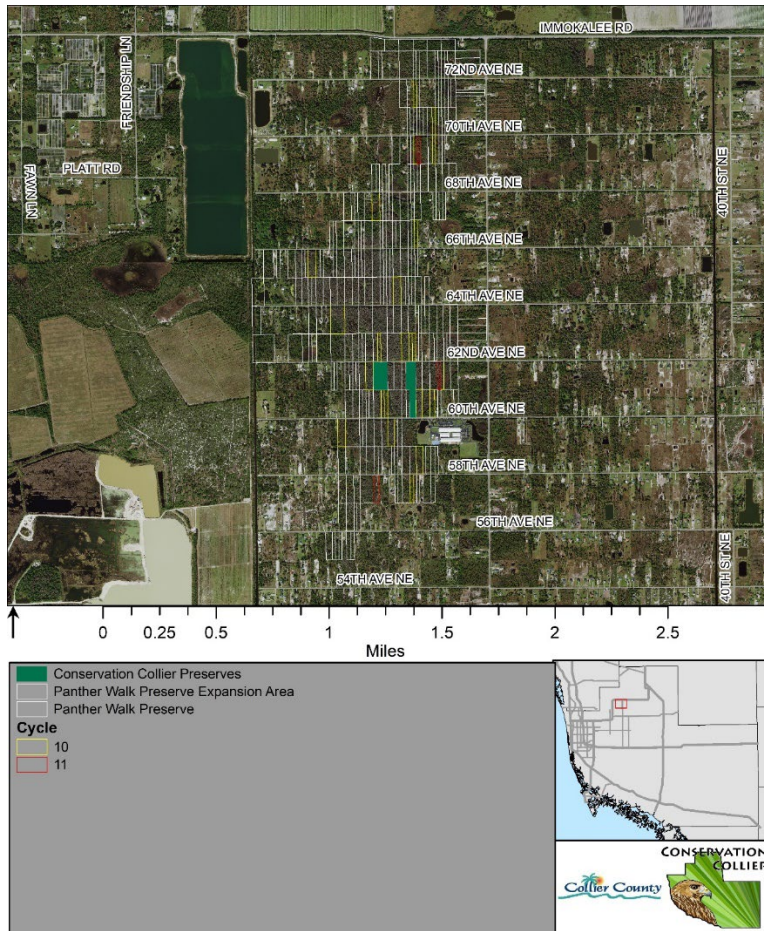


# Conservation Collier Initial Criteria Screening Report

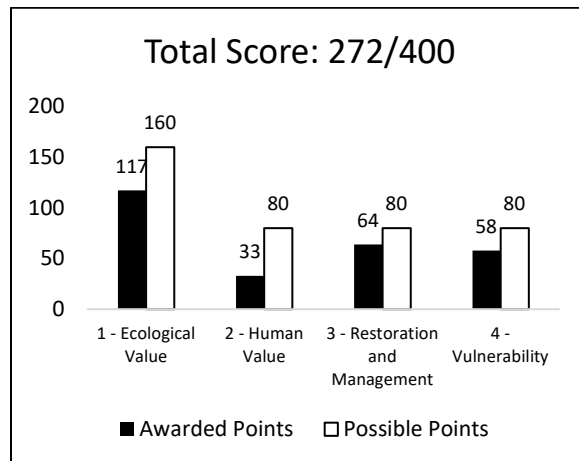
## Panther Walk TPMA



Target Protection Area Parcels and Acreage: 262 parcels (513.07 ac)

Applied Parcel Owner(s): Berman Trust (39155120000), McGinnis (39150600004), Repola (38848960002), Vaz (38845280002), and Scalley (38846640007)

Staff Report Date: August 3, 2022 (Revised August 26, 2022)



# Table of Contents

<b>Table of Contents</b> .....	2
<b>1. Introduction</b> .....	4
<b>2. Summary of Property</b> .....	5
Figure 1 - Parcel Location Overview, 1 – Berman Trust, 2 – McGinnis, 3 – Repola Braffman, 4 – Vaz, 5 - Scalley .....	5
Figure 2 - Parcel Close-up .....	6
<b>2.1 Summary of Property Information</b> .....	7
Table 1 – Summary of Property Information .....	7
Figure 3 - Secondary Criteria Score .....	8
Table 2 - Secondary Criteria Score Summary .....	8
<b>2.2 Summary of Assessed Value and Property Cost Estimates</b> .....	9
Table 3. Assessed & Estimated Value .....	9
<b>2.2.1 Zoning, Growth Management and Conservation Overlays</b> .....	9
<b>2.3 Summary of Initial Screening Criteria Satisfaction (Ord. 2002-63, Sec. 10)</b> .....	10
<b>3. Initial Screening Criteria</b> .....	12
<b>3.1 Ecological Values</b> .....	12
<b>3.1.1 Vegetative Communities</b> .....	12
Table 4. Listed Plant Species .....	12
Figure 4 - CLIP4 Priority Natural Communities .....	13
Figure 5 - Florida Cooperative Land Cover Classification System .....	14
Figure 6 – Cypress strand forest .....	15
Figure 7 – Wet prairie situated between pine flatwood and mixed wetland hardwood communities .....	15
<b>3.1.2 Wildlife Communities</b> .....	16
Table 5 – Listed Wildlife Detected .....	16
Figure 8 - Wildlife Spatial Data (i.e., telemetry, roosts, etc) .....	17
Figure 9 - CLIP4 Potential Habitat Richness .....	18
<b>3.1.3 Water Resources</b> .....	19
Figure 10 - CLIP Aquifer Recharge Priority and Wellfield Protection Zones .....	20
Figure 11 - Collier County Soil Survey .....	21
Figure 12 LIDAR Elevation Map .....	22
<b>3.1.4 Ecosystem Connectivity</b> .....	23

Figure 13 - Conservation Lands ..... 24

**3.2 Human Values** ..... 25

**3.2.1 Recreation** ..... 25

**3.2.2 Accessibility** ..... 25

**3.2.3 Aesthetic/Cultural Enhancement** ..... 25

Figure 14 – Mature cypress strand forest and marsh ..... 25

**3.3 Restoration and Management**..... 25

**3.3.1 Vegetation Management** ..... 25

        3.3.1.1 Invasive Vegetation ..... 25

        3.3.1.2 Prescribed Fire ..... 26

**3.3.2 Remediation and Site Security**..... 26

**3.3.3 Assistance** ..... 26

**3.4 Vulnerability**..... 26

**3.4.1 Zoning and Land Use** ..... 26

**3.4.2 Development Plans** ..... 29

**4. Acquisition Considerations**..... 29

**5. Management Needs and Costs** ..... 29

    Table 6 - Estimated Costs of Site Remediation, Improvements, and Management ..... 29

**6. Potential for Matching Funds**..... 29

**7. Secondary Criteria Scoring Form**..... 29

**8. Additional Site Photos** ..... 34

    Potential Listed Wildlife Species..... 37

    Non-Listed Wildlife Species Observed..... 38

**APPENDIX 1 – Critical Lands and Water Identification Maps (CLIP) Definitions**..... 39

## 1. Introduction

The Conservation Collier Program (Program) is an environmentally sensitive land acquisition and management program approved by the Collier County Board of County Commissioners (Board) in 2002 and by Collier County Voters in 2002 and 2006. The Program was active in acquisition between 2003 and 2011, under the terms of the referendum. Between 2011 and 2016, the Program was in management mode. In 2017, the Collier County Board reauthorized Conservation Collier to seek additional lands (2/14/17, Agenda Item 11B). On November 3, 2020, the Collier County electors approved the Conservation Collier Re-establishment referendum with a 76.5% majority.

This Initial Criteria Screening Report (ICSR) has been prepared for the Conservation Collier Program in its 11th acquisition cycle to meet requirements specified in the Conservation Collier Implementation Ordinance, 2002-63, as amended, and for purposes of the Conservation Collier Program. The sole purpose of this report is to provide objective data to demonstrate how properties meet the criteria defined by the ordinance.

The following sections characterize the property location and assessed value, elaborate on the initial and secondary screening criteria scoring, and describe potential funding sources, appropriate use, site improvements, and estimated management costs.



## 2. Summary of Property

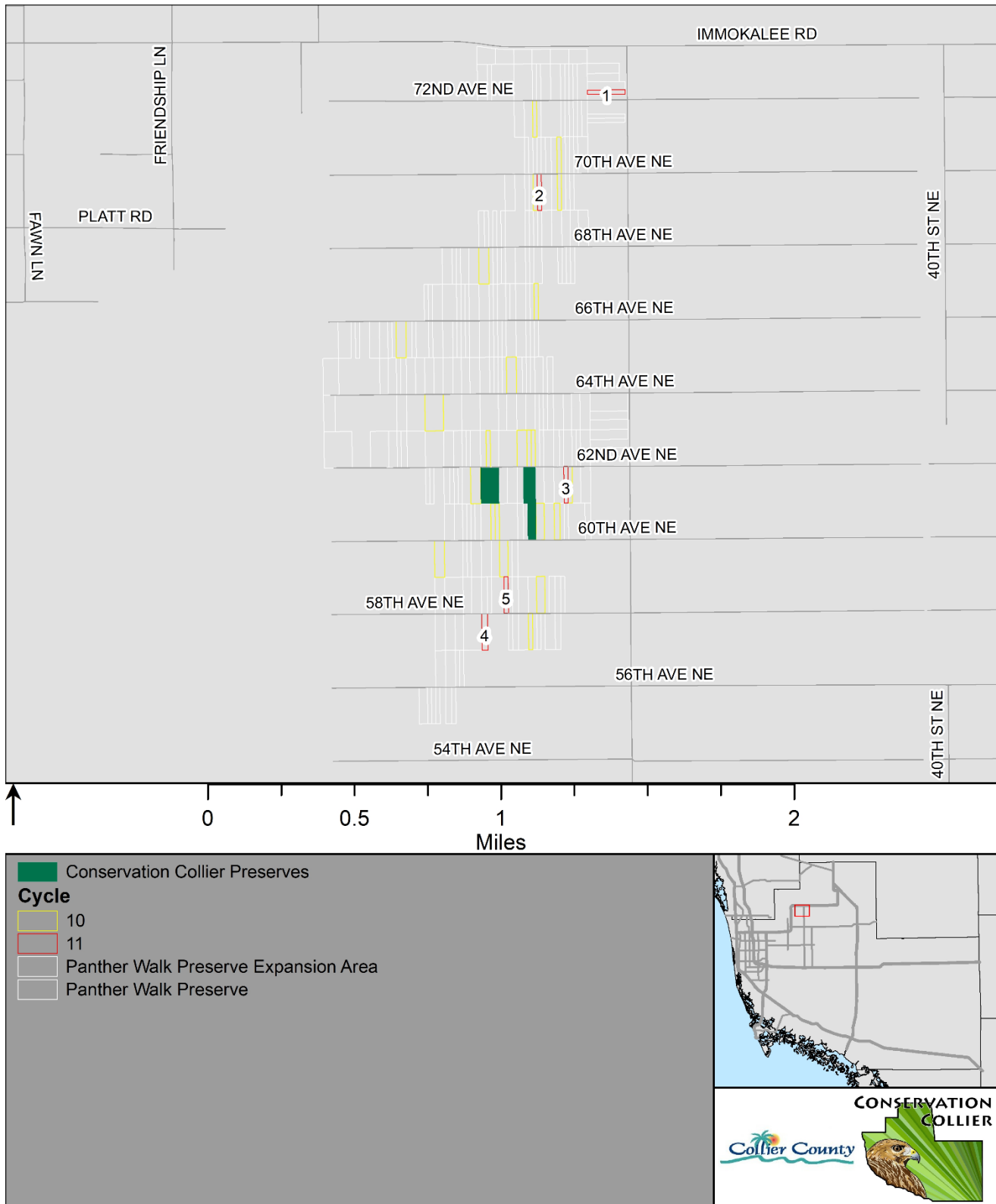


Figure 1 - Parcel Location Overview, 1 – Berman Trust, 2 – McGinnis, 3 – Repola Braffman, 4 – Vaz, 5 - Scalley

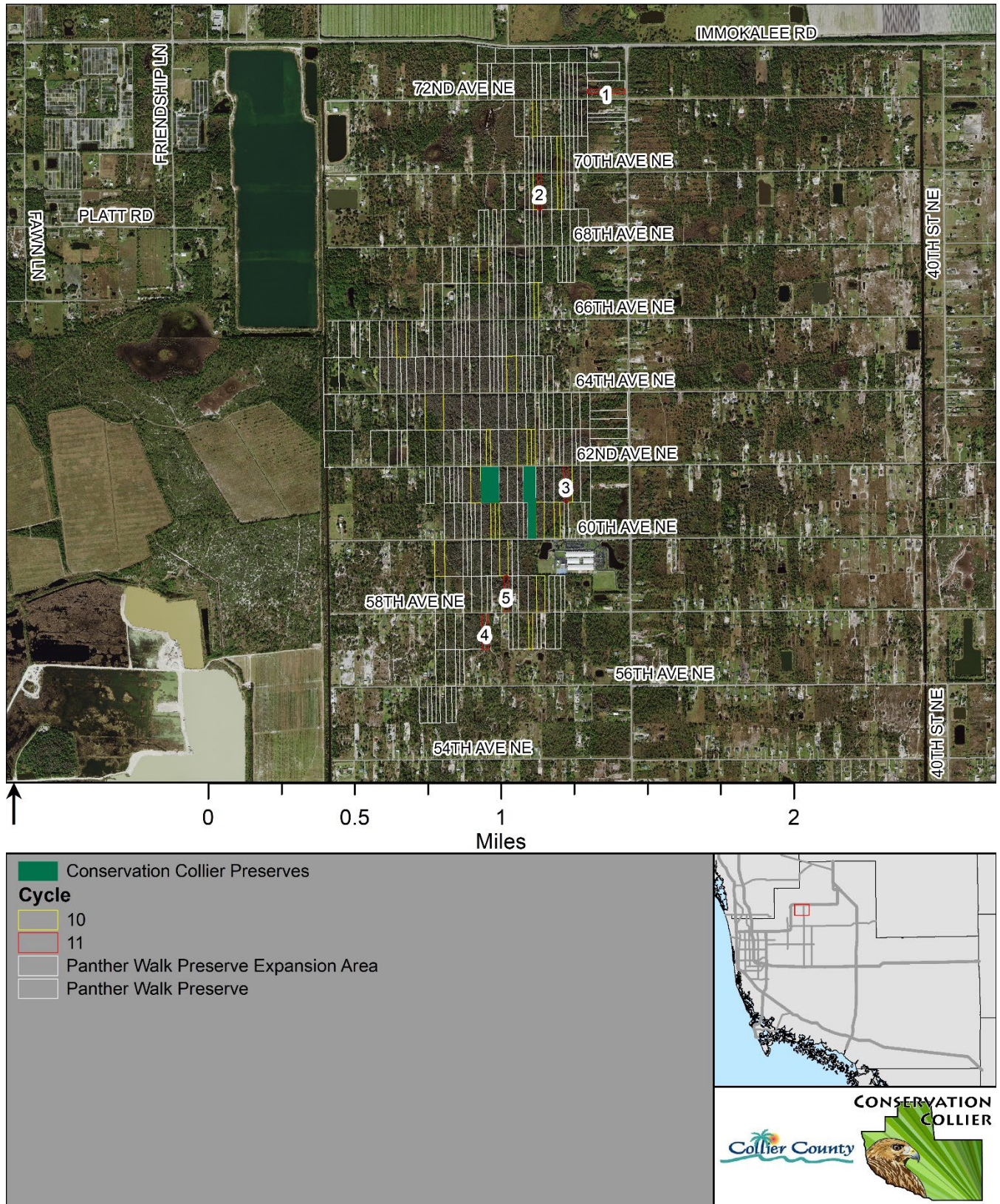


Figure 2 - Parcel Close-up

## 2.1 Summary of Property Information

Table 1 – Summary of Property Information

Characteristic	Value	Comments
Name	Multiple	Berman Trust, McGinnis, Burns, Vaz, and Scalley
Folio Number	262 parcels	
Target Protection Area	Northern Golden Gate Estates Scrub	
Size	513.07 total acres	262 parcels ranging between 1.14 and 7.62 acres
Section, Township, and Range	S31, Twn 47, R28	
Zoning Category/TDRs	E	Estates
Existing structures	None	
Adjoining properties and their Uses	Residential	Low-density, single-family homes
Development Plans Submitted	None	
Known Property Irregularities	None known	
Other County Dept Interest	Transportation	Parcels along Everglades Blvd. may be needed for roadway expansion.

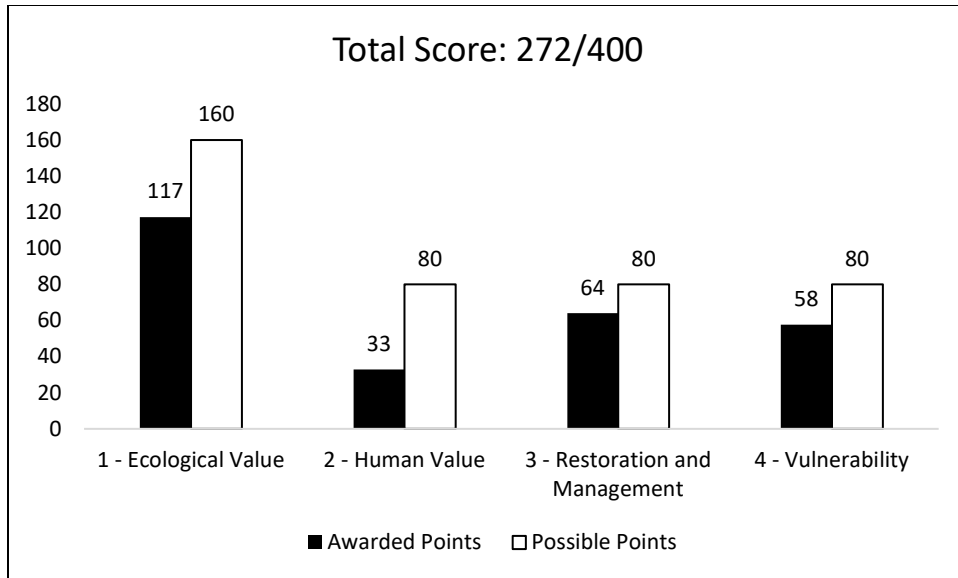


Figure 3 - Secondary Criteria Score

Table 2 - Secondary Criteria Score Summary

Criteria	Awarded Weighted Points	Possible Weighted Points	Awarded/Possible Points
<b>1 - Ecological Value</b>	<b>117</b>	<b>160</b>	<b>73%</b>
1.1 - Vegetative Communities	40	53	75%
1.2 - Wildlife Communities	21	27	80%
1.3 - Water Resources	16	27	60%
1.4 - Ecosystem Connectivity	40	53	75%
<b>2 - Human Values</b>	<b>33</b>	<b>80</b>	<b>41%</b>
2.1 - Recreation	6	34	17%
2.2 - Accessibility	23	34	67%
2.3 - Aesthetics/Cultural Enhancement	4	11	38%
<b>3 - Restoration and Management</b>	<b>64</b>	<b>80</b>	<b>80%</b>
3.1 - Vegetation Management	55	55	100%
3.2 - Remediation and Site Security	9	23	40%
3.3 - Assistance	0	2	0%
<b>4 - Vulnerability</b>	<b>58</b>	<b>80</b>	<b>72%</b>
4.1 - Zoning and Land Use	56	58	96%
4.2 - Development Plans	2	22	10%
<b>Total</b>	<b>272</b>	<b>400</b>	<b>68%</b>



## 2.2 Summary of Assessed Value and Property Cost Estimates

The interest being appraised is fee simple “as is” for the purchase of the site. A value of the parcel was estimated using only one of the three traditional approaches to value, the sales comparison approach. It is based on the principal of substitution that an informed purchaser would pay no more for the rights in acquiring a particular real property than the cost of acquiring, without undue delay, an equally desirable one. Three properties were selected for comparison, each with similar site characteristics, utility availability, zoning classification and road access. No inspection was made of the property or comparables used in this report and the Real Estate Services Department staff relied upon information solely provided by program staff. The valuation conclusion is limited only by the reported assumptions and conditions that no other known or unknown adverse conditions exist.

If the Board of County Commissioners choose to acquire this property, an appraisal by an independent Real Estate Appraiser will be obtained at that time. Pursuant to the Conservation Collier Purchase Policy, one appraisal is required for each of the Panther Walk parcels, which have an initial valuation less than \$500,000; 1 independent Real Estate Appraiser will value the subject properties and that appraisal report will determine the actual value of the subject properties.

Table 3. Assessed & Estimated Value

Property owner	Address	Acreage	Assessed Value*	Estimated Value**
R.F. Berman Revocable Trust	No address	1.17	\$19,013	\$47,000
Patricia E McGinnis	No address	1.14	\$18,525	\$45,000
Andrea Repola Braffman	No address	1.14	\$14,051	\$45,000
Maurice and Alinda Vaz	No address	1.59	\$19,597	\$70,000
William J and Martha Scalley	No address	1.14	\$16,530	\$45,000
<b>TOTAL</b>		<b>6.18</b>	<b>\$87,716</b>	<b>\$252,000</b>

\* Assessed Value is obtained from the Property Appraiser’s Website. The Assessed Value is based off the current use of the property.

\*\*The Estimated Market Value for the Panther Walk parcels were obtained from the Collier County Real Estate Services Department in July 2022.

### 2.2.1 Zoning, Growth Management and Conservation Overlays

Zoning, growth management and conservation overlays will affect the value of a parcel. The parcels are zoned Estates which allows 1 unit per 2.25 acres.

**2.3 Summary of Initial Screening Criteria Satisfaction (Ord. 2002-63, Sec. 10)**

**Location Description:** Panther Walk Preserve Target Protection Area. Properties are located in North Golden Gate Estates just south of Immokalee Rd., west of Everglades Blvd., and just south of 56<sup>th</sup> Ave. NE.

**Property Description**

Owner	Address and/or Folio	Acreage
Multiple (see map)	Multiple (see map)	272 parcels; 532.4 ac.

***Nominations to the Conservation Collier Program are based on satisfying at least two of the initial screening criteria below. Qualified sites shall then be further prioritized by secondary evaluative criteria.***

- 1. Does the property contain native plant communities? If yes, are any of the following unique and endangered plant communities present on the property? (Ord. 2002-63, Sec 10(1)(a))**  
 Yes  No  (If yes, briefly describe how parcel meets the above criteria):

Cypress, Marshes, Hydric Pine Flatwoods, Mesic Flatwoods

Ordinance Plant Community	Corresponding Priority Natural Community (Florida Cooperative Land Cover System)	Presence
Tropical Hardwood Hammock	Upland Hardwood Forest	<input type="checkbox"/>
Xeric Oak Scrub	Scrub	<input type="checkbox"/>
Coastal Strand	Coastal Upland	<input type="checkbox"/>
Native Beach	Coastal Upland	<input type="checkbox"/>
Xeric Pine	Scrub/Pine Flatwood	<input type="checkbox"/>
Riverine Oak	-	<input type="checkbox"/>
High Marsh (Saline)	Coastal Wetland	<input type="checkbox"/>
Tidal Freshwater Marsh	Coastal Wetland	<input type="checkbox"/>
Other Native Habitats		<input checked="" type="checkbox"/>

- 2. Does the property offer significant human social values, such as equitable geographic distribution, appropriate access for nature-based recreation, and enhancement of the aesthetic setting of Collier County? Ord. 2002-63, Sec. 10 (1)(b)**  
 Yes  No  (If yes, briefly describe how parcel meets the above criteria):

These properties may be accessed from several roads between 56th Ave NE and– 72th Ave NE off Everglades Boulevard North. The parcels offer land-based opportunities for natural resource-based recreation consistent with the goals of this program, including but not limited to, environmental education, hiking, and nature photography. Several of these parcels are adjacent to Estates Elementary School

- 3. Does the property offer opportunities for protection of water resource values, including aquifer recharge, water quality enhancement, protection of wetland dependent species habitat, and flood control? Ord. 2002-63, Sec. 10 (1)(c)**  
 Yes  No  (If yes, briefly describe how parcel meets the above criteria):

Hydric soils exist on just over 71% of the parcels. These properties are within the Horse Pen Strand and most contain wetlands, therefore providing habitat for wetland dependent species. These properties contribute moderately to the aquifer. The presence of hydrologic indicators on most of the properties, such as cypress knees, buttressed trunks, and open marshes, indicates that most of the properties contain surface water for at least part of the year.

**Does the property offer significant biological values, including biodiversity, listed species habitat, connectivity, restoration potential and ecological quality? Ord. 2002-63, Sec. 10 (1)(d)**

Yes  No  (If yes, briefly describe how parcel meets the above criteria):

Listed plant and animal species have been documented within the Panther Walk Preserve. These parcels all fall within the same wetland system as the Preserve. The native plant communities present within these parcels provide additional habitat for a suite of upland and wetland dependent species and wildlife including the Florida panther and black bear

**4. Does the property enhance and/or protect the environmental value of current conservation lands through function as a buffer, ecological link or habitat corridor? Ord. 2002-63, Sec. 10 (1)(e)**

Yes  No  (If yes, briefly describe how parcel meets the above criteria):

Parcels will enhance the Panther Walk Preserve. The parcels all fall within the Horsepen Strand which flows south from Corkscrew Regional Ecosystem Watershed (CREW) owned by the South Florida Water Management District and Audubon Florida.

**Any qualified land which meets at least two of the above criteria and has matching funds available and/or which Conservation Collier funds availability would leverage a significantly higher funding rank in another acquisition program. Ord. 2002-63, Sec. 10 (1)(f)**

Is the property within the boundary of another agency’s acquisition project?

Yes  No

If yes, will use of Conservation Collier funds significantly increase the rank or funding priority of the parcel for the other agency’s acquisition program?

Yes  No

**MEETS INITIAL SCREENING CRITERIA**

Yes

No

**The properties satisfy 5 initial screening criteria**

### 3. Initial Screening Criteria

#### 3.1 Ecological Values

##### 3.1.1 Vegetative Communities

Cypress strand forest: This habitat is dominated by mature cypress growing in deep water. The midstory is comprised of strangler fig and coastal plain willow. The understory is comprised of swamp fern, alligator flag, and other submerged and emergent vegetation. Numerous species of rare epiphytes are found in these forests.

Cypress/mixed hardwood forests: This habitat is found along the margins of the cypress strand forest and freshwater marshes. The canopy is comprised of cypress, laurel oak, cabbage palm, and melaleuca. The midstory is comprised of myrsine, dahoon holly, wax myrtle, and Brazilian pepper. The understory can be sparse or dense and comprised of swamp fern, saw grass, and sedges.

Oak/Pine hammock: This habitat is dominated by laurel oak, slash pine, and cabbage palms. The midstory consists of myrsine and saw palmetto. The understory consists of ferns, muscadine, and greenbriers.

Freshwater marsh: The deepest portions of these marshes are dominated by coastal plain willow with either pickerel weed or alligator flag. The shallower areas are comprised of lance leaf arrowhead and sedges which give way to grasses and ferns around the perimeter.

Wet prairie: These transitional habitats are found between wetter areas such as cypress strands or marshes and drier areas such as hammocks and flatwoods. They are dominated by grasses and sedges with a wide variety of small herbaceous species.

Pine flatwoods: This habitat is dominated by slash pines with little midstory. The understory is comprised of saw palmetto, rusty lyonia, and grasses. Flatwoods present show both hydric and mesic qualities within a single parcel. Flatwoods are listed as a priority natural community in our region by the Critical Lands and Waters Identification Project.

Table 4. Listed Plant Species

Common Name	Scientific Name	State Status	Federal Status
Hand fern	<i>Cheiroglossa palmata</i>	State Endangered	Not Listed
Stiff-leaved wild-pine, Cardinal airplant	<i>Tillandsia fasciculata</i>	State Endangered	Not Listed
Fuzzy-wuzzy air plant	<i>Tillandsia pruinosa</i>	State Endangered	Not Listed
Giant air plant	<i>Tillandsia utriculata</i>	State Endangered	Not Listed
Reflexed wild-pine, Northern needleleaf	<i>Tillandsia balbisiana</i>	State Threatened	Not Listed



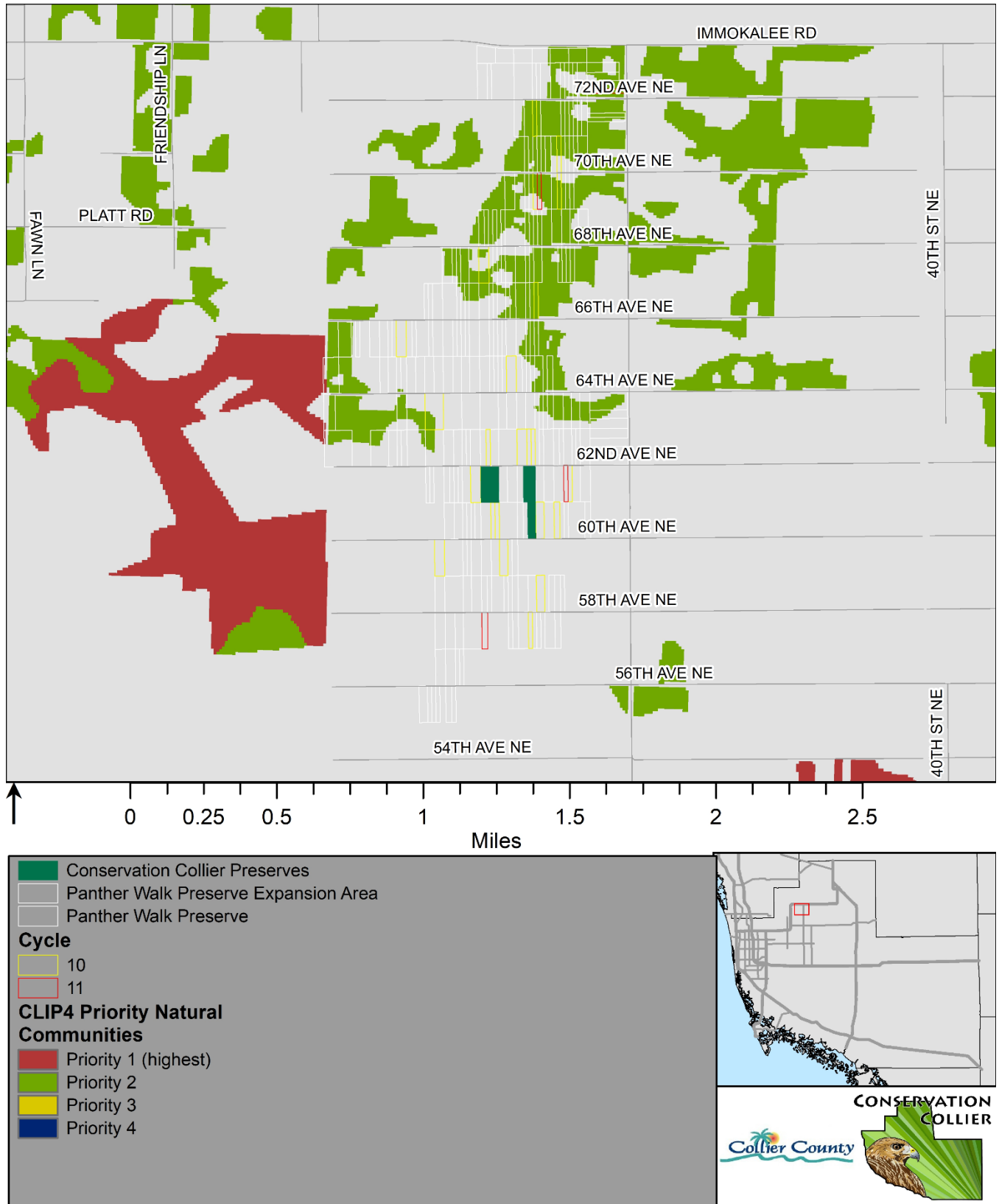


Figure 4 - CLIP4 Priority Natural Communities

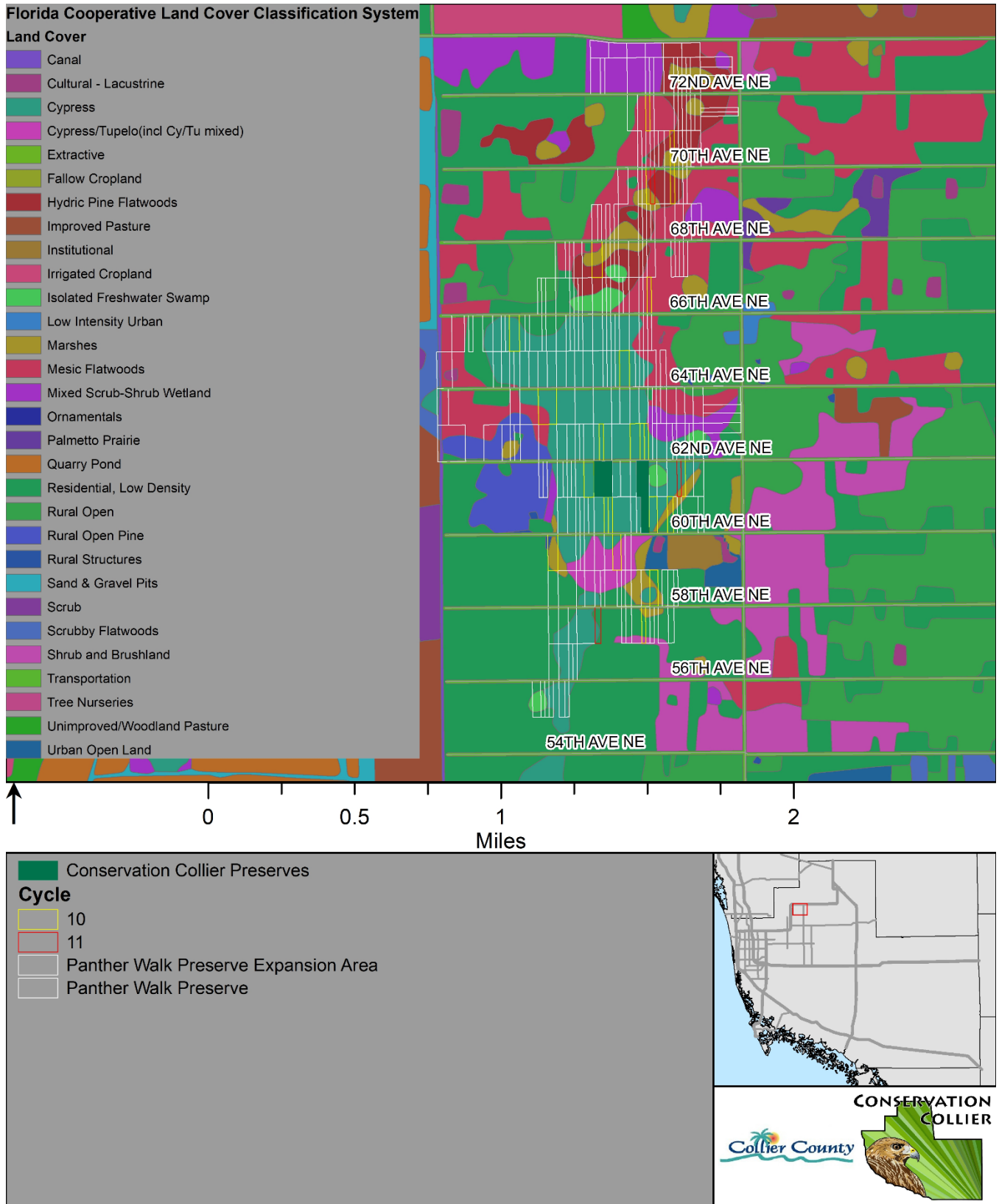


Figure 5 - Florida Cooperative Land Cover Classification System





*Figure 6 – Cypress strand forest*



*Figure 7 – Wet prairie situated between pine flatwood and mixed wetland hardwood communities*



### 3.1.2 Wildlife Communities

The biological value of these parcels is primarily the result of containing high integrity habitats ranging from upland pine flatwoods to deep cypress strand forests. These parcels were disturbed in the past but have had decades to mature into communities that are well adapted to their current environment. These high-quality habitats provide the basis for a thriving food chain for both terrestrial and aquatic species from invertebrates to the largest predators. Black bear scat was found on several parcels and Florida panthers are well documented within the adjacent Panther Walk Preserve. Although not detected during the site visit, American alligators are known to utilize the strand. Numerous river otters were observed crossing the roads. These parcels provide habitat for several species of listed birds which have all been documented in the immediate area including wood storks, little blue herons, Florida sandhill cranes, Audubon’s crested caracaras, and snail kites. Wetlands of varying depth provide foraging habitats nearly year-round.

Table 5 – Listed Wildlife Detected

Common Name	Scientific Name	State Status	Federal Status	Mode of Detection
Little blue heron	<i>Egretta caerulea</i>	Threatened	n/a	Observed on site visit
Florida sandhill crane	<i>Antigone canadensis pratensis</i>	Threatened		Observed on site visit
Crested Caracara	<i>Caracara cheriway</i>	Threatened	Threatened	
Everglades Snail Kite	<i>Rostrhamus sociabilis plumbeus</i>	Endangered	Endangered	
Florida panther	<i>Puma concolor coryi</i>	Endangered	Endangered	Trail camera on Panther Walk Preserve

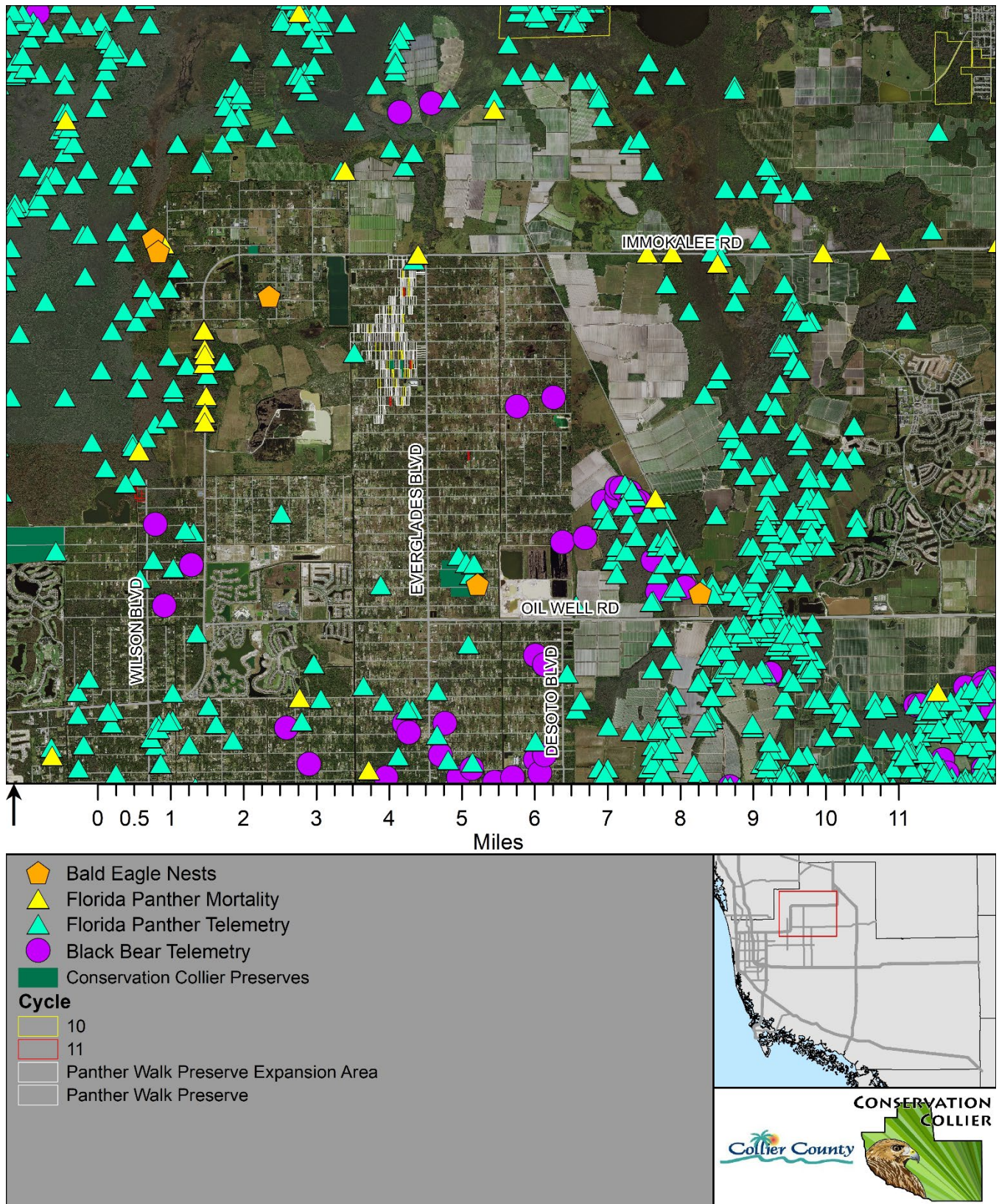


Figure 8 - Wildlife Spatial Data (i.e., telemetry, roosts, etc)



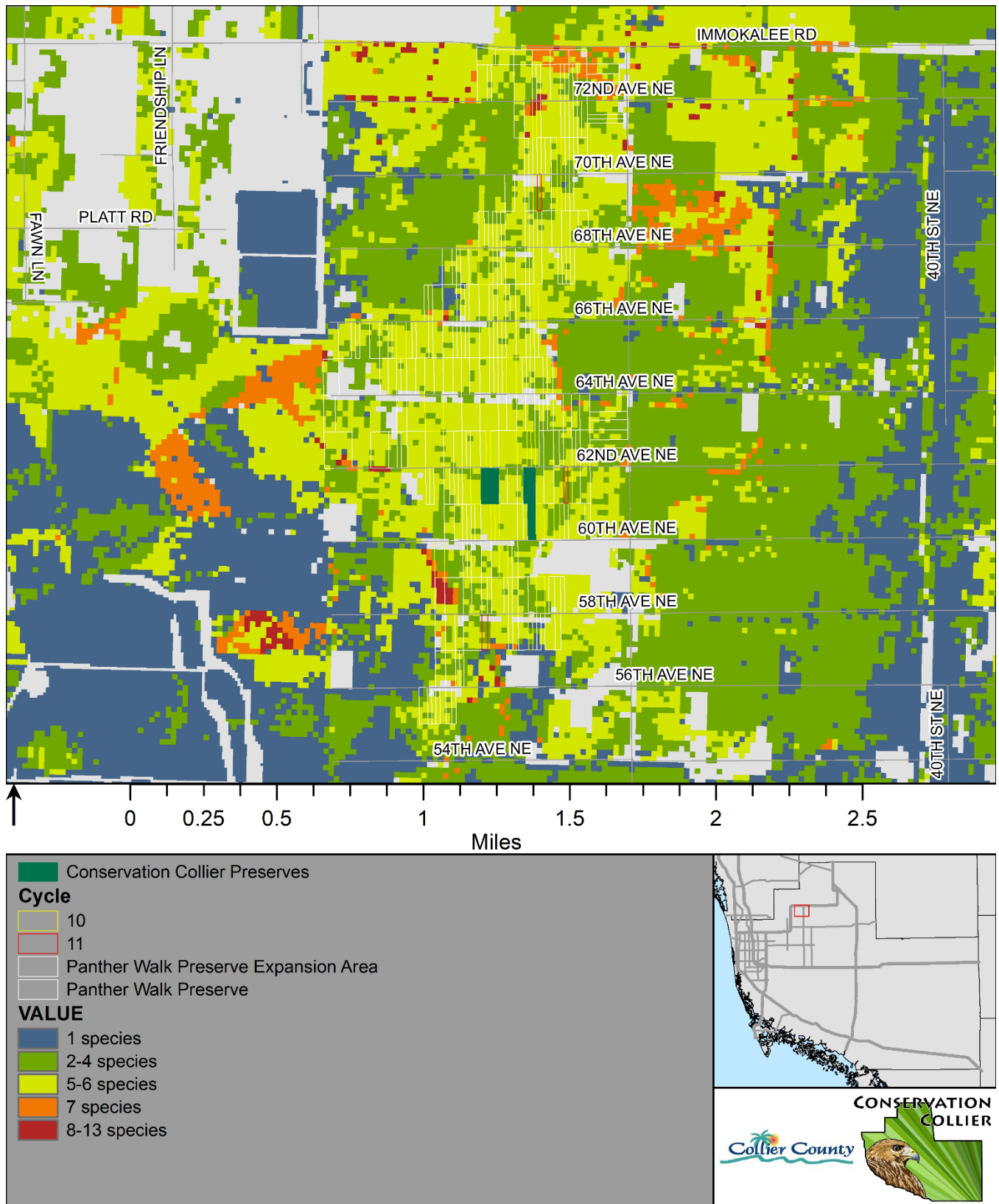


Figure 9 - CLIP4 Potential Habitat Richness

### 3.1.3 Water Resources

These parcels fall within or are adjacent to the northern reaches of the Horsepen Strand. Strands are a type of forested swamp that form slow flowing, linear drainage channels across flatlands with high water tables. The Horsepen Strand begins at Immokalee Rd in the Northern Golden Gate Estates and flows south into the North Belle Meade area located north of I-75. These parcels protect water resources significantly. They provide recharge capacity for the Surficial Aquifer. Properties in this area are subject to frequent flooding. These parcels provide critical flood water attenuation as more land is cleared and filled for development. Wetland vegetation on these parcels slows down the flow of water and filters out nutrients and sediments before it reaches the canals which flow into the gulf. The parcels also provide high quality habitat for wetland dependent species, especially wading birds.

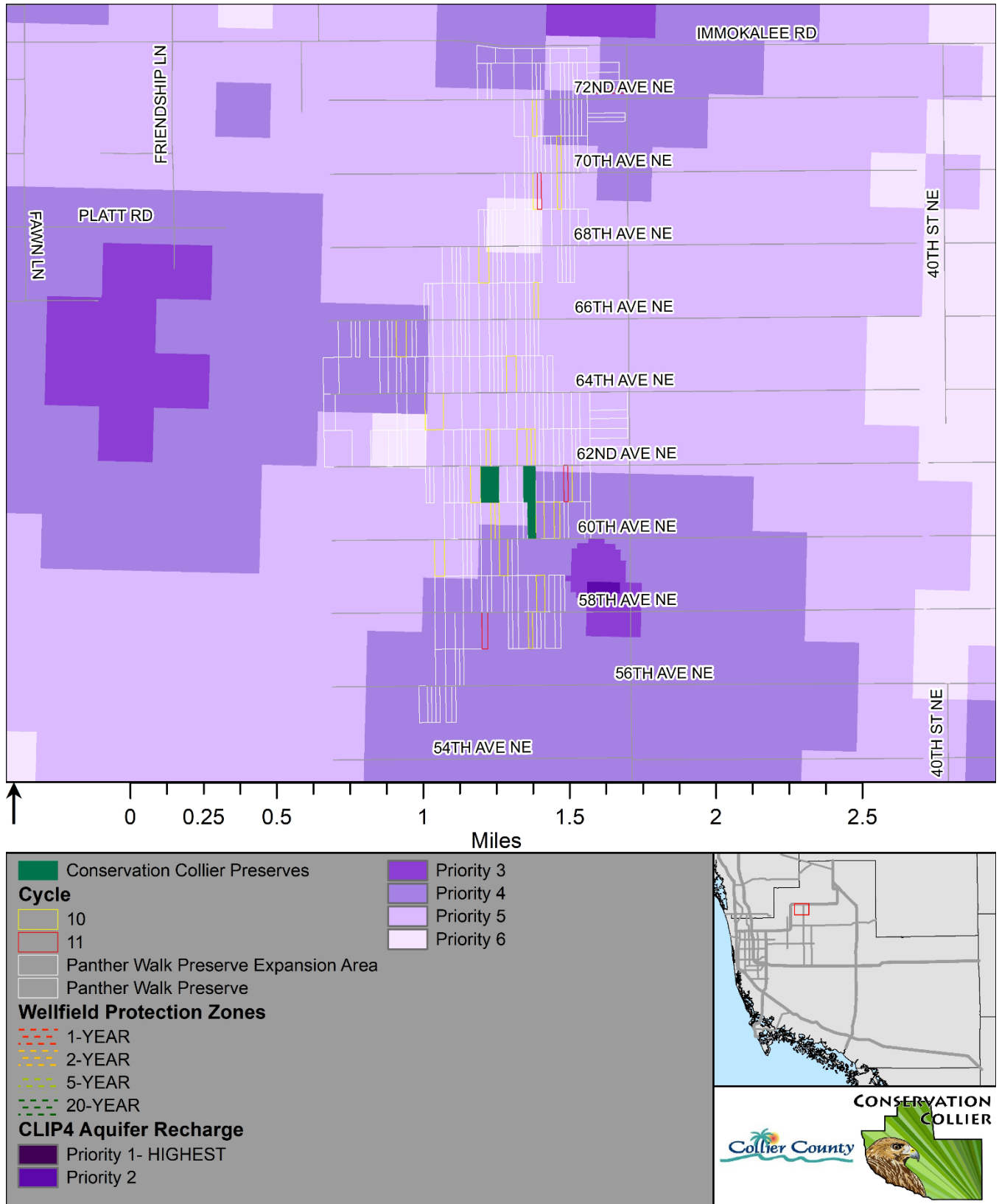


Figure 10 - CLIP4 Aquifer Recharge Priority and Wellfield Protection Zones



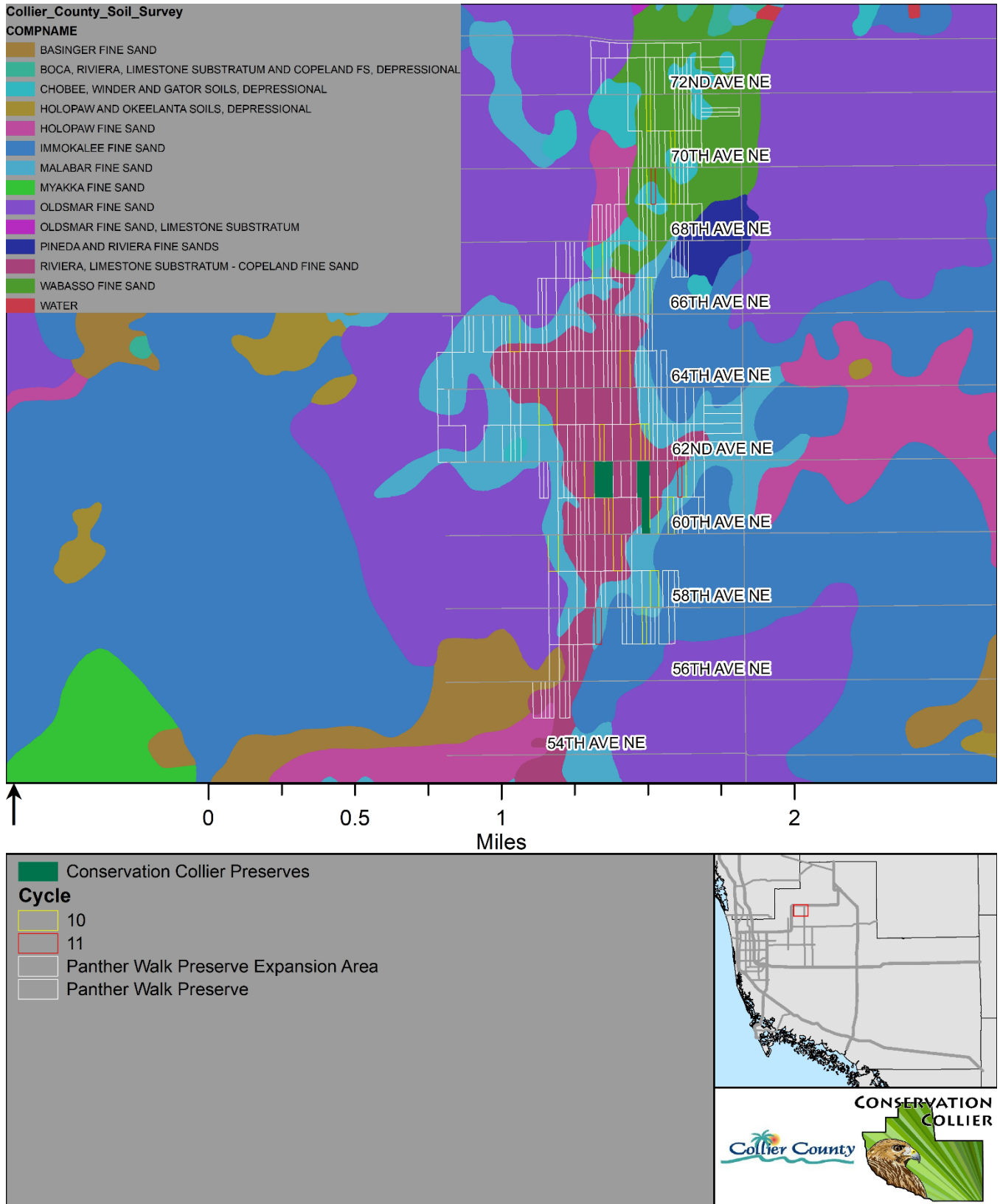


Figure 11 - Collier County Soil Survey

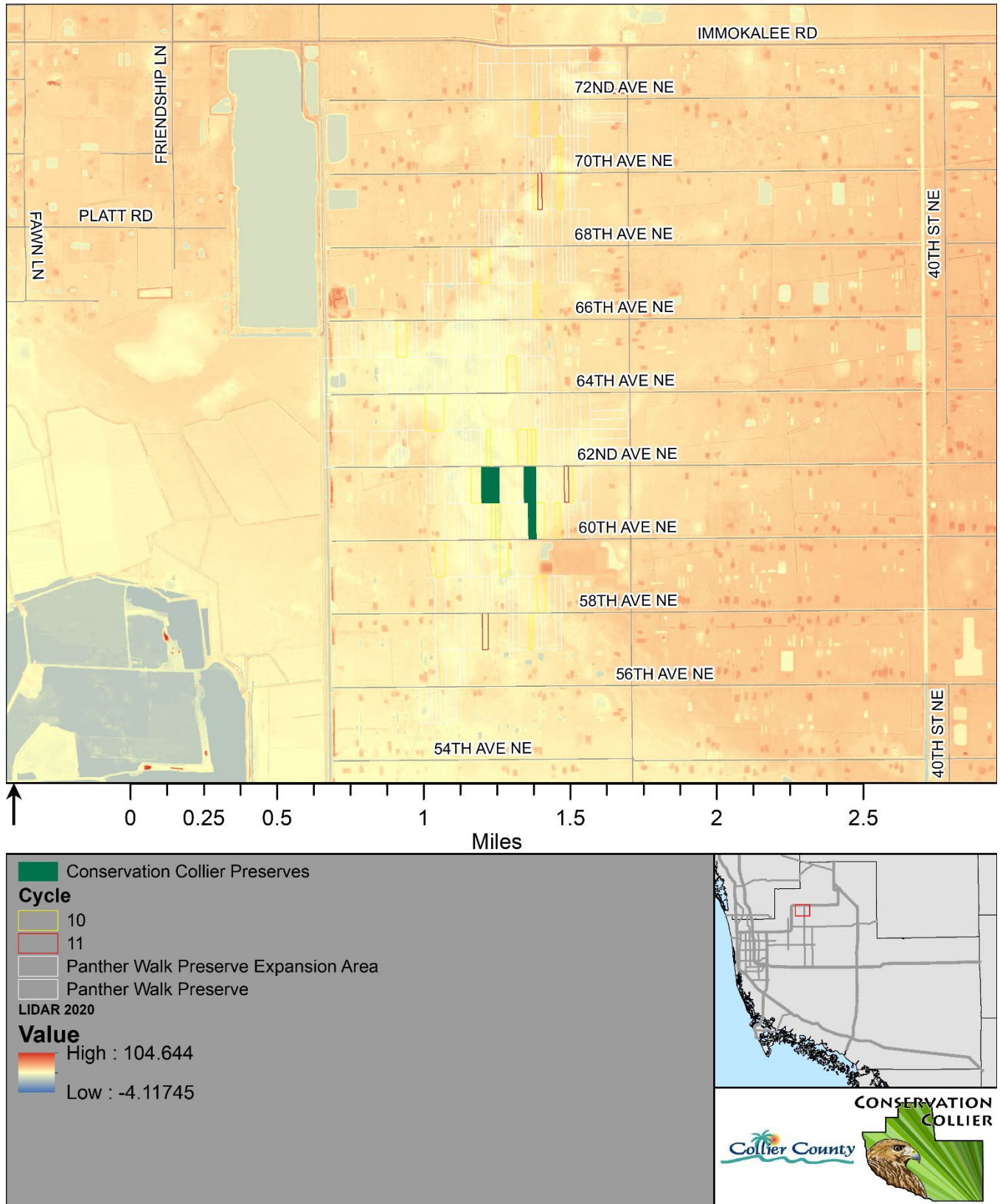


Figure 12 LIDAR Elevation Map

#### 3.1.4 Ecosystem Connectivity

These parcels are connected to the existing Panther Walk Preserve. The low-density nature of development in this neighborhood allows wildlife to move relatively unimpeded across the landscape and north into the Corkscrew Regional Ecosystem Watershed (Figure 13). A protected corridor is necessary to preserve wildlife’s freedom of movement through this rapidly developing landscape. These parcels protect the highly diverse Horsepen Strand, expand the Panther Walk Preserve, and provide the backbone for a potential north-south corridor as well as necessary refugia for “urban” wildlife.

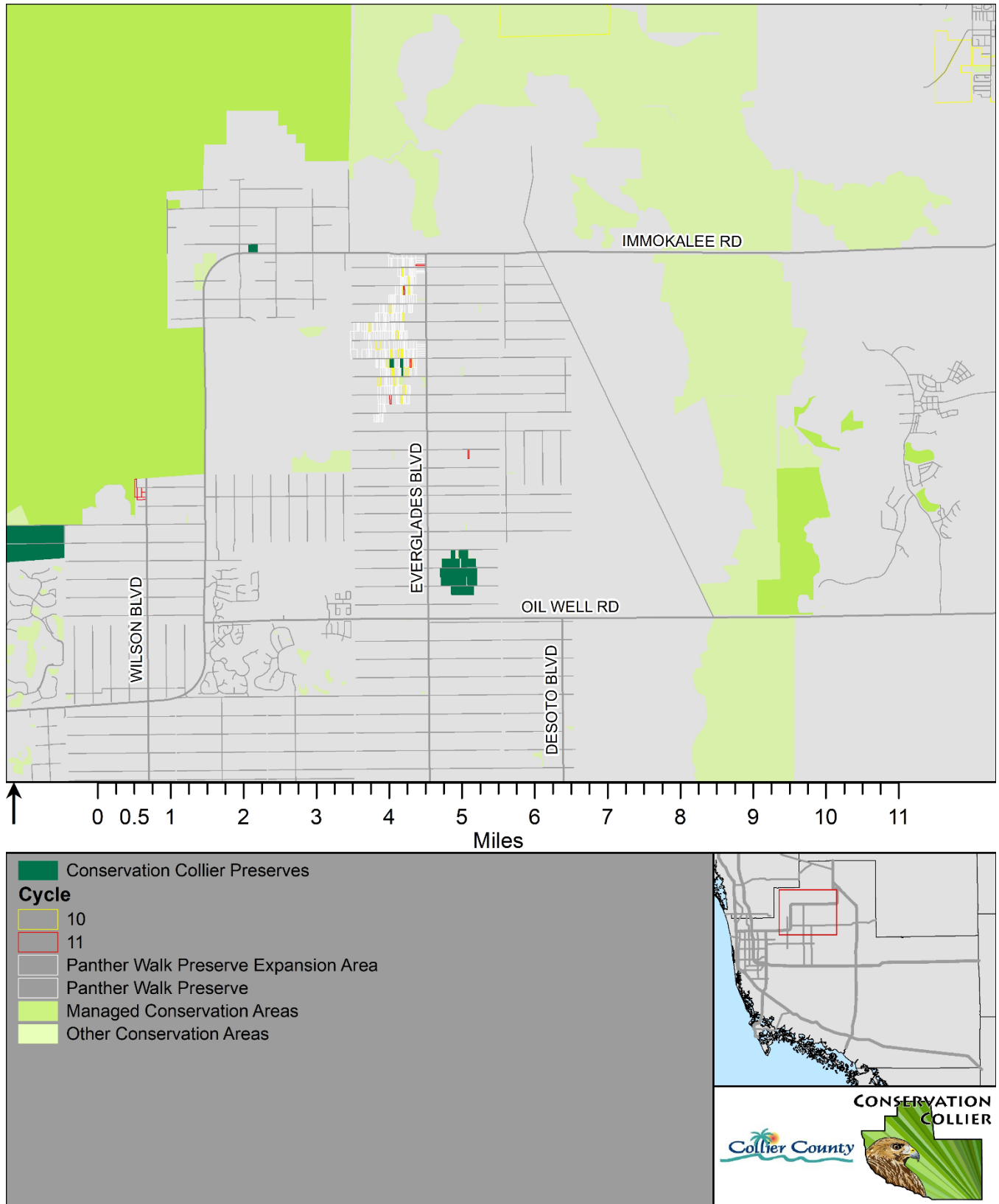


Figure 13 - Conservation Lands



## 3.2 Human Values

### 3.2.1 Recreation

These parcels provide seasonal opportunity for passive nature-based recreation such as hiking and wildlife watching. Once a contiguous string of parcels is acquired an up to two-mile trail may be installed.

### 3.2.2 Accessibility

Street parking is available along 56<sup>th</sup>-72<sup>nd</sup> Ave NE. Parcels within the strand may only be seasonally accessible while those along the perimeter may be dry year-round. Visitors from the surrounding neighborhood and Estates Elementary can walk or cycle to the trailhead.

### 3.2.3 Aesthetic/Cultural Enhancement

These parcels provide green space in a rapidly developing area and mature habitats found on these parcels provide aesthetically pleasing areas to visit.



Figure 14 – Mature cypress strand forest and marsh

## 3.3 Restoration and Management

### 3.3.1 Vegetation Management

#### 3.3.1.1 Invasive Vegetation

Invasive vegetation is primarily found along the roadside swales but is intermixed throughout some parcels. Infestation rates range from less than 5% to 30%. Invasive vegetation is interspersed in such a way that replanting is not necessary once removed. Brazilian pepper, melaleuca, and old-world climbing fern are the

predominant species. Low infestation rates, low seed source, and ease of access should reduce management costs significantly.

#### *3.3.1.2 Prescribed Fire*

Most parcels within this TPMA are wetlands which do not require prescribed fire maintenance. Some of the surrounding flatwoods would benefit from reintroduction of prescribed fire. These flatwoods are compatible with prescribed fire during the wet season. Fire breaks may need to be installed to protect nearby homes.

#### **3.3.2 Remediation and Site Security**

There are some off-road vehicle trails crossing the parcels. Historically, attempts to prevent off-roader trespass have been ineffective, expensive, and have resulted in additional vegetation damage as trespassers have cut new trails to circumvent the installed barriers. Instead of total prevention, the best method to mitigate further damage may be to attempt to restrict off-roaders to already established trails.

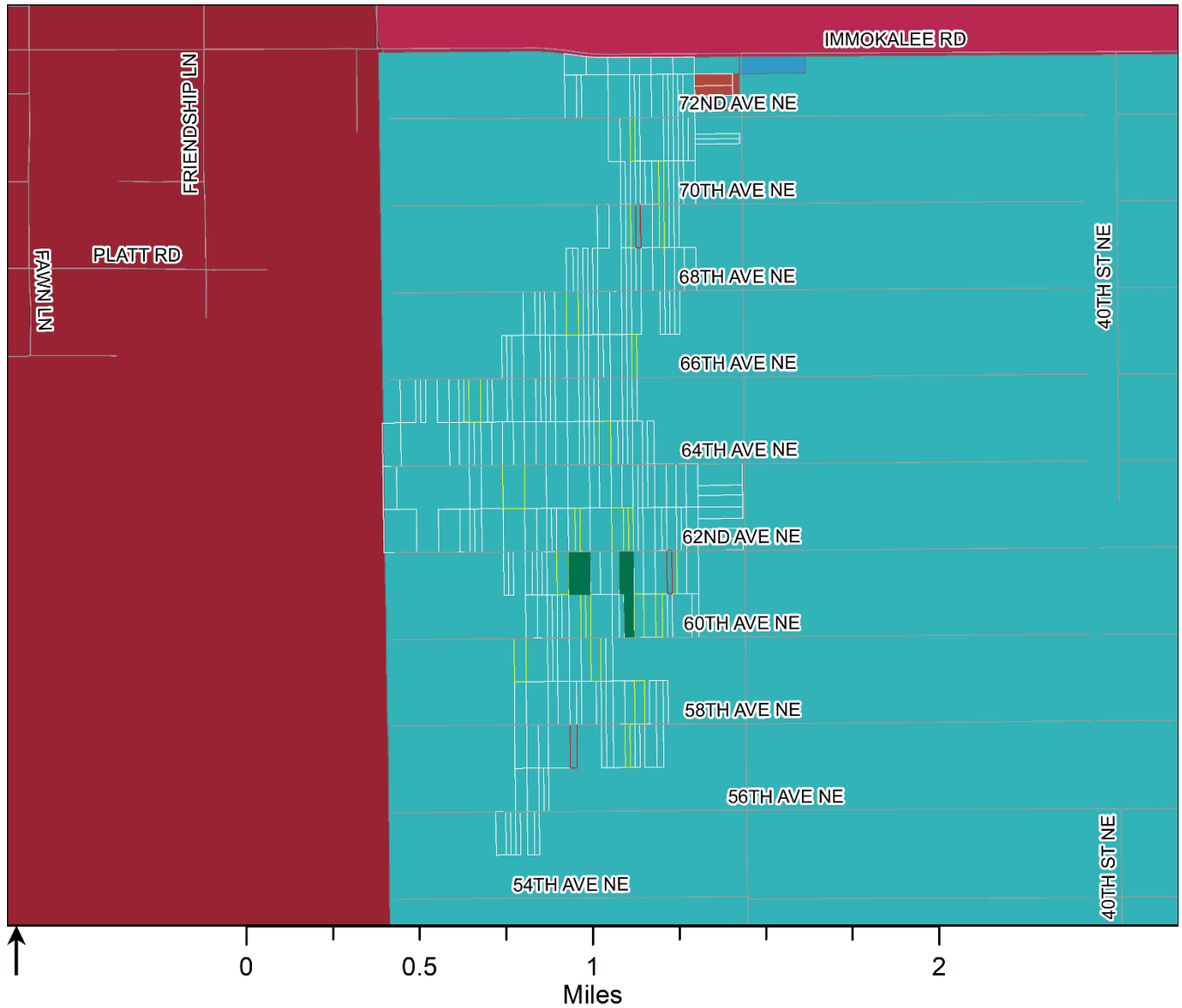
#### **3.3.3 Assistance**

Assistance is not predicted.

### **3.4 Vulnerability**

#### **3.4.1 Zoning and Land Use**

The parcel is zoned Estates. This zoning allows for one single family home and one guest house per 2.25 acres. The future land use designation for this parcel is Estates. The wetland nature of these parcels makes them undesirable for development.



	Conservation Collier Preserves
<b>Cycle</b>	
	10
	11
	Panther Walk Preserve Expansion Area
	Panther Walk Preserve
<b>Zoning General</b>	
	A-MHO
	A-MHO-RLSAO
	CPUD
	E
	MPUD

**CONSERVATION COLLIER**

Figure 15 – Zoning

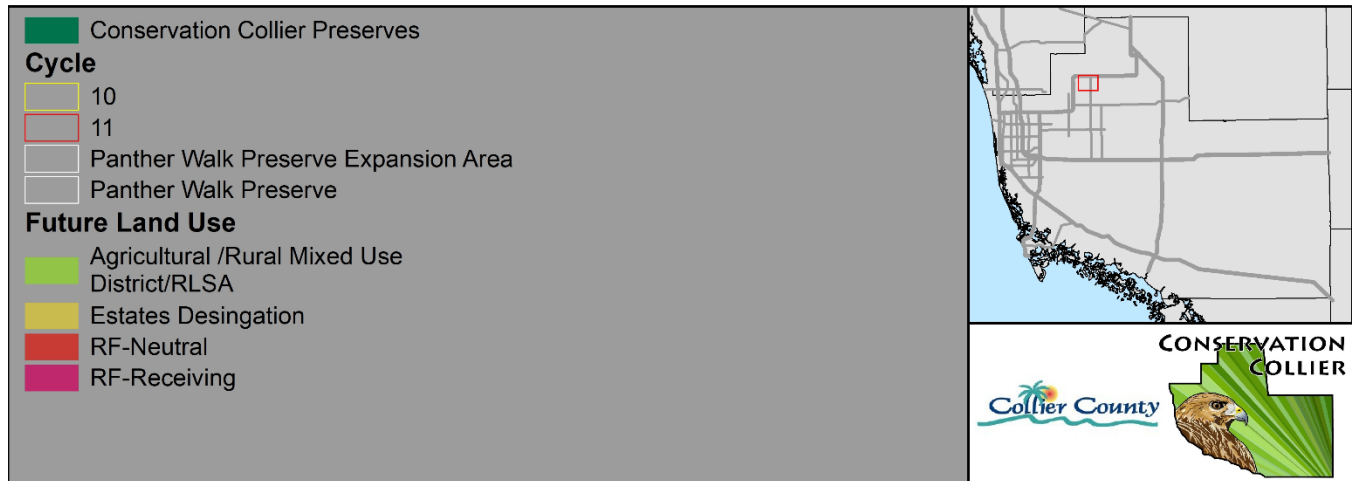
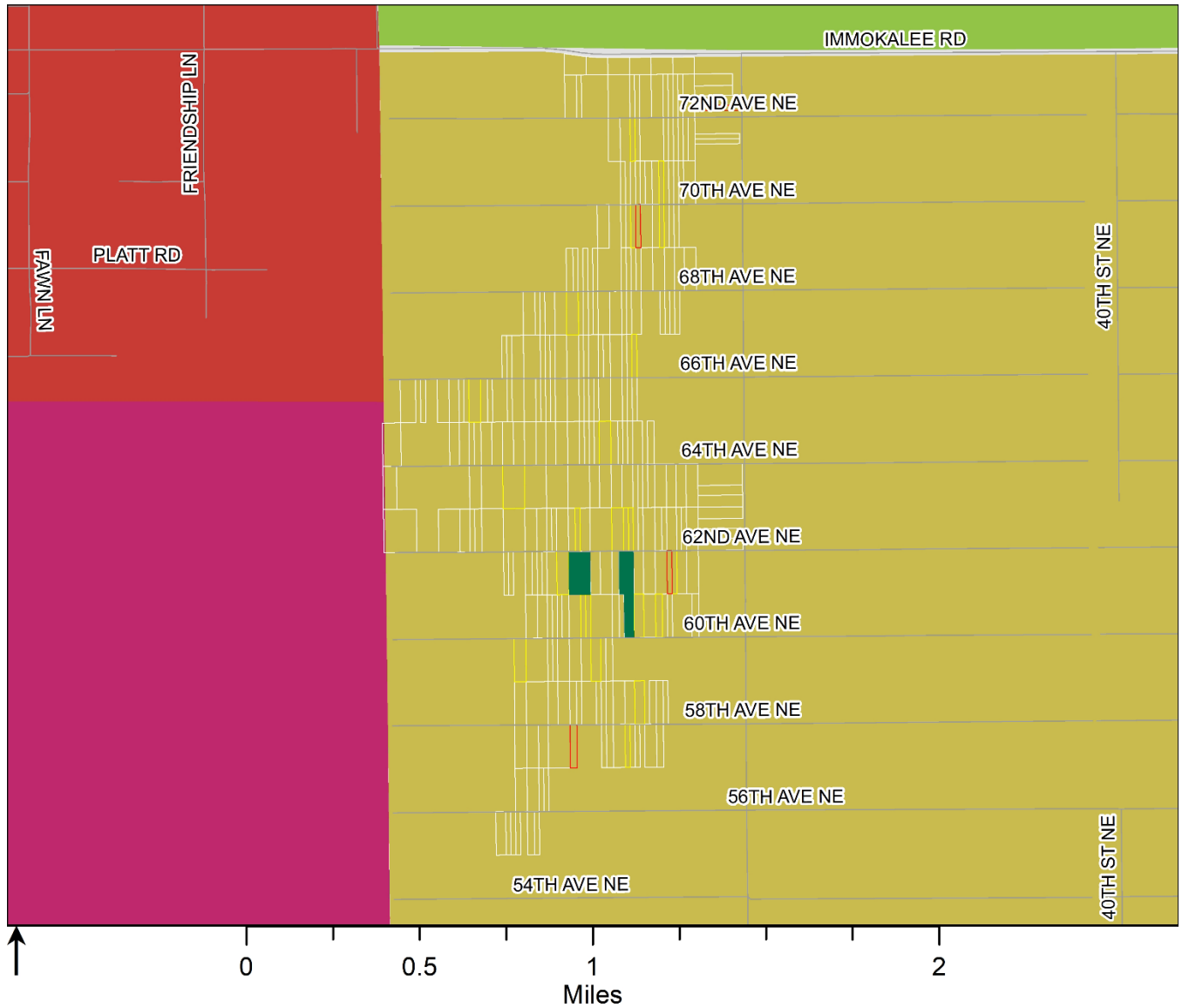


Figure 16 –Future Land Use



### 3.4.2 Development Plans

Individual parcels within this area being rapidly developed. This patchy development threatens the ability to preserve contiguous swaths of habitat.

## 4. Acquisition Considerations

Staff would like to bring the following items to the attention of the Advisory Committee during the review of this property. The following does not affect the scoring. The following are items that will be addressed in the Executive Summary to the Board of County Commissioners if this property moves forward for ranking.

Staff recommend purchasing all parcels regardless of their proximity to the Panther Walk Preserve. This will allow for maximum flexibility in creating a contiguous corridor in the future and preserve the high-quality habitats observed. Although the matrix of undeveloped and partially developed lots in the Estates is compatible with many species, protected pockets of high-quality habitat provide necessary refugia and foraging grounds to complete the more secretive portions of their lifecycles. Even if not directly connected to a wildlife corridor or preserve, these refugia allow species to persist in increasingly developed landscapes.

A portion of the Berman parcel and other parcels may be needed for expansion of along Everglades Blvd. in the near future. If this property is approved for the A-List, staff will take this information into consideration when planning amenities and public access on the site. Additionally, language will be memorialized in the Purchase Agreement and related closing documents to ensure Collier County Transportation will be able to purchase a portion of the property from Conservation Collier for future right-of-way, if and when needed, at the original per-acre acquisition cost.

## 5. Management Needs and Costs

Table 6 - Estimated Costs of Site Remediation, Improvements, and Management

Management Element	Initial Cost	Annual Recurring Cost	Comments
Invasive Vegetation Removal	\$102,600.00	\$51,300.00	\$200/acre initial, \$100/acre recurring. Low overall costs are predicted due to the low infestation levels and high accessibility. 513 acres total, not all parcels will be acquired simultaneously
Trail Installation and Maintenance	\$5,000.00	\$1,000.00	Hand cutting trails
Interpretive Signage	\$1,000.00	\$0.00	
<b>Total</b>	<b>\$108,600.00</b>	<b>\$53,200.00</b>	

## 6. Potential for Matching Funds

There are no known matching funds or partnership opportunities for acquisition in this area.

## 7. Secondary Criteria Scoring Form

1 - ECOLOGICAL VALUES (40% of total)	Possible Points	Awarded Points	Comments
1.1 VEGETATIVE COMMUNITIES	200	150	

<b>1.1.1 - Priority natural communities (Select highest score)</b>			
a. Parcel contains CLIP4 Priority 1 communities (1130 - Rockland Hammock, 1210 - Scrub, 1213 - Sand Pine Scrub, 1214 - Coastal Scrub, 1312 - Scrubby Flatwoods, 1610 - Beach Dune, 1620 - Coastal Berm, 1630 - Coastal Grasslands, 1640 - Coastal Strand, or 1650 - Maritime Hammock)	100		
b. Parcel contains CLIP4 Priority 2 communities (22211 - Hydric Pine Flatwoods, 2221 - Wet Flatwoods, or 1311 - Mesic Flatwoods)	60	60	Hydric Pine Flatwoods
c. Parcel contains CLIP4 Priority 3 communities (5250 - Mangrove Swamp, or 5240 - Salt Marsh)	50		
d. Parcel contains CLIP4 Priority 4 communities (5250 - Mangrove Swamp)	25		
<b>1.1.2 - Plant community diversity (Select the highest score)</b>			
a. Parcel has ≥ 3 CLC native plant communities (Florida Cooperative Land Cover Classification System native plant communities)	20	20	
b. Parcel has ≤ 2 CLC native plant communities	10		
c. Parcel has 0 CLC native plant communities	0		
<b>1.1.3 - Listed plant species (excluding commercially exploited species) (Select the highest score)</b>			
a. Parcel has ≥5 CLC listed plant species	30	30	
b. Parcel has 3-4 CLC listed plant species	20		
c. Parcel has ≤ 2 CLC listed plant species	10		
d. Parcel has 0 CLC listed plant species	0		
<b>1.1.4 - Invasive Plant Infestation (Select highest score)</b>			
a. 0 - 10% infestation	50		
b. 10 - 25% infestation	40	40	
c. 25 - 50% infestation	30		
d. 50 - 75% infestation	20		
e. ≥75% infestation	10		
<b>1.2 - WILDLIFE COMMUNITIES</b>	<b>100</b>	<b>80</b>	
<b>1.2.1 - Listed wildlife species (Select the highest score)</b>			
a. Listed wildlife species documented on the parcel	80	80	
b. Listed wildlife species documented on adjacent property	60		
c. CLIP Potential Habitat Richness ≥5 species	40		
d. No listed wildlife documented near parcel	0		
<b>1.2.2 - Significant wildlife habitat (Rookeries, roosts, denning sites, nesting grounds, high population densities, etc) (Select highest score)</b>			
a. Parcel protects significant wildlife habitat (Please describe)	20		
b. Parcel enhances adjacent to significant wildlife habitat (Please describe)	10		
c. Parcel does not enhance significant wildlife habitat	0	0	
<b>1.3 - WATER RESOURCES</b>	<b>100</b>	<b>60</b>	
<b>1.3.1 - Aquifer recharge (Select the highest score)</b>			

a. Parcel is located within a wellfield protection zone or within a CLIP4 Aquifer Recharge Priority 1 area	40		
b. Parcel is located within a CLIP4 Aquifer Recharge Priority 2 or 3 area	30		
c. Parcel is located within a CLIP4 Aquifer Recharge Priority 4 or 5 area	20	20	
d. Parcel is located within a CLIP4 Aquifer Recharge Priority 6 area	0		
<b>1.3.2 - Surface Water Protection (Select the highest score)</b>			
a. Parcel is contiguous with and provides buffering for an Outstanding Florida Waterbody	30		
b. Parcel is contiguous with and provides buffering for a creek, river, lake, canal or other surface water body	20	20	
c. Parcel is contiguous with and provides buffering for an identified flowway	15		
d. Wetlands exist on site	10		
e. Parcel does not provide opportunities for surface water quality enhancement	0		
<b>1.3.3 - Floodplain Management (Select all that apply)</b>			
a. Parcel has depressional or slough soils	10	10	
b. Parcel has known history of flooding and is likely to provide onsite water attenuation	10	10	
c. Parcel provides storm surge buffering	10		
d. Parcel does not provide floodplain management benefits	0		
<b>1.4 - ECOSYSTEM CONNECTIVITY</b>			
	<b>200</b>	<b>150</b>	
<b>1.4.1 - Acreage (Select Highest Score)</b>			
a. Parcel is ≥ 300 acres	150	150	
b. Parcel is ≥ 100 acres	100		
b. Parcel is ≥ 50 acres	75		
c. Parcel is ≥ 25 acres	25		
d. Parcel is ≥ 10 acres	15		
e. Parcel is < 10 acres	0		
<b>1.4.2 - Connectivity (Select highest score)</b>			
a. Parcel is immediately contiguous with conservation lands	50		
b. Parcel is not immediately contiguous, but parcels between it and nearby conservation lands are undeveloped	25		
c. Parcel is isolated from conservation land	0	0	
<b>ECOLOGICAL VALUES TOTAL POINTS</b>			
	<b>600</b>	<b>440</b>	
<b>ECOLOGICAL VALUES WEIGHTED SCORE (Awarded Points/Possible Points*160)</b>			
	<b>160</b>	<b>117</b>	

<b>2 - HUMAN VALUES (20%)</b>	<b>Possible Points</b>	<b>Awarded Points</b>	<b>Comments</b>
<b>2.1 - RECREATION</b>	<b>120</b>	<b>20</b>	
<b>2.1.1 - Compatible recreation activities (Select all that apply)</b>			
a. Hunting	20		

b. Fishing	20		
c. Water-based recreation (paddling, swimming, etc)	20		
d. Biking	20		
e. Equestrian	20		
f. Passive natural-resource based recreation (Hiking, photography, wildlife watching, environmental education, etc)	20	20	
g. Parcel is incompatible with nature-based recreation	0		
<b>2.2 - ACCESSIBILITY</b>	<b>120</b>	<b>80</b>	
<b>2.2.1 - Seasonality (Select the highest score)</b>			
a. Parcel accessible for land-based recreation year-round	20		
b. Parcel accessible for land-based recreation seasonally	10	10	
c. Parcel is inaccessible for land-based recreation	0		
<b>2.2.2 - Vehicle access (Select the highest score)</b>			
a. Public access via paved road	50	50	
b. Public access via unpaved road	30		
c. Public access via private road	20		
d. No public access	0		
<b>2.2.3 - Parking Availability (Select the highest score)</b>			
a. Minor improvements necessary to provide on-site parking	40		
b. Major improvements necessary to provide on-site parking (Requires site development plan)	25		
b. Public parking available nearby or on adjacent preserve	20		
c. Street parking available	10	10	
d. No public parking available	0		
<b>2.2.4 - Pedestrian access (Select the highest score)</b>			
a. Parcel is easily accessible to pedestrians (within walking distance of housing development)	10	10	
b. Parcel is not easily accessible to pedestrians	0		
<b>2.3 - AESTHETICS/CULTURAL ENHANCEMENT</b>	<b>40</b>	<b>15</b>	
<b>2.3.1 - Aesthetic/cultural value (Choose all that apply)</b>			
a. Mature/outstanding native vegetation	5	5	
b. Scenic vistas	5		
c. Frontage enhances aesthetics of public thoroughfare	10	10	
d. Archaeological/historical structures present	15		
e. Other (Please describe)	5		
f. None	0		
<b>HUMAN VALUES TOTAL SCORE</b>	<b>280</b>	<b>115</b>	
<b>HUMAN VALUES WEIGHTED SCORE (Awarded Points/Possible Points*80)</b>	<b>80</b>	<b>33</b>	

<b>3 - RESTORATION AND MANAGEMENT (20%)</b>	<b>Possible Points</b>	<b>Awarded Points</b>	<b>Comments</b>
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<b>3.1 - VEGETATION MANAGEMENT</b>	<b>120</b>	<b>120</b>	
<b>3.1.1 - Invasive plant management needs (Select the highest score)</b>			
a. Minimal invasive/nuisance plant management necessary to restore and maintain native plant communities (<30%)	100	100	
b. Moderate invasive/nuisance plant management necessary to restore and maintain native plant communities (30-65%)	75		
c. Major invasive/nuisance plant management necessary to restore and maintain native plant communities (>65%)	50		
d. Major invasive/nuisance plant management and replanting necessary to restore and maintain native plant communities (>65%)	25		
e. Restoration of native plant community not feasible	0		
<b>3.1.2 - Prescribed fire necessity and compatibility (Select the highest score)</b>			
a. Parcel contains fire dependent plant communities and is compatible with prescribed fire or parcel does not contain fire dependent plant communities	20	20	
b. Parcel contains fire dependent plant communities and is incompatible with prescribed fire	0		
<b>3.2 - REMEDIATION AND SITE SECURITY</b>	<b>50</b>	<b>20</b>	
<b>3.2.1 - Site remediation and human conflict potential (Dumping, contamination, trespassing, vandalism, other) (Select the highest score)</b>			
a. Minimal site remediation or human conflict issues predicted	50		
b. Moderate site remediation or human conflict issues predicted (Please describe)	20	20	
c. Major site remediation or human conflict issues predicted (Please describe)	5		
d. Resolving site remediation or human conflict issues not feasible	0		
<b>3.3 - ASSISTANCE</b>	<b>5</b>	<b>0</b>	
<b>3.4.1 - Management assistance by other entity</b>			
a. Management assistance by other entity likely	5		
b. Management assistance by other entity unlikely	0	0	
<b>RESTORATION AND MANAGEMENT TOTAL SCORE</b>	<b>175</b>	<b>140</b>	
<b>RESTORATION AND MANAGEMENT WEIGHTED SCORE (Awarded Points/Possible Points*80)</b>	<b>80</b>	<b>64</b>	

<b>4 - VULNERABILITY (20%)</b>	<b>Possible Points</b>	<b>Awarded Points</b>	<b>Comments</b>
<b>4.1 - ZONING AND LAND USE</b>	<b>130</b>	<b>125</b>	
<b>4.1.1 - Zoning and land use designation (Select the highest score)</b>			
a. Zoning allows for Single Family, Multifamily, industrial or commercial	100	100	
b. Zoning allows for density of no greater than 1 unit per 5 acres	75		
c. Zoning allows for agricultural use /density of no greater than 1 unit per 40 acres	50		
d. Zoning favors stewardship or conservation	0		

<b>4.1.2 - Future Land Use Type (Select the highest score)</b>			
a. Parcel designated Urban	30		
b. Parcel designated Estates, Rural Fringe Receiving and Neutral, Agriculture	25	25	
c. Parcel designated Rural Fringe Sending, Rural Lands Stewardship Area	5		
d. Parcel is designated Conservation	0		
<b>4.2 - DEVELOPMENT PLANS</b>	<b>50</b>	<b>5</b>	
<b>4.2.1 - Development plans (Select the highest score)</b>			
a. Parcel has been approved for development	20		
b. SFWMD and/or USACOE permit has been applied for or SDP application has been submitted	15		
c. Parcel has no current development plans	0	0	
<b>4.2.2 - Site characteristics amenable to development (Select all that apply)</b>			
a. Parcel is primarily upland	10		
b. Parcel is along a major roadway	10		
c. Parcel is >10 acres	5		
d. Parcel is within 1 mile of a current or planned commercial or multi-unit residential development	5	5	
<b>VULNERABILITY TOTAL SCORE</b>	<b>180</b>	<b>130</b>	
<b>VULNERABILITY WEIGHTED SCORE (Awarded Points/Possible Points*80)</b>	<b>80</b>	<b>58</b>	

## 8. Additional Site Photos





Wide off-road vehicle trail ringing freshwater marsh on 70<sup>th</sup> Ave NE



Horsepen Strand looking north from 60<sup>th</sup> Ave NE. Note lighter green cypress foliage in center surrounded by darker pines and oak





Melaleuca infestation in transitional habitat zone on Repola parcel off 62<sup>nd</sup> Ave NE

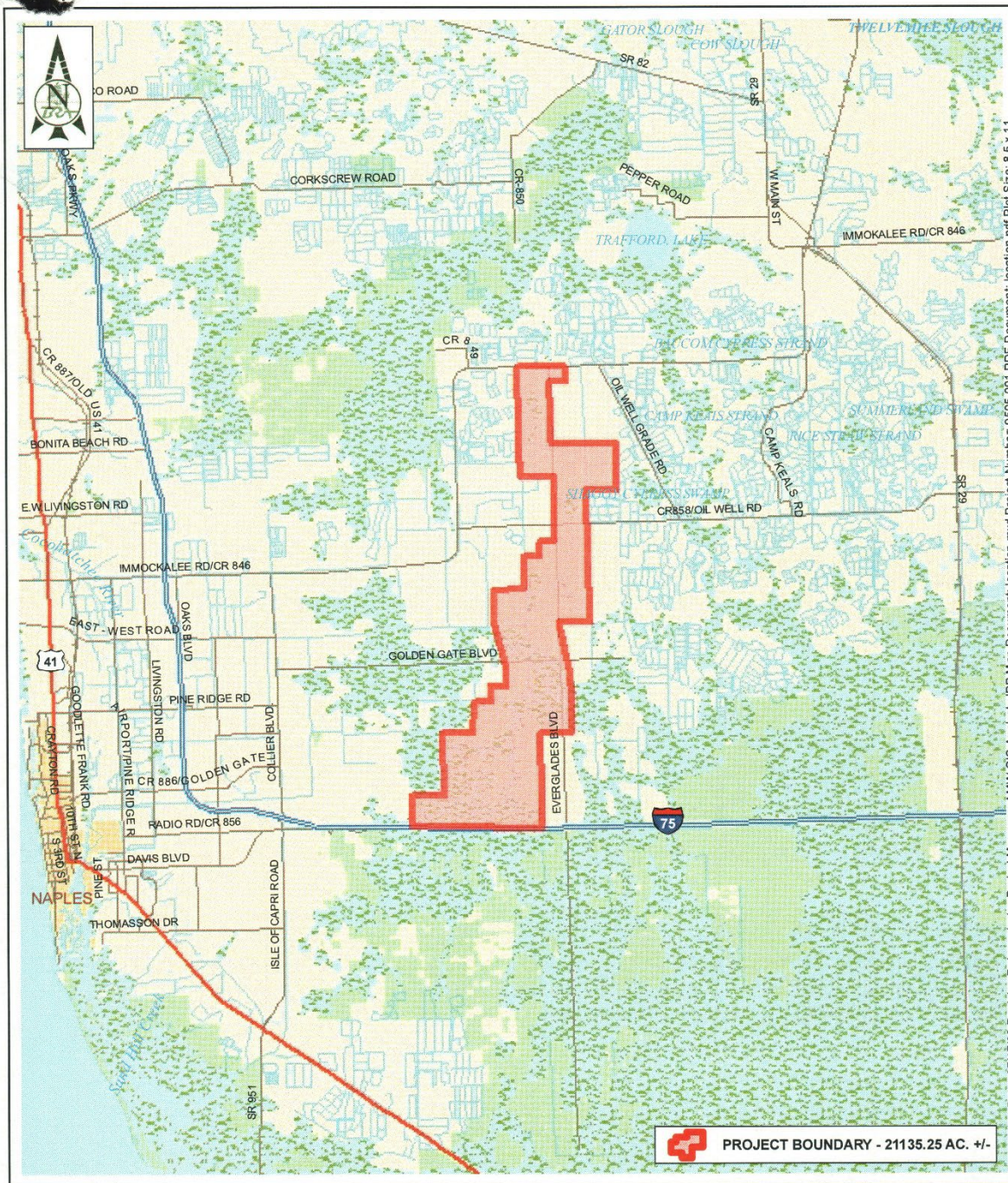


Image: NONE  
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**Location Map**  
**Horsepen Strand Conservation Area**  
**Collier County, Florida**

**Biological Research Associates**  
 22 Sarasota Center Blvd  
 Sarasota, Florida 34240  
 ph 941.378.0660 fx 941.378.0787  
 www.biologicalresearch.com





Horsepen Strand Conservation Area



Left: State endangered giant air plant (*Tillandsia utriculata*)

Center: State endangered hand fern (*Cheiroglossa palmata*)

Right: State endangered fuzzy-wuzzy air plants (*Tillandsia pruinosa*)

Potential Listed Wildlife Species

Common Name	Scientific Name	Status
Florida bonneted bat	<i>Eumops floridanus</i>	FE
Florida panther	<i>Puma concolor coryi</i>	FE
Everglade snail kite	<i>Rostrhamus sociabilis plumbeus</i>	FE
Wood stork	<i>Mycteria americana</i>	FT
Audubon’s crested caracara	<i>Polyborus plancus audubonii</i>	FT
Mangrove fox squirrel	<i>Sciurus niger avicennia</i>	ST
Tricolored heron	<i>Egretta tricolor</i>	ST
Roseate spoonbill	<i>Platalea ajaja</i>	ST
American alligator	<i>Alligator mississippiensis</i>	FT (S/A)

Status: FE=Federally Endangered, FT=Federally Threatened, FT (S/A)=Federally Threatened due to Similarity of Appearance, SE=State Endangered, ST=State Threatened, CE= Commercially Exploited

*Non-Listed Wildlife Species Observed*

<b>Species</b>	<b>Scientific Name</b>
nine-banded armadillo	<i>Dasypus novemcinctus</i>
eastern gray squirrel	<i>Sciurus carolinensis</i>
raccoon	<i>Procyon lotor</i>
North American river otter	<i>Lontra canadensis</i>
white-tailed deer	<i>Odocoileus virginianus</i>
black bear	<i>Ursus americanus</i>
cat	<i>Felis catus</i>
black racer	<i>Coluber constrictor</i>
chicken turtle	<i>Deirochelys reticularia</i>
southern leopard frog	<i>Lithobates sphenoccephalus</i>
queen butterfly	<i>Danaus gilippus</i>
great blue heron	<i>Ardea herodias</i>
great egret	<i>Ardea alba</i>
green heron	<i>Butorides virescens</i>
American bittern	<i>Botaurus lentiginosus</i>
white ibis	<i>Eudocimus albus</i>
belted kingfisher	<i>Megaceryle alcyon</i>
anhinga	<i>Anhinga anhinga</i>
black-bellied whistling-ducks	<i>Dendrocygna autumnalis</i>
wild turkey	<i>Meleagris gallopavo</i>
red-shouldered hawk	<i>Buteo lineatus</i>
black vulture	<i>Coragyps atratus</i>
turkey vulture	<i>Cathartes aura</i>
American crow	<i>Corvus brachyrhynchos</i>
blue jay	<i>Cyanocitta cristata</i>
red-bellied woodpecker	<i>Melanerpes carolinus</i>
pileated woodpecker	<i>Dryocopus pileatus</i>
downy woodpecker	<i>Dryobates pubescens</i>
yellow-bellied sapsucker	<i>Sphyrapicus varius</i>
pine warbler	<i>Setophaga pinus</i>
northern parula	<i>Setophaga americana</i>
blue-gray gnat catcher	<i>Poliophtila caerulea</i>
northern mockingbird	<i>Mimus polyglottos</i>
gray catbird	<i>Dumetella carolinensis</i>
mourning dove	<i>Zenaida macroura</i>
common ground dove	<i>Columbina passerina</i>
northern cardinal	<i>Cardinalis cardinalis</i>

## APPENDIX 1 – Critical Lands and Water Identification Maps (CLIP) Definitions

This report makes use of data layers from the Florida Natural Areas Inventory and University of Florida Critical Lands and Waters Identification Project (CLIP4). CLIP4 is a collection of spatial data that identify statewide priorities for a broad range of natural resources in Florida. It was developed through a collaborative effort between the Florida Areas Natural Inventory (FNAI), the University of Florida GeoPlan Center and Center for Landscape Conservation Planning, and the Florida Fish and Wildlife Conservation Commission (FWC). It is used in the Florida Forever Program to evaluate properties for acquisition. CLIP4 is organized into a set of core natural resource data layers which are representative of 5 resource categories: biodiversity, landscapes, surface water, groundwater and marine. The first 3 categories have also been combined into the Aggregated layer, which identifies 5 priority levels for natural resource conservation.

Below is a description of each of the three CLIP4 data layers used in this report.

### Figure 4 - CLIP4 Priority Natural Communities

Consists of 12 priority natural community types: upland glades, pine rocklands, seepage slopes, scrub, sandhill, sandhill upland lakes, rockland hammock, coastal uplands, imperiled coastal lakes, dry prairie, upland pine, pine flatwoods, upland hardwood forest, or coastal wetlands. These natural communities are prioritized by a combination of their heritage global status rank (G-rank) and landscape context, based on the Land Use Intensity Index (subset of CLIP Landscape Integrity Index) and FNAI Potential Natural Areas. Priority 1 includes G1-G3 communities with Very High or High landscape context. Priority 2 includes G1-G3 Medium and G4 Very High/High. Priority 3 includes G4 Medium and G5 Very High/High. Priority 5 is G5 Medium.

This data layer was created by FNAI originally to inform the Florida Forever environmental land acquisition program. The natural communities were mapped primarily based on the FNAI/FWC Cooperative Land Cover (CLC) data layer, which is a compilation of best-available land cover data for the entire state. The CLC is based on both remote-sensed (from aerial photography, primarily from water management district FLUCCS data) and ground-truthed (from field surveys on many conservation lands) data.

### Figure 9. Potential Habitat Richness CLIP4 Map

This CLIP version 4.0 data layer is unchanged from CLIP v3.0. FWC Potential Habitat Richness. Because SHCAs do not address species richness, FWC also developed the potential habitat richness layer to identify areas of overlapping vertebrate species habitat. FWC created a statewide potential habitat model for each species included in their analysis. In some cases, only a portion of the potential habitat was ultimately designated as SHCA for each species. The Potential Habitat Richness layer includes the entire potential habitat model for each species and provides a count of the number of species habitat models occurring at each location. The highest number of focal species co-occurring at any location in the model is 13.

### Figure 17: CLIP4 Aquifer Recharge Priority and Wellfield Protection Zones

High priorities indicate high potential for recharge to an underlying aquifer system (typically the Floridan aquifer but could be intermediate or surficial aquifers in some portions of the state). The highest priorities indicate high potential for recharge to springs or public water supplies. This figure also includes Wellfield Protection Zones. Collier County Wellfield Protection Zones are referenced in the Land Development Code and updated in 2010 by Pollution Control and Prevention Department Staff. The public water supply wellfields, identified in section 3.06.06 and permitted by the SFWMD for potable water to withdraw a minimum of 100,000 average gallons per day (GPD), are identified as protected wellfields, around which specific land use and activity (regulated development) shall be regulated under this section.