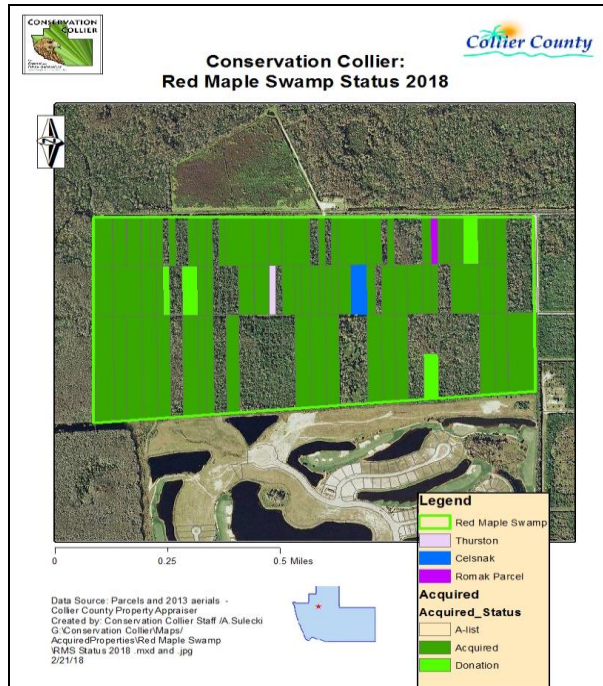


Conservation Collier Initial Criteria Screening Report Update 2018



**Property Name: North Golden Gate Estates - Unit 53 a.k.a Red Maple Swamp
Multi-parcel Project
Currently offered properties:**

Thurston – 39491680000 – 1.14 acres
Celsnak – 39492560006 – 2.73 acres
Romak – 39493520003 – 1.14 acres

Staff Report Date: March 12, 2018

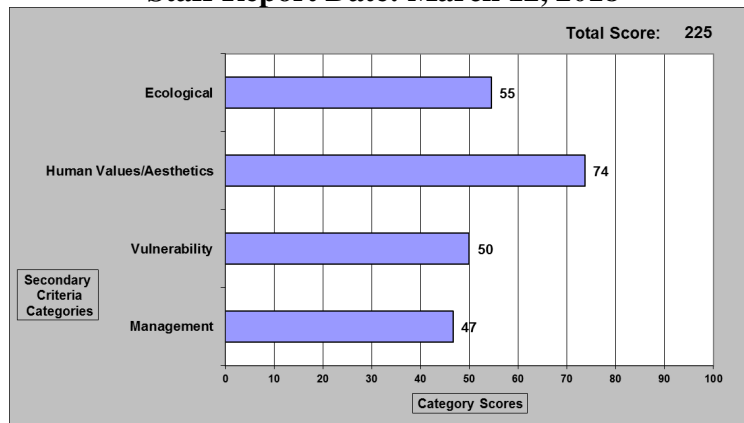


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Introduction

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).

This updated Initial Criteria Screening Report (ICSR) has been prepared for the Conservation Collier Program in its 9th acquisition cycle for purposes of the Conservation Collier Program. It provides an update to the ICSR that was prepared for this property in 2003 demonstrating how this property meet the criteria as defined by the ordinance (2002-63, as amended). That is the sole purpose for this report and it is not meant for any other use. This property was categorized as an “A” List property (Exhibit Q) on January 25, 2011, by the Board of County Commissioners. This update simply uses more updated metrics.

One of the updates is to make 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.

Not all CLIP4 Layers were used in this report. Those used include:

- Biodiversity
- Surface Water Priorities
- Landscape Integrity
- Priority Natural Communities
- Strategic Habitat Conservation Areas
- Aggregated Conservation Priorities

Additional updated metrics are FLUCCS code GIS layers and sources for listed species plants and animals and updated state and federal protected species lists.

I. Summary of Property Information

The purpose of this section is to provide information concerning the subject property to describe how the property meets each Program criteria in its various physical characteristics and to provide other general property information.

Table 1. Summary of Property Information

Characteristic	Value	Comments
Name	Three Properties currently offered	Celsnak – 2.73 acres Romak 1.14 acres Thurston – 1.14 acres
Folio Number	<i>Celsnak-39492560006</i> <i>Romak – 39493520003</i> <i>Thurston - 39491680000</i>	2.73 acres 1.14 acres 1.14 acres
Size	The Red Maple Swamp multi-parcel project incorporates 105 parcel and 305.69 acres.	Currently acquired are 75 parcels totaling 209.11 acres – or 68%.
Zoning Category	Estates (single family)	n/a
Existing structures	none	No building permits issued in entire unit as of 2/21/18
Adjoining properties and their Uses	All adjoining properties are vacant and undeveloped	n/a
Development Plans Submitted	none	A review of Citiview planning and development software finds no building permits associated within NGGE Unit53/Red Maple Swamp
Known Property Irregularities	Current use Historic use	There is one parcel, not contiguous with the subject parcels, where livestock are present. There is possibly a hunting camp on another parcel. No building except one fence permit. The center of the 1/3 unit (approx. 100 acres) was historically cleared and farmed (until late 1960s)
Other Dept. interest	Transportation, Utilities, Solid Waste, Parks and Recreation, Environmental Services, Housing, Coastal systems, Zoning/Planning, Engineering	No other County Departments have expressed interest in this area

Summary of Assessed Value and Property Costs Estimates

Values have been calculated based on acquisition of each separate parcel.

The interest being appraised for this estimate is fee simple for the purchase of the site, and the value of this interest is subject to the normal limiting conditions and the quality of market data. A market study was performed on NGGE Unit 53/Red Maple Swamp in July 2017 using 2 independent appraisal firms routinely contracted by Collier County. Each property falls into the category of below \$500,000 and therefore, pursuant to the Conservation Collier Purchase Policy, one appraisal is required for each parcel. The entire area was appraised as one project to save time and money. Therefore, two independent appraisals were secured and the offer amount for each is the average of the two values or \$5,750 per acre.

Assessed Value: *

Celsnak – Folio # 39492560006 – 2.73 acres - \$21,431

Romak – Folio # 39493520003 – 1.14 acres - \$8,949

Thurston – Folio # 39493520003 – 1.14 acres - \$8,949

Market Value: **

Celsnak – Folio # 39492560006 – 2.73 acres - \$15,698

Romak – Folio # 39493520003 – 1.14 acres - \$6,555

Thurston – Folio # 39493520003 – 1.14 acres - \$6,555

Total **\$28,808**

“ESTIMATED MARKET VALUE” IS SOLELY AN ESTIMATE OF VALUE PROVIDED BY COLLIER COUNTY REAL ESTATE SERVICES DEPARTMENT STAFF AND SHOULD NOT BE RELIED UPON BY ANY ENTITY.

Zoning, Growth Management and Conservation Overlays

Zoning for these and all parcels within the Red Maple Swamp multi-parcel project is Estates (E). The purpose and intent of the estates district “E” is to provide lands for low density residential development in a semi-rural to rural environment, with limited agricultural activities. In addition to low density residential development with limited agricultural activities, the E district is also designed to accommodate as conditional uses, development that provides services for and is compatible with the low density residential, semi-rural and rural character of the E district. There are no zoning overlays covering the Red Maple Swamp/NGGE Unit 53 multi-parcel project.

* Property Appraiser’s Website

** Market values are the average of values provided by a Market Study from two independent appraisers, performed in July 2017.

Figure 1. Location Map

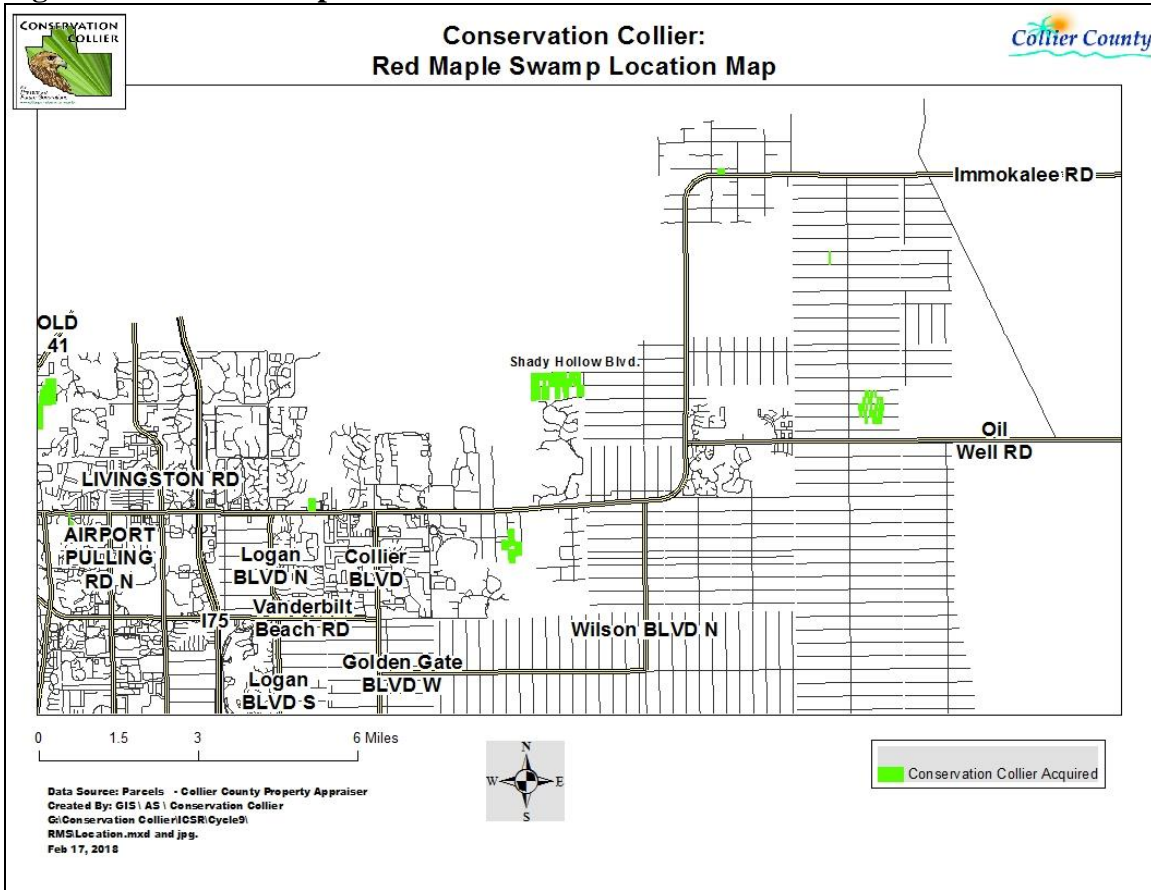


Figure 2. Aerial Map

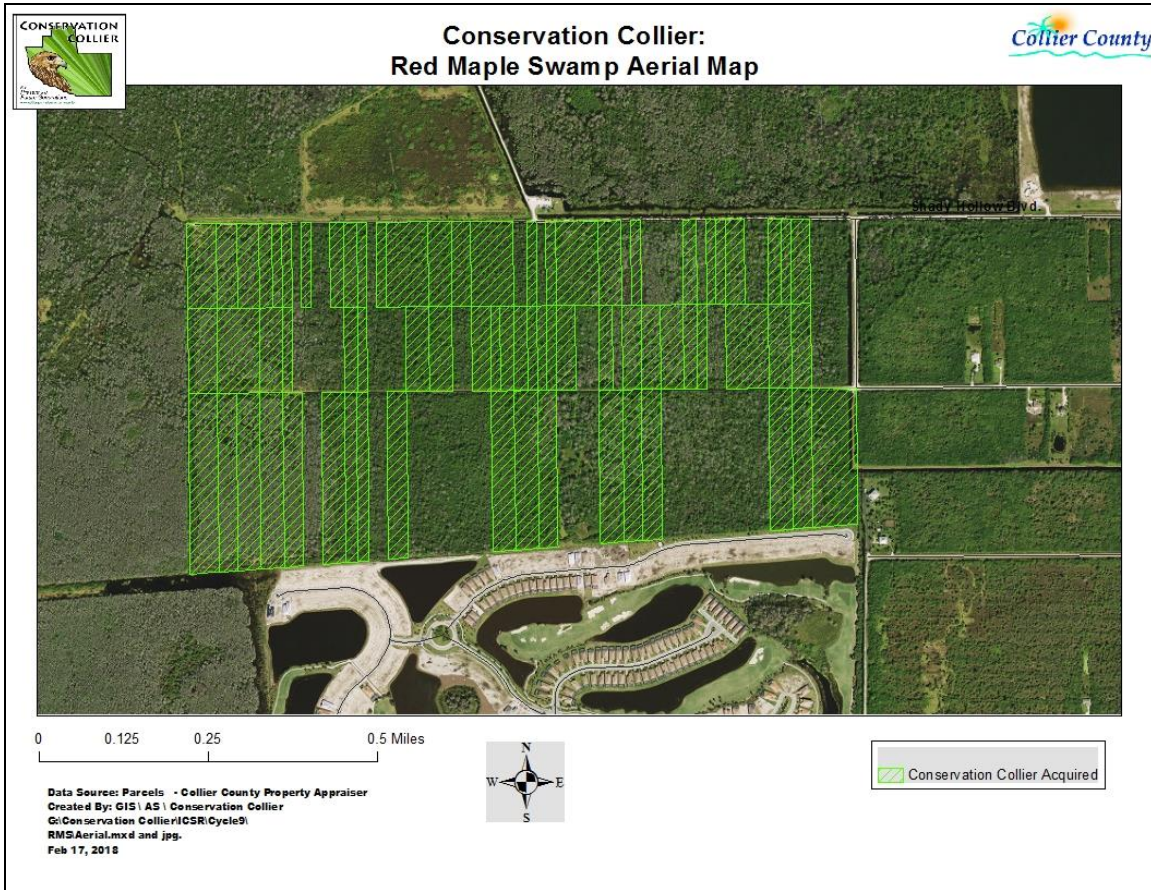
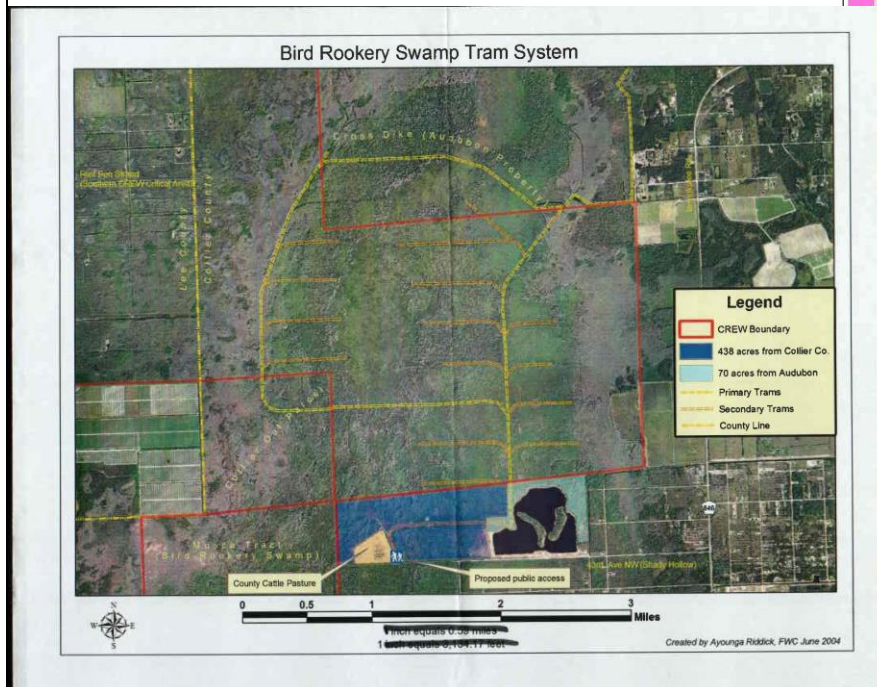
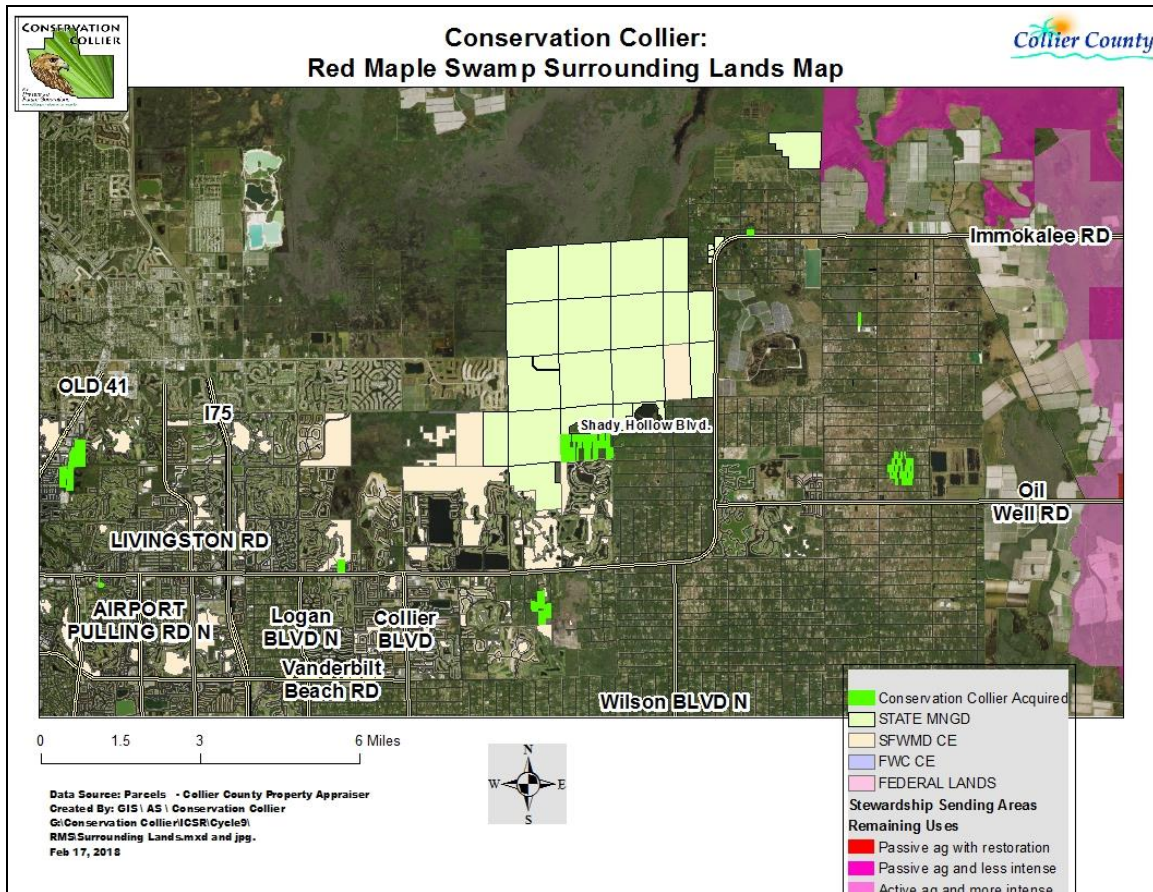


Figure 3. Surrounding Lands Aerial



II. Statement for satisfying Initial Screening Criteria, Including Biological and Hydrological Characteristics

Collier County Environmental Resources Department staff conducted a site visit on August 22, 2003, and following project approval, approximately 4-5 times annually through 2017. Material for this update was gathered by examining the Project site management log and photographs taken throughout the time this project has been in existence. No additional site visit was made for this report.

MEETS INITIAL SCREENING CRITERIA - Yes

1. Are any of the following unique and endangered plant communities found on the property? Order of preference as follows: Ord. 2002-63, Sec. 10 (1)(a)

i. Hardwood hammocks	No
ii. Xeric oak scrub	No
iii. Coastal strand	No
iv. Native beach	No
v. Xeric pine	No
vi. High marsh (saline)	No
vii. Tidal freshwater marsh	No
viii. Other native habitats	Yes

Vegetative Communities:

The following identifies what native plant communities were observed: Red maple (*Acer rubrum*) and cypress (*Taxodium distichum*) swamp with willow (*Salix spp.*), bay (*Persea spp.*), cabbage palm (*Sabal palmetto*) and dahoon holly (*Ilex cassine*) scattered throughout. Unit 53 is an excellent example of a wetland hardwood forest community and contains many mature red maples in areas outside of those historically farmed. Even farmed areas show significant red maple re-growth.

FLUCCS:

Staff used two methods to determine native plant communities present; review of South Florida Water Management District (SFWMD) electronic databases for Department of Transportation's Florida Land Use, Cover and Forms (FLUCCS) (1994/1995) and field verification of same. The electronic database identified:

- 6170 – Mixed wetland hardwoods 50%
- 6172 – Mixed wetland hardwoods – shrubs – 30%
- 6210 – Cypress – 10%

Staff observed:

- 6170 – Mixed wetland hardwoods. This differentiation was made between this FLUCCs code and 6172 (Mixed wetland hardwoods- where no species achieves dominance) because there is a clear dominance by red maple, with secondary dominance by cypress.

Characterization of Plant Communities present:

Ground Cover: Swamp fern (*Blechnum serrulatum*), Wild coco orchid (*Eulophia alta*), saltbush (*Bacharris halimifolia*), Virginia buttonweed (*Diodia virginica*), Broadleaf arrowhead (*Sagittaria latifolia*), pickerelweed (*Pontederia cordata*), sawgrass (*Cladium jamaicense*), buttonbush (*Cephalanthus occidentalis*), False nettle (*Boehmeria cylindrica*), rushes (*Juncus ssp.*), and royal fern (*Osmunda regalis*).

Midstory: The Midstory includes wax myrtle (*Myrica cerifera*), saltbush, cabbage palm (*Sabal palmetto*), bay (*Persea sp.*), dahoon holly (*Ilex cassine*) swamp dogwood (*Cornus foemina*), and willow (*Salix. Sp.*).

Canopy: The canopy is primarily composed of red maple (*Acer rubrum*) and cypress (*Taxodium distichum*). Additional canopy plants include bay (*Persea sp.*), pop ash (*Fraxinus caroliniana*) and cabbage palm (*Sabal palmetto*).

All portions of Red Maple Swamp are invaded by exotic plant species. The percent coverage was estimated at 25% in 2004. Since then, in most areas, the percent coverage seen has increased to approximately 35-40%, with some areas having lower and higher concentrations. Primary species observed are Brazilian pepper (*Schinus terebinthifolius*), creeping signalgrass (*Urochloa plantaginea*), air potato (*Dioscorea bulbifera*) and old world climbing fern (*Lygodium microphyllum*), with an increase in all species.

Statement for satisfaction of criteria:

These data confirm that a native plant community of mixed wetland hardwoods exists over the project area and is persisting despite increasing invasion by exotic plant species.

2. *Does land 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**

A Phase 1 Site Assessment done by the Pollution Control & Prevention Department was performed in December 2004 and found no evidence of recognized environmental conditions on the project site. As a result, there was no objection to the acquisition of these properties with the stipulation that the County be given adequate indemnification that it will be held harmless against any contamination which may have occurred prior to acquisition. Indemnification language regarding environmental contamination is in the standard agreements.

Statement for satisfaction of criteria:

These parcels are in a Target Protection Area, the Golden Gate Estates subdivision. Unpaved roads exist, as the property was platted for single-family residential development. The project is located approximately 3 miles north of the Rivers Road Preserve and 5 miles west of the Winchester Head multi-parcel project (Figure 1). Lime rock roads provide access to the area, though it somewhat seasonal access, as the roads

can be flooded and inaccessible at the western end of the unit during rainy season. Future parking may be along the road, as all parcels are considered wetland and a parking area might not be permitted. Visitors can park at the Bird Rookery Swamp parking area on South Florida Water Management District (District) property, where future plans are to connect seasonal trails on Red Maple Swamp Preserve with the District’s 12 miles of existing trails (Figure 3).

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**

Hydrological Characteristics:

Groundwater:

Staff has observed water flowing southward over the surface of the landscape and across the unpaved roads. Older aerials show that the center of the unit (approximately 100 acres representing 1/3 of the area) was cleared for farming, indicating that, historically, at least this portion of the unit was likely seasonally flooded. Summer site visits show flooded conditions with healthy cabbage palms growing in 12-inches of water indicating flooding remains seasonal. The abundance of obligate (OBL) and facultative/wet (FACW) wetland plants, including *Juncus* spp., *Sagittaria* spp., Swamp fern (*Blechnum serulatum*), pickerelweed (*Pontederia cordata*), sawgrass (*Cladium jamaicense*) and buttonbush (*Cephalanthus occidentalis*), observed indicates the area remains moist even during the dry season.

Wetland dependent plant species (OBL/ FACW) observed:

OBL	FACW
Cypress (<i>Taxodium distichum</i>)	Wild coco (<i>Eulophia alta</i>)
Bay (<i>Persea sp.</i>)	Buttonweed (<i>Diodia virginica</i>)
False nettle (<i>Boehmeria cylindrica</i>)	Red maple (<i>Acer rubrum</i>)
Pop ash (<i>Fraxinus caroliniana</i>)	
Royal fern (<i>Osmunda regalis</i>)	
Broadleaf arrowhead (<i>Sagittaria latifolia</i>)	
Willow (<i>Salix sp.</i>)	
Pickerelweed (<i>Pontederia cordata</i>)	
Sawgrass (<i>Cladium jamaicense</i>)	
Buttonbush (<i>Cephalanthus occidentalis</i>)	
Swamp dogwood (<i>Cornus foemina</i>)	
Rush (<i>Juncus ssp.</i>)	

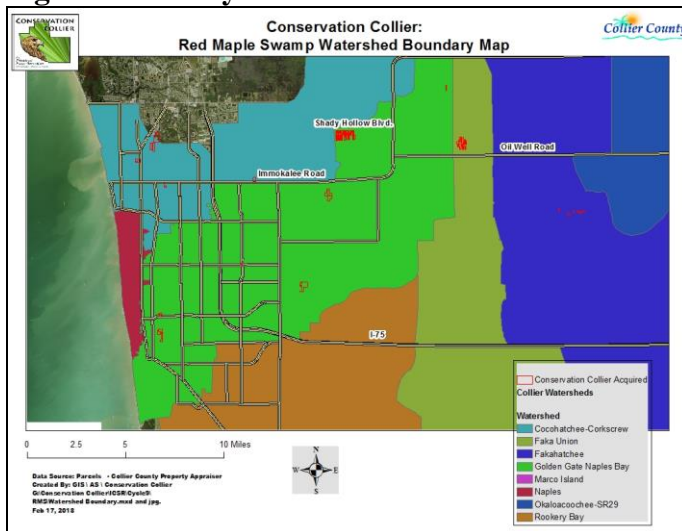
Wetland dependent wildlife species observed: Wetland dependent bird species have been observed regularly at the Red Maple Swamp Preserve. Species seen include wood storks (*Mycteria Americana*), little blue herons (*Egretta caerulea*), snowy egrets (*Egretta thula*), white ibis (*Eudocemus alba*), and red shouldered hawks (*Buteo lineatus*).

Aquifer Recharge Potential:

Aquifer recharge map data was developed by Fairbank, P. and S. Hohner in 1995 and published as *Mapping recharge (infiltration and leakage) throughout the South Florida*

Water Management District, Technical publication 95-20 (DRE # 327), South Florida Water Management District, West Palm Beach, Florida. Most people in Collier County get their drinking water from the surficial aquifer, but many also have wells to the Lower Tamiami aquifer, a slightly deeper but connected aquifer. This property lies within Golden Gate Naples Bay watershed (Figure 4), with groundwater flowing from the north east to the southwest.

Figure 4. County Watershed Boundaries



Recharge capacity for the entire Golden Gate Estates Unit 53 is moderate to high - between 7 and 14 inches per year.

Lower Tamiami recharge Capacity: The mapped Lower Tamiami aquifer recharge is moderate at 7” to <14” annually. Protection of this site in an undeveloped state will help to protect the Lower Tamiami aquifer (Exhibit C).

Surficial Aquifer Recharge Capacity: The mapped surficial aquifer recharge for this project is high at 56” to 67” annually. They lie near the edge of the mapped area, with the nearby zone mapped at 43” to < 56” annually. These parcels contribute significantly to the surficial aquifer (Exhibit C).

Wellfield Protection: The closest wellfield and wellfield protection zones are 1.5 miles to the southeast. There is also wellfield 3 miles to the southwest. This project area does not intersect with any of the wellfield protection zones (Exhibit C).

FEMA Flood map designation: The property is currently within Flood Zone AH (Exhibit F). The AH zone designation indicates the property is subject to inundation of by the 1-percent-annual-chance flood event where average depths are 1-3 feet, and where base flood elevations, flood insurance and floodplain management standards apply.

Soils:

Soils data is based on the Soil Survey of Collier County Area, Florida (USDA/NRCS, 1990).

Mapped soils on this parcel include, in order from larger to smaller area covered:

Soil Number and Name	Acres	Soil Type
25 Boca, Riviera, Limestone Sub, & Copeland FS	230	Depressional
27 Holopaw Fine Sand	74	Hydric, slough
21 Boca fine sand	2	Upland with seasonal wetness

Areas having Boca, Riviera etc., soils are typically cypress swamps and marshes. Natural vegetation includes cypress, pickerelweed, rushes, alligator flag, saw grass and willow. These soils generally indicate a collecting basin for the area and have standing water for at least six months out of the year.

In areas of Holopaw Fine Sands, the water table is typically within a depth of twelve inches of the surface for three to six months of the year. In very dry times, surface water can recede to a depth of 40 inches. During wet periods, the soil can be covered by shallow, slow moving water for about seven days. The natural vegetation consists of slash pine, cypress, cabbage palm, saw palmetto, wax myrtle and grasses. The historically 100-acre farmed area was entirely on Holopaw Fine Sands.

Boca fine Sand is considered an upland soil type but is also poorly drained and prone to seasonal droughtiness and wetness. Typical vegetation on this soil type is slash pine, cabbage palm, palmetto, wax myrtle and grasses. The vegetation here is mixed wetland forest, like the rest of this area.

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)

Statement for satisfaction of criteria:

This project is entirely wetlands, based on observed seasonal groundwater presence, mapped soils (Exhibit B), aquifer recharge rates (Exhibit C) and vegetation (Exhibit A). This project area additionally satisfies the initial criteria relating to potential for flood control, as slough and depressional soils may be expected to hold and channel groundwater and floodwater away from surrounding developed properties. These properties provide forage for wetland dependent bird species, as numerous white ibis (*Eudocimus albus*), wood storks (*Mycteria Americana*), great blue herons (*Ardea Herodias*), and various other wading birds have been observed during site visits. The project is not within a wellfield protection zone and opportunities for water quality enhancement are minimal, as the Red Maple Swamp Preserve area is in the upper reaches of the Golden Gate Naples Bay watershed (Figure 4).

4. 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

The CLIP4 Potential Habitat Richness layer (Exhibit L) identifies between five and thirteen vertebrate species mapped as potentially using this area. Thirteen vertebrate species is the highest number mapped.

Listed Plant Species:

The federal authority to protect land-based plant species is administered by the U.S. Fish and Wildlife Service (FWS) and published in 50 Code of Federal Regulations (CFR) 23. Lists of protected plants can be viewed on-line at <https://www.fws.gov/angered/>. The Florida state lists of protected plants are administered and maintained by the Florida Department of Agriculture and Consumer Services (DOACS) via chapter 5B-40, Florida Administrative Code (F.A.C.). This list of plants can be viewed from a link provided at <http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Bureaus-and-Services/Bureau-of-Entomology-Nematology-Plant-Pathology/Botany/Florida-s-Endangered-Plants>.

The following listed plant species were observed:

COMMON NAME	SCIENTIFIC NAME	STATUS	
		DOACS	FWS
Common wild pine	<i>Tillandsia fasciculata</i>	E	n/a
Royal fern	<i>Osmunda regalis</i>	CE	n/a
Pine pink orchid	<i>Bletia purpurea</i>	T	n/a

E=Endangered, T=Threatened, CE=Commercially Exploited

Listed Wildlife Species:

Federal wildlife species protection is administered by the USFWS with specific authority published in 50 CFR 17. Lists of protected wildlife can be viewed on-line at: <https://www.fws.gov/angered/>. FWC maintains the Florida state list of protected wildlife in accordance with Rules 68A-27.003, 68A-27.004, and 68A-27.005, respectively, of the Florida Administrative Code (F.A.C.).

A list of protected Florida wildlife species can be viewed at:

<http://myfwc.com/wildlifehabitats/imperiled/profiles/>.

The only listed wildlife species observed has been wood storks (*Mycteria Americana*) and little blue herons (*Egretta caerulea*) feeding in the canal along Shady Hollow Blvd., however, bear scat and deer have been observed throughout the years Conservation Collier has been visiting the area and the entire project area is within FWC Priority One panther habitat (Exhibit O). FWC panther telemetry shows panthers using the property in 2001 and 2002, however, there are a significant number of panthers that are not fitted with telemetry collars and panthers likely utilize the property, based on the presence of game species.

Potential Listed Species:

According to the USFWS IPaC Information for Planning and Consulting website (<https://ecos.fws.gov/ipac/>), the following listed species could potentially occur:

COMMON NAME	SCIENTIFIC NAME	STATUS	
		State	Federal
Florida bonneted bat	<i>Eumops floridanus</i>	FE	E
Florida panther	<i>Puma concolor coryi</i>	FE	E
Everglades snail kite	<i>Rostrhamus sociabilis plumbeus</i>	FE	E

FE-Federally Endangered, E-Endangered

Statement for satisfaction of criteria:

These data confirm that this parcel satisfies the initial criteria relating to listed species, though only minimally directly observed. Listed wetland dependent birds, including wood storks, snowy egrets, ibis and little blue herons have been observed during site visits to this area throughout the years. The entire unit is considered part of Primary Zone panther habitat by the FWC. Deer have been observed in the area and Florida Black bears are known to inhabit adjoining public lands. The CLIP4 Biodiversity map layer (Exhibit K) identifies the area of the project lands as priority one – the highest priority – and the area is within FWC Priority One panther habitat (Exhibit O).

The ecological value of the parcel is related to its wetland characteristics and location in relation with surrounding wetland conservation lands. Restoration potential is high, as there has been no development in the unit. The CLIP4 Aggregated Conservation Priorities map (Exhibit N) identified this area as the highest conservation priority. Connectivity is discussed in Criteria #5

5. 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

Statement for satisfaction of criteria:

Red Maple Swamp is connected on its north and west sides with the 60,000 acre Florida Forever Corkscrew Regional Ecosystem Watershed (CREW) Project, which includes Corkscrew Marsh, Bird Rookery Swamp, Flint Pen Strand and Audubon’s Corkscrew Swamp Sanctuary. Through them, Red Maple Swamp connects with the Pepper Ranch and Caracara Prairie Preserves, private mitigation lands and lands protected under the County’s Rural Lands Stewardship Program. Conservation Collier acquisitions within NGGE Unit 53 would enhance, protect, and buffer these already conserved lands (Figure 3).

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

No

If yes, will use of Conservation Collier funds leverage a significantly higher rank or funding priority for the parcel?

N/A

Without such funding circumstances, Conservation Collier funds shall not be available for purchase of these lands. Ord. 2002-63, Sec. 10 (1)(f)

III. Potential for Appropriate Use and Recommended Site Improvements

Potential Uses as Defined in Ordinance 2002-63, section 5.9:

Hiking: *Hiking could be done in the dry season and a trails connection could be made with surrounding CREW lands.*

Nature Photography: *Nature photography would be a likely use.*

Bird-watching: *Bird watching would be a likely use.*

Kayaking/Canoeing: *No water bodies are available for canoeing and kayaking.*

Swimming: *No water bodies are available for swimming.*

Hunting: *Hunting could be an appropriate use and is allowed on nearby CREW Wildlife and Environmental Area (WEA) lands between July and the following June. Hunting includes limited quotas for deer, turkey, and small game animals. There is no limit on hogs.*

Fishing: *No opportunity for fishing exists.*

Recommended Site Improvements:

Grade unpaved roads back to surface grade and reduce existing roads to trails. Provide a seasonal trail that travels through forested areas from Shady Hollow Blvd to 41st St NE and back. Look for an appropriate place to develop a small parking area and trailhead, or lacking suitable uplands, work with SFWMD to share existing parking for Bird Rookery Swamp boardwalk and trail system.

IV. Assessment of Management Needs and Costs

Management of this property will address the costs of exotic vegetation removal and control. The following assessment addresses both the initial and recurring costs of management. Costs provided are actual costs incurred by Conservation Collier between 2013 and 2017.

Exotic, Invasive Plants:

Exotic invasive plants observed on project lands include Brazilian pepper (*Schinus terebinthifolius*) Climbing fern (*Lygodium microphyllum*), creeping signalgrass (*Urochloa plantaginea*) and Air potato (*Dioscorea bulbifera*). The Brazilian pepper is heaviest along the roadways and in the 100-acre area previously cleared for agriculture and now overgrown with vegetation. In the previously farmed areas, a monoculture of mature Brazilian pepper with a fern understory was observed. Climbing fern was observed in large patches in the natural sections of the project, and appears to be gaining a significant foothold in the area. Air potato was observed in the tree canopy on the east side of the unit. No other invasive exotics were observed, but it is likely that others are present.

Exotic Vegetation Removal and Control

In 2003, staff estimated that initial removal costs would likely range from \$150 per hour to \$600 per hour for the initially offered 21 acres (10 parcels). Costs for follow-up maintenance, were estimated at between \$100 and \$450 per acre, per year. Control of both air potato and climbing fern were problematic, as air potato tubers continue to sprout until bulbils are gone and climbing fern spreads by airborne (and possibly waterborne) spores. Actual costs for the initial treatment of 53 acres on the west side of the project in 2014 were \$120 per acre, for a total of \$6,455 for the 53-acre area. Follow-up treatment in 2015 was \$118 per acre (\$6,300), and in 2016 was \$146 per acre (\$7,749). This area was not treated in 2017. Therefore, the value of **\$146 per acre** is considered a current actual cost.

Exotic wildlife:

In March 2015, a Tegu lizard was photographed crossing Shady Hollow Blvd. A subsequent survey was performed during a volunteer workday of the area by the Southwest Florida Cooperative Invasive Species Management Area (CISMA) group. No tegus were observed, but it is likely they are there.



Photo taken March 18, 2015

Public Parking Facility:

The property would not require an area for visitor parking now, as not enough parcels would be acquired to provide a resource destination.

Public Access Trails:

Construction of trails would also not be feasible now.

Security and General Maintenance:

At this time, staff has been advised that ATV riders use the unit, apparently accessing it by 41st and 43rd Avenues NW and trails cut through some properties, though staff did not directly observe this. Properties would need to be posted with signs and arrangements made for law enforcement to occasionally visit and monitor activities, though fencing these properties does not seem an efficient use of resources until a larger contiguous group of parcels could be acquired.

Table 2. Summary of Estimated Management Needs and Costs

Management Element	Initial Cost	Annual Recurring Costs	Comments
Exotics Control	\$44,630	\$44,630	In-place chemical treatment - \$146 per acre for initial and maintenance events. Costs calculated for entire 305.69 acres and on treating every acre.
Parking Facility			Not at this time
Access Trails			t.b.d.
Fencing			Not at this time
Signs	\$100 each		3' X 1.5 metal sign on post
Basic Maintenance / Trash Removal	t.b.d.	t.b.d	Community Service available
*Total	\$44,630	\$44,630	

t.b.d. To be determined

Not at this time: Construction of trails, parking and placement of fencing would be best postponed until more properties are acquired.

*These costs were calculated for the entire project area. Currently, Conservation Collier has acquired 208 acres, out of which approximately 13 donation acres have been initially treated by donors with maintenance funds provided for approx. 7 years of treatment each, and 53 acres that have been treated nearly annually since 2013. Once an area is initially treated, follow-up maintenance is necessary or exotics will regrow, wasting the initial investment. No other parcels besides the donation parcels and the western 53 acres are currently being treated. An additional 5 acres are currently offered for acquisition, but exotic removal is not planned for them until larger contiguous areas are acquired. **Therefore, the current annual maintenance cost is approximately \$9,600.**

V. Potential for Matching Funds

The primary partnering agencies for conservation acquisitions, and those identified in the Conservation Collier ordinance are the Florida Communities Trust (FCT), and The Florida Forever Program. The following highlights potential for partnering funds, as communicated by agency staff:

Florida Communities Trust - Parks and Open Space Florida Forever grant program:

Application for this program is typically made for pre-acquired sites up to two years from the time of acquisition. The Florida Legislature appropriated \$10 million in Florida Forever funding in fiscal year 2016-17 to FCT. Funding has not been awarded for this cycle. There is currently no funding available until the Florida Legislature determines the 2017-18 budget.

Florida Forever Program:

Staff has been advised that the Florida Forever Program has limited funds and is concentrating on parcels already included on its ranked priority list. This parcel is not inside a Florida Forever priority project boundary. Additionally, the Conservation Collier Program has not been successful in partnering with the Florida Forever Program due to conflicting acquisition policies and issues regarding joint title between the programs.

Other Potential Funding Sources:

There is potential for utilizing funding donations to the Conservation Collier program to fulfill requirements for off-site preserves pursuant to the Collier County Land Development Code, Section 3.05.07. There is currently approximately \$133,400 in this fund, with \$105,000 proposed for multi-parcel project properties (Including Red Maple Swamp and Winchester Head) whose owners have accepted the County's offers.

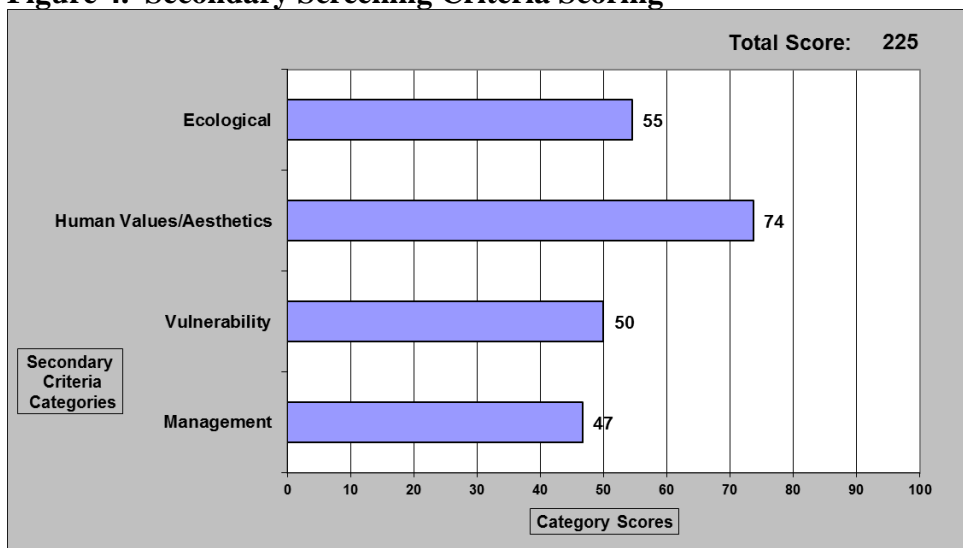
VI. Summary of Secondary Screening Criteria

Staff has scored this project using the current Secondary Criteria Screening Form and has attached the scoring form as Exhibit P. **A total score of 225 out of a possible 400** was achieved. The chart and graph below show a breakdown of the specific components of the score.

Table 3. Tabulation of Secondary Screening Criteria

Secondary Screening Criteria	Possible Points	Scored Points	Percent of Possible Score
Ecological	100	55	55%
Human Values/Aesthetics	100	74	74%
Vulnerability	100	50	50%
Management	100	47	47%
Total Score:	400	225	56%
Percent of Maximum Score:			56%

Figure 4. Secondary Screening Criteria Scoring



Summary of factors contributing to score

Total Score 225 out of 400 possible points

Ecological 55 out of 100: This moderate score was achieved because none of the preferred plant communities from the ordinance were found and diversity of habitats was low, though the red maple swamp was a fine example of a native habitat. Only a few listed plant or animal species were directly observed, but more are likely present. Points were gained for aquifer recharge and because the project site is a wetland, has listed plants and documentation of listed wildlife and is immediately contiguous to conservation land. A few points were lost due to significant exotic plant presence.

Human Values/Aesthetics – 74 out of 100: This score was achieved primarily because the parcels are accessible, even though by unpaved roads, and offer land-based opportunities for natural resource recreation with an opportunity to connect with existing 12 miles of CREW trails. A few points were gained because native terrestrial orchid species can be found along the unpaved roads.

Vulnerability – 50 out of 100: These parcels are zoned for Single-family Estates residences at 1 residence per lot if under 2.5 acres or 1 home per 2.5 acres. The only thing in the way of developing these lots is their wetland nature. Florida Department of Environmental Protection (FDEP) wetland determinations map 2016 identifies the entire NGGE Unit 53 as a wetland.

Management – 47 out of 100: The parcel scored relatively well because even though there is considerable Brazilian pepper, air potato and Climbing fern present. The type of exotic management that is most feasible, chemical treatment-in place, is lower in cost than the cutting, treating and debris removal that would be necessary in more urban lands. Points were lost because trespass issues exist and use of prescribed fire would not be advisable in a wetland hardwood forest.

Parcel Size: The entire project size for this multi-parcel project is 305.69 acres. While property size is not scored, the ordinance advises that based on comparative size, the larger of similar parcels is preferred. This project is similar to the 158.67-acre Winchester Head Multi-parcel project and the 192.15-acre Gore project.

Exhibit A. FLUCCs Map

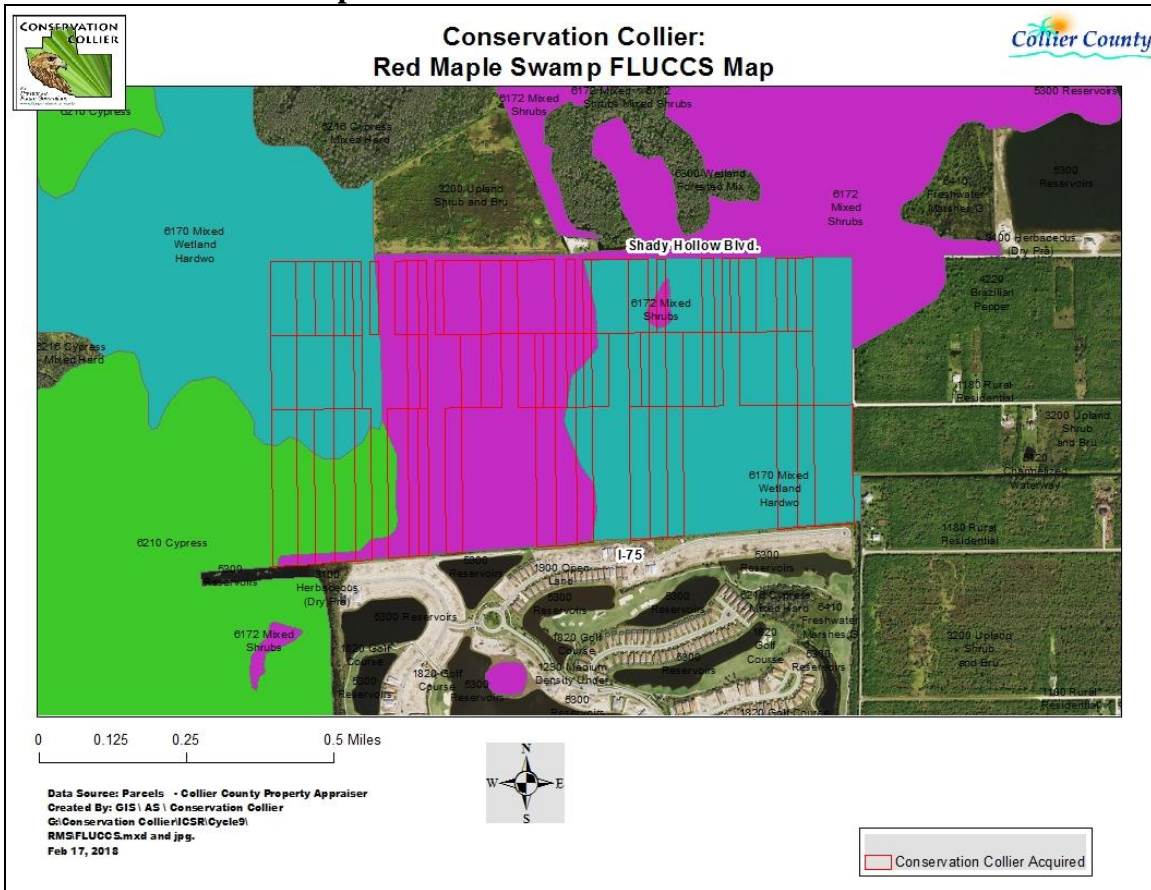


Exhibit B. Soils Map

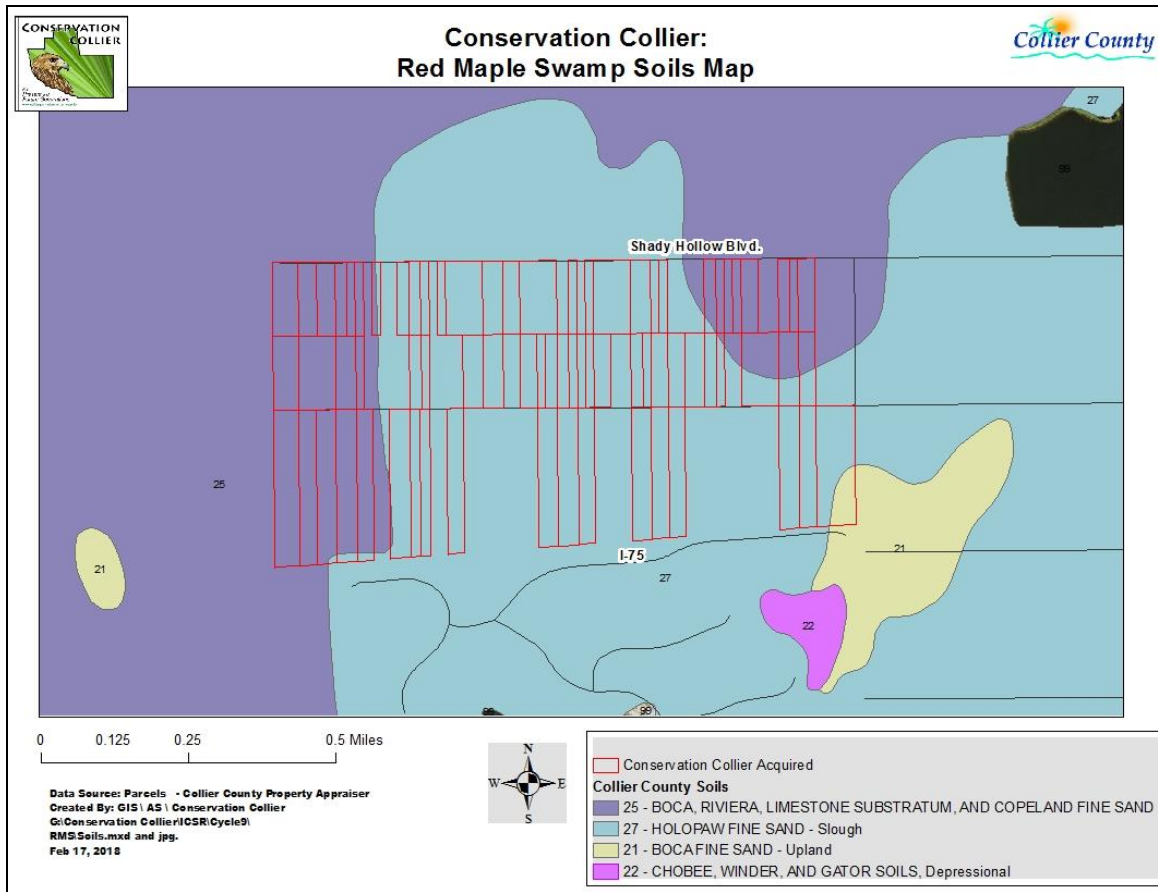


Exhibit C. Wellfield Protection and Aquifer Recharge Maps

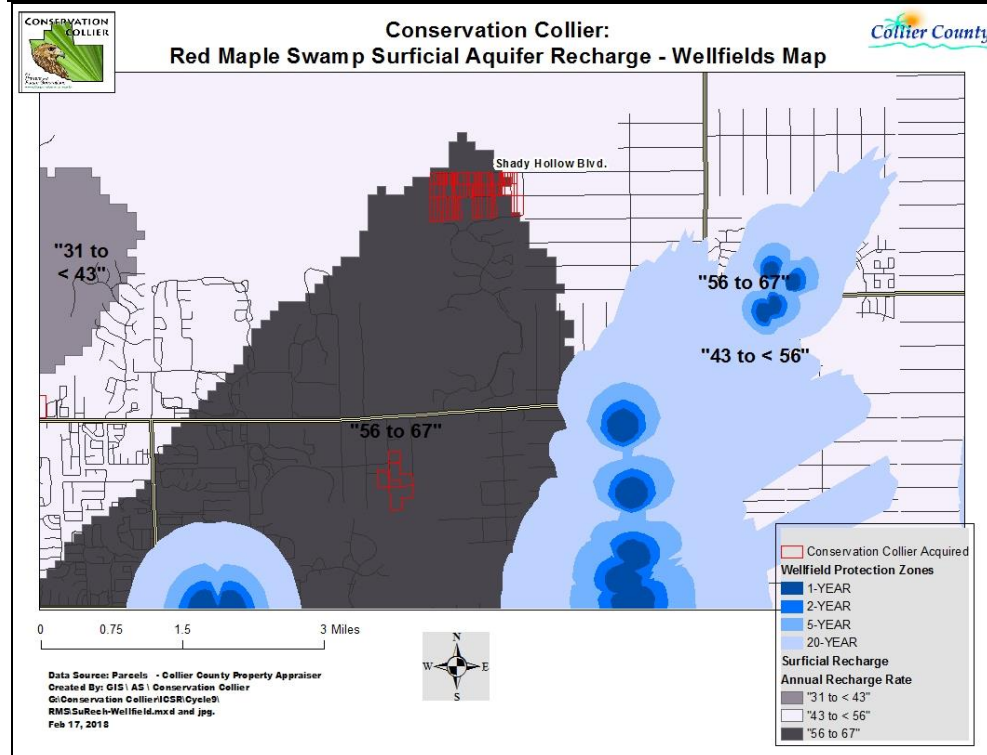
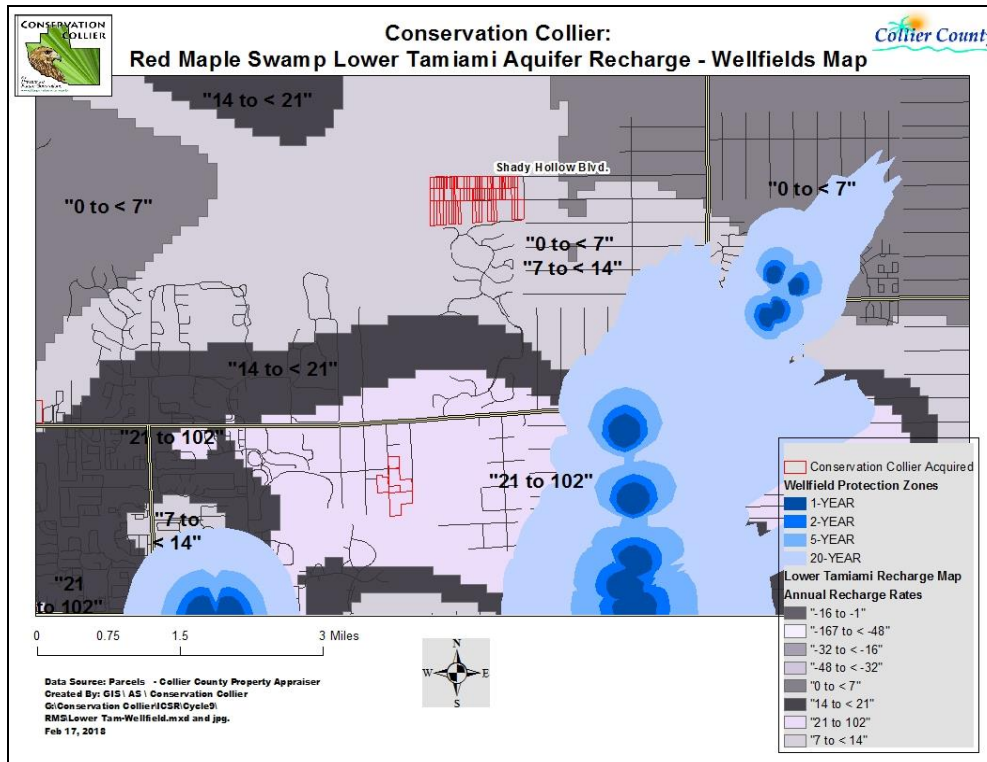


Exhibit D. Zoning map

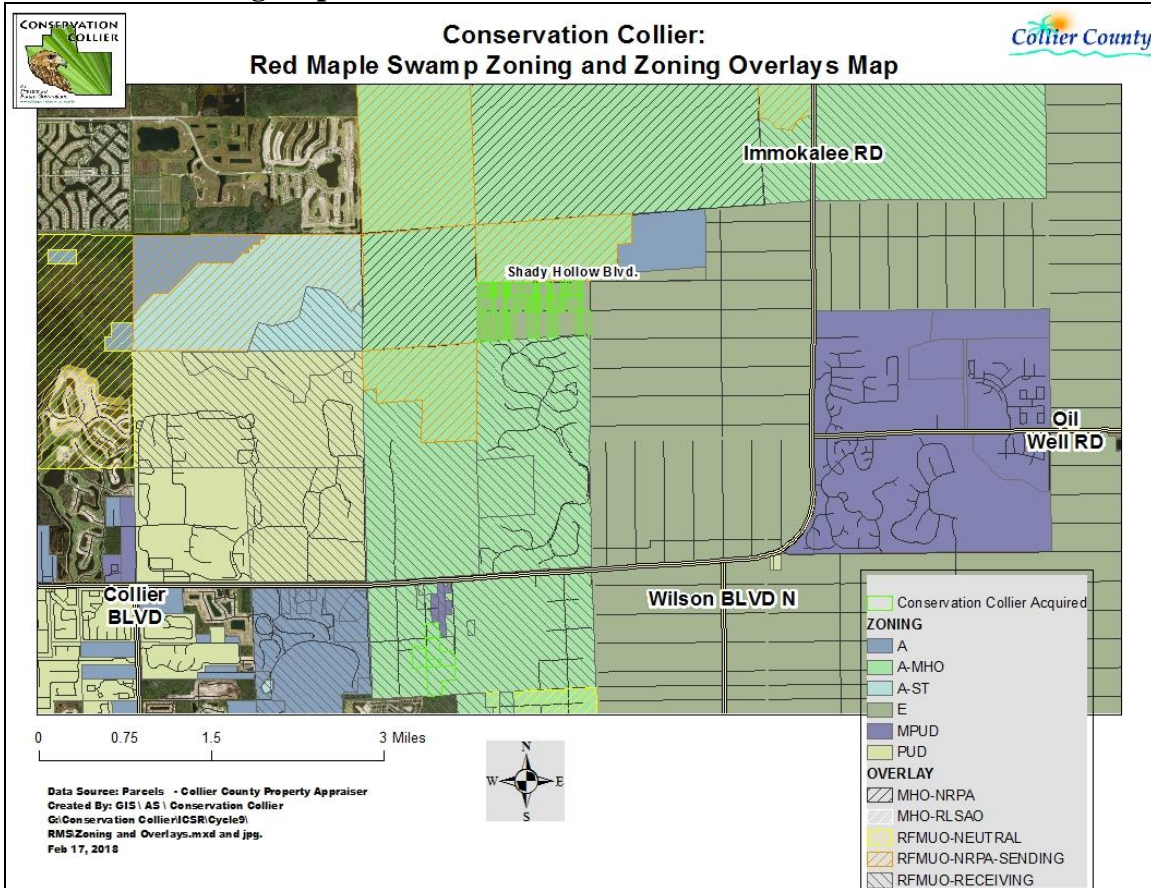
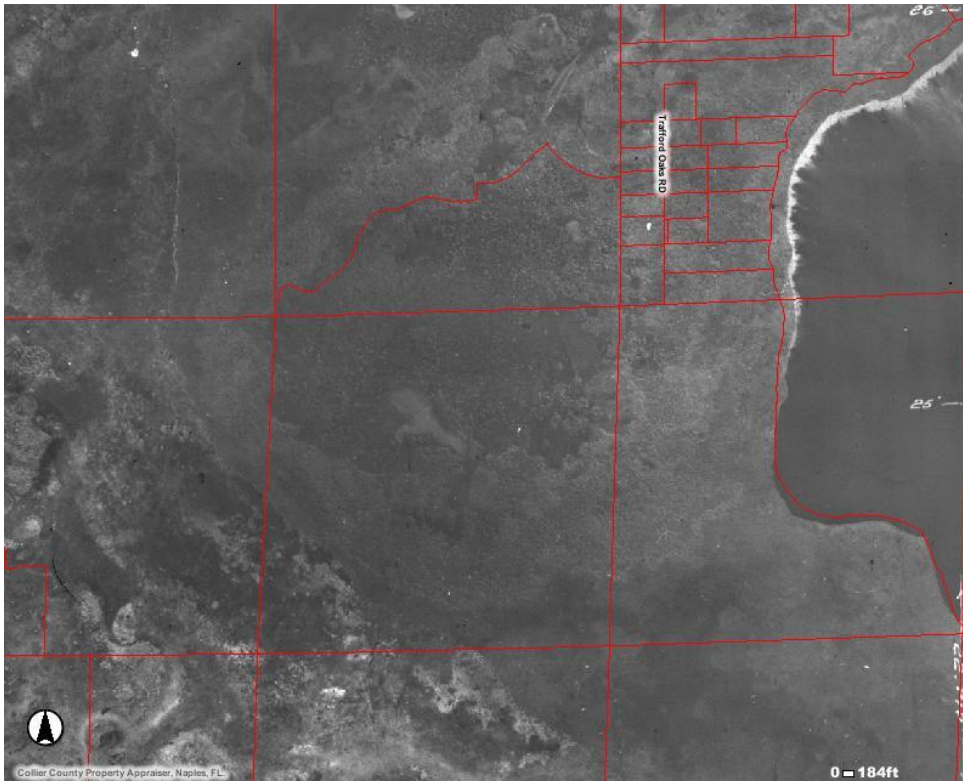
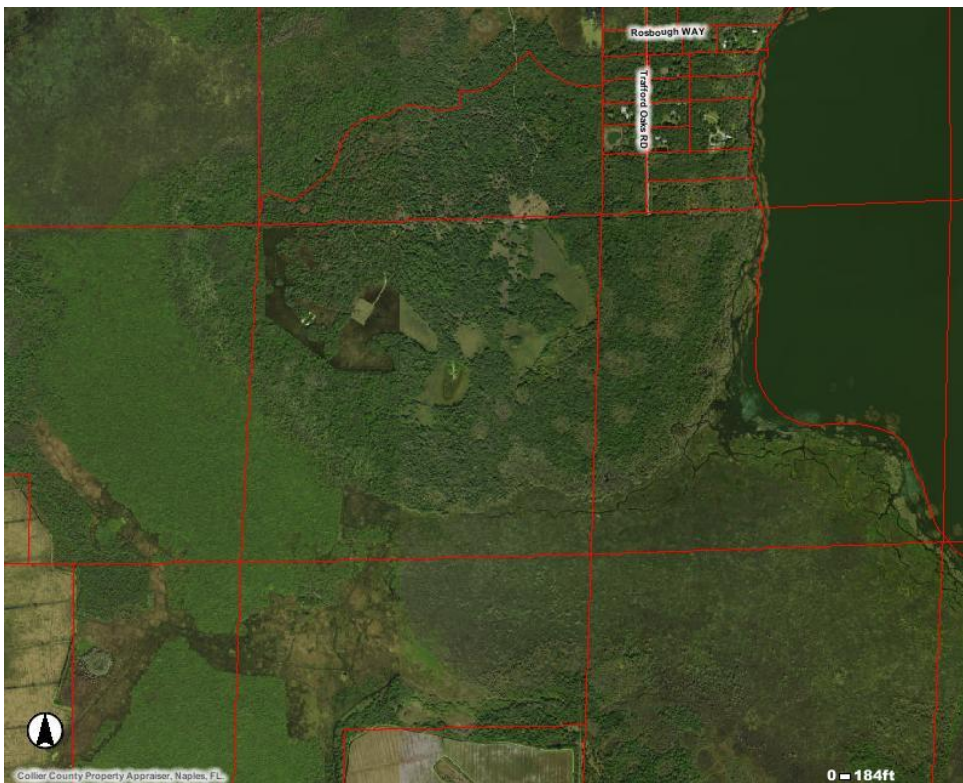


Exhibit E. Historical Aerials 2017 and 1940 (Source: Property Appraiser)



1940



2017

Exhibit F. FEMA Flood Zones Map

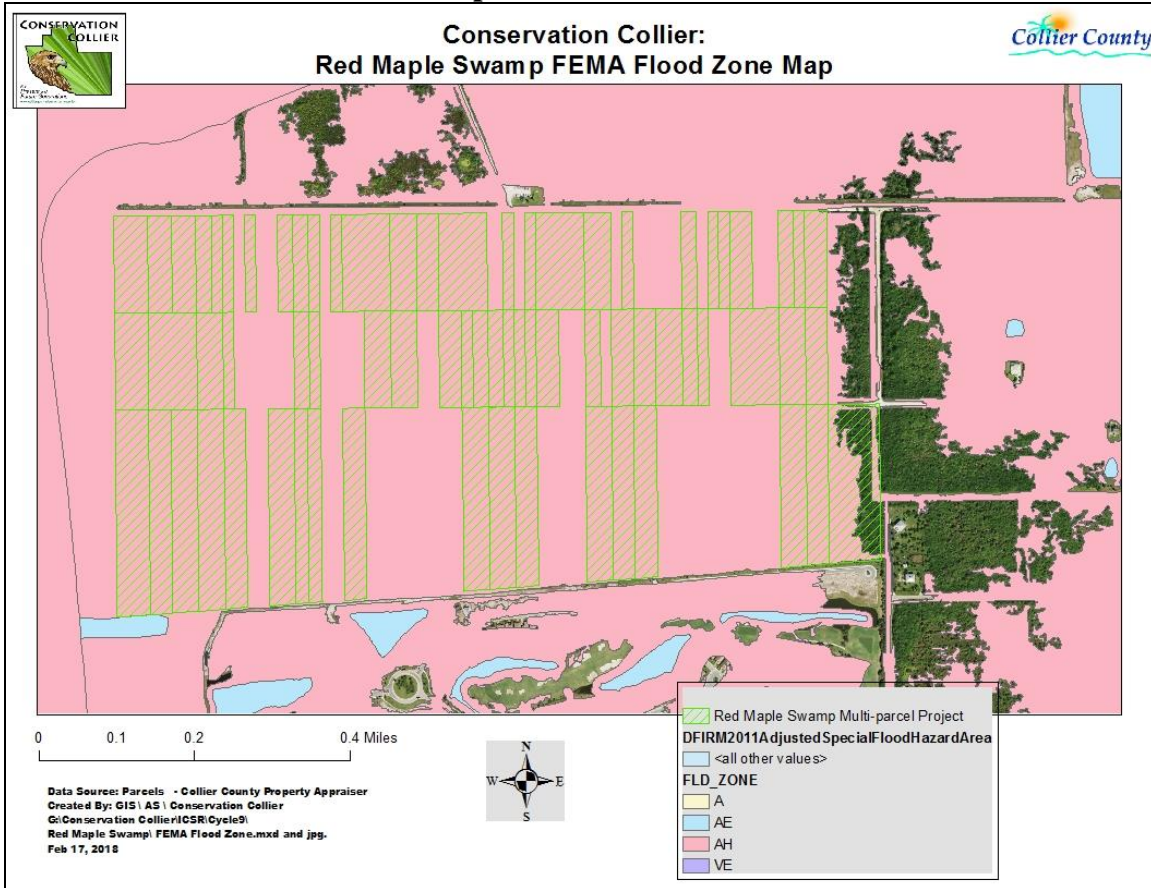


Exhibit G. LIDAR Map

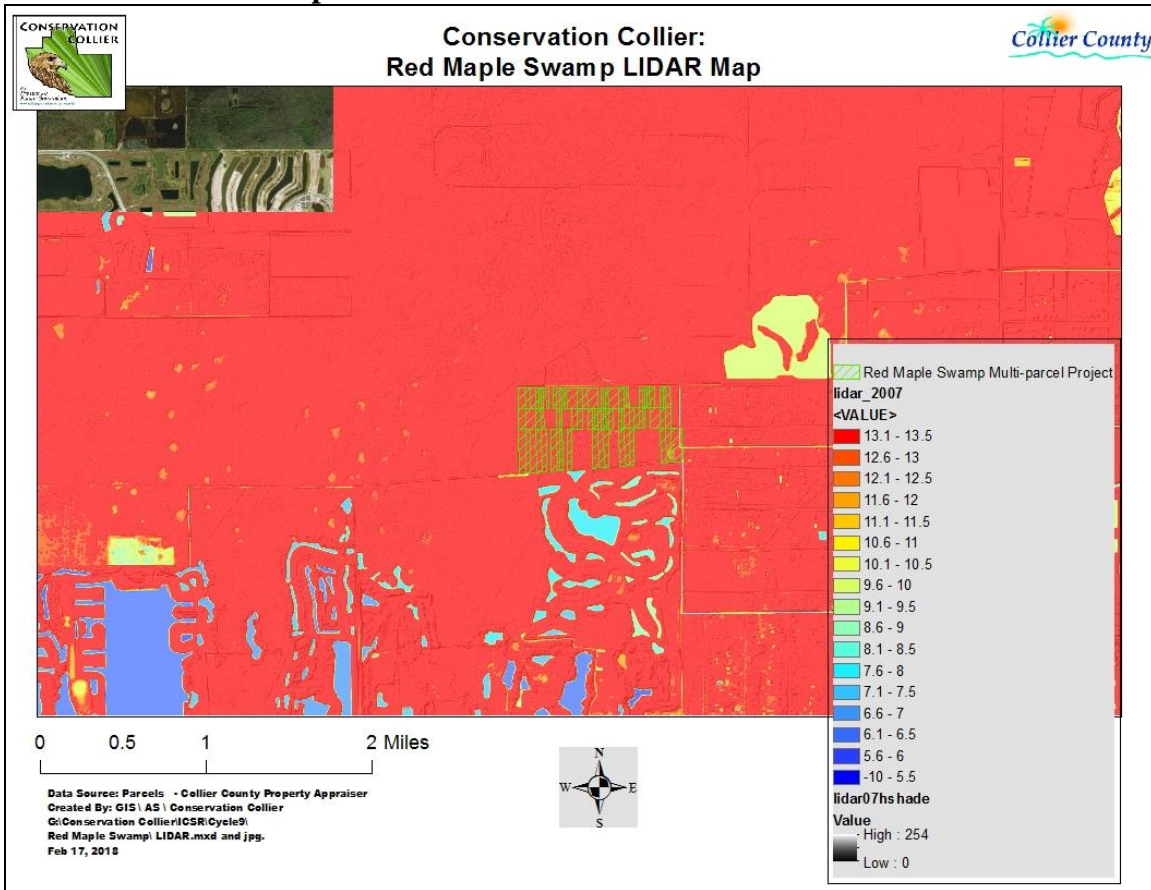


Exhibit H. Surface Water Priorities CLIP4 Map

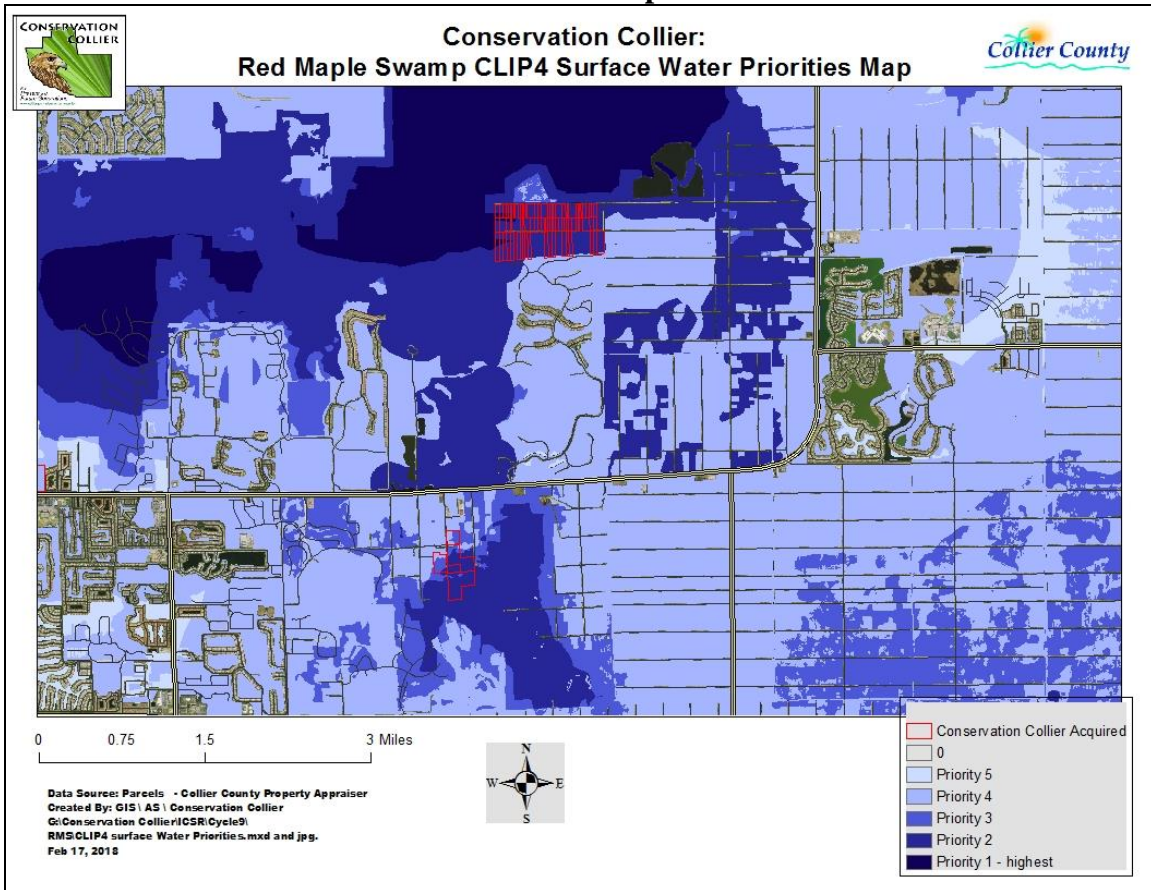


Exhibit I. Landscape Integrity CLIP4 Map

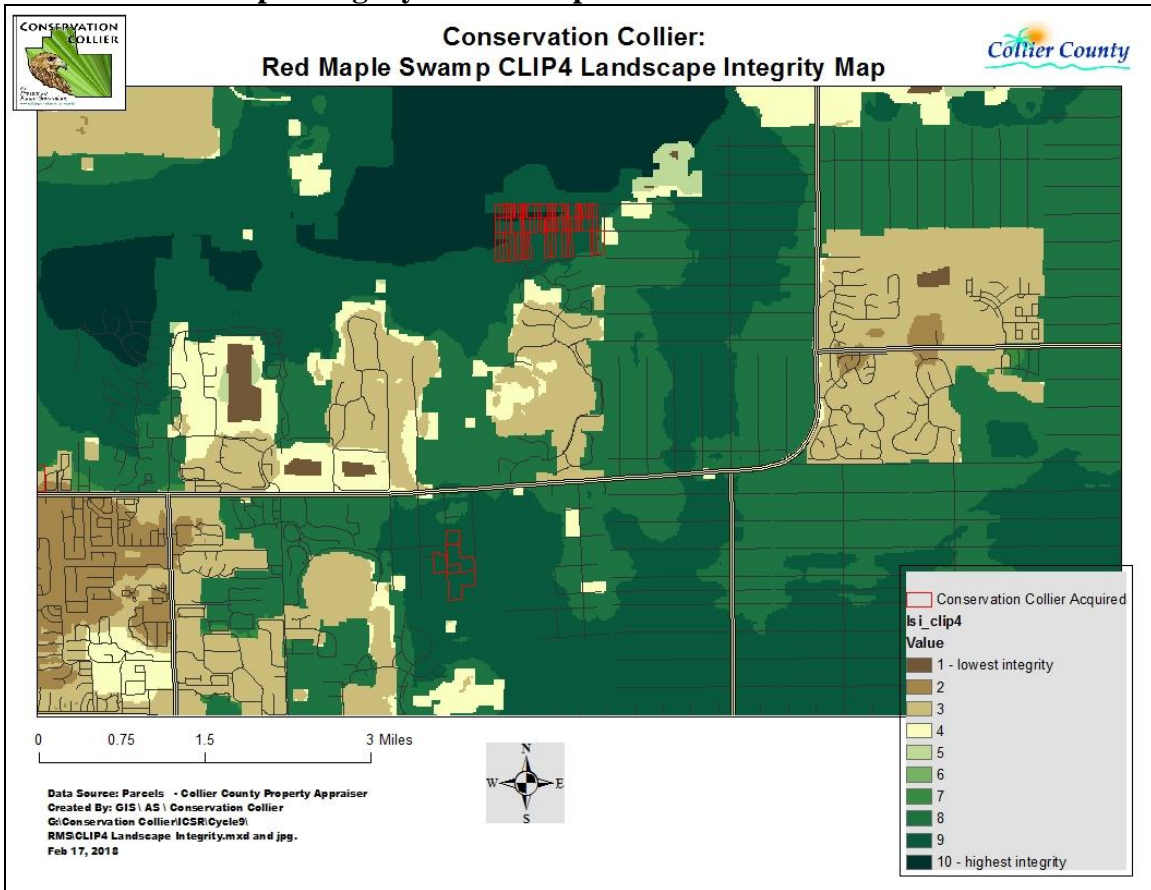


Exhibit J. Priority Natural Communities CLIP4 Map

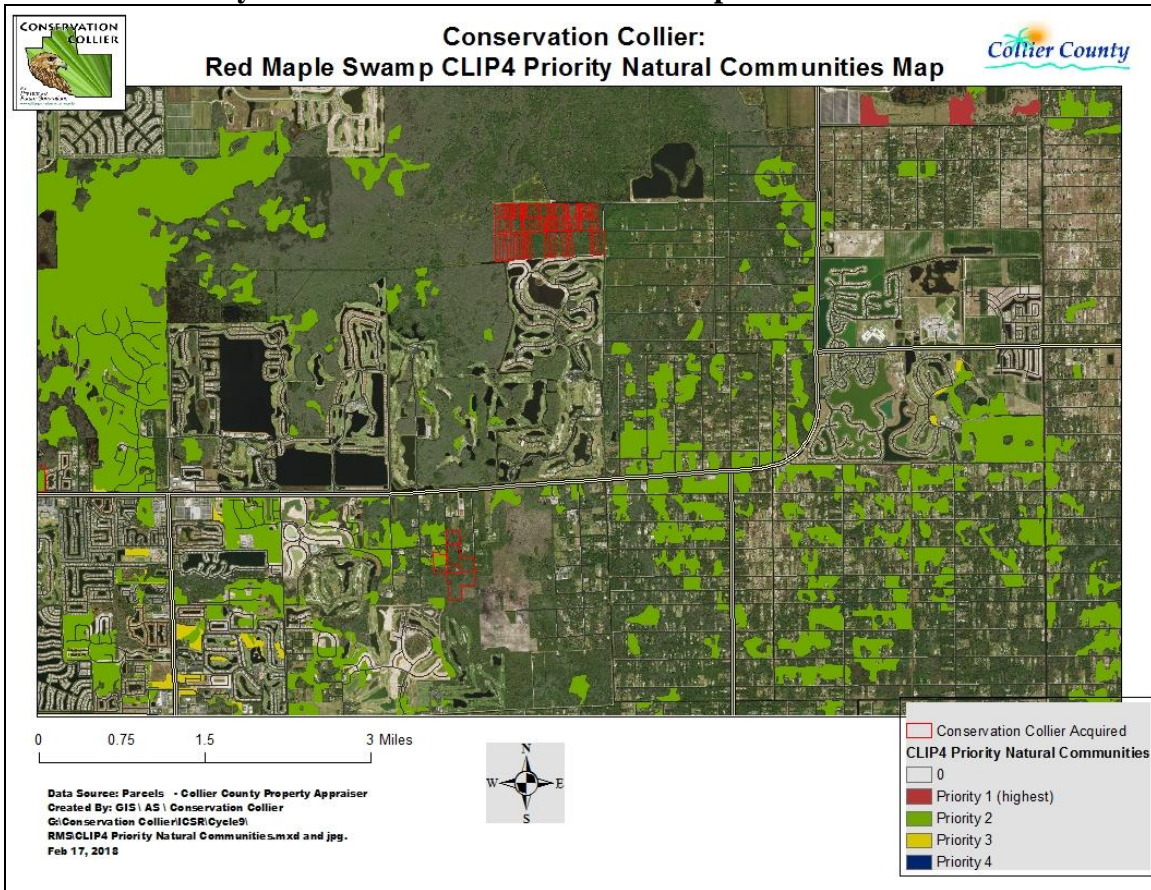


Exhibit K. Biodiversity CLIP4 Map

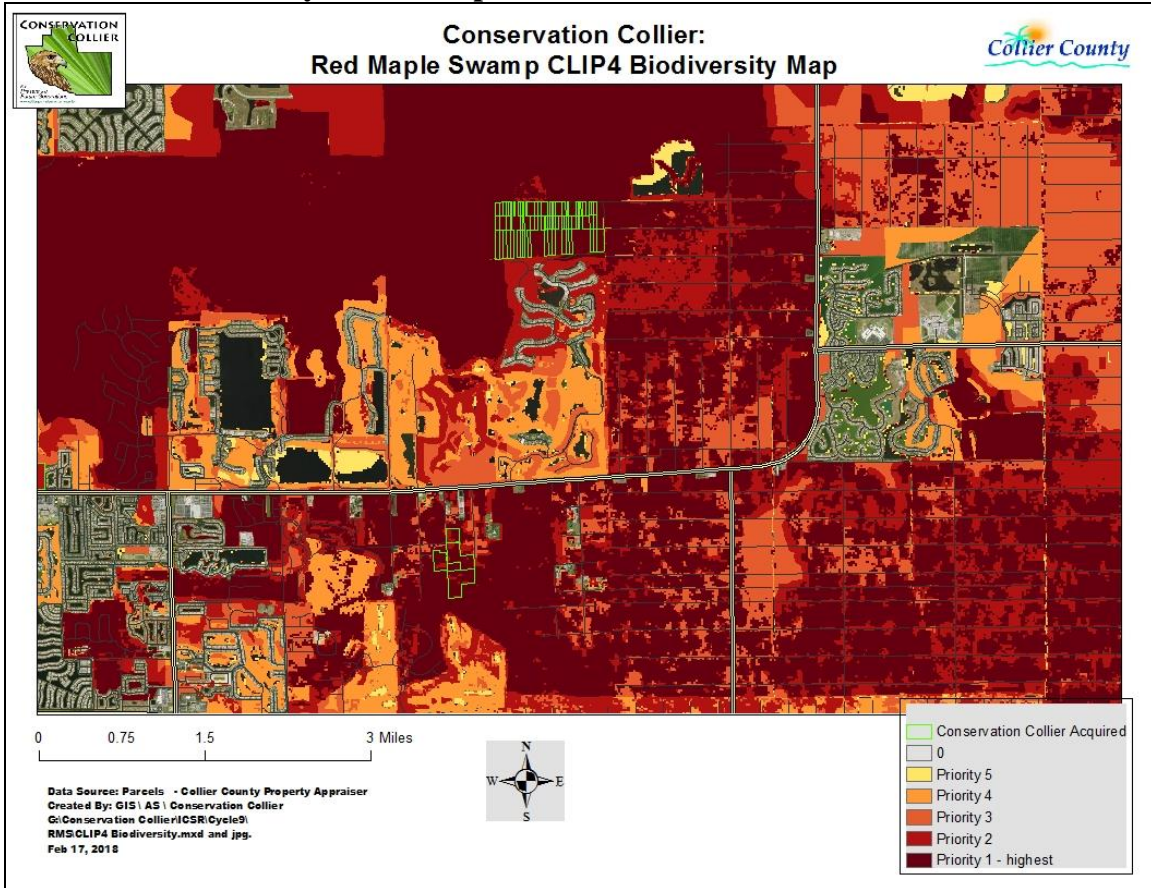


Exhibit L. Potential Habitat Richness CLIP4 Map

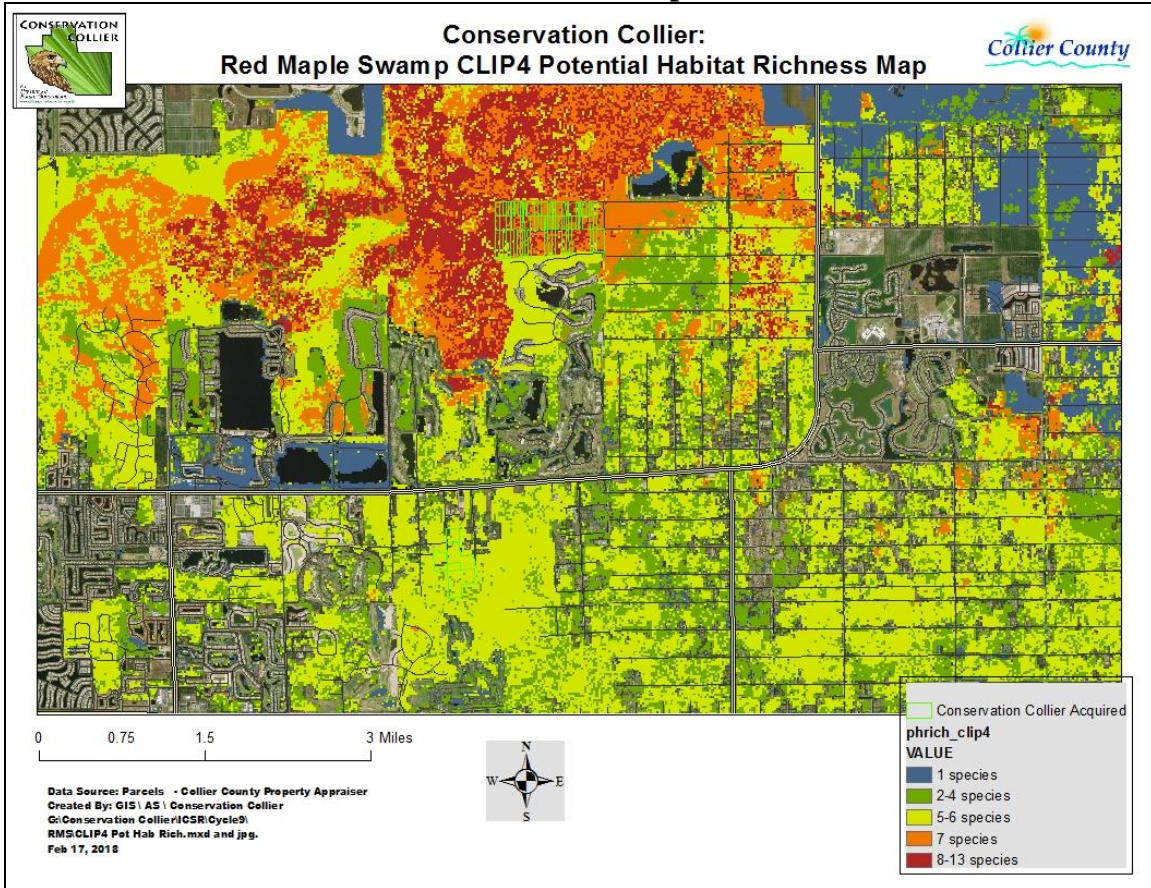


Exhibit M. Strategic Habitat Conservation Areas CLIP4 Map

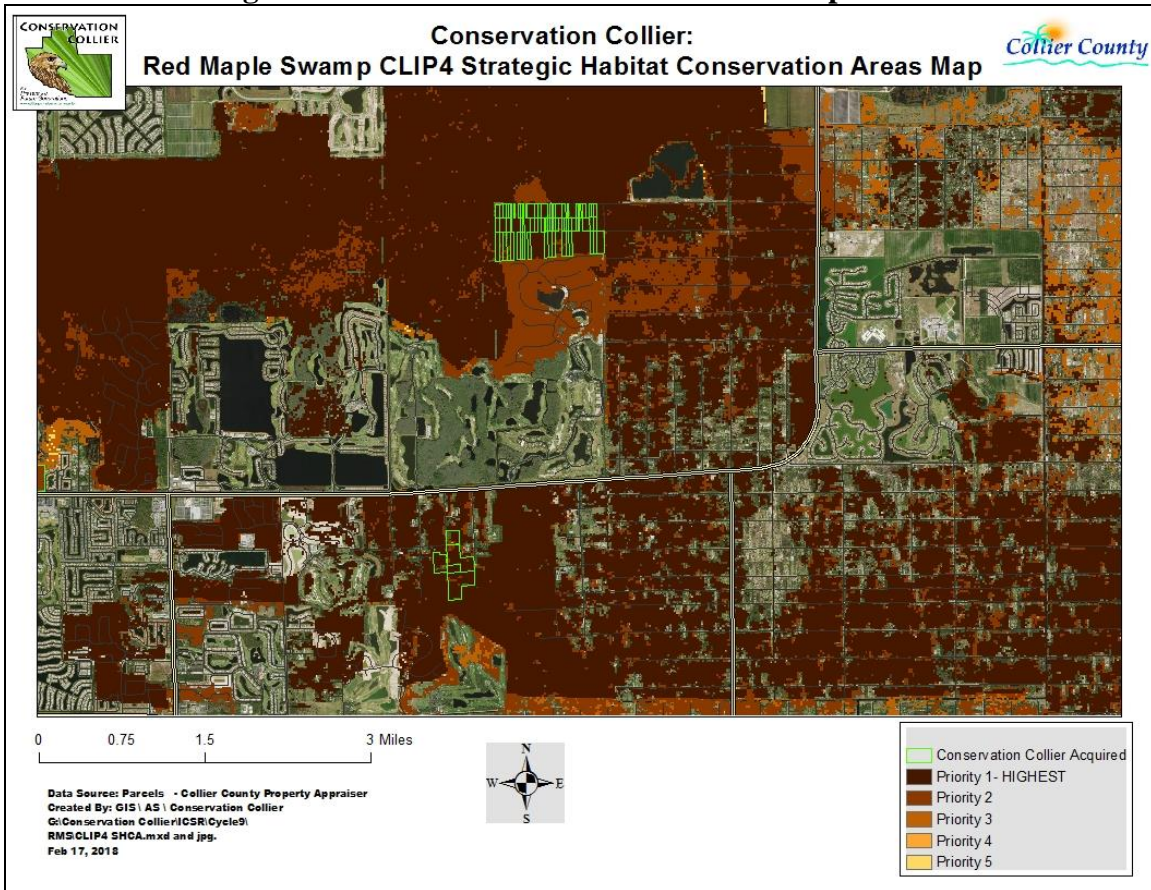


Exhibit N. Aggregated Conservation Priorities CLIP4 Map

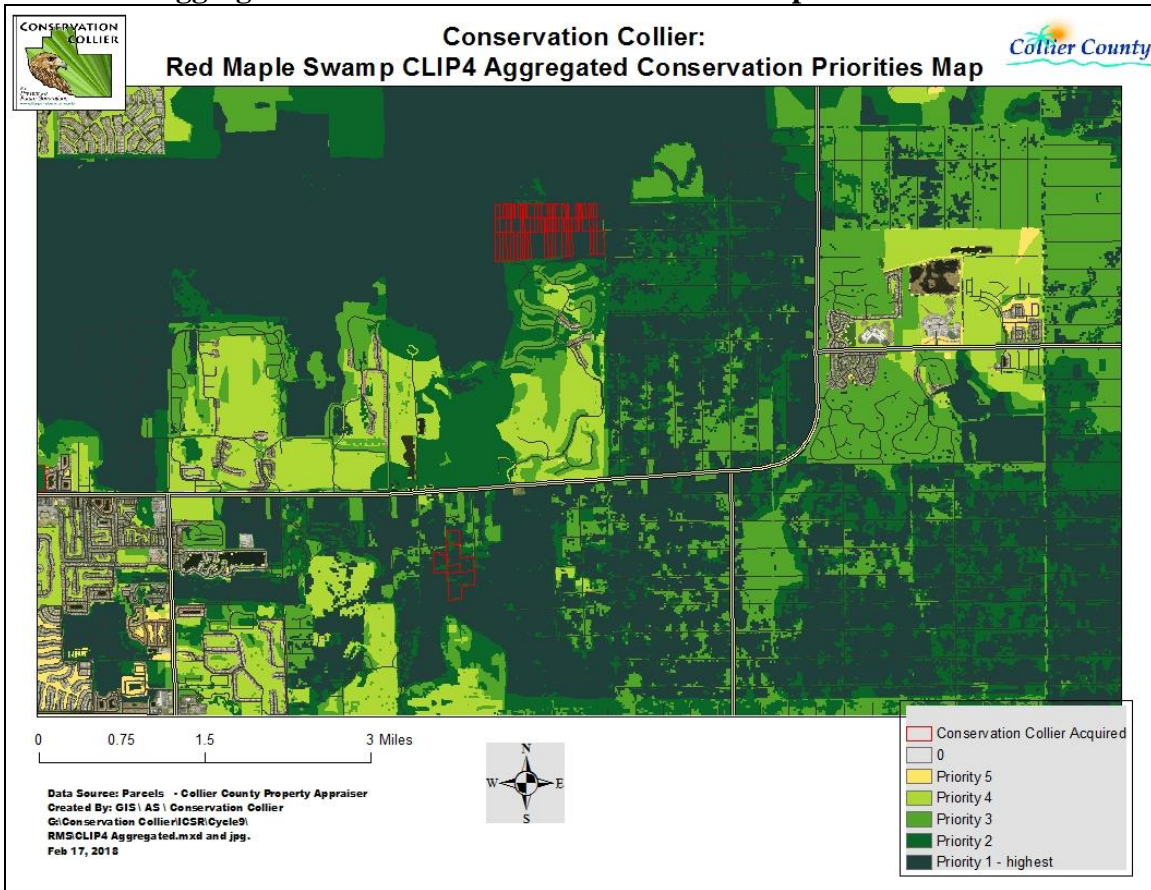


Exhibit O. FWC and USFWS Listed Species Focal and Consultation Areas Maps

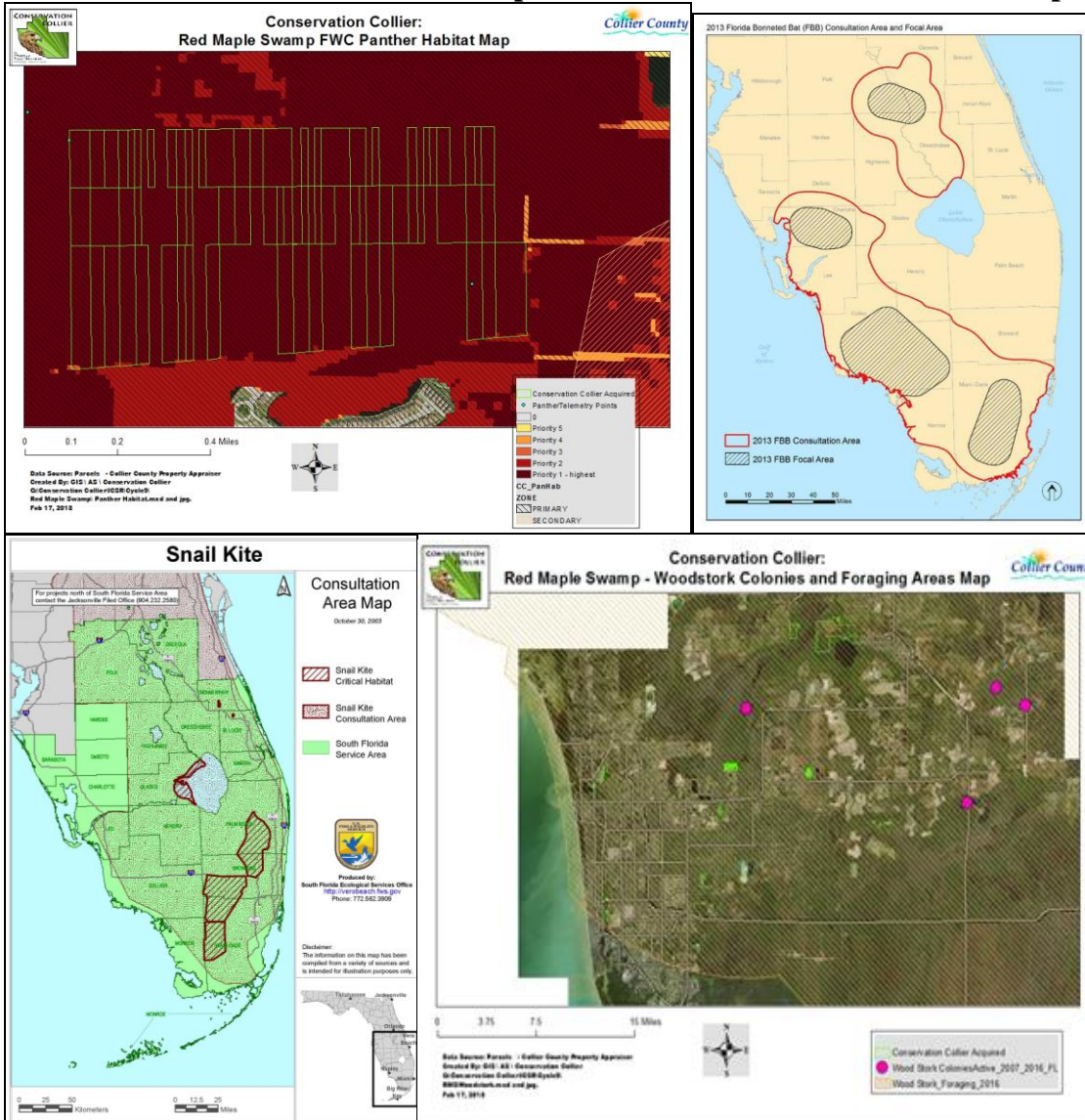


Exhibit P. Completed and Scored Secondary Criteria Screening Form

Property Name: NGGE Unit 53 aka Red Maple Swamp Preserve		Folio Numbers: numerous	
Geographical Distribution (Target Protection Area): NGGE			
1. Confirmation of Initial Screening Criteria (Ecological)			
1.A Unique and Endangered Plant Communities	Possible points	Scored points	Comments
<i>Select the highest Score:</i>			
1. Tropical Hardwood Hammock	90		
2. Xeric Oak Scrub	80		
3. Coastal Strand	70		
4. Native Beach	60		
5. Xeric Pine	50		
6. Riverine Oak	40		
7. High Marsh (Saline)	30		
8. Tidal Freshwater Marsh	20		
9. Other Native Habitats	10	10	6170 - Mixed wetland hardwoods
10. Add additional 5 points for each additional Florida Natural Areas Inventory (FNAI) listed plant community found on the parcel	5 each		
11. Add 5 additional points if plant community represents a unique feature, such as maturity of vegetation, outstanding example of plant community, etc.	5	5	Mature red maples in areas outside of those historically farmed.
1.A. Total	100	15	
1.B Significance for Water Resources	Possible points	Scored points	Comments
1. Aquifer Recharge (<i>Select the Highest Score</i>)			
a. Parcel is within a wellfield protection zone	100		
b. Parcel is not in a wellfield protection zone but will contribute to aquifer recharge	50	50	Lower Tamimi Recharge is mapped at 7" to <14" annually (moderate); Surficial aquifer recharge is mapped at 56" to 67" annually (high)
c. Parcel would contribute minimally to aquifer recharge	25		
d. Parcel will not contribute to aquifer recharge, eg., coastal location	0		
2. Surface Water Quality (<i>Select the Highest Score</i>)			
a. Parcel is contiguous with and provides buffering for an Outstanding Florida Waterbody	100		
b. Parcel is contiguous with and provides buffering for a creek, river, lake or other surface water body	75		
c. Parcel is contiguous with and provides buffering for an identified flowway	50		
d. Wetlands exist on site	25	25	The entire project site is wetlands
e. Acquisition of parcel will not provide opportunities for surface water quality enhancement	0		
3. Strategic to Floodplain Management (<i>Calculate for a and b; score c if applicable</i>)			
a. Depressional soils	80	20	25% of soils are depressional. 80 X 25% = 20
b. Slough Soils	40	30	75% of soils are slough 40 X 75% = 30
c. Parcel has known history of flooding and is likely to provide onsite water attenuation	20	20	Project area is routinely flooded to the point of water flowing over the road during rainy season
Subtotal	300	145	
1.B Total	100	48	<i>Obtained by dividing the subtotal by 3.</i>
1.C Resource Ecological/Biological Value	Possible points	Scored points	Comments
1. Biodiversity (<i>Select the Highest Score for a, b and c</i>)			
a. The parcel has 5 or more FLUCCS native plant communities	100		
b. The parcel has 3 or 4 FLUCCS native plant communities	75		
c. The parcel has 2 or or less FLUCCS native plant communities	50		
d. The parcel has 1 FLUCCS code native plant communities	25	25	6170 - Mixed wetland hardwoods
2. Listed species			
a. Listed wildlife species are observed on the parcel	80		<i>If a. or b. are scored, then c. Potential Habitat Richness is not scored.</i>
b. Listed wildlife species have been documented on the parcel by	70	70	<i>Provide documentation source - FWC panther telemetry 2002 (cat #99) and 2003(cat #92)</i>
c. Habitat Richness score 5 categories	70		<i>Score is prorated from 14 to 70 based on the highest of the 5 CLIP4 Potential Habitat Richness categories-</i>
d. Rookery found on the parcel	10		
e. Listed plant species observed on parcel - add additional 20 poi	20	20	Osmunda regalis (ST), Bletia purpurea (ST), and Tillandsia fasciculata (SE)

Exhibit P. Completed and Scored Secondary Criteria Screening Form (Continued)

3. Restoration Potential			
a. Parcel can be restored to high ecological function with minimal alteration	100		
b. Parcel can be restored to high ecological function but will require moderate work, including but not limited to removal of exotics and alterations in topography.	50	50	Significant exotic removal work is needed and roads may need to be graded back to a natural grade
c. Parcel will require major alterations to be restored to high ecological function.	15		
d. Conditions are such that parcel cannot be restored to high ecological function	0		<i>explain limiting conditions</i>
Subtotal	300	165	
1.C Total	100	55	<i>Divide the subtotal by 3</i>
1.D Protection and Enhancement of Current Conservation Lands	Possible points	Scored points	Comments
1. Proximity and Connectivity			
a. Property immediately contiguous with conservation land or conservation easement.	100	100	CREW lands to north and west
b. Property not immediately contiguous, parcels in between it and the conservation land are undeveloped.	50		
c. Property not immediately contiguous, parcels in-between it and conservation land are developed	0		
d. If not contiguous and developed, add 20 points if an intact ecological link exists between the parcel and nearest conservation land	20		
1.D Total	100	100	
1. Ecological Total Score	100	55	<i>Sum of 1A, 1B, 1C, 1D then divided by 4</i>
2. Human Values/Aesthetics			
2.A Human Social Values/Aesthetics	Possible points	Scored points	Comments
1. Access (<i>Select the Highest Score</i>)			
a. Parcel has access from a paved road	100		
b. Parcel has access from an unpaved road	75	75	Access roads are unpaved lime rock and dirt roads
c. Parcel has seasonal access only or unimproved access easer	50		
d. Parcel does not have physical or known legal access	0		
2. Recreational Potential (<i>Select the Highest Score</i>)			
a. Parcel offers multiple opportunities for natural resource-based recreation consistent with the goals of this program, including but not limited to, environmental education, hiking, nature photography, bird watching, kayaking, canoeing, swimming, hunting (based on size?) and fishing.	100		
b. Parcel offers only 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.	75	75	Opportunity to connect with CREW lands & to enhance public access to those lands
c. Parcel offers limited opportunities for natural-resource based recreation beyond simply accessing and walking on it	50		
d. Parcel does not offer opportunities for natural-resource based recreation	0		
3. Enhancement of Aesthetic Setting			
a. Percent of perimeter that can me seen by public. Score based on percentage of frontage of parcel on public thoroughfare	80	51	<i>Score between 0 and 80 based on the percentage of the parcel perimeter that can be seen by the public from a public thoroughfare. 64% of the perimeter can be seen by people driving the 2 access roads. 80 X 64% = 51</i>
b. Add up to 20 points if the site contains outstanding aesthetic characteristic(s), such as but not limited to water view, mature trees, native flowering plants, or archeological site	20	20	<i>Provide a description and photo documentation of the outstanding characteristic Native flowering terrestrial orchids - Bletia purpurea and Eulophia alta along roadways</i>
Subtotal	300	221	
2. Human Social Values/Aesthetics Total Score	100	74	<i>Obtained by dividing the subtotal by 3.</i>

Exhibit P. Completed and Scored Secondary Criteria Screening Form (Continued)

3. Vulnerability to Development/Degradation			
3.A Zoning/Land Use Designation	Possible points	Scored points	Comments
1. Zoning allows for Single Family, Multifamily, industrial or commercial	50	50	Estates Zoning - single family
2. Zoning allows for density of no greater than 1 unit per 5 acres	45		
3. Zoning allows for agricultural use /density of no greater than 1 unit per acre	40		
4. Zoning favors stewardship or conservation	0		
5. If parcel has ST overlay, remove 20 points	-20		
6. Property has been rezoned and/or there is SDP approval	25		
7. SFWMD and/or USACOE permit has been issued	25		
8. A rezone or SDP application has been submitted	15		
9. SFWMD and/or USACOE permit has been applied for	15		
3. Vulnerability Total Score	100	50	
4. Feasibility and Costs of Management			
4.A Hydrologic Management Needs	Possible points	Scored points	Comments
1. No hydrologic changes are necessary to sustain qualities of site in perpetuity	100		
2. Minimal hydrologic changes are required to restore function, such a cut in an existing berm	75		
3. Moderate hydrologic changes are required to restore function, such as removal of existing berms or minor re-grading that require use of machinery	50	50	scrape roadways down to natural ground level
4. Significant hydrologic changes are required to restore function, such as re-grading of substantial portions of the site, placement of a berm, removal of a road bed, culvert or the elevation of the water table by installing a physical structure and/or changes unlikely	0		
5.A Total	100	50	
4.B Exotics Management Needs	Possible points	Scored points	Comments
1. Exotic Plant Coverage			
a. No exotic plants present	100		
b. Exotic plants constitute less than 25% of plant cover	80		
c. Exotic plants constitute between 25% and 50% of plant cover	60	60	Brazilian pepper, climbing fern, air potato and creeping signalgrass
d. Exotic plants constitute between 50% and 75% of plant cover	40		
e. Exotic plants constitute more than 75% of plant cover	20		
maintenance effort and management will be needed (e.g., heavy infestation by air potato or downy rosemytle)	-20	-20	There are significant exotics and many areas are hard to access where machinery is not allowed due to wetlands
g. Adjacent lands contain substantial seed source and exotic removal is not presently required	-20		
5.B Total	100	40	
4.C Land Manageability	Possible points	Scored points	Comments
1. Parcel requires minimal maintenance and management, examples: cypress slough, parcel requiring prescribed fire where fuel loads are low and neighbor conflicts unlikely	80		
2. Parcel requires moderate maintenance and management, examples: parcel contains trails, parcel requires prescribed fire and circumstances do not favor burning	60	60	Once exotics are removed, maintenance will be moderate but since it is a wetland, no machinery will be allowed. All work must be done by hand. Prescribed fire is not appropriate for this habitat.
3. Parcel requires substantial maintenance and management, examples: parcel contains structures that must be maintained, parcel requires management using machinery or chemical means which will be difficult or expensive to accomplish	40		
4. Add 20 points if the maintenance by another entity is likely	20	0	
5. Subtract 10 points if chronic dumping or trespass issues exist	-10	-10	ATVs are used in the area, access is easy and no one is around - a recipe for dumping.
5.C Total	100	50	
4. Feasibility and Management Total Score	100	47	Sum of 5A, 5B, 5C, then divided by 3
Total Score	400	225	

Exhibit Q. Cycle 8 Active Acquisition List Approved by The Board of County Commissioners January 25, 2011

CCLAAC Cycle 8 Approved
Acquisition List
January 25, 2011

NAME	Estimated Value	Size (ac)	Estimated Value per acre	Proposed List Category	Priority Designation for "A" Category Properties
Barron Collier Investments LTD - Area I	\$822,500	235.00	\$3,500	A	2*
Barron Collier Investments LTD - Area II	\$1,199,100	799.00	\$1,501	A	3
CDC Land Investments, Inc.	\$432,000	7.51	\$57,523	A	1*
A-LIST SUBTOTAL	\$2,453,600	1041.51			
NGGE Unit 53 Multi-parcel Project (remaining)**	\$804,115	123.71	\$6,500	A	n/a
Winchester Head Multi-parcel Project (remaining)**	\$612,010	87.43	\$7,000	A	n/a
Cycle 8 & Multi-parcel Projects total	\$1,416,125	211.14			
A-LIST TOTAL	\$3,869,725	1252.65			
North Golden Gate Estates I-75 Project	ALM LLC	\$33,500	6.70	\$5,000	B
	Argay	\$35,250	7.05	\$5,000	B
	Arias (2 parcels)	\$34,700	6.94	\$5,000	B
	Ayra	\$15,900	3.18	\$5,000	B
	Berman	\$11,700	2.34	\$5,000	B
	Blake	\$7,950	1.59	\$5,000	B
	Faust	\$34,200	6.84	\$5,000	B
	Fernandez	\$16,750	3.35	\$5,000	B
	Gascon	\$11,700	2.34	\$5,000	B
	Gore	\$988,300	197.66	\$5,000	B
	Mayr	\$33,500	6.70	\$5,000	B
	Mohabir	\$33,500	6.70	\$5,000	B
Velez	\$33,800	6.76	\$5,000	B	
B-LIST SUBTOTAL	\$1,290,750	258.15			
Gateway Shoppes II LLC	\$45,000	13.00	\$3,462	C	
Paskanik	\$11,000	2.73	\$4,029	C	
Worthington-Collier LLC	\$1,200,000	662.80	\$1,811	C	
C-LIST SUBTOTAL	\$1,256,000	678.53			
GRAND TOTAL	\$6,416,475	2189.33			

* With the caveat that the acquisition of Parcel 2 is dependent upon the purchase of parcel 1.
**Blue parcels are conceptually but not specifically approved. On May 22, 2007, Agenda Item 10F, the Board approved activating the Multi-Parcel Projects, with conditions relating to appraised value, and they were placed on the "A" list.

Exhibit R. Photographs

Photo 1. 41st Avenue NW at the beginning of the east end looking towards the west



Photo 2. The west end of 41st Ave. NW – Water level covering unpaved roadway. Willow growing in previously cleared and farmed area along south side of 41st Ave. NW



Photo 3. Mature Red Maple forest on east side of GGE Unit 53



Photo 4. Interior of Beardsley parcel (3.79 acres, Tract 43). Water level is approx 12 inches. Note Cabbage palm growing at right of photo.



Photo 5. Climbing fern 2003 and 2018



Photo 6. Wild Coco (*Eulophia alta*) – terrestrial orchid in vegetative stage, observed on east side. State Threatened.



Photo 7. Royal fern (*Osmunda regalis*) observed on east side of GGE Unit 53. State listed as Commercially Exploited.



Photo 8. Mature Dahoon Holly tree on west side of GGE Unit 53, south of 41st Ave. NW



Photo 9. Air potato in canopy on east side of GGE Unit 53



Photo 10. Brazilian pepper along sides of 43rd Ave. NW – at west side of GGE Unit 53



Photo 11. Center of GGE Unit 53 looking west on 43rd Ave. NW



Photo 12. Water flowing over the road surface to the south over 43rd Ave. NW. Note mature Brazilian pepper canopy. This is on the previously farmed portion.

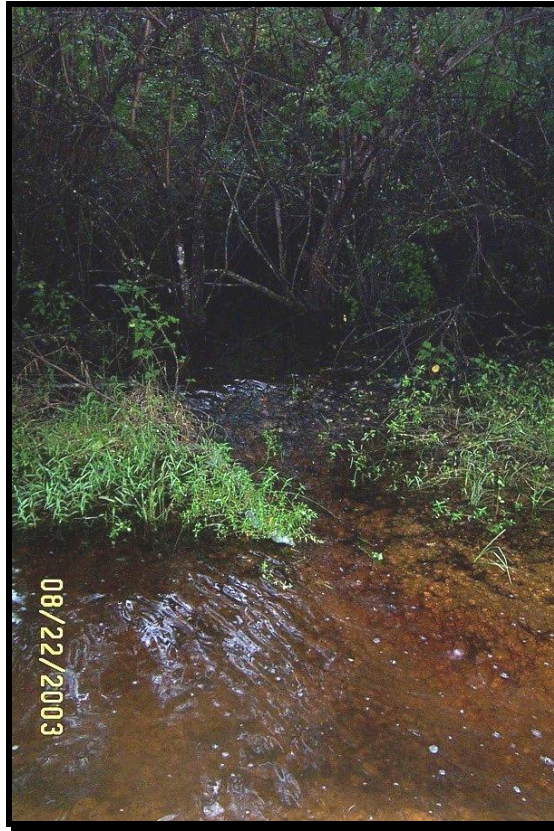


Photo 13. Deer along Shady Hollow Drive 2015



Photo 14. Entrance to Bird Rookery Swamp parking and Trail 2015

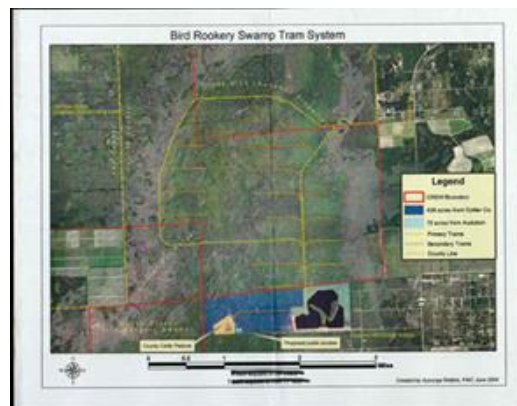


Photo 15. 41st Ave. NW looking west from 9th St. NW 2016, 2017 & 2018



Photo 16. Wildlife markings on cypress 2018

