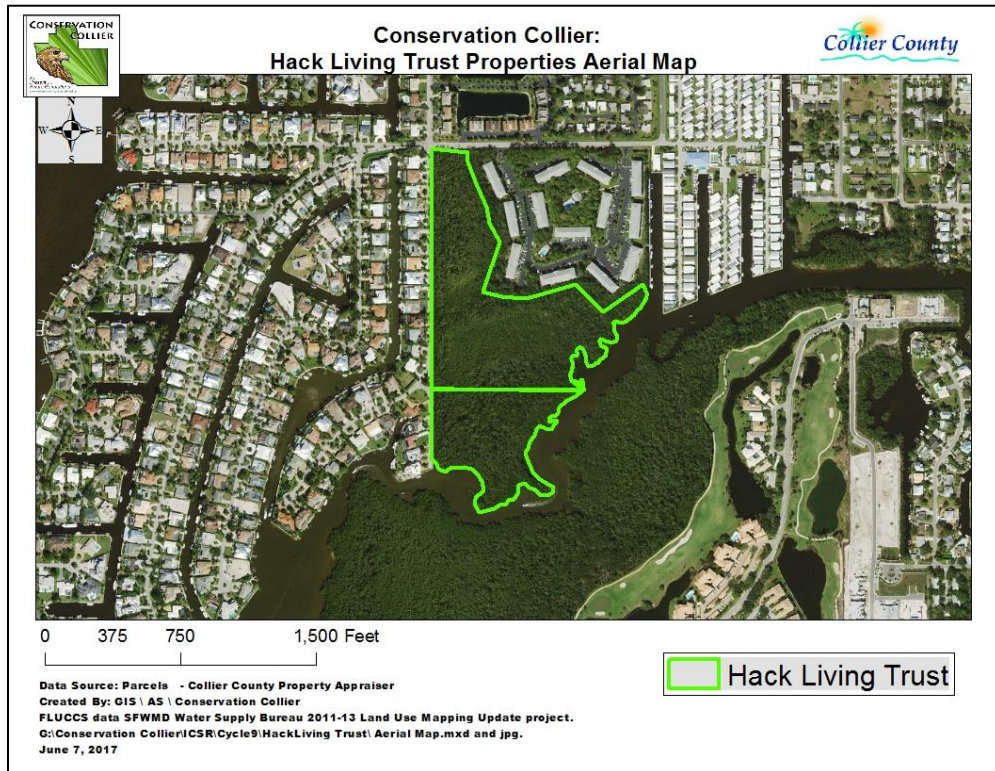
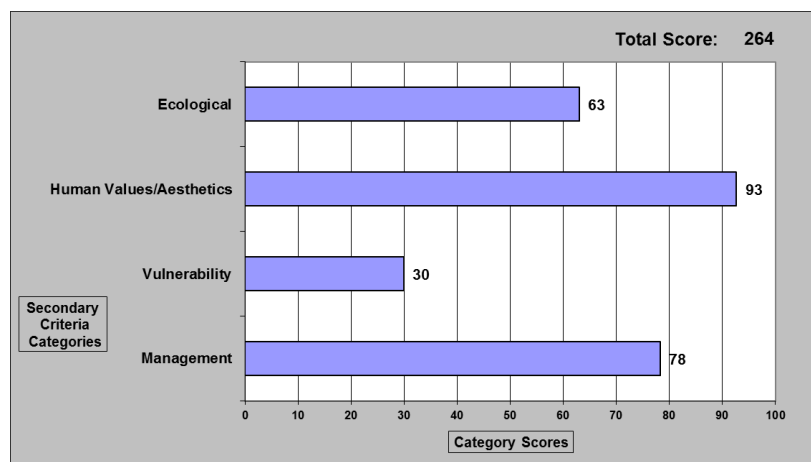


# Conservation Collier Initial Criteria Screening Report



**Property Name: Hack Living Trust**  
**Folio Number(s): 00388160002, 00033484002**

**Staff Report Date: January 8, 2018**



## Table of Contents

Introduction.....	3
I. Summary of Property Information .....	4
Table 1. Summary of Property Information.....	4
Figure 1. Location Map.....	5
Figure 2. Aerial Map.....	6
Figure 3. Surrounding Lands Aerial .....	7
Zoning, Growth Management and Conservation Overlays .....	8
II. Statement for satisfying Initial Screening Criteria, Including Biological and Hydrological Characteristics.....	9
III. Potential for Appropriate Use and Recommended Site Improvements .....	15
IV. Assessment of Management Needs and Costs.....	16
Table 2. Summary of Estimated Management Needs and Costs .....	18
V. Potential for Matching Funds.....	19
VI. Summary of Secondary Screening Criteria .....	20
Table 3. Tabulation of Secondary Screening Criteria.....	20
Figure 4. Secondary Screening Criteria Scoring.....	20
Exhibit A. FLUCCs Map .....	22
Exhibit B. Soils Map.....	23
Exhibit C. Aquifer Recharge-Wellfield Protection Maps.....	24
Exhibit D. Zoning Map .....	25
Exhibit E. Historical Aerials (Source: 1953 and 1962 aerials - University of Florida Digital Collections. 1980 aerial - Collier County Property Appraiser) .....	26
Exhibit F. FEMA Map .....	27
Exhibit G. LIDAR Map .....	28
Exhibit H. CLIP4 Biodiversity Map .....	29
Exhibit I. CLIP4 Potential Habitat Richness Map .....	30
Exhibit J. CLIP4 Strategic Habitat Map .....	31
Exhibit K. CLIP4 Priority Natural Communities Map .....	32
Exhibit L. CLIP4 Landscape Integrity Map .....	33
Exhibit M. CLIP4 Surface Water Priorities Map.....	34
Exhibit N. CLIP4 Aggregate Priorities Map.....	35
Exhibit O. USFWS Florida bonneted bat and West Indian manatee habitat areas.....	36
Exhibit P. Completed and Scored Secondary Criteria Screening Form .....	37
Exhibit Q. Photographs .....	40

## **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 Initial Criteria Screening Report (ICSR) has been prepared for the Conservation Collier Program in its 9<sup>th</sup> acquisition cycle to meet requirements specified in the Conservation Collier Implementation Ordinance, 2002-63, as amended, and for purposes of the Conservation Collier Program. It provides objective data to demonstrate how properties meet the criteria defined by the ordinance. That is the sole purpose for this report and it is not meant for any other use.

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.

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

- Biodiversity
- Surface Water Priorities
- Landscape Integrity
- Priority Natural Communities
- Potential Habitat Richness (Vertebrates)
- Strategic Habitat Conservation Areas
- Aggregated Conservation Priorities

Following the first section, which looks more closely at initial criteria, additional sections address potential for appropriate public use, assessment of management needs and costs, potential for matching funds, and a summary of the secondary screening criteria.

### 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
<b>Name</b>	<b>Hack Living Trust</b>	<b>A local developer holds an Options Contract</b>
<b>Folio Numbers</b>	<b>00388160002 00033484002</b>	<b>17.85 acres 10.61 acres</b>
<b>Target Protection Area</b>	<b>Urban</b>	
<b>Commission District</b>	<b>4</b>	<b>Commissioner - Penny Taylor</b>
<b>Size</b>	<b>none</b>	<b>n/a</b>
<b>STR</b>	<b>S11 T50 R25 and S14 T50 R25</b>	<b>Adjacent to the City of Naples but within Unincorporated Collier County.</b>
<b>Zoning Category/TDRs</b>	<b>RMF-6 -ST</b>	<b>RMF-6=Residential Multi-family up to 6 units per acre – 6 units remain under Sandpiper development. ST - Special Treatment Overlay exists over both parcels</b>
<b>FEMA Flood Map Category</b>	<b>AE</b>	<b>Area subject to inundation by the 1-percent-annual-chance-flood event. Base flood elevations, mandatory flood insurance and floodplain management standards apply.</b>
<b>Existing structures</b>	<b>n/a</b>	<b>No structures</b>
<b>Adjoining properties and their Uses</b>	<b>Single and multi-family residential, PUD, open space/conservation</b>	<b>North- Multi-family (Sandpiper Bay and Royal Arms) East-Mobile Home (Naples land Yacht Harbor and other residential South-PUD-open space/conservation (Windstar) West- Single family residential (Royal Harbor, City of Naples)</b>
<b>Development Plans Submitted</b>	<b>Developer with option seeks to place 6 additional units on the property</b>	<b>Based on property density, 6 more units might be possible for construction on this property IF the ST Overlay were removed. A site assessment was done on the property in August 2015 by a local environmental consulting firm, which concluded that this property would be difficult and expensive to permit and develop because of its mangrove wetlands.</b>
<b>Known Property Irregularities</b>	<b>Oil, Gas and Mineral rights (OGMs)</b>	<b>OGMs not included</b>
<b>Other County Dept Interest</b>	<b>Transportation, Utilities, Solid Waste, Parks and Recreation, Environmental Services, Housing, Coastal systems, Zoning, Engineering</b>	<b>No other County Division has expressed interest in these parcels.</b>

Figure 1. Location Map

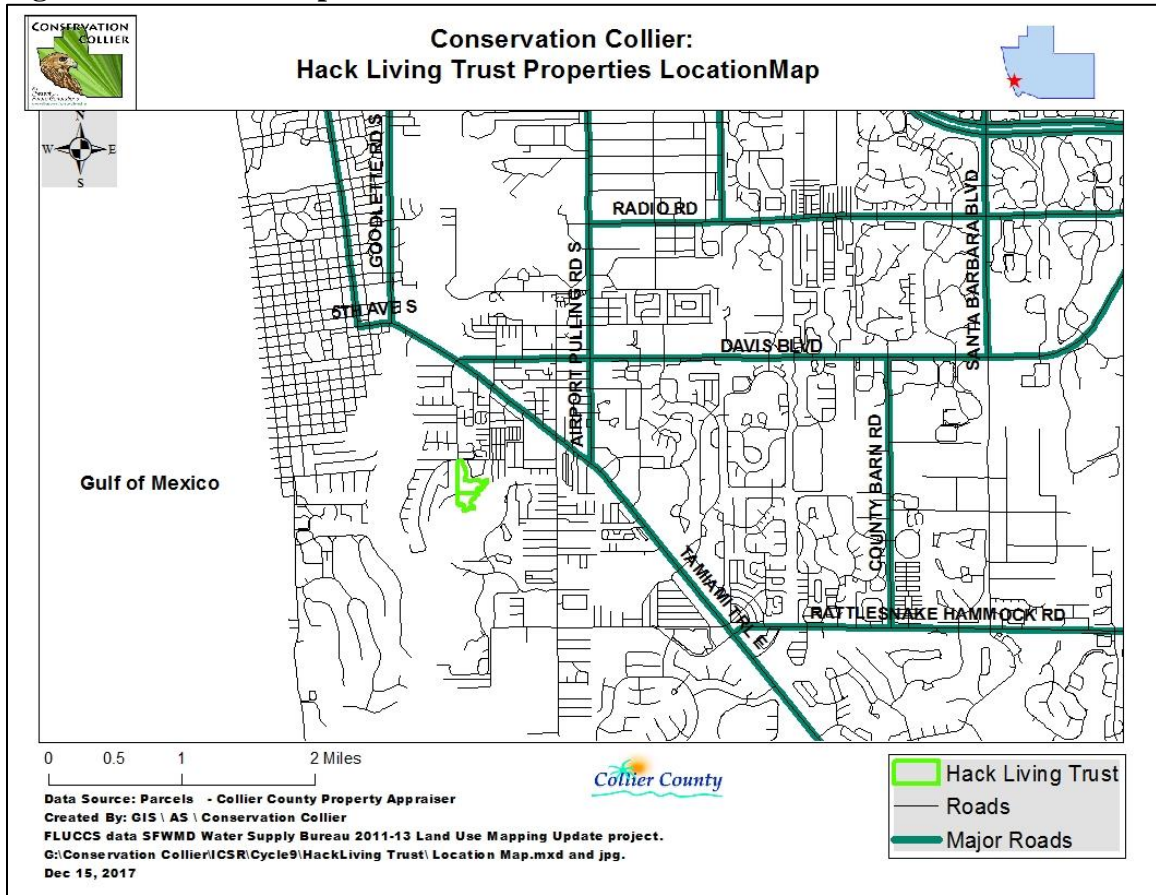
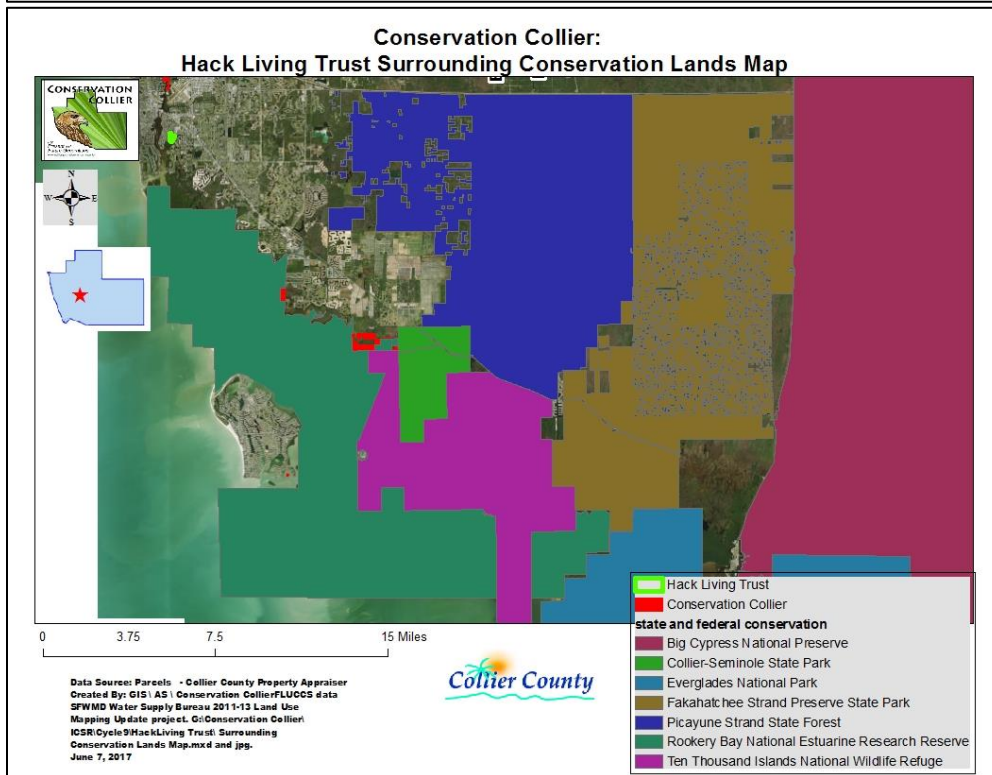
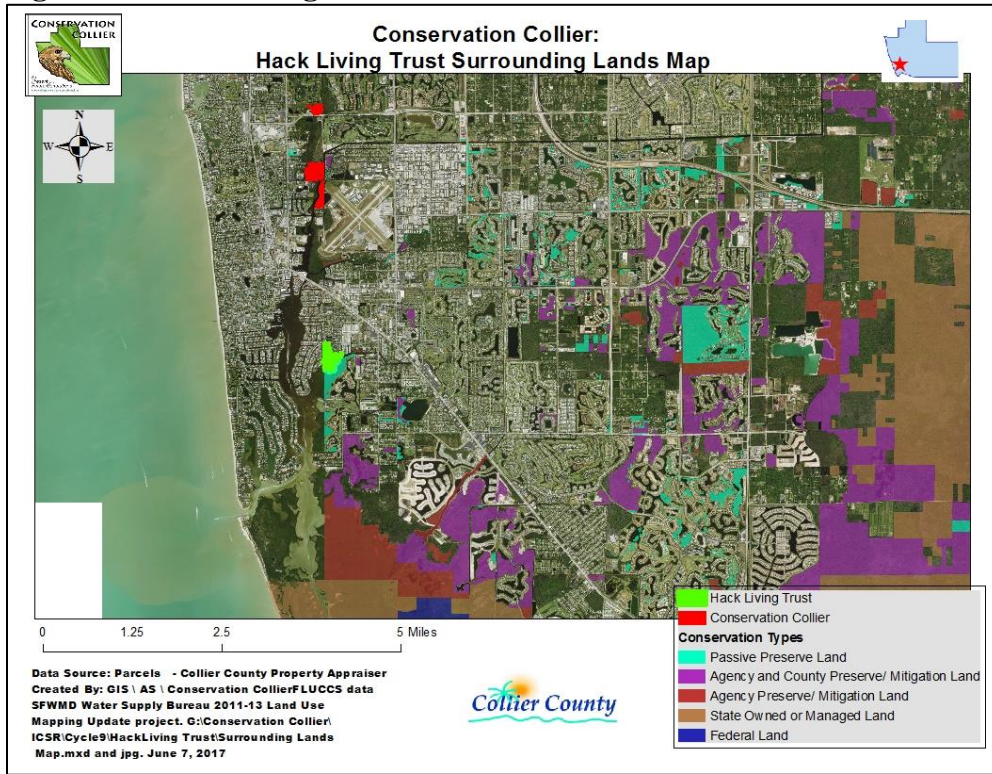


Figure 2. Aerial Map



**Figure 3. Surrounding Lands Aerial**



Summary of Assessed Value and Property Costs Estimates

The interest being valued 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 value of the parcel was **estimated** using three traditional approaches, cost, income capitalization and sales comparison. Each 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 from within 3 miles of this property 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 the report and the Real Estate Services Department staff relied upon information provided by program staff. Conclusions are limited only by the reported assumptions and conditions that no other known or unknown adverse conditions exist. Pursuant to the Conservation Collier Purchase Policy, **one** appraisal is required.

**Assessed Value: \* 00388160002 – 17.85 acres - \$893.00**  
**00394840002 – 10.61 acres - \$531.00**

**Estimated Market Value: \*\* \$108,000 for both parcels**

**“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, growth management and conservation overlays will affect the value of a parcel. This parcel is zoned RMF-6 (Residential Multi-family – up to 6 units per acre). It is also within a Special Treatment (ST) Overlay and is marine wetlands. The implications for acquisition are US Army Corps of Engineers (ACOE), Florida Department of Environmental Protection (FDEP) wetland regulations and local (Collier County) development rules present obstacles to its development. The ST Overlay, which removes approximately 95% of developable value could be removed through a public process and the State wetland protections could be overcome with enough mitigation. It would be difficult and expensive, but the property might conceivably be developed for the remaining 6 units. The August 15, 2017 site Assessment by Turrell, Hall and Associates, Inc. additionally advises that the Collier County Manatee Protection Plan would allow for docks under limiting criteria from local, state and federal agencies.

\* Property Appraiser’s Website

\*\* Collier County Real Estate Services Department – date of value estimate – September 2010



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

The purpose of this section is to provide a closer look at how the property meets initial criteria. Conservation Collier Program staff conducted site visits on July 13, 2017 and December 21, 2017.

### MEETS INITIAL SCREENING CRITERIA-

#### 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)

**Yes**

i. Hardwood hammocks	No
ii. Xeric oak scrub	No
iii. Coastal strand	No
iv. Native beach	No
v. Xeric pine	No
vi. Riverine Oak	No
vii. High marsh (saline)	No
viii. Tidal freshwater marsh	No
ix. Other native habitats Swamp	YES – Mangrove

#### Vegetative Communities:

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.

#### FLUCCS:

The electronic database identified: FLUCCS 6120 – Mangrove swamp

The following native plant communities were observed: 6120 - Mangrove swamp – consisting of red, black and white mangroves (*Rhizophora mangle*, *Avicennia germinans*, and *Laguncularia racemosa*) - covers almost the entire property. Mangrove swamp associates such as buttonwood (*Conocarpus erectus*), sea grape (*Coccoloba uvifera*), strangler fig (*Ficus aurea*) and cabbage palm (*Sabal palmetto*) are present as well as non-native invasive plant species. Invasive exotic and landscape plants dominate along the edges and on the spoil piles. Mangroves are protected under the 1996 Mangrove Trimming and Protections Act, Florida Statutes (F.S.) Sections 403.9321-403.0333. Mangroves provide the following ecological function and services:

- Habitat for wetland dependent species of wildlife,
- Protection of coastal areas from storm surge and erosion,
- Protection of water quality, by filtering urban freshwater runoff before it reaches open water,
- Acting as the food base for the estuarine food chain, which includes commercially and recreationally important fish species and protected species,
- Absorption and reduction of greenhouse gasses such as carbon dioxide.

**Characterization of Plant Communities present:**

**Ground Cover:** Ground cover in undisturbed mangrove area is sparse, consisting of saltwort (*Batis maritima*), glasswort (*Salicornia bigelovii*) and coin vine (*Dahlbergia ecastophyllum*). Groundcover on spoil mounds consists of invasive exotic plants like Arrowhead (*Syngonium podophyllum*), bowstring hemp (*Sansevieria sp.*), carrot wood (*Cupaniopsis anacardioides*), wedelia (*Wedelia trilobata*), beach naupaka (*Scaevola sericea*), and rosary pea (*Abrus precatorius*).

**Midstory:** There is no midstory in mangrove areas. Spoil mounds have some Midstory plants, mostly exotic species. Natives include cabbage palms, sea grape, strangler fig, and beauty berry (*Callicarpa Americana*). Exotic and landscape plants include Brazilian pepper (*Schinus terebinthifolius*), climbing cassia (*Senna pendula*), carrotwood, Cuban laurel (*Ficus retusa*), Scheffelera (*Shefflera actinophylla*), banana (*Musa sp.*), areca palm (*Chrysalidocarpus lutescens*), frangipani (*Plumeria sp.*), dracaena (*Dracaena sp.*), and hibiscus (*Hibiscus sp.*),

**Canopy:** The canopy in mangrove areas is comprised of white, red and black mangroves with scattered buttonwood. On spoil mounds, the canopy includes natives such as strangler fig and buttonwood, the landscape tree mango (*Magnifera sp.*), and the invasive exotic Australian pine (*Casuarina sp.*). Some trees along the edges and internally appeared to be infected with Crown Gall, a disease vectored by a bacterium, *Agrobacterium tumefaciens*, which is soil-borne and enters the plant through wounds in the bark.

**Statement for satisfaction of criteria 1:** Although this property does not contain any unique and endangered plant communities, it does contain a relatively intact mangrove swamp community, one of the few remaining undeveloped in the urban area. Spoil piles have allowed invasive exotic plants to get a toehold in the interior but they are limited to the piles. The remainder of the mangrove forest appears to be functioning. The CLIP4 Priority Natural Communities Map (Exhibit J) shows mangroves to be a lower priority, but still one of the few urban areas surrounding to have any type of priority at all.

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**

**Statement for satisfaction of criteria 2:** This property is approximately 2 miles from the Gordon River Greenway, the closest Conservation Collier Property. Rookery Bay, a publicly accessible State conservation area is approximately 3 miles south. There is appropriate access for nature-based recreation along Sandpiper St. and Marlin St., however, parking is currently not allowed within the Right of Way (ROW) along Marlin St., the obvious choice for access, and developing a parking area in mangroves would be very expensive. The Board of County Commissioners could grant permission to park in the ROW, but approval is not assured. Access to the parcel itself for recreation would only be possible with development of a boardwalk through the mangroves and a dock for fishing or canoe/kayak access (Figure 2). The property can be seen along paved public streets

(Sandpiper and Marlin), and along the Haldeman Creek. With both perimeters included, 72% of its perimeter can be seen by the driving and boating public.

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**

**General Hydrologic Characteristics observed and description of adjacent upland /wetland buffers:** The National Wetlands Inventory classifies this property as an intertidal wetland property within an estuarine system. Both properties are forested with mangrove species. Mangroves are salt tolerant trees that generally grow in tidally influenced locations along the coast. These mangroves are surrounded by development with no undeveloped upland buffers. A pipe that flows into the mangroves is located on the north-east corner. This pipe drains area storm water from surrounding developed areas. A Light Detection and Ranging (LIDAR) map of the properties shows the elevation to be between 5 and 6 feet above sea level – roughly the same level as Haldeman Creek (Exhibit F).

**Wetland dependent plant species (OBL/ FACW) observed:**

OBL	FACW
Black mangrove ( <i>Avicennia germinans</i> )	none
White mangrove ( <i>Laguncularia racemosa</i> )	
Red mangroves ( <i>Rhizophora mangle</i> )	
Glasswort ( <i>Salicornia bigelovii</i> )	
Saltwort ( <i>Batis maritima</i> )	

**Wetland dependent wildlife species observed:** Several mangrove crabs (*Aratus pisonii*) and a great egret (*Casmerodius albus*) were observed.

**Other Hydrologic indicators observed:** Pneumatophores and prop roots were observed throughout the property.

**Soils:** Soils data is based on the Soil Survey of Collier County Area, Florida (USDA/NRCS, 1990). Soils are entirely Durban and Wulfert mucks, frequently flooded. These soils are level, poorly drained and typically found in mangrove swamps. Natural vegetation consists of red, black and white mangroves. These soils have severe limitations for urban and recreational development (Exhibit B).

**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 (SFWMD) West Palm Beach, Florida.

**Lower Tamiami recharge capacity:** The SFWMD model indicates that the Lower Tamiami aquifer recharge potential for the property is low (0” to < 7” yearly),

however this may not be the case. Because of its coastal location and tidal activity, it most likely does not contribute to the Lower Tamiami aquifer (Exhibit C).

**Surficial Aquifer Recharge Capacity:** This area is mapped as having a 31” to < 43” recharge rate for the surficial aquifer (Exhibit C).

**Wellfield Protection:** The closest wellfield protection zone is approximately 2 miles to the north (Exhibit C).

**FEMA Flood map designation:** The property is currently within Flood Zone AE, which indicates an area subject to inundation by the 1-percent-annual-chance flood event. Base flood elevations, mandatory flood insurance and floodplain management standards apply.

**Statement for satisfaction of criteria 3:** These two parcels are both entirely estuarine tidal wetlands with an intact mangrove forest cover. Mangrove forests are extremely productive habitats, providing ecological value and services, and are protected by the State of Florida. There is likely minimal aquifer recharge happening on the parcel, but the parcels are mapped as having moderate surficial aquifer recharge capacity. One of the functions of mangroves is to act as a natural filter for upland runoff. These properties likely provide some water quality benefits for the Haldeman Creek by filtering storm water flowing in from surrounding residential areas. There are wetland dependent species, both flora and fauna, using the property. Some measure of flood control is also happening, as water flows into the mangroves from surrounding developed areas. Additionally, during the recent hurricane Irma, several residents credit the mangroves with taking the brunt of the wind and water and protecting their homes. The CLIP4 Surface Water Priorities map (Exhibit L) shows this property to be a priority 3 on a scale of 1 to 5.

**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**

**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>	SE	

SE=State Endangered

**Listed Wildlife Species:**

Federal wildlife species protection is administered by the FWS with specific authority published in 50 CFR 17. Lists of protected wildlife can be viewed on-line at: <https://www.fws.gov/endangered/>. 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/>.

**Bird Rookery observed?** No bird rookery was observed.

**GIS mapped species and habitats:** This area is mapped by USFWS as critical habitat for the Florida bonneted bat and the West Indian manatee (Exhibit N). The CLIP4 Aggregate map (Exhibit M) shows this property to have a priority 3 and 4 on a scale of 1 to 5.

**Non-listed species observed:** Several mangrove crabs (*Aratus pisonii*), a great egret (*Casmerodius albus*), and a grey squirrel (*Sciurus carolinensis*) were observed and noise was heard that was likely a raccoon (*Procyon lotor*).

**Potential Listed Species:**

COMMON NAME	SCIENTIFIC NAME	STATUS	
		FWC	USFWS
Everglades snail kite	<i>Rostrhamus sociabilis plumbeus</i>	FE	E
Little blue heron	<i>Egretta caerulea</i>	ST	
Reddish egret	<i>Egretta ruficens</i>	ST	
Osprey	<i>Pandion haliaetus</i>	SSC	
Florida bonneted bat	<i>Eumops floridanus</i>	FE	E
American crocodile	<i>Crocodylus acutus</i>	FT	T
West Indian manatee*	<i>Trichechus manatus</i>	FT	

FE=Federally Endangered; ST=State Threatened; FT=Federally Threatened; E=Endangered; T=Threatened; SSC=Species of Special Concern

\*The West Indian Manatee is also protected under the Marine Mammal Protection Act of 1972.

This area can also provide habitat for birds that are protected under the Migratory Bird Treaty Act of 1918, the Bald and Golden Eagle Protection Act of 1940, and the USFWS Birds of Conservation Concern (BCC) 2008 list.

Some of these possible species include:

- Bald Eagle (*Haliaeetus leucocephalus*) (Bald and Golden Eagle Protection Act)
- American oystercatcher (*Haematopus palliatus*) (BCC)
- Black-whiskered vireo (*Vireo altiloquus*) (BCC)
- Magnificent frigatebird (*Fregata magnificens*) (BCC)
- Mangrove cuckoo (*Coccyzus minor*) (BCC)
- Swallow-tailed kite (*Elanoides forficatus*) (BCC)

**Statement for satisfaction of criteria 4:** While no listed plant or animal species were observed on the parcel, the CLIP4 Biodiversity layer (Exhibit G) identifies this area as a priority 2 and 3 (out of 5). The CLIP4 Potential Habitat Richness layer (Exhibit H) identifies that 5 to 6 vertebrate species can be expected to use the habitat. The property is within the USFWS consultation areas for the Florida bonneted bat and the West Indian

manatee. There is potential for use of the parcel for roosting by numerous bird species, including several listed on the USFWS birds of Conservation Concern (BCC) 2008 list. Restoration potential is high with the removal of exotic plants. Coastal mangrove swamps provide ecological quality because they are considered a base for the estuarine food web.

**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 5:** The Hack parcels are located along the Haldeman Creek, an intertidal area that is connected to the Naples Bay. This parcel is directly connected with conserved lands and connects through them with other conserved lands for a total of over 2,500,000 acres. These connected lands include:

- Windstar PUD preserves - 76 acres
- Rookery Bay National Estuarine Research Reserve – 110,000 acres
- Ten Thousand Islands National Wildlife Refuge – 35,000 acres
- Collier Seminole State Park – 7,271 acres
- Fakahatchee Strand Preserve State Park – 85,000 acres
- Big Cypress National Park – 729,000 acres
- Everglades National Park – 1,500,000 acres

The CLIP4 Strategic Habitat Map (Exhibit I) identifies them as having both priority 2 and 5 lands, with 1 being the highest and 5 being the lowest. These are some of the few lands in this urban area given any priority status at all. This property can be considered as contributing to an ecological and habitat corridor connecting to larger protected estuarine and other conserved areas to the south and east (Figure 3).

**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?**

### **III. Potential for Appropriate Use and Recommended Site Improvements**

#### **Potential uses as defined in Ordinance No. 2002-67, as amended by Ordinance No. 2007-65, section 5.9:**

**Hiking:** This property is not appropriate for hiking unless a boardwalk is built.

**Nature Photography:** Nature photography is an appropriate use for this property

**Bird-watching:** Bird watching is an appropriate use for this property.

**Kayaking/Canoeing:** If a boardwalk and dock is built here, this would be an appropriate place to launch a kayak or canoe.

**Swimming:** Swimming is not an appropriate use.

**Hunting:** Hunting is not an appropriate use for this habitat and this sized parcel.

**Fishing:** If a boardwalk and dock is built here, this would be an appropriate place for fishing.

**Recommended Site Improvements:** Construction of a small parking area along Marlin Dr. and a boardwalk and small dock for fishing and canoe/kayak launch.

**Access:** Access to this parcel would necessarily involve development of a small parking area, a sidewalk, a boardwalk and potentially a small dock, to fully take advantage of appropriate public uses. Currently, there is no ability to park in the 25-foot ROW along Marlin Dr., the most obvious access point. An exception could be granted by the Board of County Commissioners, though it is not assured. Estimated costs for providing access are approximately \$1,088,000.

#### IV. Assessment of Management Needs and Costs

Management of this property will address the costs of exotic vegetation removal and control, and provide an estimate for funding needs for construction of a boardwalk to allow the public to have access to selected portions of the property. The following assessment addresses both the initial and recurring costs of management. These are very preliminary estimates; Ordinance No. 2002-67, as amended by Ordinance No. 2007-65, requires a formal land management plan be developed for each property acquired by Conservation Collier.

##### **Exotic, Invasive Plants Present:**

Exotic, invasive species noted here are taken from the Florida Exotic Pest Plant Council's (FLEPPC) 2016 List of Invasive Plant Species (Category I and Category II). FLEPPC is an independent incorporated advisory council created to support the management of invasive exotic plants in Florida's natural areas by providing a forum for exchanging scientific, educational and technical information. Its members come primarily from public educational institutions and governmental agencies. Annual lists of invasive plant species published by this organization are used widely in the state of Florida for regulatory purposes.

The current FLEPPC list (2016) can be viewed on-line at <http://www.fleppc.org/list/list.htm>. Category I plants are those which are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused. **Category II** invasive exotics have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by **Category I** species. These species may become **Category I** if ecological damage is demonstrated.

##### **Category I and II plants found on this parcel in order of observed abundance:**

###### **Category I**

<b>Common Name</b>	<b>Scientific Name</b>
Brazilian pepper	<i>Schinus terebinthifolius</i>
Carrotwood	<i>Cupaniopsis anacardioides</i>
Air potato	<i>Dioscorea bulbifera</i>
Arrowhead vine	<i>Syngonium podophyllum</i>
Australian pine	<i>Casuarina equisetifolia</i>
Christmas senna	<i>Senna pendula</i>
Shefflera	<i>Shefflera actinophylla</i>
Rosary pea	<i>Abrus precatorius</i>

###### **Category II**

<b>Common Name</b>	<b>Scientific Name</b>
Bowstring hemp	<i>Sanseveria hyacinthoides</i>
Wedelia	<i>Wedelia trilobata</i>
Pothos	<i>Epipremnum pinnatum</i>



**Staff observations are:** Invasive exotic plants exist along the edges and on spoil mounds, but not in other areas of the property.

**Exotic Vegetation Removal and Control**

An estimate of the cost for initial exotic removal and follow-up maintenance was developed based on costs incurred for exotic removals on a similar property (Shell Island Preserve). Based on this estimate, initial costs for the level of infestation observed to treat exotics and remove those along the edges and treat in place those on spoil mounds would be **\$200/acre**, or **\$6,000**.

Costs for follow-up maintenance, done anywhere from quarterly to annually have been estimated at **\$150 per acre**, per year for a total of **\$4,200** for 28 acres. These costs could decrease over time as the soil seed bank is depleted, and if a boardwalk were placed over spoil mounds so staff could easily monitor and treat any regrowth.

**Public Parking Facility:**

The cost of design and construction of a shell or gravel parking lot to accommodate approximately 3 cars would be approximately \$25,000, including a stabilized handicapped parking space, which would be required. Additional costs would include any other Americans with Disabilities Act (ADA) requirements, design, review fees and permitting.

**Public Access Trails:**

The property could not accommodate trails due to its wetland nature, but a boardwalk could be constructed to allow visitors to view the mangrove forest and reach a small fishing area and canoe/kayak launch. Costs were estimated using the Gordon River Greenway costs as guide. Depending on width, the cost would be between \$510,000 and \$900,000.

**Security and General Maintenance:**

General maintenance can be accomplished by staff or volunteers. Security may become an issue as the preserve would be unstaffed for most of the time and it is in the middle of a residential area. If a fishing platform were developed, a more frequent visitation than the typical monthly would be required to keep the area clean. Cameras could provide some added security and law enforcement would be closer as this is in an urban area.

**Table 2. Summary of Estimated Management Needs and Costs**

<b>Management Element</b>	<b>Initial Cost</b>	<b>Annual Recurring Costs</b>	<b>Comments</b>
Exotics Control	\$6,000	\$4,200	Based on Shell Island Preserve costs
Parking Facility	\$25,000	\$100	Ongoing annual cost based on cost to pressure wash one concrete parking spot and repaint wheel stops as necessary.
Access Trails/ ADA	n/a	n/a	Trails are not possible.
Fencing	n/a	n/a	Fencing is not necessary
Boardwalk	\$510,000 - \$900,000		Based on boardwalk costs for Gordon River Greenway
Development costs for parking and boardwalk	\$168,000	t.b.d.	Includes Site Improvement Plan (SIP) consultant, required sidewalk, DEP permitting, SFWMD review fee, and Collier County review fee. Not included and currently unknown are mitigation costs, which are based on a UMAM evaluation.
Trash removal	\$0	\$0	There is not much trash and staff could handle initial and ongoing trash removal.
Signs	\$2,000	t.b.d.	Large sign at parking area
<b>Total</b>	<b>\$711,000 - \$1,101,000</b>	<b>\$4,300</b>	<b>Additional ongoing costs for maintenance of the boardwalk would be incurred but no estimates are currently available.</b>

**t.b.d. To be determined; cost estimates have not been finalized.**

## V. Potential for Matching Funds

The primary partnering agencies for conservation acquisitions, and those identified in the 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 (FCT) - 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 within a Florida Forever priority project boundary, however, staff communications with the Division of State Lands have determined that money is not available for this project now. 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 governmental entities. The County Attorney has advised against a partnership unless there is a shared title arrangement.

### **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 \$299,400 in this fund, with \$91,000 earmarked for multi-parcel project properties whose owners have accepted the County's offers.

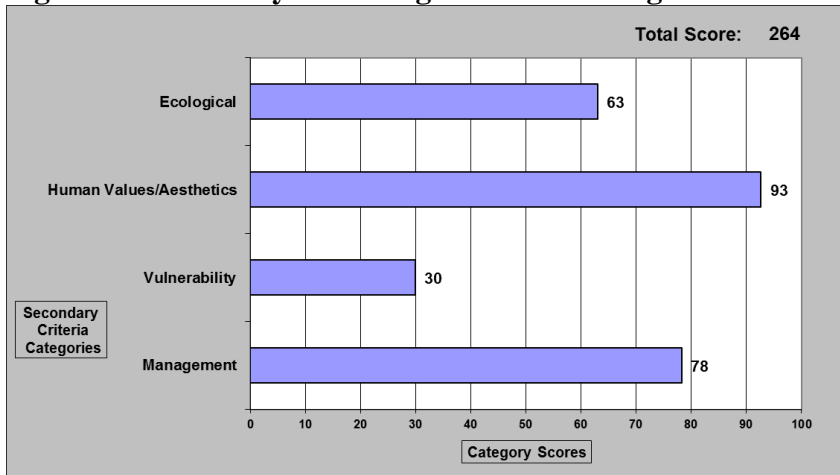
## VI. Summary of Secondary Screening Criteria

Staff has scored property on the Secondary Criteria Screening Form and attached the scoring form as Exhibit H. A total score of 264 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	63	63%
Human Values/Aesthetics	100	93	93%
Vulnerability	100	30	30%
Management	100	78	78%
<b>Total Score:</b>	<b>400</b>	<b>264</b>	<b>66%</b>
<b>Percent of Maximum Score:</b>			<b>66%</b>

**Figure 4. Secondary Screening Criteria Scoring**



## Summary of factors contributing to score

**Total Score: 264 out of 400 possible points**

**Ecological: 63 out of 100 possible points**

A moderate score was achieved because there is only one type of vegetative community on the properties – mangrove forest. There is no Lower Tamiami recharge occurring and the surficial recharge is moderate, if at all. The properties are not within a wellfield protection zone. However, they do provide buffering for the adjacent Haldeman Creek and Naples Bay and the site is entirely estuarine tidal wetlands, which could be providing some level of flood protection for surrounding properties. Area water management includes an outfall for storm water into the mangrove property. The CLIP4 potential Habitat Richness layer indicates that 5-6 vertebrate species could be using the property, through only a squirrel was seen and a raccoon heard. No listed wildlife species were observed or documented on the property. One listed plant species was found. This parcel connects with and enhances other conserved lands that form a corridor southward into Rookery Bay National Estuarine Research Reserve.

**Human Values/Aesthetics: 93 out of 100 possible points**

A high score was achieved because the parcels have access from paved public roads, they could offer fishing and canoe/kayak launching and environmental education if a boardwalk is built. Additionally, they are highly visible to the public with 72% of the perimeter visible from public thoroughfares including the Haldeman Creek, and they have water views and a mature mangrove forest.

**Vulnerability: 30 out of 100 possible points**

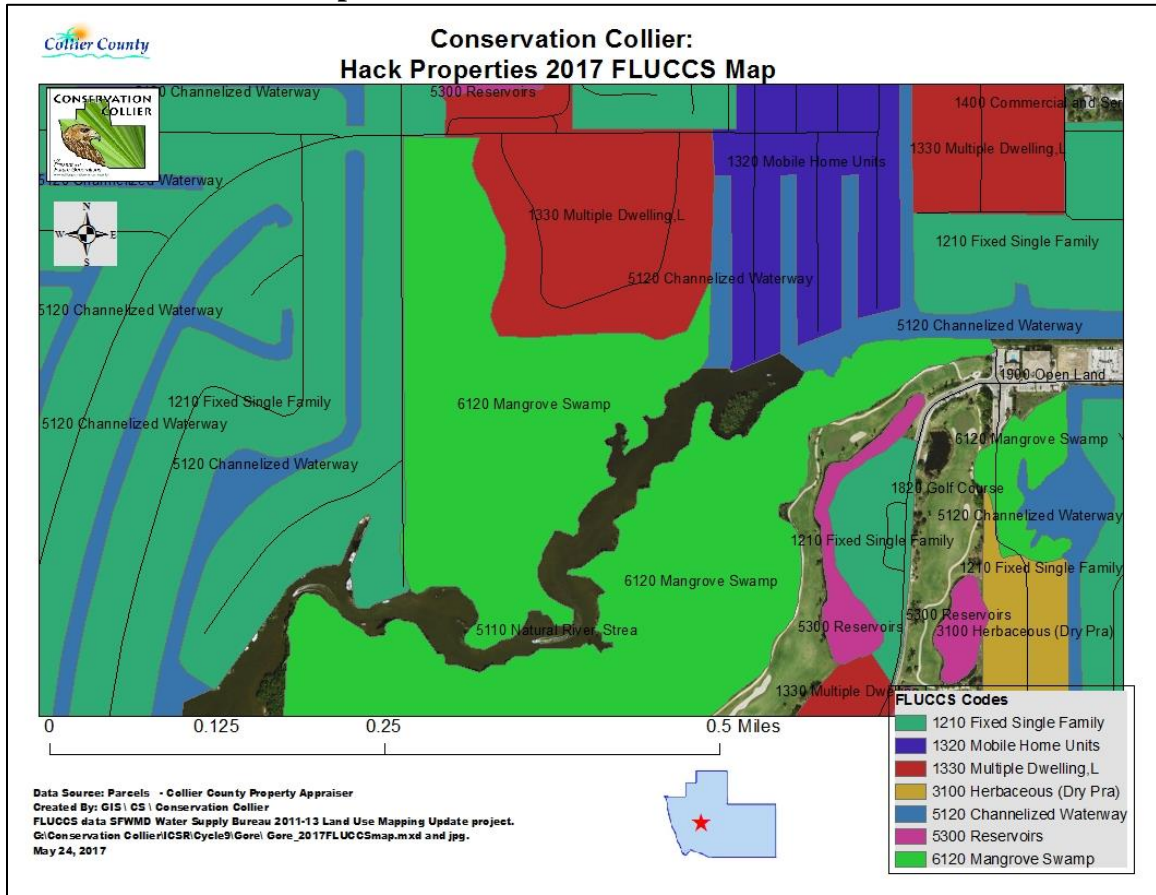
A low score results from the tentative nature of the ability to develop the property. While there is a contract for sale to a developer, and the developer has indicated intent to pursue the apparently remaining 6 units. Mitigation makes development possible in mangrove areas, however, the costs and time required for permitting and development can pose a serious impediment. It is unclear whether development is likely but there may be a possibility. An ST overlay exists on the property which further discourages development.

**Management: 78 out of 100 possible points**

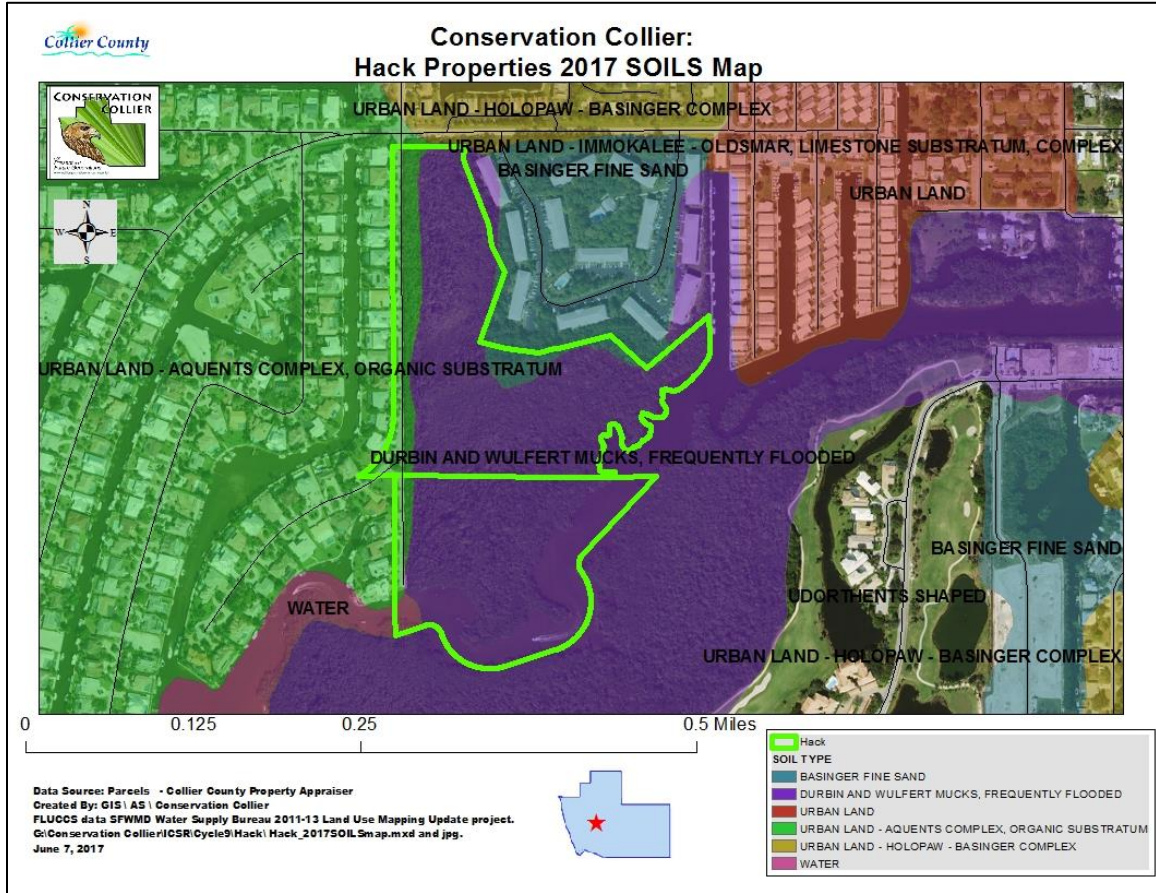
A moderately good score was achieved because the property is clear of exotics except on spoil mounds and along edges. While costs for developing access are significant, management of the parcel is not expected to be overly expensive in the long run.

**Parcel Size:** While parcel size was not scored, the ordinance advises that based on comparative size, the larger of similar parcels is preferred. There are no similar properties offered in the current cycle.

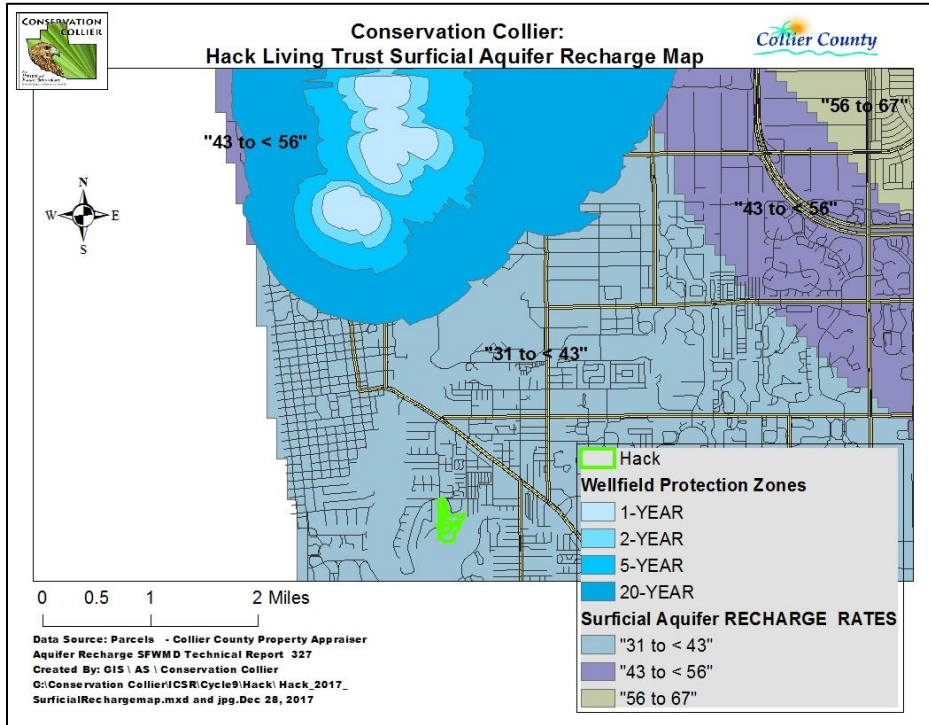
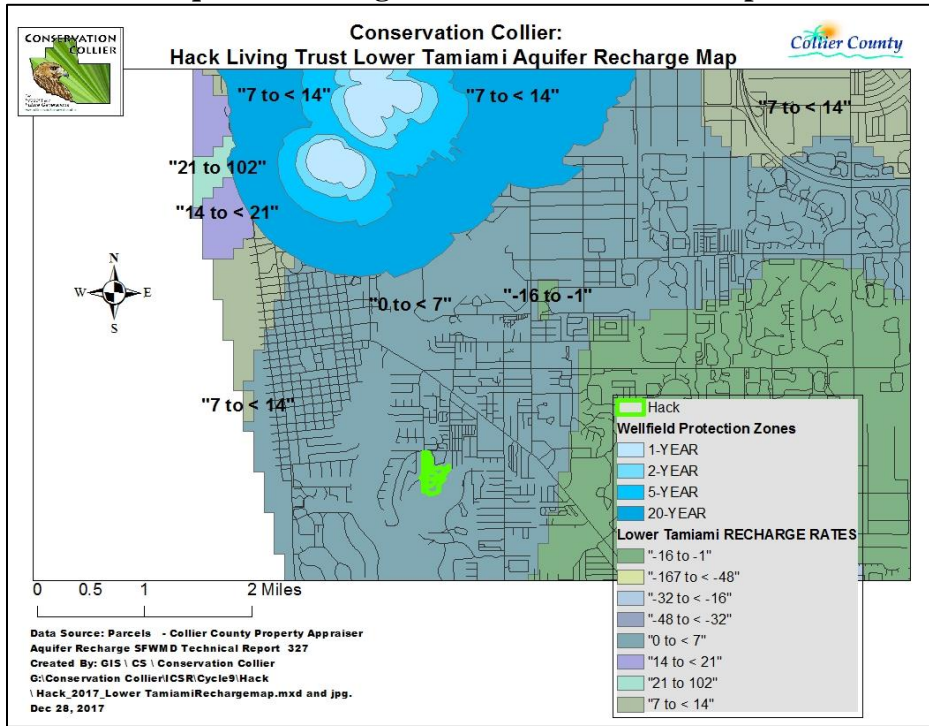
**Exhibit A. FLUCCs Map**



### Exhibit B. Soils Map

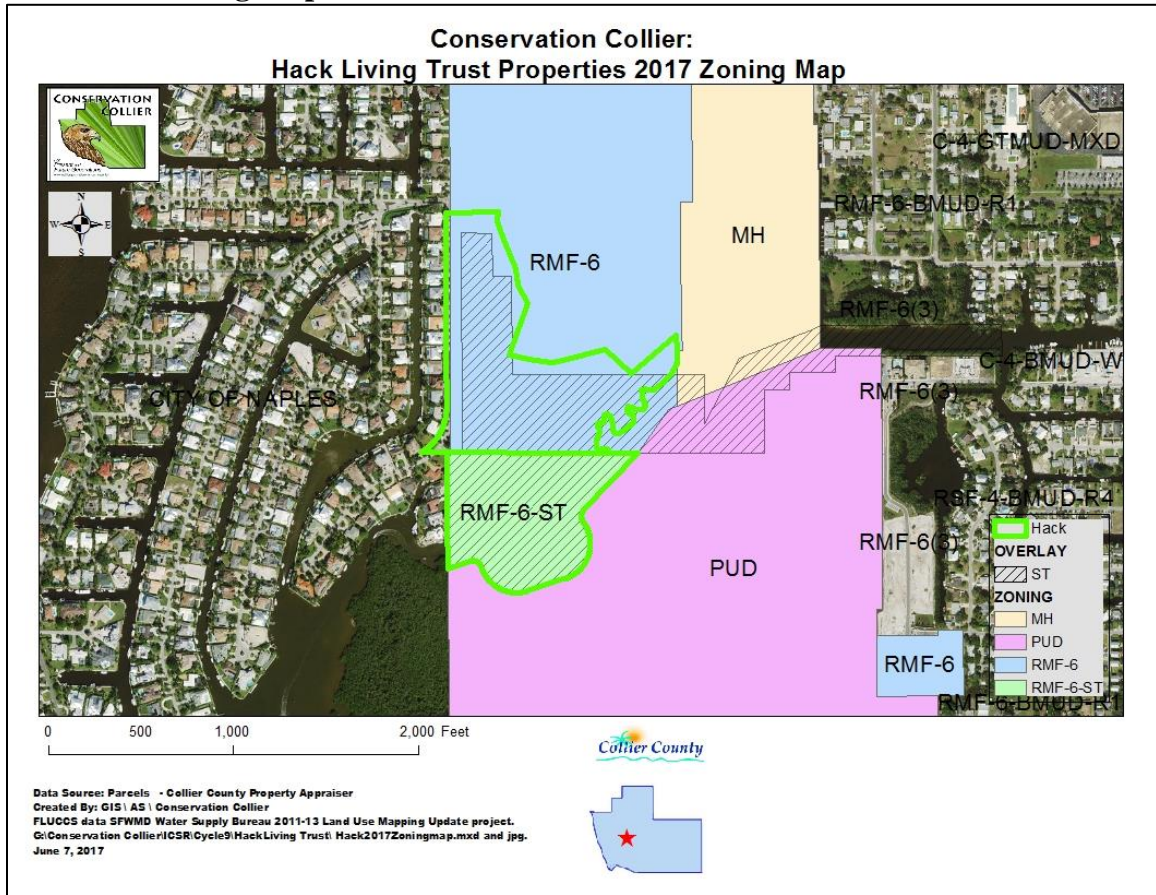


**Exhibit C. Aquifer Recharge-Wellfield Protection Maps**





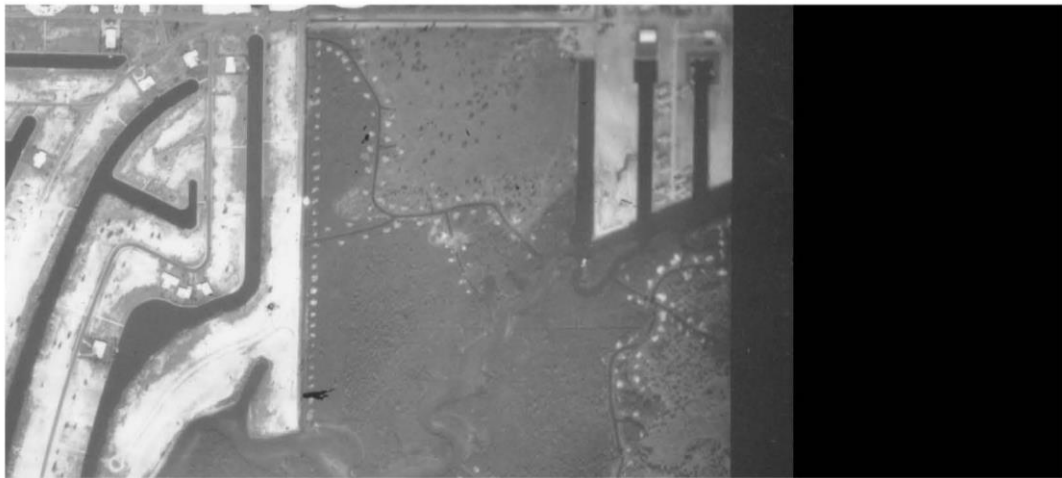
### Exhibit D. Zoning Map



**Exhibit E. Historical Aerials (Source: 1953 and 1962 aerials - University of Florida Digital Collections. 1980 aerial - Collier County Property Appraiser)**



1953

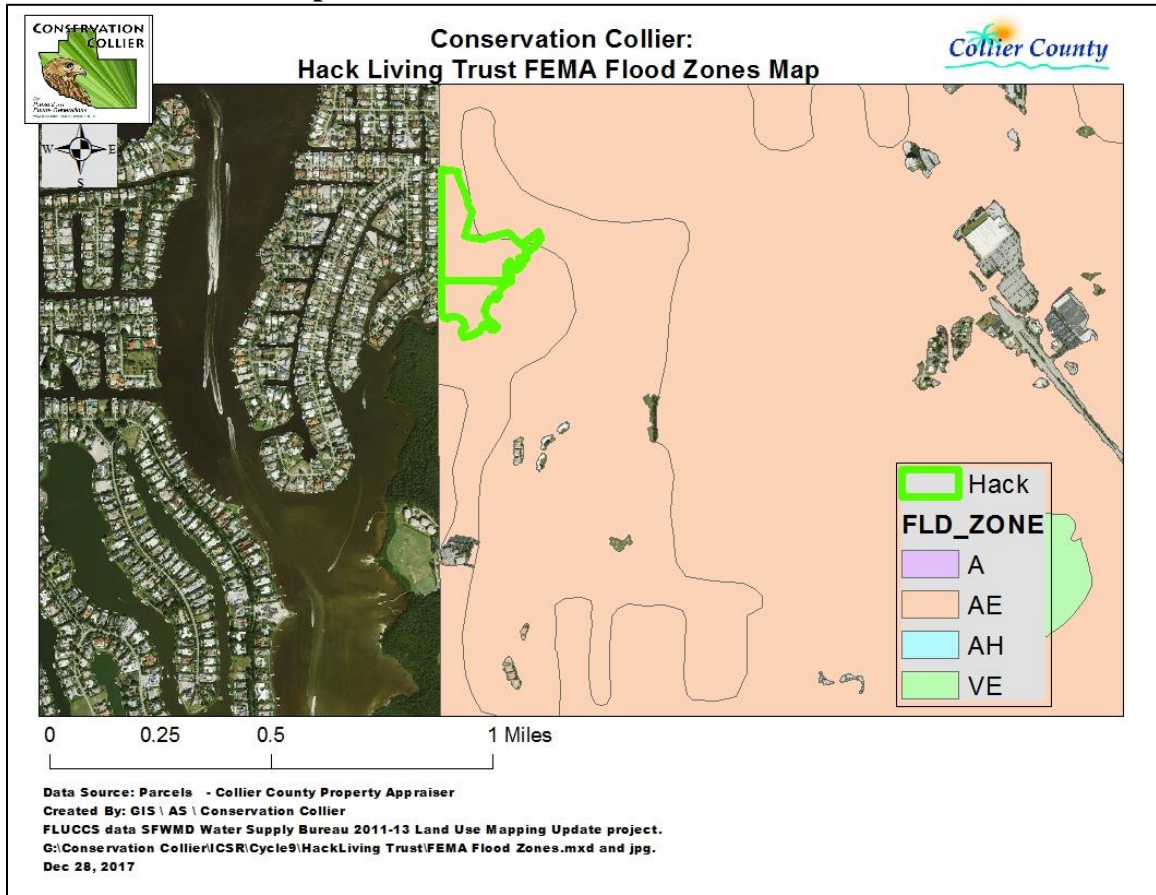


1962

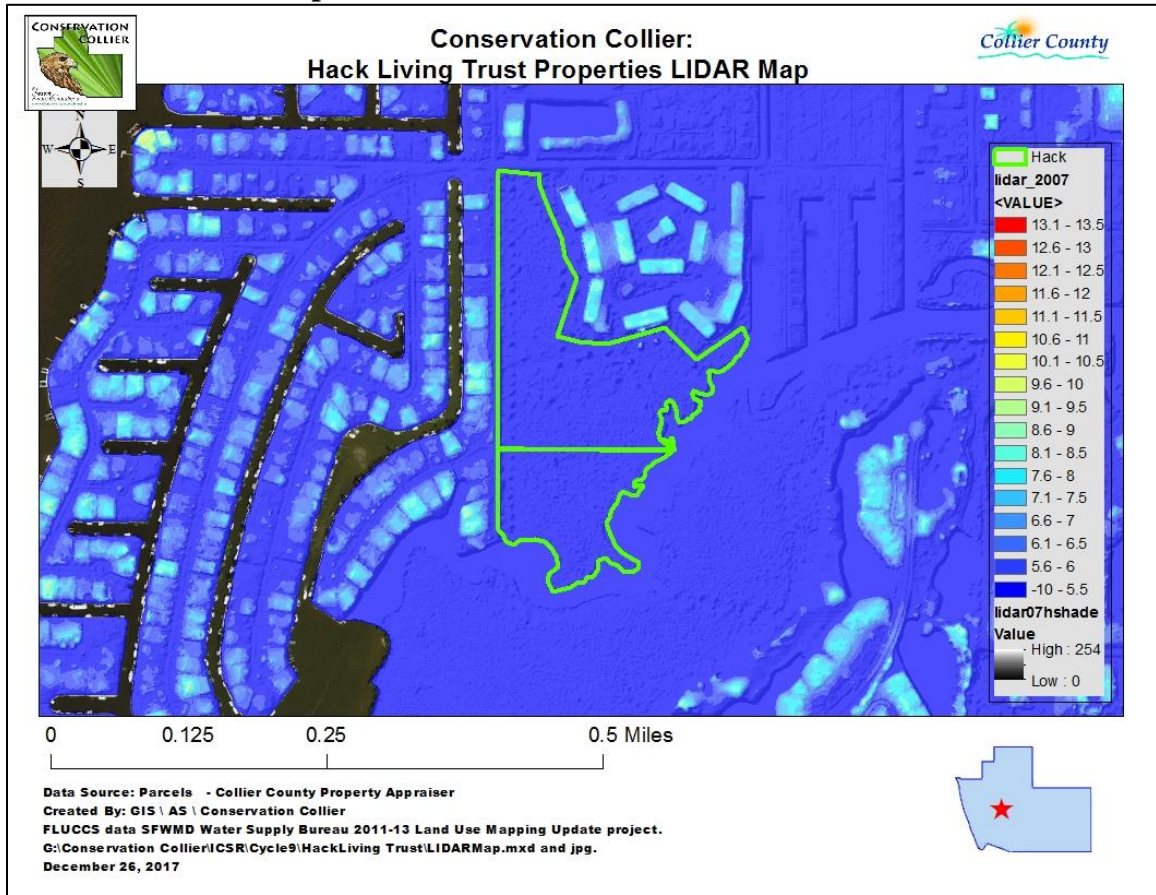


1980

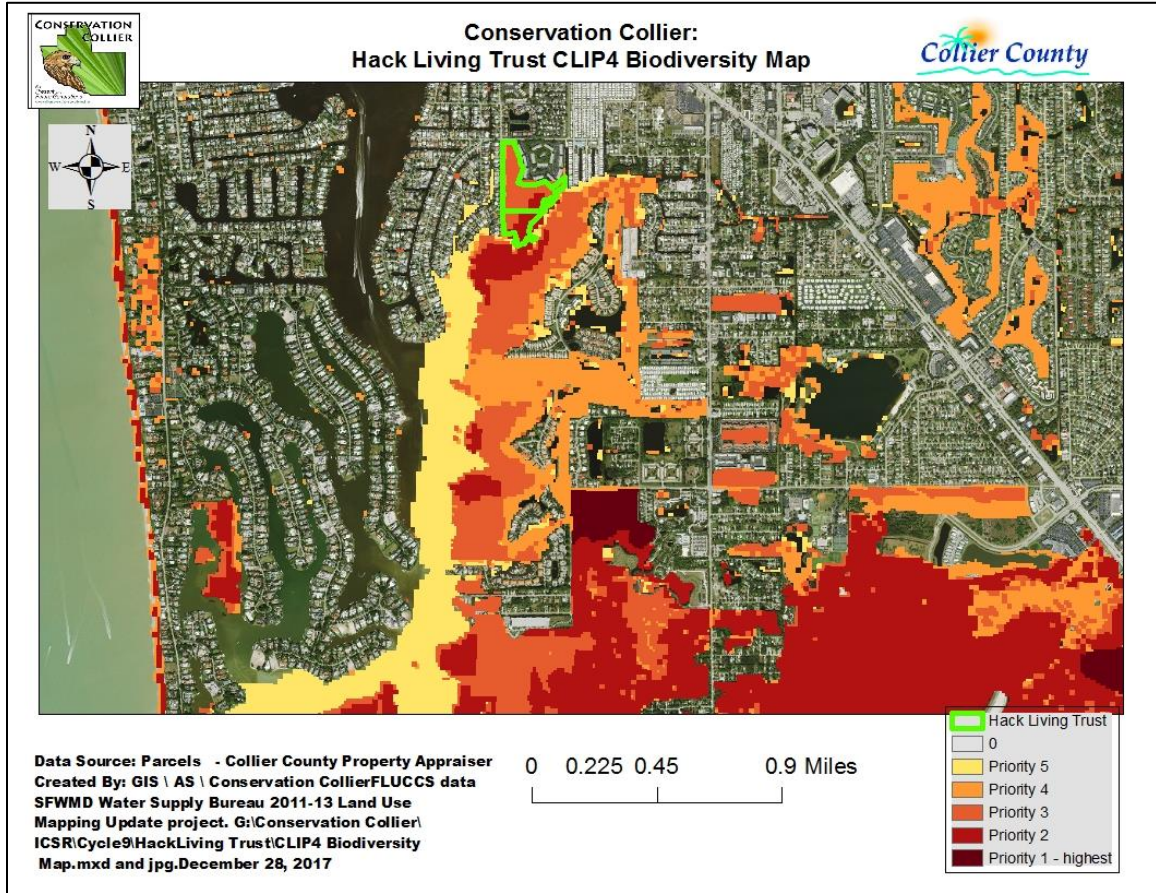
### Exhibit F. FEMA Map



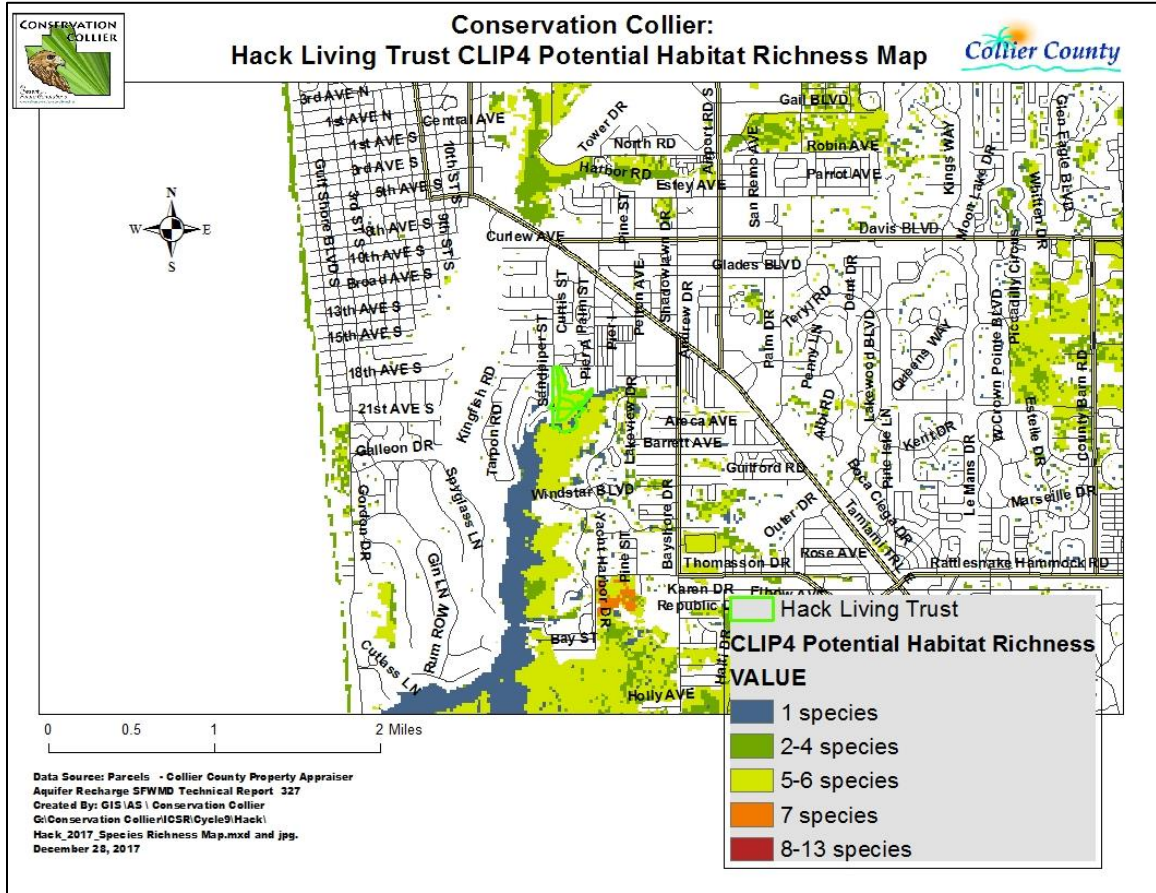
### Exhibit G. LIDAR Map



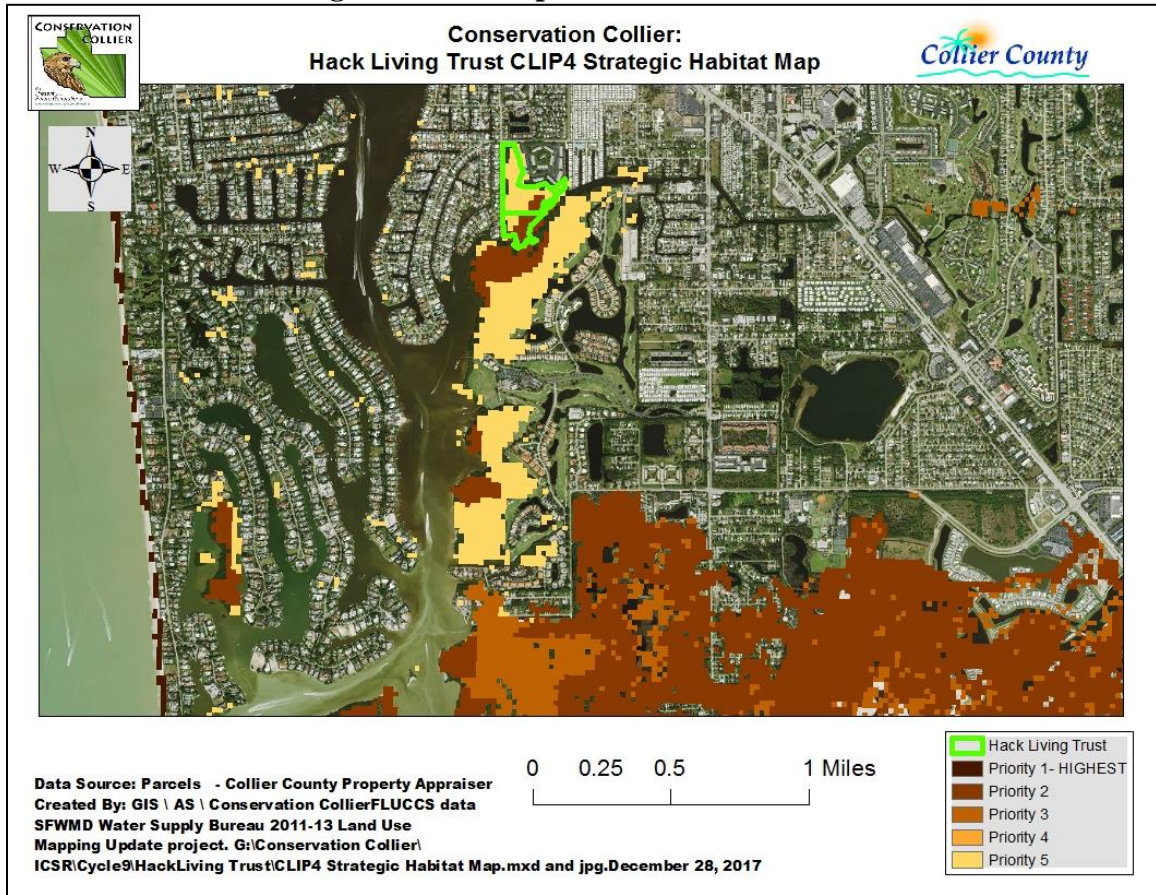
### Exhibit H. CLIP4 Biodiversity Map



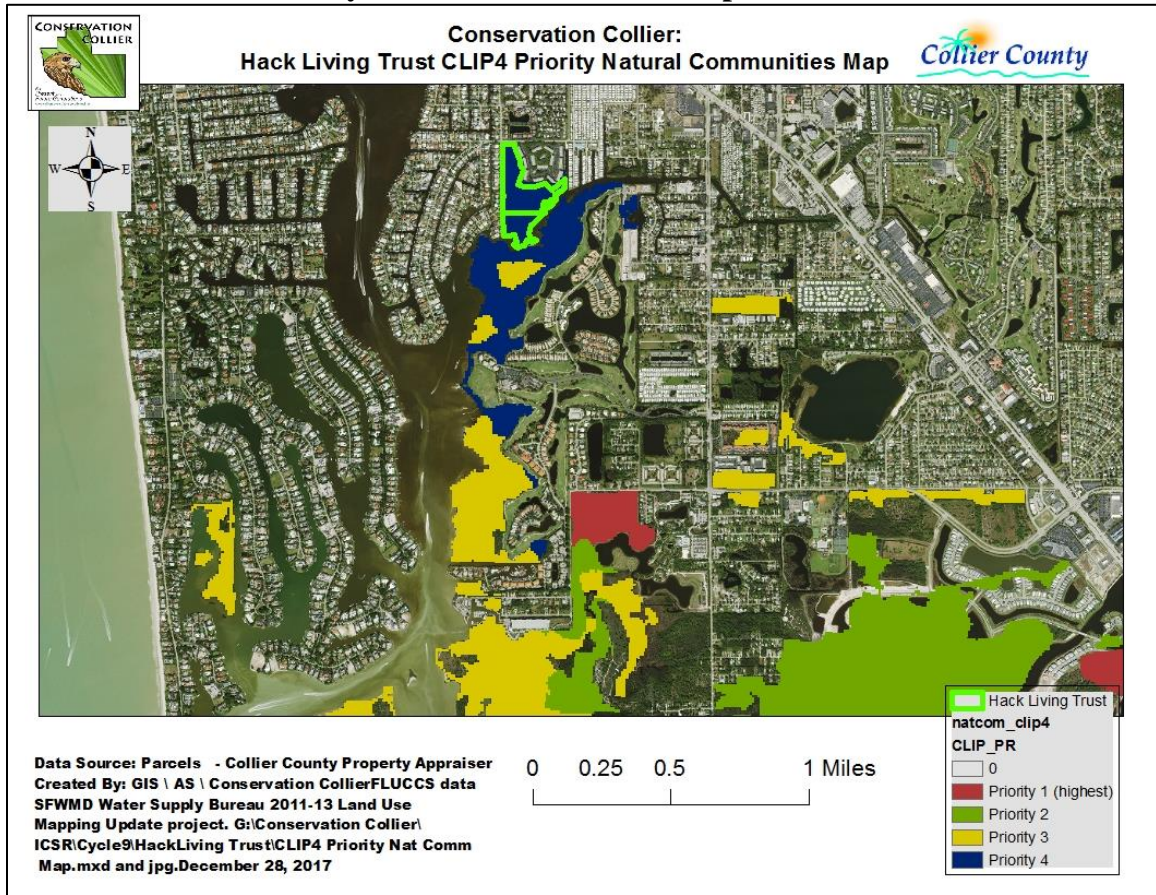
**Exhibit I. CLIP4 Potential Habitat Richness Map**



### Exhibit J. CLIP4 Strategic Habitat Map

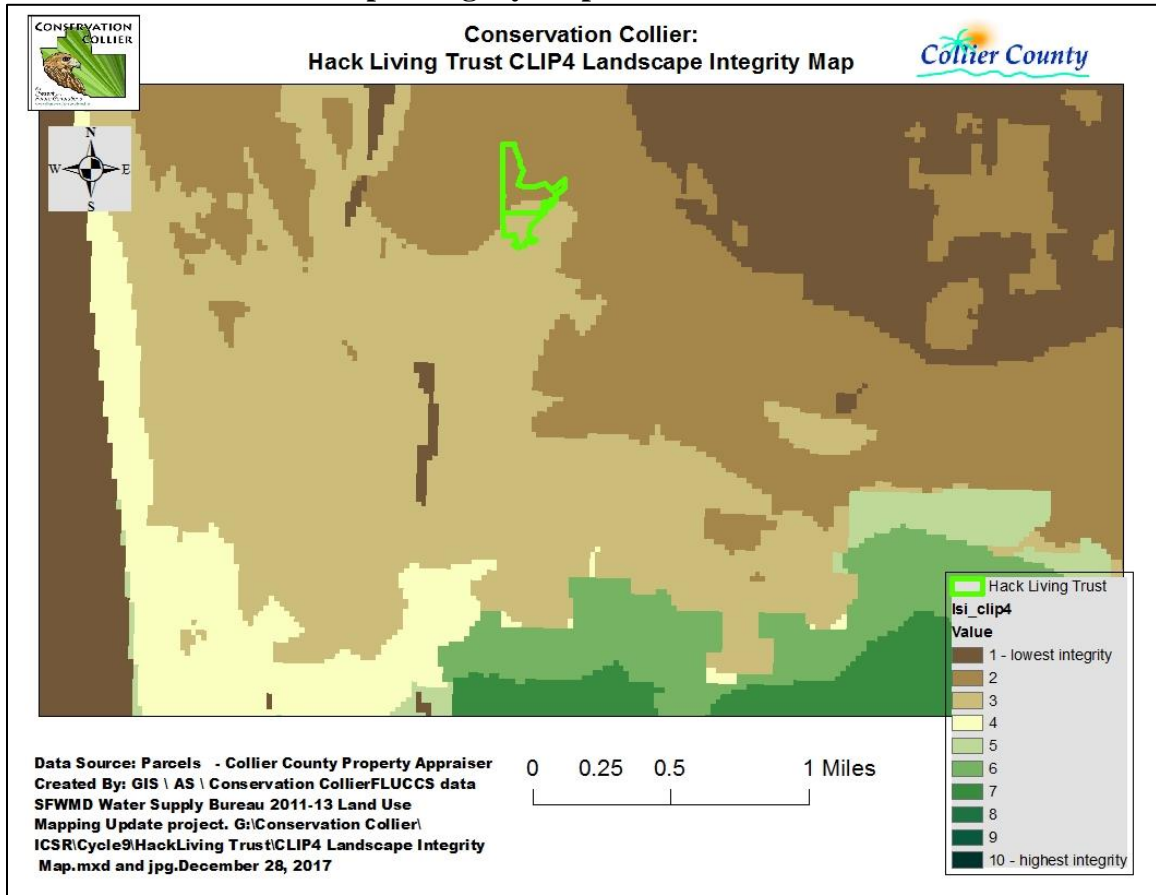


### Exhibit K. CLIP4 Priority Natural Communities Map

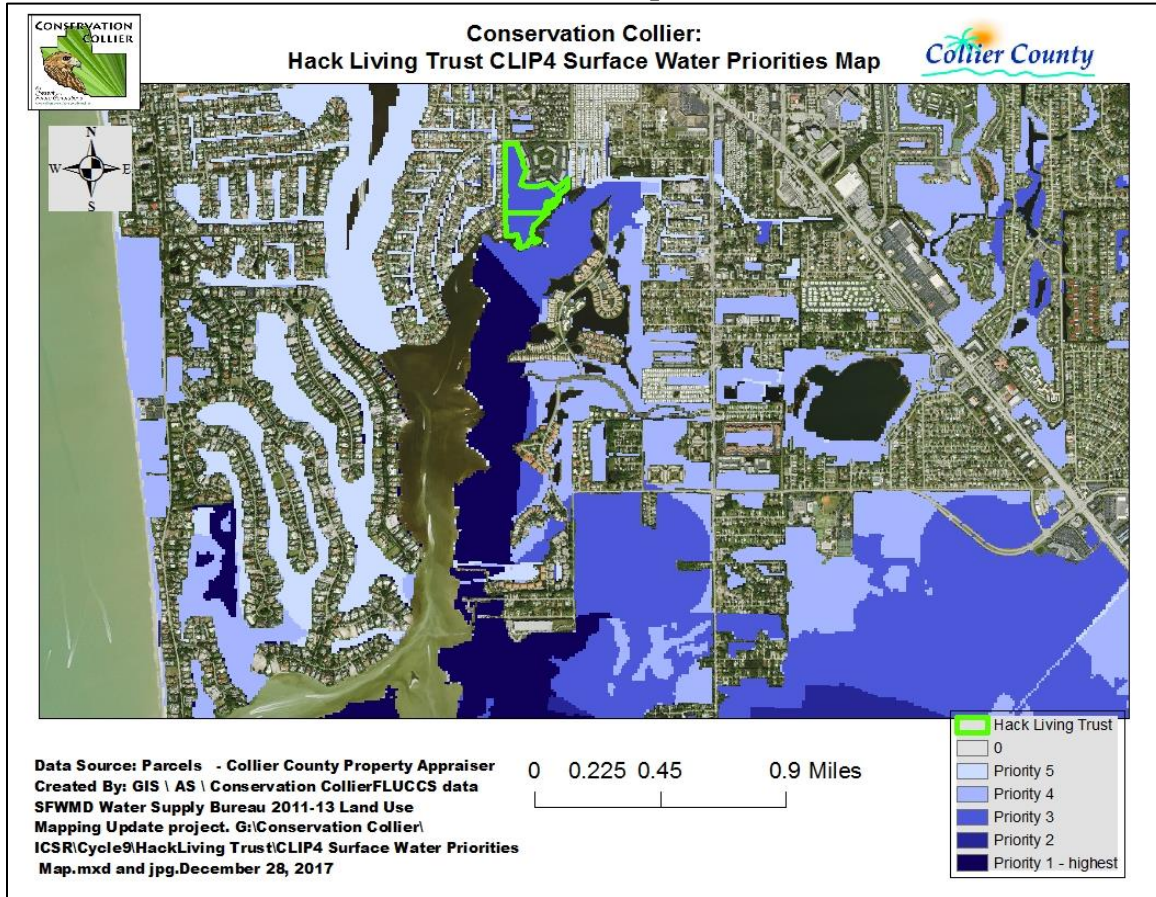




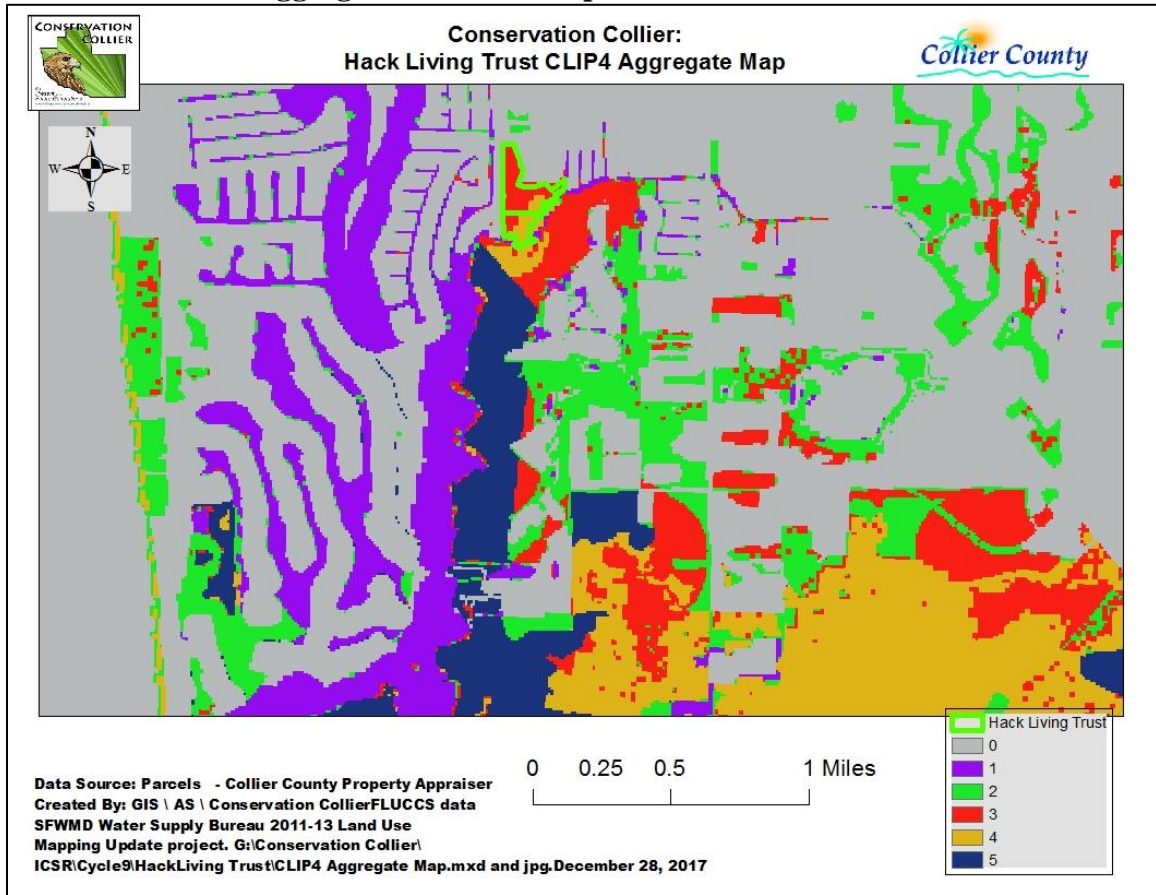
### Exhibit L. CLIP4 Landscape Integrity Map



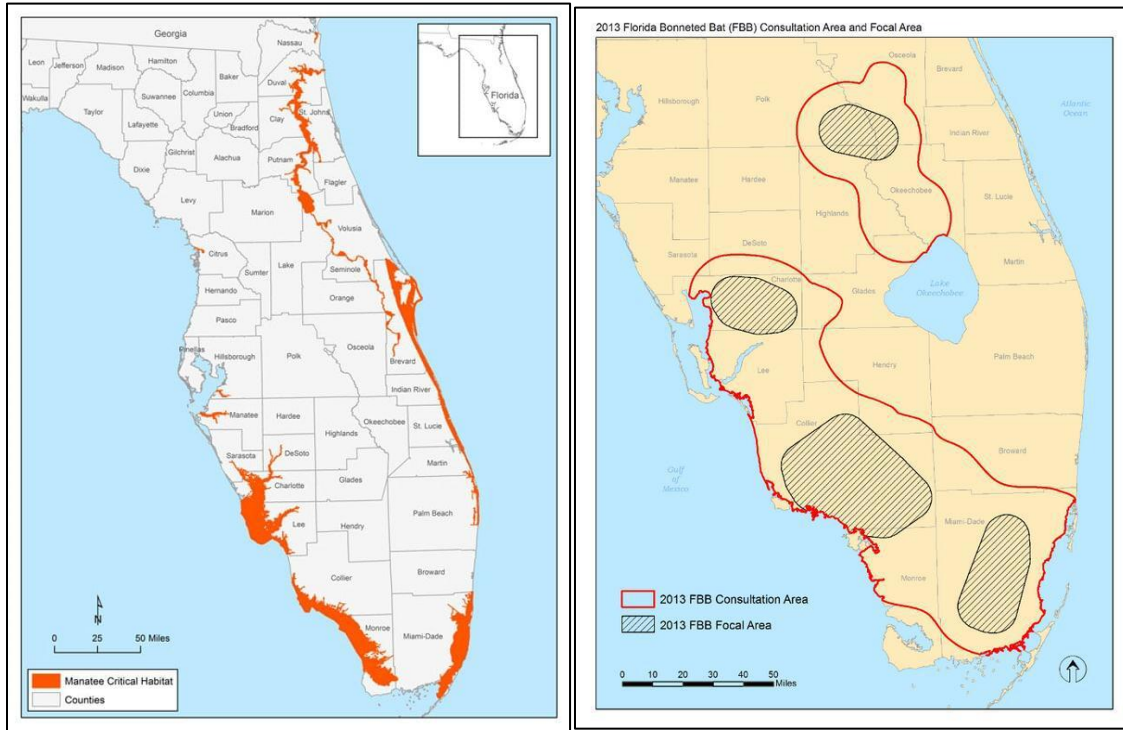
### Exhibit M. CLIP4 Surface Water Priorities Map



### Exhibit N. CLIP4 Aggregate Priorities Map



**Exhibit O. USFWS Florida bonneted bat and West Indian manatee habitat areas**



**Exhibit P. Completed and Scored Secondary Criteria Screening Form**

Property Name: Hack Living Trust 2018		Folio Numbers: 00388160002, 00394840002	
Geographical Distribution (Target Protection Area): Urban			
<b>1. Confirmation of Initial Screening Criteria (Ecological)</b>			
<b>1.A Unique and Endangered Plant Communities</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
<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	6120 - Mangrove swamp
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	Most of the mangrove forest is in very good condition.
<b>1.A. Total</b>	<b>100</b>	<b>15</b>	
<b>1.B Significance for Water Resources</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
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	Parcels would contribute moderately to surficial aquifer recharge (31" to <43"), but minimally to Lower Tamiami aquifer recharge (0" to < 7").
c. Parcel would contribute minimally to aquifer recharge	25		
d. Parcel will not contribute to aquifer recharge, eg., coastal loca	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	75	Buffering for Haldeman Creek and Naples Bay
c. Parcel is contiguous with and provides buffering for an identified flowway	50		
d. Wetlands exist on site	25	25	the property is estuarine tidal 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	80	Durban and Wulfert Mucks - tidal
b. Slough Soils	40		
c. Parcel has known history of flooding and is likely to provide onsite water attenuation	20	20	Parcel floods with the tides.
Subtotal	300	250	
<b>1.B Total</b>	<b>100</b>	<b>83</b>	<i>Obtained by dividing the subtotal by 3.</i>
<b>1.C Resource Ecological/Biological Value</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
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	6120 - Mangrove Swamp
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		<i>Provide documentation source -</i>
c. Habitat Richness score 5 categories	70	42	<i>Score is prorated from 14 to 70 based on the highest of the 5 CLIP4 Potential Habitat Richness categories- 14 points for each category. Property scored 3 out of 5. 3 X 14 = 42</i>
d. Rookery found on the parcel	10		
e. Listed plant species observed on parcel - add additional 20 po	20	20	Common wild pine <i>Tillandsia fasciculata</i>

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

<b>3. Restoration Potential</b>			
a. Parcel can be restored to high ecological function with minimal alteration	100	75	Removal of exotics and of spoil mounds where exotics grow would restore this property, but use of spoil mounds to locate a boardwalk could be advantageous.
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		
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	162	
<b>1.C Total</b>	<b>100</b>	<b>54</b>	<i>Divide the subtotal by 3</i>
<b>1.D Protection and Enhancement of Current Conservation Lands</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
<b>1. Proximity and Connectivity</b>			
a. Property immediately contiguous with conservation land or conservation easement.	100	100	Windstar conservation to the east and south, which leads to Rookery Bay national Estuarine Research Reserve.
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		
<b>1.D Total</b>	<b>100</b>	<b>100</b>	
<b>1. Ecological Total Score</b>	<b>100</b>	<b>63</b>	<i>Sum of 1A, 1B, 1C, 1D then divided by 4</i>
<b>2. Human Values/Aesthetics</b>			
<b>2.A Human Social Values/Aesthetics</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
<b>1. Access (Select the Highest Score)</b>			
a. Parcel has access from a paved road	100	100	Sandpiper St. and Marlin Rd.
b. Parcel has access from an unpaved road	75		
c. Parcel has seasonal access only or unimproved access easer	50		
d. Parcel does not have physical or known legal access	0		
<b>2. Recreational Potential (Select the Highest Score)</b>			
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	100	If a boardwalk and dock were installed, visitors could fish in the Haldeman Creek or launch kayaks and canoes in addition to exploring a mangrove area. Environmental education could occur in mangrove habitat.
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		
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		
<b>3. Enhancement of Aesthetic Setting</b>			
a. Percent of perimeter that can me seen by public. Score based on percentage of frontage of parcel on public thoroughfare	80	58	<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. Perimeter is 1.27 miles. If only street frontage is counted, 30% of the property can be seen. Haldeman Creek is also a public thoroughfare, and if that is counted (42%), there is a total of 72% that can be seen by the public. 80 X 72%= 57.6.</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. Water view of Haldeman Creek.</i>
Subtotal	300	278	
<b>2. Human Social Values/Aesthetics Total Score</b>	<b>100</b>	<b>93</b>	<i>Obtained by dividing the subtotal by 3.</i>

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

<b>3. Vulnerability to Development/Degradation</b>			
<b>3.A Zoning/Land Use Designation</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
1. Zoning allows for Single Family, Multifamily, industrial or commercial	50	50	Zoning is RMF-6 with a Special Treatment Overlay. All but 6 units of development have been constructed. Development of these units may be possible but would be difficult.
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	-20	
6. Property has been rezoned and/or there is SDP approval	25		Site has an ST Overlay
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		
<b>3. Vulnerability Total Score</b>	<b>100</b>	<b>30</b>	
<b>4. Feasibility and Costs of Management</b>			
<b>4.A Hydrologic Management Needs</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
1. No hydrologic changes are necessary to sustain qualities of site in perpetuity	100		Possible removal of spoil piles.
2. Minimal hydrologic changes are required to restore function, such a cut in an existing berm	75	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		
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		
<b>5.A Total</b>	<b>100</b>	<b>75</b>	
<b>4.B Exotics Management Needs</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
1. Exotic Plant Coverage			Exotics exist on edges and on spoil piles only.
a. No exotic plants present	100		
b. Exotic plants constitute less than 25% of plant cover	80	80	
c. Exotic plants constitute between 25% and 50% of plant cover	60		
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		
g. Adjacent lands contain substantial seed source and exotic removal is not presently required	-20		
<b>5.B Total</b>	<b>100</b>	<b>80</b>	
<b>4.C Land Manageability</b>	<b>Possible points</b>	<b>Scored points</b>	<b>Comments</b>
1. Parcel requires minimal maintenance and management, examples: cypress slough, parcel requiring prescribed fire where fuel loads are low and neighbor conflicts unlikely	80	80	Tidal action will maintain the property for the most part. Maintenance of exotics on spoil piles and along edges is all that would be necessary.
2. Parcel requires moderate maintenance and management, examples: parcel contains trails, parcel requires prescribed fire and circumstances do not favor burning	60		
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		
<b>5.C Total</b>	<b>100</b>	<b>80</b>	
<b>4. Feasibility and Management Total Score</b>	<b>100</b>	<b>78</b>	Sum of 5A, 5B, 5C, then divided by 3
<b>Total Score</b>	<b>400</b>	<b>264</b>	

**Exhibit Q. Photographs**

**Photo 1. Looking west at 25' ROW along Marlin Dr. on north side of property**



**Photo 2. Looking south along Sandpiper St.**





**Photo 3. Excavated canal running down western edge of property (Sandpiper St.)**



**Photo 4. Air potato along western edge of property (Sandpiper St.)**



**Photo 5. Crown gall on white mangrove tree along western edge of property (Sandpiper St.)**



**Photo 6. Area water management along west side of property (Sandpiper St.) allowing storm runoff into mangroves**



**Photo 7. Water view of southwest side from Henderson Creek**



**Photo 8. Water view of southeast side from Henderson Creek**



**Photo 9. Hydrologic indicators - prop roots and pneumatophores**



**Photo 10. Great egret foraging on southwest side of property**



**Photo 11. Spoil mound with exotics arrowhead and areca palm**



**Photo 12. Common wild pine (*Tillandsia fasciculata*) – State Threatened**



**Photo 13. View of mangrove forest on south side near Henderson Creek**

