<i>Linum medium</i> var. <i>texanum</i>	stiff yellow flax	native			R	
<b>Family: Malvaceae (mallow)</b>						
<i>Melochia corchorifolia</i>	chocolateweed	exotic				
<i>Sida acuta</i>	common wireweed	native				
<i>Urena lobata</i>	caesarweed	exotic	II			
<b>Family: Moraceae (mulberry)</b>						
<i>Ficus aurea</i>	strangler fig, golden fig	native				
<b>Family: Myricaceae (bayberry)</b>						
<i>Myrica cerifera</i>	wax myrtle	native				
<b>Family: Myrsinaceae (myrsine)</b>						
<i>Rapanea punctata</i>	myrsine	native				
<b>Family: Myrtaceae (myrtle)</b>						
<i>Melaleuca quinquenervia</i>	punktree	exotic	I			
<i>Syzygium cumini</i>	Java plum	exotic	I			
<b>Family: Olaceae (olive)</b>						
<i>Fraxinus caroliniana</i>	pop ash	native			R	
<b>Family: Onagraceae (eveningprimrose)</b>						
<i>Ludwigia octovalvis</i>	Mexican primrosewillow	native				
<i>Ludwigia repens</i>	creeping primrosewillow	native				
<b>Family Oxalidaceae (woodsorrel)</b>						
<i>Oxalis corniculata</i>	common yellow woodsorrel	native				
<b>Family: Poaceae (grass)</b>						
<i>Amphicarpum muhlenbergianum</i>	blue-maidencane	native			R	
<i>Andropogon glomeratus</i> var. <i>pumilus</i>	common bushy bluestem	native				
<i>Eustachys glauca</i>	saltmarsh fingergrass	native				
<i>Hymenachne amplexicaulis</i>	West Indian marsh grass	exotic	I			
<i>Imperata cylindrica</i>	cogongrass	exotic	I			
<b>Family: Rubiaceae (madder)</b>						
<i>Cephalanthus occidentalis</i>	common buttonbush	native				
<i>Psychotria nervosa</i>	wild coffee	native				
<i>Spermacoce prostrata</i>	prostrate false buttonweed	native			R	
<i>Spermacoce verticillata</i>	shrubby false buttonweed	exotic				
<b>Family: Salicaceae (willow)</b>						
<i>Salix caroliniana</i>	Carolina willow	native				
<b>Family: Sapindaceae (soapberry)</b>						
<i>Acer rubrum</i>	red maple	native				
<i>Cupaniopsis anacardioides</i>	carrotwood	exotic	I			
<b>Family: Sapotaceae (sapodilla)</b>						
<i>Sideroxylon reclinatum</i>	Florida bully	native			R	
<b>Family: Turneraceae (turnera)</b>						
<i>Piriqueta caroliniana</i>	pitted stripeseed	native				
<b>Family: Urticaceae (nettle)</b>						
<i>Boehmeria cylindrica</i>	false nettle	native				

## Appendix B: Plant Species List for Hidden Cypress Preserve

Common and scientific names for this list were obtained from Wunderlin Hansen, 2003

Scientific Name	Common Name	Native/Exotic	EPPC	FDACS	IRC	FNAI
<b>Family: Verbenaceae (vervain)</b>						
<i>Callicarpa americana</i>	American beautyberry	native				
<i>Phyla nodiflora</i>	capeweed	native				
<i>Phyla nodiflora</i>	turkey tangle fogfruit	native				
<b>Family: Veronicaceae (speedwell)</b>						
<i>Mecardonia acuminata subsp. peninsularis</i>	axilflower	native				
<b>Family: Vitaceae (grape)</b>						
<i>Parthenocissus quinquefolia</i>	Virginia creeper	native				
<i>Vitis rotundifolia</i>	muscadine (wild grape vine)	native				

### Key

#### Florida EPPC Status

I = species that are invading and disrupting native plant communities

II = species that have shown a potential to disrupt native plant communities

#### FDACS (Florida Department of Agriculture and Consumer Services)

E = Endangered

T = Threatened

CE = Commercially Exploited

#### IRC (Institute for Regional Conservation)

CI = Critically Imperiled

I = Imperiled

R = Rare

#### FNAI (Florida Natural Areas Inventory)

G= Global Status

T= Threatened

CE= Commercially Exploited

1= Critically imperiled because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.

2= Imperiled because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.

3= Either very rare and local throughout its range (21-200 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.

4= Apparently secure

5= Demonstrably secure

## **Appendix C: Wildlife Species List**

## Appendix C: Wildlife Species List for Hidden Cypress Preserve

Scientific Name	Common Name	Designated Status		
		FWC	FWS	FNAI
<b>MAMMALS</b>				
<b>Family: Didelphidae (opossums)</b>				
<i>Didelphis virginiana</i>	Virginia opossum			
<b>Family: Dasypodidae (armadillos)</b>				
<i>Dasypus novemcinctus</i>	nine-banded armadillo *			
<b>Family: Sciuridae (squirrels and their allies)</b>				
<i>Sciurus carolinensis</i>	eastern gray squirrel			
<i>Sciurus niger avicennia</i>	Big Cypress fox squirrel	T		G5T2/S2
<b>Family: Muridae (mice and rats)</b>				
<i>Peromyscus gossypinus</i>	cotton mouse			
<i>Sigmodon hispidus</i>	hispid cotton rat			
<b>Family: Felidae (cats)</b>				
<i>Puma concolor coryi</i>	Florida panther	E	E	G5T1/S1
<b>Family: Procyonidae (raccoons)</b>				
<i>Procyon lotor</i>	raccoon			
<b>Family: Suidae (old world swine)</b>				
<i>Sus scrofa</i>	feral hog *			
<b>Family: Cervidae (deer)</b>				
<i>Odocoileus virginianus</i>	white-tailed deer			
<b>BIRDS</b>				
<b>Family: Anatidae (swans, geese and ducks)</b>				
<b>Subfamily: Anatinae (dabbling ducks)</b>				
<i>Anas fulvigula</i>	mottled duck			
<b>Family: Phasianidae (pheasant, grouse, turkeys and their allies)</b>				
<b>Subfamily: Meleagridinae (turkeys)</b>				
<i>Meleagris gallopavo</i>	wild turkey			
<b>Family: Phalacrocoracidae (cormorants)</b>				
<i>Phalacrocorax auritus</i>	double-crested cormorant			
<b>Family: Anhingidae (anhingas)</b>				
<i>Anhinga anhinga</i>	anhinga			
<b>Family: Ardeidae (herons, egrets, bitterns)</b>				
<i>Ardea herodias</i>	great blue heron			
<i>Ardea alba</i>	great egret			G5/S4
<i>Egretta thula</i>	snowy egret	SSC		G5/S3
<i>Egretta caerulea</i>	little blue heron	SSC		G5/S4
<i>Egretta tricolor</i>	tricolored heron	SSC		G5/S4
<i>Butorides virescens</i>	green heron			
<i>Nycticorax nycticorax</i>	black-crowned night heron			G5/S3
<i>Nyctanassa violacea</i>	yellow-crowned night heron			G5/S3
<b>Family: Threskiornithidae (ibises and spoonbills)</b>				
<i>Eudocimus albus</i>	white ibis	SSC		G5/S4
<i>Plegadis falcinellus</i>	glossy ibis			G5/S3
<i>Ajaia ajaja</i>	roseate spoonbill	SSC		G5/S2
<b>Family: Ciconiidae (storks)</b>				
<i>Mycteria americana</i>	wood stork	E	E	G4/S2
<b>Family: Cathartidae (new world vultures)</b>				
<i>Coragyps atratus</i>	black vulture			
<i>Cathartes aura</i>	turkey vulture			
<b>Family: Pandionidae (ospreys)</b>				
<i>Pandion haliaetus</i>	osprey			G5/S3S4

## Appendix C: Wildlife Species List for Hidden Cypress Preserve

Scientific Name	Common Name	Designated Status		
		FWC	FWS	FNAI
<b>Family: Accipitridae (hawks, kites, accipiters, harriers, eagles)</b>				
<b>Subfamily: Elaninae and Milvinae (kites)</b>				
<i>Elanoides forficatus</i>	swallow-tailed kite			G5/S2
<b>Subfamily: Buteoninae (buzzard hawks and eagles)</b>				
<i>Haliaeetus leucocephalus</i>	bald eagle	T		G5/S3
<b>Subfamily: Circinae (harriers)</b>				
<i>Circus cyaneus</i>	northern harrier			
<b>Subfamily: Accipitrinae (bird hawks)</b>				
<i>Accipiter cooperii</i>	Cooper's hawk			G5/S3
<b>Subfamily: Buteoninae (buzzard hawks and eagles)</b>				
<i>Buteo brachyurus</i>	short-tailed hawk			G4G5/S1
<b>Family: Falconidae (falcons)</b>				
<b>Subfamily: Falconinae (falcons)</b>				
<i>Falco sparverius</i>	American kestrel			
<b>Family: Aramidae (limpkins)</b>				
<i>Aramus guarauna</i>	limpkin	SSC		G5/S3
<b>Family: Gruidae (cranes)</b>				
<i>Grus canadensis tabida</i>	sandhill crane			
<b>Family: Charadriidae (plovers)</b>				
<i>Charadrius vociferus</i>	killdeer			
<b>Family: Recurvirostridae (avocets and stilts)</b>				
<i>Himantopus mexicanus</i>	black-necked stilt			
<b>Family: Scolopacidae (sandpipers and phalaropes)</b>				
<i>Tringa melanoleuca</i>	greater yellowlegs			
<i>Gallinago delicata</i>	Wilson's snipe			
<b>Family: Columbidae (pigeons and doves)</b>				
<i>Zenaida macroura</i>	mourning dove			
<i>Columbina passerina</i>	common ground-dove			
<b>Family: Cuculidae (cuckoos and their allies)</b>				
<i>Coccyzus americanus</i>	yellow-billed cuckoo			
<b>Family: Strigidae (true owls)</b>				
<i>Strix varia</i>	barred owl			
<b>Family: Caprimulgidae (goatsuckers)</b>				
<i>Chordeiles minor</i>	common nighthawk			
<b>Family: Apodidae (swifts)</b>				
<i>Chaetura pelagica</i>	chimney swift			
<b>Family: Alcedinidae (kingfishers)</b>				
<i>Ceryle alcyon</i>	belted kingfisher			
<b>Family: Picidae (woodpeckers)</b>				
<i>Melanerpes carolinus</i>	red-bellied woodpecker			
<i>Picoides pubescens</i>	downy woodpecker			
<i>Dryocopus pileatus</i>	pileated woodpecker			
<b>Family: Tyrannidae (tyrant flycatchers)</b>				
<i>Sayornis phoebe</i>	eastern phoebe			
<i>Myiarchus cinicensis</i>	great-crested flycatcher			
<b>Family: Vireonidae (vireos)</b>				
<i>Vireo griseus</i>	white-eyed vireo			
<i>Vireo solitarius</i>	blue-headed vireo			
<i>Vireo olivaceus</i>	red-eyed vireo			
<b>Family: Corvidae (crows, jays, etc.)</b>				
<i>Cyanocitta cristata</i>	blue jay			
<i>Corvus brachyrhynchos</i>	American crow			
<i>Corvus ossifragus</i>	fish crow			

## Appendix C: Wildlife Species List for Hidden Cypress Preserve

Scientific Name	Common Name	Designated Status		
		FWC	FWS	FNAI
<b>Family: Hirundinidae (swallows)</b>				
<i>Progne subis</i>	purple martin			
<i>Tachycineta bicolor</i>	tree swallow			
<b>Family: Troglodytidae (wrens)</b>				
<i>Thryothorus ludovicianus</i>	Carolina wren			
<i>Troglodytes aedon</i>	house wren			
<b>Family: Sylviidae (gnatcatchers)</b>				
<i>Poliophtila caerulea</i>	blue-gray gnatcatcher			
<b>Family: Turdidae (thrushes)</b>				
<i>Catharus ustulatus</i>	Swainson's thrush			
<i>Sialia sialis</i>	eastern bluebird			
<i>Turdus migratorius</i>	American robin			
<b>Family: Mimidae (mockingbirds and thrashers)</b>				
<i>Dumetella carolinensis</i>	gray catbird			
<i>Mimus polyglottos</i>	northern mockingbird			
<b>Family: Sturnidae (starlings)</b>				
<i>Sturnus vulgaris</i>	European starling *			
<b>Family: Parulidae (wood-warblers)</b>				
<i>Parula americana</i>	northern parula			
<i>Dendroica coronata</i>	yellow-rumped warbler			
<i>Dendroica pinus</i>	pine warbler			
<i>Dendroica discolor</i>	prairie warbler			
<i>Dendroica palmarum</i>	palm warbler			
<i>Mniotilta varia</i>	black-and-white warbler			
<i>Protonotaria citrea</i>	prothonotary warbler			
<i>Geothlypis tristis</i>	common yellowthroat			
<i>Wilsonia citrina</i>	hooded warbler			
<b>Family: Thraupidae (tanagers)</b>				
<i>Piranga rubra</i>	summer tanager			
<i>Piranga olivacea</i>	scarlet tanager			
<b>Family: Emberizine (sparrows and their allies)</b>				
<i>Passerculus sandwichensis</i>	Savannah sparrow			
<b>Family: Cardinalidae (cardinals, some grosbeaks, new world buntings, etc.)</b>				
<i>Cardinalis cardinalis</i>	northern cardinal			
<i>Passerina cyanea</i>	indigo bunting			
<i>Passerina ciris</i>	painted bunting			
<b>Family: Icteridae (blackbirds, orioles, etc.)</b>				
<i>Agelaius phoeniceus</i>	red-winged blackbird			
<i>Quiscalus quiscula</i>	common grackle			
<i>Quiscalus major</i>	boat-tailed grackle			
<b>REPTILES</b>				
<b>Family: Alligatoridae (alligator and caiman)</b>				
<i>Alligator mississippiensis</i>	American alligator	SSC		G5/S4
<b>Family: Kinosternidae (musk and mud turtles)</b>				
<i>Kinosternon baurii</i>	striped mud turtle			
<b>Family: Polychridae (anoles)</b>				
<i>Anolis carolinensis</i>	green anole			
<i>Anolis sagrei</i>	brown anole *			
<b>Family: Colubridae (harmless egg-laying snakes)</b>				
<i>Pantherophis guttatus</i>	eastern corn snake			
<i>Coluber constrictor priapus</i>	southern black racer			
<b>Family: Crotalidae (pitvipers)</b>				
<i>Agkistrodon piscivorus conanti</i>	Florida cottonmouth			

## Appendix C: Wildlife Species List for Hidden Cypress Preserve

Scientific Name	Common Name	Designated Status		
		FWC	FWS	FNAI
<b>Family Natricidae (harmless live-bearing snakes)</b>				
<i>Nerodia fasciata pictiventris</i>	Florida water snake			
<i>Thamnophis sauritus sackerii</i>	peninsula ribbon snake			
<b>AMPHIBIANS</b>				
<b>Family: Bufonidae (toads)</b>				
<i>Anaxyrus quercicus</i>	oak toad			
<b>Family: Hylidae (treefrogs and their allies)</b>				
<i>Hyla cinerea</i>	green treefrog			
<i>Pseudacris ocularis</i>	litttle grass frog			
<b>MILLIPEDES</b>				
<b>Family: Spirobolidae (millipedes)</b>				
<i>Chicobolus spinigerus</i>	Florida ivory millipede			
<b>INSECTS</b>				
<b>Family: Romaleidae (lubber grasshoppers)</b>				
<i>Romalea microptera</i>	eastern lubber grasshopper			
<b>Family: Corixidae (water boatmen)</b>				
unknown	water boatman			
<b>Family: Psyllidae (psyllids)</b>				
<i>Boreioglycaspis melaleuca</i>	melaleuca psyllid *			
<b>Family: Bibionidae (march flies)</b>				
<i>Plecia nearctica</i>	love bug*			
<b>Family: Curculionidae (true weevils)</b>				
<i>Oxyops vitiosa</i>	melaleuca weevil *			
<b>Family: Papilionidae (swallowtails)</b>				
<i>Eurytides marcellus</i>	zebra swallowtail			
<i>Papilio polyxenes</i>	black swallowtail			
<i>Papilio glaucus</i>	tiger swallowtail			
<b>Subfamily: Coliadinae (sulphurs)</b>				
<i>Phoebis sennae</i>	cloudless sulphur			
<i>Phoebis philea</i>	orange-barred sulphur			
<b>Family: Lycaenidae (gossamer-wings)</b>				
<b>Subfamily: Theclinae (hairstreaks)</b>				
<i>Fixsenia favonius</i>	southern hairstreak			
<b>Subfamily: Polyommatainae (blues)</b>				
<i>Brephidium isophthalma</i>	eastern pygmy blue			
<b>Family: Riodinidae (metalmarks)</b>				
<i>Calephelis virginianensis</i>	little metalmark			
<b>Family: Nymphalidae (brushfoots)</b>				
<b>Subfamily: Heliconiinae (longwings)</b>				
<i>Agraulis vanillae</i>	gulf fritillary			
<i>Dryas iulia</i>	julia			
<i>Heliconius charitonius</i>	zebra			
<b>Subfamily: Nymphalinae (brushfoots)</b>				
<i>Vanessa atalanta</i>	red admiral			
<i>Junonia coenia</i>	common buckeye			
<i>Anartia jatrophae</i>	white peacock			
<b>Subfamily: Danaidae (milkweed butterflyes)</b>				
<i>Danaus plexippus</i>	monarch			
<b>ARACHNIDS</b>				
<i>in the order of spiders, scorpions, mites and ticks</i>				
<b>Family: Araneidae (orb weavers)</b>				
<i>Gasteracantha elipsoides</i>	crablike spiny orb weaver			

**Appendix C: Wildlife Species List for Hidden Cypress Preserve**

Scientific Name	Common Name	Designated Status		
		FWC	FWS	FNAI
<i>Family: Oxyopidae (lynx spiders)</i>				
<i>Peucetia viridans</i>	green lynx spider			

**KEY:**

**FWC = Florida Fish & Wildlife Conservation Commission**

**FWS = U.S. Fish & Wildlife Service**

E - Endangered

T - Threatened

SSC - Species of Special Concern

**FNAI = Florida Natural Areas Inventory**

G - Global rarity of the species

S - State rarity of the species

T - Subspecies of special population

1 - Critically imperiled

2 - Imperiled

3 - Rare, restricted or otherwise vulnerable to extinction

4 - Apparently secure

5 - Demonstrably secure

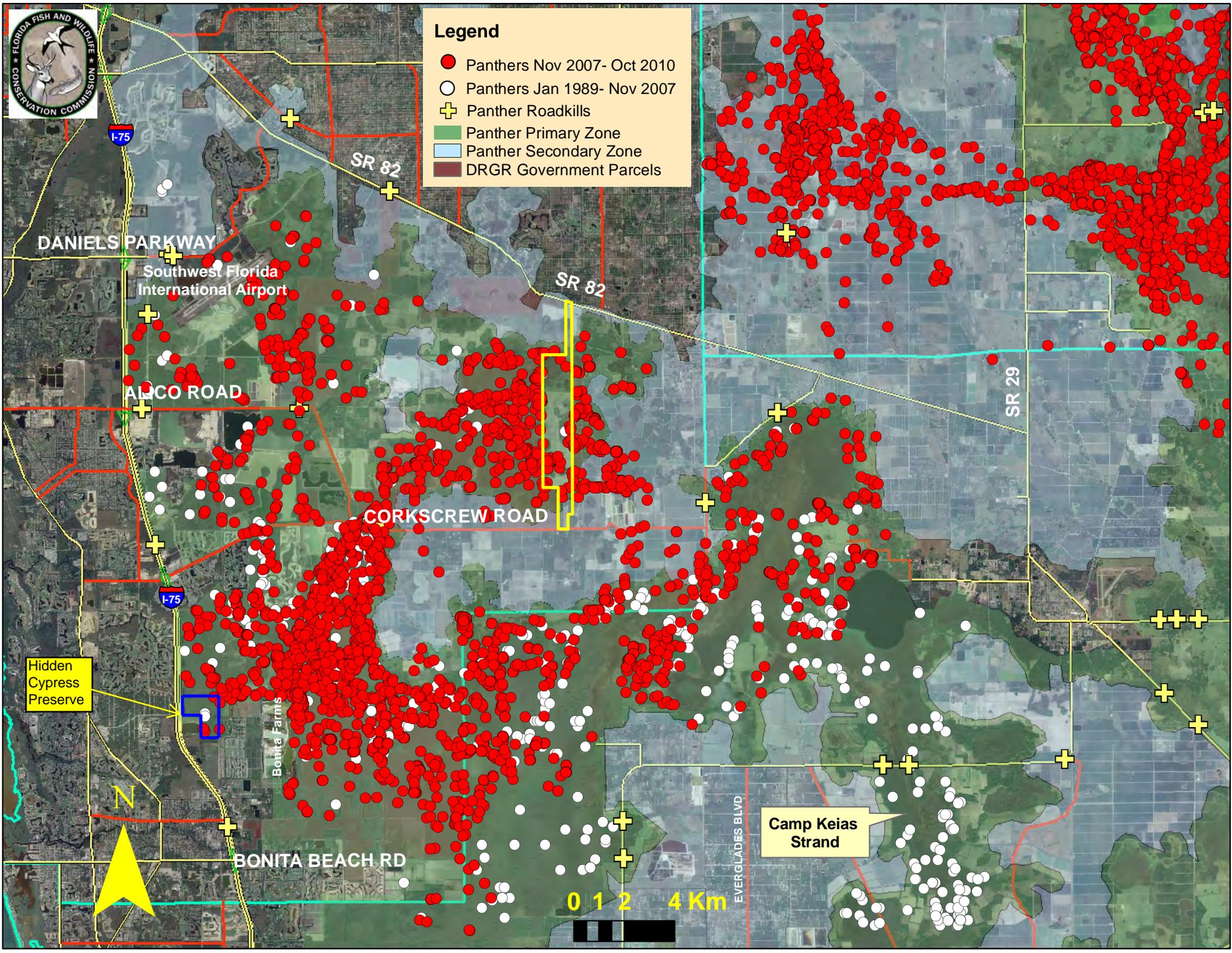
**\* = Non-native**

## **Appendix D: FWC Radio-collared Panther Tracks**



### Legend

- Panthers Nov 2007- Oct 2010
- Panthers Jan 1989- Nov 2007
- ⊕ Panther Roadkills
- Panther Primary Zone
- Panther Secondary Zone
- DRGR Government Parcels



## **Appendix E: Letter to Edison Farms**



LEE COUNTY  
SOUTHWEST FLORIDA

BOARD OF COUNTY COMMISSIONERS

John E. Manning  
District One

Brian Bigelow  
District Two August 24, 2012

Ray Judah  
District Three

Tammy Hall  
District Four Agripartners Limited Partnership and  
Edison Farms Holdings, LLC, as Trustee of the Edison Farms Trust

Frank Mann  
District Five 21 East Long Lake Road, Suite 100  
Bloomfield Hills, MI 48304

Karen B. Hawes  
County Manager Re: Access Easement in Lee County, Florida

Diana M. Parker  
County Hearing Examiner Dear Sir or Madam:

The Lee County Conservation 2020 staff is currently drafting the land stewardship plan for Hidden Cypress Preserve (HCP), a Conservation 2020 preserve located along the southern border of the property owned by Agripartners Limited Partnership and Edison Farms Holdings, LLC, (Edison Farms) in Lee County, Florida. A location map is enclosed for your reference.

As a part of the planning process county staff reviews the survey information available. During this review, staff discovered an issue with respect to the ingress/egress easement running along the eastern boundary of HCP. Specifically, the recorded ingress/egress easement does not appear to provide access to the Edison Farms property. As the County is considering eliminating the ingress/egress along its eastern boundary, we are seeking any input or documentation you may have with regard to an established right, for the benefit of the Edison Farms property, to traverse this ingress/egress easement that may not be available through a review of the public records. In accord with the County's research, it appears the legal access to the Edison Farms property is from Corkscrew Road as opposed to the HCP property.

Based on the above, the County requests that you provide any documentation you may have establishing a right or entitlement to traverse the HCP property to obtain access to the Edison Farms property located along the northern boundary of the Conservation 2020 parcel. A response within the next 30 days will be greatly appreciated.

Should you have any questions regarding the above, please do not hesitate to contact me at 239 533-7455.

Sincerely,

Cathy Olson

Conservation 20/20 Senior Supervisor

cc: Dawn Lehnert, County Attorneys Office

Teresa Mann, County Lands

Jason B. Wagner, The Landon Companies, 21 E. Long Lake Road, Ste 100,  
Bloomfield Hills, MI 48304

Squire Sanders & Dempsey, LLP, 201 N. Franklin Street, Ste 2100, Tampa, FL  
33602

## **Appendix F: Legal Description**

# Old Republic National Title Insurance Company

## OWNER'S TITLE INSURANCE POLICY

### Issued Through Attorneys' Title Fund Services, LLC

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS AND STIPULATIONS, OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, a Minnesota corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land.

The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title, as insured, but only to the extent provided in the Conditions and Stipulations.

*In Witness Whereof*, OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY has caused this policy to be signed and sealed as of Date of Policy shown in Schedule A, the policy to become valid when countersigned by an authorized signatory.



OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY  
A Stock Company  
400 Second Avenue South, Minneapolis, Minnesota 55401  
(612) 371-1111

By

President

Attest

Secretary

SERIAL

OPM-

4032105

**Old Republic National Title Insurance Company**  
*Issued Through Attorneys' Title Fund Services, LLC*  
**OWNER'S POLICY**  
**Schedule A**

Policy No.:  
OPM-4032105

Effective Date:  
March 15, 2010 @ 09:35 AM

Agent's File Reference:  
THG WatrBS Lee2

Amount of Insurance: \$2,065,000.00

1. Name of Insured: LEE COUNTY, a political subdivision of the State of Florida
  
2. The estate or interest in the land described herein and which is covered by this policy is a Fee Simple and is at the effective date hereof vested in the named insured as shown by instrument recorded as Official Records Instrument Number 2010000065208 of the Public Records of Lee County, Florida.
  
3. The land referred to in this policy is described as follows:

The SE 1/4 of Section 13, Township 47 South, Range 25 East, Less and Except the East 330 feet, lying and being in Section 13, Township 47 South, Range 25 East, Lee County, Florida.

Easement Parcel 1:

Easement for ingress and egress reserved in Official Record Book 1377, Page 1372, Public Records of Lee County, Florida, over the following described property: West 60 feet of the East 390 feet of Section 24, Township 47 South, Range 25 East, Lee County, Florida.

Easement Parcel 2:

Easement for ingress and egress over the following described property: A tract or parcel of land situated in the State of Florida, County of Lee, lying in Section 24, Township 47 South, Range 25 East and further described as follows:

Commencing at the Southeast corner of Section 24, Township 47 South, Range 25 East; thence N 01 Degrees 01' 19" W along the East line of said Section 24 for 67.72 feet to the Point of Beginning; thence continue N 01 Degrees 01' 19" W along the East line of said Section 24 for 60.00 feet; thence S 88 Degrees 47' 42" W for 225.00 feet to the beginning of a curve concave to the Northeast having a radius of 110.00

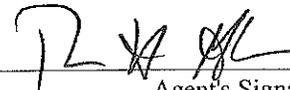
**OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY**

*Issued Through Attorneys' Title Fund Services, LLC*

Agent No.: 200

Issuing Agent:

**HENDERSON, FRANKLIN, STARNES &  
HOLT, P.A.**  
1715 Monroe St.  
P. O. Box 280  
Fort Myers, FL 33902



\_\_\_\_\_  
Agent's Signature  
**Thomas H. Gunderson**  
Attorney at Law

**Old Republic National Title Insurance Company**

*OWNER'S POLICY*

**Schedule A (Continued)**

Policy No.:  
OPM-4032105

Agent's File Reference:  
THG WatrBS Lee2

feet; thence Northwesterly along the arc of said curve to the right through a central angle of 72 Degrees 14' 23" for 138.69 feet to an intersection with the East line of an easement as described in Official Record Book 2379, Page 277 of the Public Records of Lee County, Florida; thence S 01 Degrees 01' 19" E along said East line for 105.51 feet; thence S 65 Degrees 47' 16" E for 72.07 feet; thence N 88 Degrees 47' 42" E (parallel with and 67.72 feet North of the South line of said Section 24) for 264.81 feet to the Point of Beginning.

**Old Republic National Title Insurance Company**  
**Issued Through Attorneys' Title Fund Services, LLC**  
**OWNER'S POLICY**  
**Schedule B**

Policy No.:  
OPM-4032105

Agent's File Reference:  
THG WatrBS Lee2

This policy does not insure against loss or damage by reason of the following exceptions:

1. The lien of all taxes for the year 2010 and thereafter, which are not yet due and payable.
2. Subject to rights of tenants under that certain unrecorded Revised Ag Lease Agreement by and between Watermen at Bonita, LLC, and Robert Daughtery.
3. Lee County Ordinance No. 86-14 recorded November 30, 1990, in O.R. Book 2189, Page 3281; and amended by Ordinance No. 86-38 in O.R. Book 2189, Page 3334, Public Records of Lee County, Florida, providing for mandatory solid waste collection and the imposition of special assessments for said collection services. The special assessments for the current tax year are payable with the ad valorem taxes.
4. Subject to an easement for ingress and egress over and across the West 60 feet of the East 390 feet of said Section 13, which easement terminates 100 feet South of the North line of said Section 13 as described in Deed recorded in O.R. Book 1378, Page 2305, Public Records of Lee County, Florida, and as described in instrument recorded in O.R. Book 1300, Page 2137, Public Records of Lee County, Florida, as to Parcel 1 only.
5. Subject to an easement of ingress and egress over and across the South 30 feet and over the West 60 feet of the East 390 feet of Section 13-47-25 recorded in O.R. Book 1388, Page 495, Public Records of Lee County, Florida. (As to SE 1/4 of Section 13-47-25)
6. Oil, gas, mineral or other reservations, with right of entry as set forth in that certain Deed recorded in Deed Book 216, Page 440, Public Records of Lee County, Florida.
7. Oil, gas, mineral or other reservations, with right of entry as set forth in that certain deed recorded in Deed Book 216, Page 440, Public Records of Lee County, Florida. (As to Easement Parcel 1 and Easement Parcel 2)
8. Subject to the terms, provisions and conditions of an easement agreement between Bonita Springs Utilities, Inc., Waterman At Bonita, LLC and Liberty Youth Ranch, LLC recorded in Clerk's File Number 2008000045412, Public Records of Lee County, Florida. (As to Easement Parcel 2)
9. Subject to the terms, provisions and conditions of an Easement described in Warranty Deed recorded in O.R. Book 1377, Page 1372, Public Records of Lee County, Florida. (As to Easement Parcel 1)
10. Easement as described in Warranty Deed recorded in O.R. Book 1300, Page 2137, Public Records of Lee County, Florida. (As to Easement Parcel 2)
11. Negative Easement (Servitude) Upon Use of Servient Estate For The Benefit of The Named Dominate Estates recorded in O.R. Book 3255, Page 4715 and O.R. Book 3255, Page 4733, Public Records of Lee County, Florida. (As to Easement Parcel 1 and Easement Parcel 2)
12. Right of Way and Drainage Easement recorded in O.R. Book 389, Page 570, Public Records of Lee County, Florida. (Easement Parcel 2)
13. Subject to the right, title and interest of Bonita Springs Utilities, Inc., as the underlying fee owner. (As to Easement Parcel 1 and Easement Parcel 2)
14. Easement Deed recorded in O.R. Book 331, Page 402, Public Records of Lee County, Florida. (As to Easement Parcel 1 and Easement Parcel 2)
15. Grant of Utility easement to Bonita Springs Water System, Inc. recorded in O.R. Book 1844, Page 3207, Public Records of Lee County, Florida.

Note: The attached Florida Form 9.1 does not apply to Easement Parcel 1 or Easement Parcel 2.

FLORIDA ENDORSEMENT FORM 9.1 (10/17/98) (RESTRICTIONS, EASEMENTS, MINERALS)  
(OWNER'S POLICY: UNIMPROVED LAND)

**Old Republic National Title Insurance Company**  
*Issued Through Attorneys' Title Fund Services, LLC*

Endorsement No. **1** to Owner's Policy No.: **OPM-4032105**

The Company insures the insured against loss or damage sustained by reason of:

1. The existence, at Date of Policy, of any of the following unless expressly excepted in Schedule B:
  - (a) Present violations on the land of any enforceable covenants, conditions or restrictions.
  - (b) Any instrument referred to in Schedule B as containing covenants, conditions or restrictions on the land which, in addition (i) establishes an easement on the land; (ii) provides for an option to purchase, a right of first refusal or the prior approval of a future purchaser or occupant; or (iii) provides a right of reentry, possibility of reverter or right of forfeiture because of violations on the land of any enforceable covenants, conditions or restrictions.
  - (c) Any encroachment onto the land of existing improvements located on adjoining land.
  - (d) Any notices of violation of covenants, conditions and restrictions relating to environmental protection recorded or filed in the public records.
2. Damage to buildings constructed on the land after Date of Policy resulting from the future exercise of any right existing at Date of Policy to use the surface of the land for the extraction or development of minerals excepted from the description of the land or excepted in Schedule B.

Wherever in this endorsement the words "covenants, conditions or restrictions" appear, they shall not be deemed to refer to or include the terms, covenants, conditions or limitations contained in an instrument creating a lease.

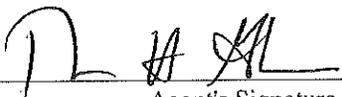
As used in paragraph 1(a) the words "covenants, conditions or restrictions" shall not be deemed to refer to or include any covenants, conditions or limitations relating to environmental protection.

This endorsement is made a part of the policy and is subject to all of the terms and provisions thereof and of any prior endorsements thereto. Except to the extent expressly stated, it neither modifies any of the terms and provisions of the policy and any prior endorsements, nor does it extend the effective date of the policy and any prior endorsements, nor does it increase the face amount thereof.

**HENDERSON, FRANKLIN, STARNES & HOLT,**  
P.A.  
Name of Agent

200

Agent No.



Agent's Signature  
**Thomas H. Gunderson**  
Attorney at Law

**Old Republic National Title Insurance Company**  
**Rande K. Yeager**  
President

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to the insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the Company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

#### **5. Proof of Loss or Damage**

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the insured claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in this paragraph shall terminate any liability of the Company under this policy as to that claim.

#### **6. Options To Pay or Otherwise Settle Claims; Termination of Liability**

In case of a claim under this policy, the Company shall have the following additional options:

##### **(a) To Pay or Tender Payment of the Amount of Insurance.**

To pay or tender payment of the amount of insurance under this policy

together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay.

Upon the exercise by the Company of this option, all liability and obligations to the insured under this policy, other than to make the payment required, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

##### **(b) To Pay or Otherwise Settle With Parties Other than the Insured or With the Insured Claimant.**

(i) to pay or otherwise settle with other parties for or in the name of an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b)(i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute or continue any litigation.

#### **7. Determination, Extent of Liability and Coinsurance**

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

(a) The liability of the Company under this policy shall not exceed the least of:

(i) the Amount of Insurance stated in Schedule A; or,

(ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.

*(b) (This paragraph dealing with Coinsurance was removed from Florida policies.)*

(c) The Company will pay only those costs, attorneys' fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations

#### **8. Apportionment**

If the land described in Schedule A consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

#### **9. Limitation of Liability**

(a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim of unmarketability of title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

(c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

#### **10. Reduction of Insurance; Reduction or Termination of Liability**

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance

Prepared by and return to:

**Thomas H. Gunderson**  
Attorney at Law  
HENDERSON, FRANKLIN, STARNES & HOLT, P.A.  
1715 Monroe St. P. O. Box 280  
Fort Myers, FL 33902  
239-344-1100  
File Number: THG WatrBS Lee2  
Will Call No.: 35  
Parcel Identification Number: 13-47-25-B3-00001.0020

INSTR # 2010000065208, Pages 3  
Doc Type D, Recorded 03/15/2010 at 09:35 AM,  
Charlie Green, Lee County Clerk of Circuit Court  
Deed Doc. \$14455.00 Rec. Fee \$27.00  
Deputy Clerk BHANZEVACK  
#1

[Space Above This Line For Recording Data]

## Warranty Deed

This Warranty Deed made this 9<sup>th</sup> day of March, 2010 between Watermen at Bonita, LLC, a Florida limited liability company whose post office address is 265 Sevilla Avenue, Coral Gables, FL 33134, grantor, and LEE COUNTY, a political subdivision of the State of Florida whose post office address is P.O. Box 398, Fort Myers, FL 33902-0398, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

**Witnesseth**, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Lee County, Florida to-wit:

The SE 1/4 of Section 13, Township 47 South, Range 25 East, Less and Except the East 330 feet, lying and being in Section 13, Township 47 South, Range 25 East, Lee County, Florida.

### Easement Parcel 1:

Easement for ingress and egress reserved in Official Record Book 1377, Page 1372, Public Records of Lee County, Florida, over the following described property: West 60 feet of the East 390 feet of Section 24, Township 47 South, Range 25 East, Lee County, Florida.

### Easement Parcel 2:

Easement for ingress and egress over the following described property: A tract or parcel of land situated in the State of Florida, County of Lee, lying in Section 24, Township 47 South, Range 25 East and further described as follows:

Commencing at the Southeast corner of Section 24, Township 47 South, Range 25 East; thence N 01 Degrees 01' 19" W along the East line of said Section 24 for 67.72 feet to the Point of Beginning; thence continue N 01 Degrees 01' 19" W along the East line of said Section 24 for 60.00 feet; thence S 88 Degrees 47' 42" W for 225.00 feet to the beginning of a curve concave to the Northeast having a radius of 110.00 feet; thence Northwesterly along the arc of said curve to the right through a central angle of 72 Degrees 14' 23" for 138.69 feet to an intersection with the East line of an easement as described in Official Record Book 2379, Page 277 of the Public Records of Lee County, Florida; thence S 01 Degrees 01' 19" E along said East line for 105.51 feet; thence S 65 Degrees 47' 16" E for 72.07 feet; thence N 88 Degrees 47' 42" E (parallel with and 67.72 feet North of the South line of said Section 24) for 264.81 feet to the Point of Beginning.

Subject to taxes for 2010 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

**Together** with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

**To Have and to Hold**, the same in fee simple forever.

**And** the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to **December 31, 2009**.

**In Witness Whereof**, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Watermen at Bonita, LLC, a Florida limited liability company

By: [Signature]  
EDDY GARCIA, Manager

By: [Signature]  
DAVID KRAIZGRUN, Manager

[Signature]  
Witness Name: Maria D Garcia

[Signature]  
Witness Name: William D Hughes

[Signature]  
Witness Name: Maria D Garcia

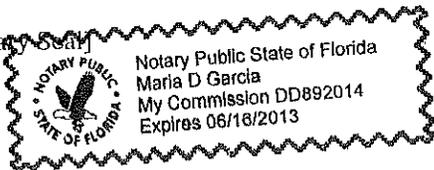
[Signature]  
Witness Name: William D Hughes

(Corporate Seal)

State of Florida  
County of Dade

The foregoing instrument was acknowledged before me this 9th day of March, 2010 by EDDY GARCIA, Manager of Watermen at Bonita, LLC, a Florida limited liability company, on behalf of the company. He is personally known to me.

[Notary Seal]



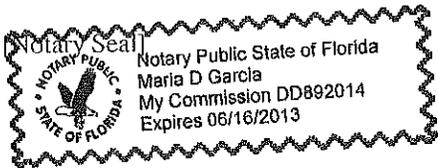
[Signature]  
Notary Public, State of Florida

Printed Name: Maria D Garcia

My Commission Expires: 6/16/2013

State of Florida  
County of Dade

The foregoing instrument was acknowledged before me this 9<sup>th</sup> day of March, 2010 by DAVID KRAIZGRUN, Manager of Watermen at Bonita, LLC, a Florida limited liability company, on behalf of the company. He is personally known to me.



Maria D Garcia  
Notary Public, State of Florida

Printed Name: Maria D Garcia

My Commission Expires: 6/16/2013

Acquisition approved by the Lee County Board  
of Commissioners action on 11/3/2009  
and accepted on behalf of the board by \_\_\_\_\_  
Debra A. Bidwell on 3/10/2010  
in accordance with B/S 20091060  
Project 8800 (20/20) Parcel 249-2  
Part B



L. Settlement charges				Borrower	POC	Seller	POC	Paid from Borrower's Funds at Settlement	Paid from Seller's Funds at Settlement
700. Total Sales/Brokers Com. based on price	\$2,065,000.00 @	% =							
701.	% to								
702.	% to								
703. Commission paid at settlement									
704.	to								
800. Items payable in connection with loan:				Borrower	POC	Seller	POC		
801. Loan origination fee	% to								
802. Loan discount	% to								
803. Appraisal fee	to								
804. Credit report	to								
805. Lender's Inspection fee	to								
806. Mortgage insurance application fee	to								
807. Assumption Fee	to								
808.	to								
809.	to								
810.	to								
811.	to								
900. Items required by lender to be paid in advance:				Borrower	POC	Seller	POC		
901. Interest from	to	@	/day						
902. Mortgage insurance premium for	months to								
903. Hazard insurance premium for	years to								
904. Flood insurance premium for	years to								
905.	years to								
1000. Reserves deposited with lender:				Borrower	POC	Seller	POC		
1001. Hazard insurance	months @		per month						
1002. Mortgage insurance	months @		per month						
1003. City property taxes	months @		per month						
1004. County property taxes	months @		per month						
1005. Annual assessments	months @		per month						
1006. Flood insurance	months @		per month						
1007.	months @		per month						
1008.	months @		per month						
1009. Aggregate accounting adjustment									
1100. Title charges:				Borrower	POC	Seller	POC		
1101. Settlement or closing fee	to	HENDERSON, FRANKLIN, STARNES & HOLT, P.A.					150.00	150.00	
1102. Abstract or title search	to	HENDERSON, FRANKLIN, STARNES & HOLT, P.A.					75.00		
1103. Title examination	to								
1104. Title Insurance binder	to								
1105. Document preparation	to								
1106. Notary fees	to								
1107. Attorney's Fees	to								
(includes above item numbers: )									
1108. Title Insurance	to	Old Republic Nat. Title/HENDERSON, FRANKLIN					5,528.75		
(includes above item numbers: )									
1109. Lender's coverage (Premium):									
1110. Owner's coverage (Premium): \$2,065,000.00 (\$5,528.75)									
1111. Endorse: F9.1-552.88								552.88	
1112.	to								
1113.	to								
1200. Government recording and transfer charges:									
1201. Recording fees	Deed	\$27.00	Mortgage(s)	Releases	\$27.00		27.00	27.00	
1202. City/county tax/stamps	Deed		Mortgage(s)						
1203. State tax/stamps	Deed	\$14,455.00	Mortgage(s)					14,455.00	
1204.	to								
1205.	to								
1300. Additional settlement charges:				Borrower	POC	Seller	POC		
1301. Survey	to								
1302. Pest Inspection	to								
1303. Payoff of 2010 Real Property Taxes	to	Lee County Tax Collector						82.79	
1304. Attorneys Fees and Costs	to	HENDERSON, FRANKLIN, STARNES & HOLT, P.A.						18,000.00	
1305.	to								
1306.	to								
1307.	to								
1308.	to								
1309.	to								
1400. Total settlement charges:									
( Enter on lines 103, Section J and 502, Section K )							5,780.75	33,267.67	

I have carefully reviewed the HUD-1 Settlement Statement and to the best of my knowledge and belief, it is a true and accurate statement of all receipts and disbursements made on my account or by me in this transaction. I further certify that I have received a copy of the HUD-1 Settlement Statement.

LEE COUNTY  
 By: Sheila A. Bedwell on behalf of Lee County Borrower  
 Sheila A. Bedwell

Watermen at Bonita, LLC  
 By: EDDY GARCIA Manager Seller  
 By: DAVID KRAIZGRUN Manager Seller

The HUD-1 Settlement Statement which I have prepared is a true and accurate account of this transaction. I have caused, or will cause, the funds to be disbursed in accordance with this statement.

HENDERSON, FRANKLIN, STARNES & HOLT, P.A.

By: \_\_\_\_\_ Date \_\_\_\_\_  
 As Its Authorized Representative

WARNING: It is a crime to knowingly make false statements to the United States on this or any other similar form. Penalties upon conviction can include a fine and imprisonment. For details see: Title 18 U.S. Code Section 1001 and Section 1010.

**Lee County Board Of County Commissioners  
Agenda Item Summary**

**Blue Sheet No. 20091060**

**1. ACTION REQUESTED/PURPOSE:**

Authorize: (1) approval of the purchase of Parcel No 249-2, Conservation 20/20 Land Acquisition Program, Project No. 8800, further identified as two vacant parcels located along the easterly right-of-way of Interstate 75 and along the north side of Liberty Youth Ranch Way approximately 3 mile north of Bonita Beach Road, consisting of 428.45 acres located in southeast Lee County, in the amount of \$6,500,000; (2) the Chairman on behalf of the Board of County Commissioners to execute all documents necessary for closing; (3) payment of necessary costs and fees to close; and (4) the Division of County Lands to handle and accept all documentation necessary to complete this transaction.

**2. FUNDING SOURCE:**

Fund—Conservation 20/20 Capital Improvement Fund; Program—Capital Project; Project: Conservation 20/20, Land Purchase

**3. WHAT ACTION ACCOMPLISHES:**

The acquisition of one of the properties recommended by the Conservation Land Acquisition and Stewardship Advisory Committee.

**4. MANAGEMENT RECOMMENDATION:** Approve

**5. Departmental Category:** <DeptCategory> **A-5A**

**6. Meeting Date:** 11/3/2009

**7. Agenda:**

Administrative

**8. Requirement/Purpose:** (specify)

- Statute
- Ordinance      96-12
- Admin Code
- Other

**9. Request Initiated**

**Commissioner:**  
**Department:** COUNTY LANDS  
**Division:** No Divisions  
**By:** Karen Forsyth



**10. Background:**

Parcel 249-2 consists of 428.45 acres of vacant unimproved land, in southeast Lee County. Total number of Conservation 20/20 acreage purchased to date is 22,483.

Interest to Acquire: Fee Simple

**Property Details:**

Owner: Watermen at Bonita, LLC

Address: N/A

STRAP No's.: 13-47-25-B3-00001.0020, 13-47-25-B1-00001.0030.

**Purchase Details:**

The property owner's original asking price was \$17,138,000 (\$40,000 per acre); however, through negotiations, they have agreed to accept the County's offer. The acquisition will occur in two stages; 1) \$4,435,000 (292.45 acres) paid at closing within 60 days of execution of the Agreement, 2) \$2,065,000 (136 acres) paid at closing on or before March 26, 2010.

Purchase Price: \$ 6,500,000 (\$15,171 per acre).

Costs to Close: \$25,000

**Appraisal Information:**

In accordance with FS 125.355, two appraisals were obtained. Copies of the appraisals by Hanson Real Estate Advisors, Inc. and Maxwell and Hendry Valuation Services, Inc., are attached.

Account: 20880030103.506110

**11. Required Review:**

<Signature>	<Signature>	<Signature>	<Signature>	<Signature>	<Signature>
<Department>	<Department>	<Department>	<Department>	<Department>	<Department>
<Signature>	<Signature>	<Signature>	<Signature>	<Signature>	<Signature>
<Department>	<Department>	<Department>	<Department>	<Department>	<Department>

**12. Commission Action:**

**APPROVED**

## **Appendix G: Expended and Projected Costs and Funding Source**

## Appendix F - Expended and Projected Costs and Funding Sources

### PROJECTED \$

#### Structures & Improvements

Item	Possible Funding Sources	Costs
Entrance	C20/20	\$300
Closed trail signs		\$500

**Total Cost Estimate**

**\$800**

#### Resource Enhancement and Protection

Item	Possible Funding Sources	Costs
Initial invasive exotic plant removal of natural areas	C20/20/FDEP	\$244,100
Mechanical brush reduction	C20/20	\$3,750
Trash removal		\$1,000
Exotic animal removal		\$1,000
Additional fireline installation		\$10,000

**Total Cost Estimate**

**\$259,850**

#### Overall Protection

Item	Possible Funding Sources	Costs
Fence repairs	C20/20	\$200

**Total Cost Estimate**

**\$200**

**Grand Total Cost Estimate**

**\$260,850**

#### Site Management and Maintenance

Item	Possible Funding Sources	Costs
Exotic plant control	C20/20	\$44,940
Prescribed fire regime (annually)	C20/20, FDOF	\$250
Fireline maintenance		\$500

**Yearly Maintenance Estimate**

**\$45,690**

## EXPENDED \$

### Resource Enhancement and Protection

Item	Funding Source	Costs
Removal of logging slash piles	C20/20	\$5,700
<b>total</b>		<b>\$5,700</b>

### Overall Protection

Item	Funding Source	Costs
Install new gates	C20/20	\$250
Boundary signs	C20/20	\$576
<b>total</b>		<b>\$826</b>

<b>TOTAL COST TO DATE</b>	<b>\$6,526</b>
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