

January 3, 2022

Mike Stuart  
**Pan Am Property, LLC**  
122 S Bumby Ave, Unit 9  
Orlando, FL 32803

**Proj: Hammond Property Site – St. Lucie County, Florida**  
**Parcel #'s 1430-313-0003-000-6 and #1430-322-0001-000-0**  
**Section 30; Township 34 South; Range 40 East**  
**(BTC File #1263-02)**  
**Re: Environmental Assessment Report**

Dear Mr. Stuart:

During January 2022, Bio-Tech Consulting, Inc. (BTC) conducted an environmental assessment on the Hammond Property site. The approximately 35.16-acre subject property is located just North of St. Lucie Blvd and east of N. Kings Hwy. and west of N. 25<sup>th</sup> St., within Section 30; Township 34 South; Range 40 East, St. Lucie County, Florida (**Figures 1, 2 & 3**). The environmental assessment included the following elements:

- Review of soil types mapped within the site boundaries;
- Evaluation of land use types/vegetative communities present;
- Field review for occurrence of protected flora and fauna;
- Delineation of on-site wetland communities; and,
- Environmental permitting constraints.

## SOILS

According to the Soil Survey of St. Lucie County, Florida, prepared by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), six (6) soil types occur within the subject property boundaries (**Figure 4**). These soil types include the following:

Orlando: Main Office  
3025 East South Street  
Orlando, FL 32803

Vero Beach Office  
4445 N A1A  
Suite 221  
Vero Beach, FL 32963

Jacksonville Office  
1157 Beach Boulevard  
Jacksonville Beach, FL 32250

Tampa Office  
6011 Benjamin Road  
Suite 101 B  
Tampa, FL 33634

Key West Office  
1107 Key Plaza  
Suite 259  
Key West, FL 33040

Aquatic & Land  
Management Operations  
3825 Rouse Road  
Orlando, FL 32817

407.894.5969  
877.894.5969  
407.894.5970 fax

Orlando

Vero Beach

Jacksonville

Tampa

Key West

- **Arents, 0 to 5 percent slopes (#4)**
- **Lawnwood sand (#21)**
- **Nettles sand (#25)**
- **Pineda sand (#32)**
- **Tantile sand (#44)**
- **Waveland-Lawnwood complex (#51)**

The following presents a brief description of the soil types mapped for the subject property:

**Arents, 0 to 5 percent slopes (#4)** consists of soil material dug from several areas that have different kinds of soil. It is used to fill such areas as low sloughs, marshes, shallow depressions, and swamps above their natural ground levels. In most places, the Arents soil is made up of loose, sandy mineral material; however, amounts of loamy and weakly cemented sandy materials that were subsoils in other areas are mixed throughout. A variable mixture of lenses, streaks, and pockets occur within short distances. Depth of the fill material ranges from about 20 to 50 inches. Several kinds of mineral soils underlie the fill material.

**Lawnwood sand (#21)** is a nearly level, poorly drained soil found on broad flatwoods. Typically, the surface layer of this soil type is 8 inches thick. It is black sand in the upper 4 inches and very dark gray in the lower 4 inches. The water table for this soil type is within a depth of less than 10 inches for 1 to 4 months and is between depths of 10 to 40 inches 6 months or more in most years. The permeability of this soil type is rapid in the surface, very slow to slow in the subsoil and moderate to rapid in the substratum.

**Nettles and Oldsmar Sands (#25)** is a nearly level, poorly drained soil found on broad flatwoods. Typically, the surface layer of this soil type is 11 inches thick. It is black sand in the upper 5 inches, very dark gray sand in the next 3 inches, and dark gray sand in the lower 3 inches. The water table for this soil type is within a depth 10 inches for 2 to 4 months during wet seasons and between depths of 10 to 40 inches for 6 months or longer in most years.

**Pineda sand (#32)** is a nearly level, poorly drained soil found in low hammocks, in broad poorly defined sloughs, and on flats. Typically, the surface layer of this soil type is sand 6 inches thick. It is very dark grayish brown in the upper 3 inches and dark brown in the lower 3 inches. The water table for this soil type is at a depth of less than 10 inches for 1 to 6 months and between depths of 10 to 40 inches for most of the rest of the year. The permeability of this soil type is rapid in the surface and subsurface layers, slow to very slow in the subsoil, and moderately rapid to rapid in the substratum.

**Tantile sand (#44)** is a nearly level, poorly drained soil found in the flatwoods. Typically, the surface layer of this soil type is sand 9 inches thick. It is black sand in the upper 2 inches, very dark gray in the next 3 inches, and dark gray in the lower 4 inches. The water table for this soil type is within a depth of 10 inches for 2 to 4 months and is between depths of 10 to 40 inches 6 months or more in most years. The permeability of this soil type is rapid in the surface and subsurface layers and very slow to moderately slow in the subsoil.

**Waveland-Lawnwood complex (#51)** consists of poorly drained depressional soils found in the flatwoods. Typically, the surface layer of Waveland soils is black fine sand 1 inch thick. Typically, the surface layer of Lawnwood soils is very dark gray sand about 3 inches thick. Both soil types associated with this complex are ponded for 6 to 9 months in most years. The permeability of the soils in this complex are rapid in the surface and subsurface layers, slow to very slow in the subsoil, and moderately rapid to rapid in the substratum.

The Florida Association of Environmental Soil Scientists (FAESS), considers the main components within the Pineda sand (#32) and Waveland-Lawnwood complex (#51) soil types to be hydric. The FAESS also considers the inclusions within the Nettles and Oldsmar sand (#25) soil type to be hydric. This information can be found in the Hydric Soils of Florida Handbook, Fourth Edition, March 2007.

## **LAND USE TYPES/VEGETATIVE COMMUNITIES**

The Hammond Property site currently supports two (2) land use types/vegetative communities within the subject property boundaries (**Figure 5**). These land use types were identified utilizing the Florida Land Use, Cover and Forms Classification System, Level III (FLUCFCS, FDOT, January 1999). The upland land use type within the subject property consists of Woodland Pastures (213). The wetland and surface water land use type within the subject property consist of Reservoirs (530). The following provides a brief description of the land use types/vegetative communities identified on the site:

### **Uplands:**

#### ***213 Woodland Pastures***

The majority of the subject property is areas of forested lands that are utilized as active grazing pastures. This portion of the subject property is classified as Woodland Pastures (213) per the FLUCFCS. Vegetation observed within this land use type includes Bermudagrass (*Cynodon dactylon*), earpod tree (*Enterolobium contortisiliquum*), bushy bluestem (*Andropogon glomeratus*), longleaf pine (*Pinus palustris*), live Oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), gallberry bush (*Ilex glabra*) and cogon grass (*Imperata cylindrica*).

## **Surface Waters:**

### **530 Reservoirs**

There are two (2) separate cow ponds located in the eastern and central portions of the subject property. These cow ponds are considered Reservoirs (530) per the FLUCFCS. Vegetation observed within the ponds includes swamp fern (*Telmatoblechnum serrulatum*), Cattail (*Typha* spp.) gallberry bush (*Ilex glabra*) and cogon grass (*Imperata cylindrica*).

## **PROTECTED SPECIES**

Utilizing methodologies outlined in the Florida's Fragile Wildlife (Wood, 2001); Measuring and Monitoring Biological Diversity Standard Methods for Mammals (Wilson, et al., 1996); and Florida Fish and Wildlife Conservation Commission's (FFWCC) Gopher Tortoise Permitting Guidelines (April 2008 - revised July 2020), an assessment for "listed" floral and faunal species occurring within the subject site boundaries was conducted in December 2021. The survey covered approximately 50 percent of the subject site's developable area, included both direct observations and indirect evidence, such as tracks, burrows, tree markings and vocalizations which indicated the presence of species observed. The assessment focused on species that are "listed" by the FFWCC's Official Lists - Florida's Endangered Species, Threatened Species and Species of Special Concern (December 2018) that have the potential to occur in St. Lucie County (attached Table 1).

The following is a list of those wildlife species identified during the evaluation of the site:

### **Reptiles and Amphibians**

black racer (*Coluber constrictor*)  
brown anole (*Norops sagrei*)  
**gopher tortoise (*Gopherus polyphemus*)**

### **Birds**

Black Vulture (*Coragyps atratus*)  
Mourning Dove (*Zenaida macroura*)  
Northern Cardinal (*Cardinalis cardinalis*)  
Northern Mockingbird (*Mimus polyglottos*)

### **Mammals**

common raccoon (*Procyon lotor*)  
eastern gray squirrel (*Sciurus carolinensis*)

nine-banded armadillo (*Dasypus novemcinctus*)  
Virginia opossum (*Didelphis virginiana*)  
Wild Pig (*Sus scrofa*)

One (1) of the above species, gopher tortoise (*Gopherus polyphemus*), was identified in the FFWCC's Official Lists - Florida's Endangered Species, Threatened Species and Species of Special Concern (December 2018). The following provides a brief description of particular wildlife species as they relate to the development of the site.

### **Gopher Tortoise (*Gopherus polyphemus*)**

*State Listed as "Threatened" by FFWCC*

Currently the gopher tortoise (*Gopherus polyphemus*) is classified as a "Category 2 Candidate Species" by the U.S. Fish & Wildlife Service (USFWS), and as of September 2007 is now classified as "Threatened" by FFWCC. The basis of the "Threatened" classification by the FFWCC for the gopher tortoise is due to habitat loss and destruction of burrows. Gopher tortoises are commonly found in areas with well-drained soils associated with the pine flatwoods, pastures and abandoned orange groves. Several other protected species have a possibility of occurring in this area, as they are gopher tortoise commensal species. However, none of these commensal species were observed during the survey conducted.

The subject property was surveyed for the existence of gopher tortoises through the use of pedestrian transects. The survey covered approximately 50 percent of the suitable habitat present within the subject property boundaries. BTC identified several gopher tortoise burrows and would advise a 100% survey prior to site construction.

The FFWCC provides three (3) options for developers that have gopher tortoises on their property. These options include: 1) avoidance (i.e., 25-foot distance from construction), 2) preservation of habitat, and 3) off-site relocation. As such, resolution of the gopher tortoise issue will need to be permitted through FFWCC prior to any construction activities. Surveys utilized for permitting with FFWCC are valid for 90 days and should be updated prior to construction.

### **Eastern Indigo Snake (*Drymarchon couperi*)**

*Federally Listed as "Threatened" by USFWS*

The eastern indigo snake (*Drymarchon couperi*) is listed as threatened by USFWS, based on dramatic population declines caused by over-collecting for the domestic and international pet trade as well as mortalities caused by rattlesnake collectors who gassed gopher tortoise burrows to collect snakes. Since its listing, habitat loss and fragmentation by residential and commercial expansion have become much more significant threats to the eastern indigo snake. This species is

widely distributed throughout central and south Florida; in northern Florida and southern Georgia, it primarily occurs in sandhill habitats.

BTC did not observe indigo snakes during the wildlife survey conducted. However, if requested by the USFWS, a survey specific to indigo snake may be required. The survey can be accomplished from October 1<sup>st</sup> thru April 30<sup>th</sup> for a minimum of five (5) surveys with 2 days of optimal weather (overnight low temperature above 60° F).

**Bald Eagle (*Haliaeetus leucocephalus*)**

*State protected by F.A.C. 68A-16.002 and federally protected by both the Migratory Bird Treaty Act (1918) and the Bald and Golden Eagle Protection Act (1940)*

In August of 2007, the USFWS removed the Bald Eagle from the list of federally endangered and threatened species. Additionally, the Bald Eagle was removed from FFWCC's imperiled species list in April of 2008. Although the Bald Eagle is no longer protected under the Endangered Species Act, it is still protected under the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, and FFWCC's Bald Eagle rule (F.A.C. 68A-16.002 Bald Eagle (*Haliaeetus leucocephalus*)).

In May of 2007, the USFWS issued the National Bald Eagle Management Guidelines. In April of 2008, the FFWCC adopted a new Bald Eagle Management Plan that was written to closely follow the federal guidelines. In November of 2017, the FFWCC issued "A Species Action Plan for the Bald Eagle" in response to the sunset of the 2008 Bald Eagle Management Plan. Under the USFWS's management plans, buffer zones are recommended based on the nature and magnitude of the project or activity. The recommended protective buffer zone is 660 feet or less from the nest tree, depending on what activities or structures are already near the nest. As provided within the above referenced Species Action Plan, the USFWS is the regulating body responsible for issuing permits for Bald Eagles. In 2017, the need to obtain a State permit (FFWCC) for the take of Bald Eagles or their nests in Florida was eliminated following revisions to Rule 68A-16.002, F.A.C. A USFWS Bald Eagle "Non-Purposeful Take Permit" is not needed for any activity occurring outside of the 660-foot buffer zone. No activities are permitted within 330 feet of a nest without a USFWS permit.

In addition to the on-site evaluation for listed species, BTC conducted a desktop review of FFWCC's database and Audubon's EagleWatch program database for recorded Bald Eagle nests within the surrounding 660 feet of the subject site. This review revealed that there are no Bald Eagle nests (through the 2016-2017 nesting season for FFWCC data and 2019-2020 nesting season for Audubon EagleWatch data) within 660 feet of the project site boundaries. Thus, no developmental constraints are expected with respect to Bald Eagle nests.



## USFWS CONSULTATION AREAS

The USFWS have established “consultation areas” for certain listed species. Generally, these consultation areas only become an issue if USFWS consultation is required, which is usually associated with federal Section 10 and/or Section 404 permitting through the Florida Department of Environmental Protection (FDEP) or the USACE. It should be noted that a listed species presence and need for additional review are often determined to be unnecessary early in the permit review process due to lack of appropriate habitat or other conditions. However, the USFWS makes the final determination.

Consultation areas are typically very regional in size, often spanning multiple counties where the species in question is known to exist. Consultation areas by themselves do not indicate the presence of a listed species. They only indicate an area where there is a potential for a listed species to occur and that additional review might be necessary to confirm or rule-out the presence of the species. The additional review typically includes the application of species-specific criteria to rule-out or confirm the presence of the species in question. Such criteria might consist of a simple review for critical habitat types. In other cases, the review might include the need for species-specific surveys using established methodologies that have been approved by the USFWS. The following provides a brief description of the respective species, its habitat, and the potential for additional review.

***Florida Grasshopper Sparrow (*Ammodramus* *savannarum* *floridanus*)***  
*Federally Listed as “Endangered” by USFWS*

The Florida Grasshopper Sparrow is a subspecies of grasshopper sparrow that is endemic to the dry prairie of south-central Florida in the counties of Polk, Osceola, Highlands, and Okeechobee. This subspecies is extremely habitat specific and relies on fire every two to three years to maintain its habitat. This species was listed as endangered by the State of Florida in 1977. The USFWS listed the Florida Grasshopper Sparrow as endangered in 1986. The main threats to the Florida grasshopper sparrow are habitat destruction, degradation, and fragmentation. The conversion of open prairie habitat to agriculture fields has caused destruction of available habitats for the Florida Grasshopper Sparrow. Florida Grasshopper Sparrow habitat consists of large, treeless, relatively poorly-drained grasslands that have a history of frequent fires.

No Florida Grasshopper Sparrows were observed on the site during the wildlife survey conducted by BTC. Since there is no suitable habitat for this species within the site boundary, a formal survey is not required by the USFWS or another agency to determine if any Florida Grasshopper Sparrows utilize any portions of the site.

***Everglade Snail Kite (Rostrhamus sociabilis)***

*Federally Listed as “Endangered” by USFWS*

The subject site falls within the USFWS Consultation Area for the Everglade Snail Kite. Currently the Snail Kite is listed as “Endangered” by the USFWS. Snail Kites are similar in size to Red-shouldered Hawks. All Snail Kites have deep red eyes and a white rump patch. Males are slate gray, and females and juveniles vary in amounts of white, light brown, and dark brown, but the females always have white on their chin. Kites vocalize mainly during courtship and nesting. They may occur in nearly all of the wetlands of central and southern Florida. They regularly occur in lake shallows along the shores and islands of many major lakes, including Lakes Okeechobee, Kissimmee, Tohopekaliga (Toho) and East Toho. They also regularly occur in the expansive marshes of southern Florida such as Water Conservation Areas 1, 2, and 3, Everglades National Park, the upper St. John’s River marshes and Grassy Waters Preserve.

No Snail Kites were observed within the subject site during the wildlife survey conducted by BTC. As no suitable habitat exists on the subject property, a formal survey should not be required by the USFWS or another agency to determine if any Snail Kites utilize any portions of the site.

***Florida panther (Puma concolor coryi)***

*Federally/State Listed as “Endangered” by USFWS & FFWCC*

The Florida panther (*Puma concolor coryi*) is Federally and State listed as “Endangered”. The Florida panther is a solitary species and is one of the smaller species of cougar in the Western Hemisphere. The home range of Adult males is approximately 200 square miles and the home range of adult females is approximately 75 square miles. Adult Florida panthers can reach a length of seven feet and a height of 2 feet 4 inches. Adult Florida panthers are typically reddish-brown on their back, dark tan on their sides with a pale gray belly. Florida panthers inhabit large forested communities and wetlands. The Florida panther is a carnivore with a typical diet consisting of deer, raccoons, wild hogs, armadillos, rabbits and other small mammals and reptiles.

No Florida panthers were observed within the subject site during the wildlife survey conducted by BTC. As minimal suitable habitat exists on the subject property, a formal survey should not be required by the USFWS or another agency to determine if any Florida panthers utilize any portions of the site.

***Audubon’s Crested Caracara (Polyborus plancus audubonii)***

*Federally Listed as “Threatened” by USFWS*

The subject site falls within the USFWS Consultation Areas for the species Audubon’s Crested Caracara (*Polyborus plancus audubonii*). Currently the Audubon’s Crested Caracara is listed as



threatened by the USFWS due primarily to habitat loss. The Audubon's Crested Caracara commonly occurs in dry or wet prairie areas with scattered cabbage palms, lightly wooded areas with saw palmetto, scrub oaks and cypress. The Audubon's Crested Caracara also uses improved or semi-improved pasture with seasonal wetlands. Audubon's Crested Caracaras construct new nests each nesting season, often in the same tree as the previous year.

Although the subject site falls within the USFWS Audubon's Crested Caracara consultation area, no Crested Caracaras were observed on the subject site. As minimal suitable habitat exists on the subject property, a formal survey should not be required by the USFWS or another agency to determine if any Crested Caracara utilize any portions of the site.

### **Florida Scrub-Jay (*Aphelocoma coerulescens*)**

*Federally Listed as "Threatened" by USFWS*

The subject site falls within the USFWS Consultation Area for the Florida Scrub-jay. Currently the Florida Scrub-jay is listed as threatened by the USFWS. Florida Scrub-jays are largely restricted to scattered, often small and isolated patches of sand pine scrub, xeric oak, scrubby flatwoods, and scrubby coastal stands in peninsular Florida (Woolfenden 1978a, Fitzpatrick et al. 1991). They avoid wetlands and forests, including canopied sand pine stands. Optimal Scrub-jay habitat is dominated by shrubby scrub, live oaks, myrtle oaks, or scrub oaks from 1 to 3 m (3 to 10 feet) tall, covering 50 percent to 90 percent of the area; bare ground or sparse vegetation less than 15 cm (6 in.) tall covering 10 percent to 50 percent of the area; and scattered trees with no more than 20 percent canopy cover (Fitzpatrick et al. 1991).

During the wildlife survey conducted no evidence of Scrub-jays was observed and no suitable scrub habitat exists within the property boundary. Due to the lack of suitable on-site habitat it is not anticipated that a formal Scrub-jay survey will be required and no further action should be required pertaining to Scrub-jays.

## **PERMITTING DEVELOPMENT CONSTRAINTS**

Permitting through the St. Lucie County Environmental Resources Department Environmental Resources Department (SLCERD), South Florida Water Management District (SFWMD), and the Florida Department of Environmental Protection (FDEP) and/or U.S. Army Corps of Engineers (USACE) would be required to develop the project site. The study area is located within the St. Lucie drainage basin.

### **St. Lucie County Environmental Resources Department**

Coordination and permitting with the SLCERD will be required for the project. The County uses the following general classification system for the purposes of protecting wetland functions and values within the unincorporated areas of St. Lucie County.

- a. Category I Wetlands - shall include any wetlands, regardless of size, having hydrological connection to natural surface water bodies; any isolated wetland 20 acres or larger; or wetlands containing Strategic Habitat Conservation Areas as identified by the Florida Wildlife Conservation Commission.
- b. Category II Wetlands - shall include any isolated wetlands which are connected to other surface waters and are greater than or equal to 5 acres, or are less than 20 acres and do not qualify as Category I wetlands;
- c. Category III Wetlands - shall include isolated wetlands less than 5 acres that do not qualify as Category I or II wetlands, or wetlands which are connected to other surface waters and are less than 5 acres.

St. Lucie County requires identification of Category I, II, and III wetlands prior to staff review of all land development proposals, including future land use, zoning, site plan or construction applications. The County requires a minimum 50-foot buffer between Category I or II wetlands and new development activity and a minimum 25-foot buffer between Category III wetlands and new development activity. The buffer is measured landward from the approved jurisdictional line.

### **South Florida Water Management District**

A new Environmental Resource Permit (ERP) application will be required through the SFWMD for all wetland and/or other surface water impacts (both direct and secondary) in association with the proposed site. Impacts to the project's wetland and/or other surface water communities would be permissible by SFWMD as long as the issues of elimination and reduction of wetland impacts have been addressed and as long as the mitigation offered is sufficient to offset the functional losses incurred via the proposed impacts. Coordination with the Division of Historical Resources (DHR) and the FFWCC will be necessary as part of the permitting process.

## **Florida Department of Environmental Protection**

### **State 404 Program**

In December of 2020, the FDEP “assumed” federal permitting authority for all wetland and surface water resources under Section 404 of the Clean Water Act (CWA). The State 404 Program is a separate program from the existing ERP Program described above. For those project’s whose wetland and surface water resources are associated with tidal waters or traditional navigable waters, under Section 10 of the Rivers and Harbors Act, the USACE will “retain” federal permitting authority. These “retained” resources also include wetlands and/or other surface waters that fall within the 300 foot guide line established from the ordinary high water mark or mean high tide line of the retained waters.

With respect to the subject site, it is anticipated some of the on-site wetlands and/or other surface waters adjacent to the Indian River Aquatic Preserve will fall under the regulatory authority of the Section 404 Program. The federal permitting authority has been assumed by the FDEP under Section 404. Currently, FDEP considers all wetland and/or surface water resources to be federally jurisdictional unless the applicant provides documentation proving otherwise. A Jurisdictional Determination (JD) or No Permit Required (NPR) verification will be required to make this determination and confirm what we anticipate to be both on-site jurisdictional and non-jurisdictional wetlands. As with the ERP permitting, it is anticipated that impacts to the project’s wetland/surface water communities would be permittable by the FDEP as long as the issues of elimination and reduction of impacts have been addressed and as long as the mitigation offered is sufficient to offset the functional losses incurred via the proposed impacts.

The environmental limitations described in this document are based on observations and technical information available on the date of the on-site evaluation. This report is for general planning purposes only. The limits of any on-site wetlands/surface waters can only be determined and verified through field delineation and/or on-site review by the pertinent regulatory agencies. The wildlife surveys conducted within the subject property boundaries do not preclude the potential for any listed species, as noted in the attached **Table 1**, currently or in the future. Should you have any questions or require any additional information, please do not hesitate to contact our office at (407) 894-5969. Thank you.

Regards,

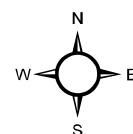
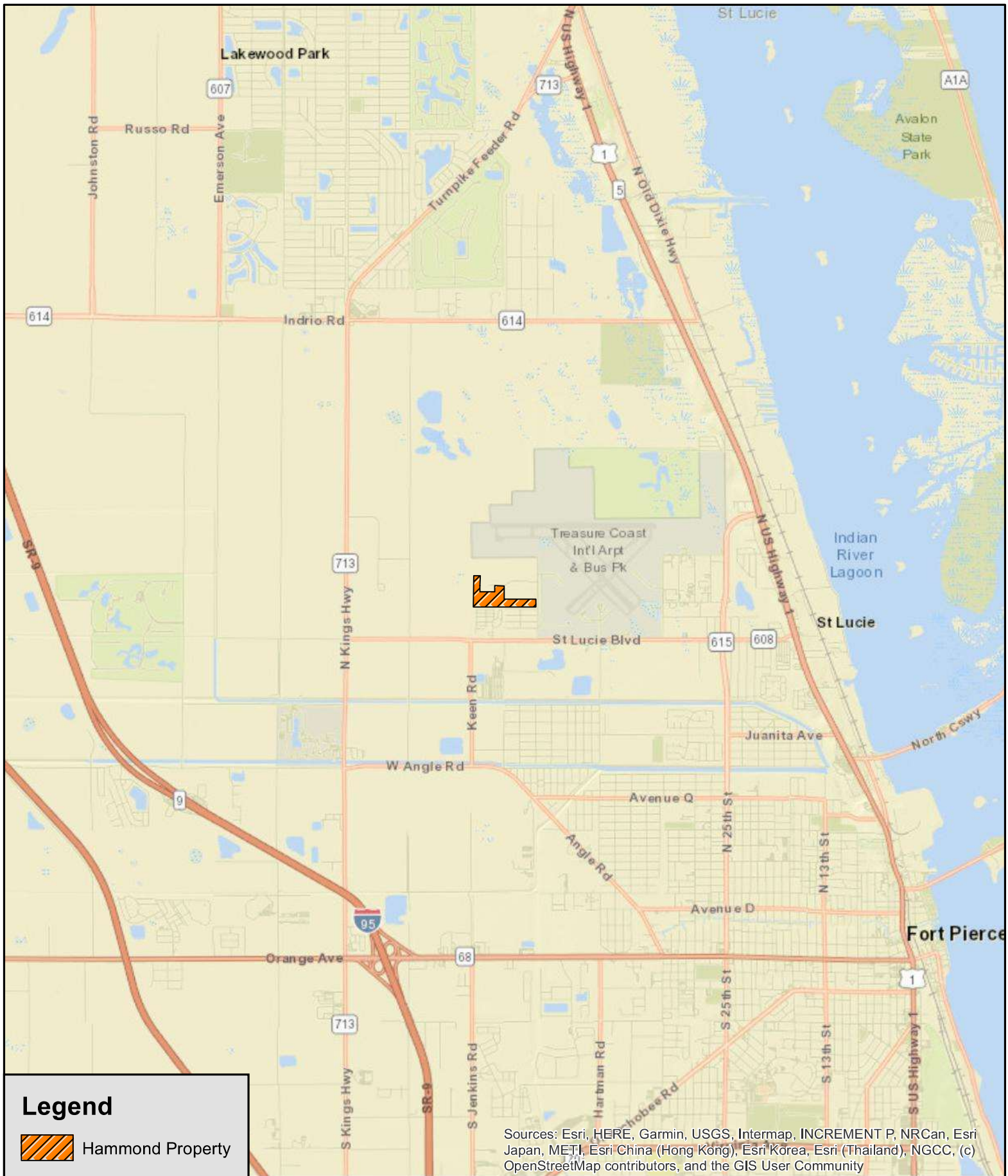


Tucker Pearce  
Field Biologist

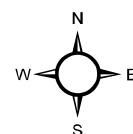
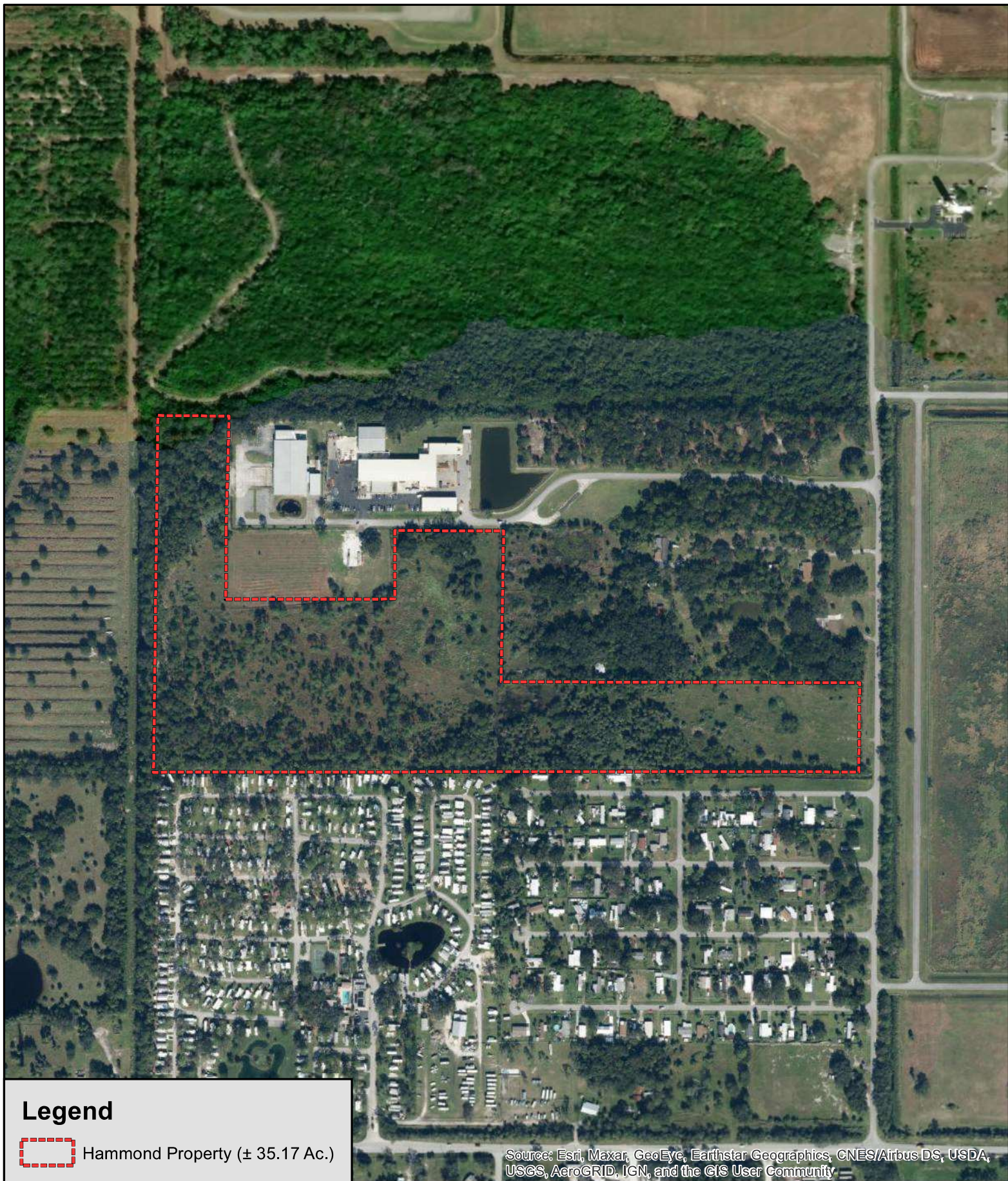


John Miklos  
President

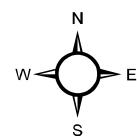
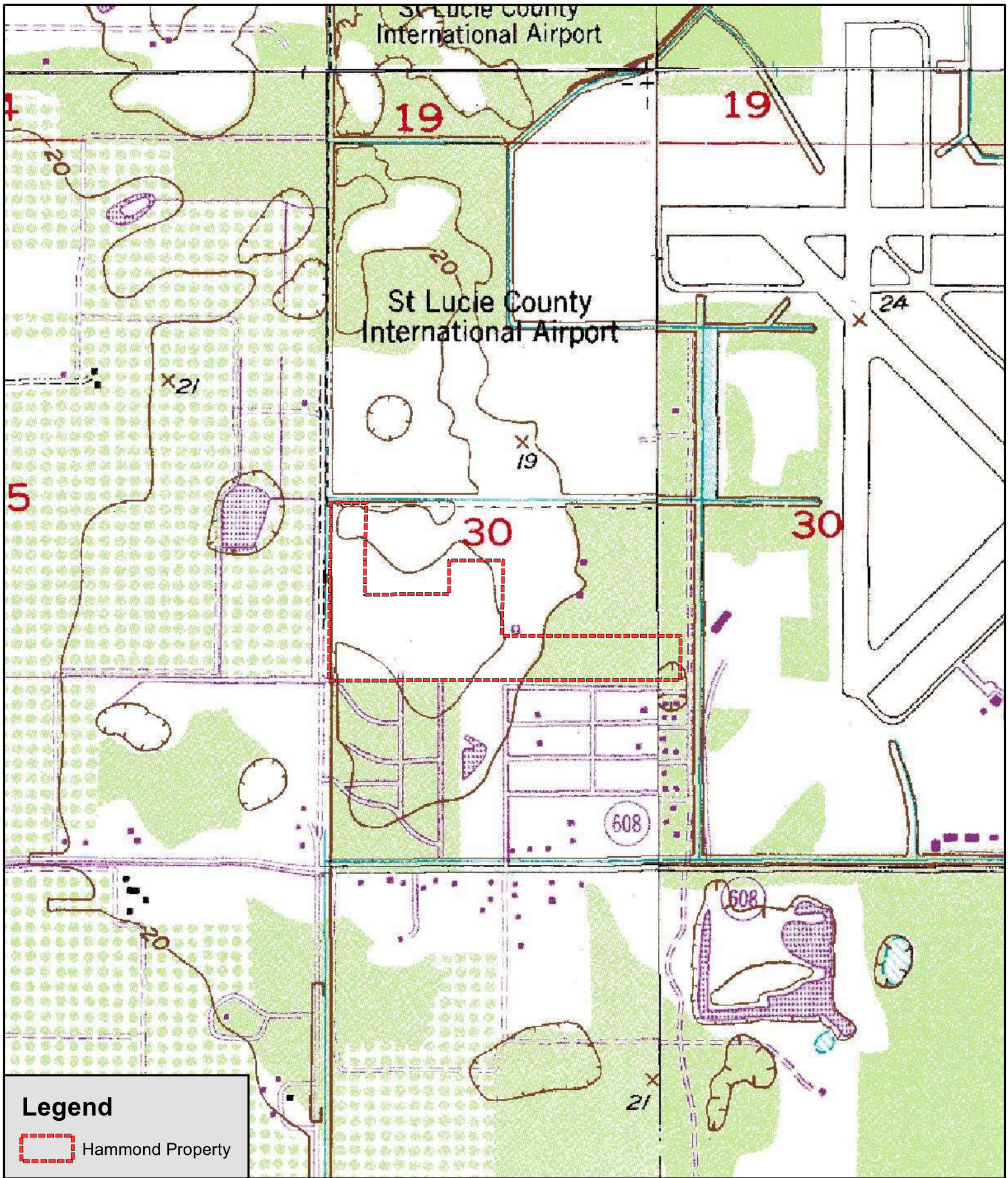




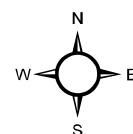
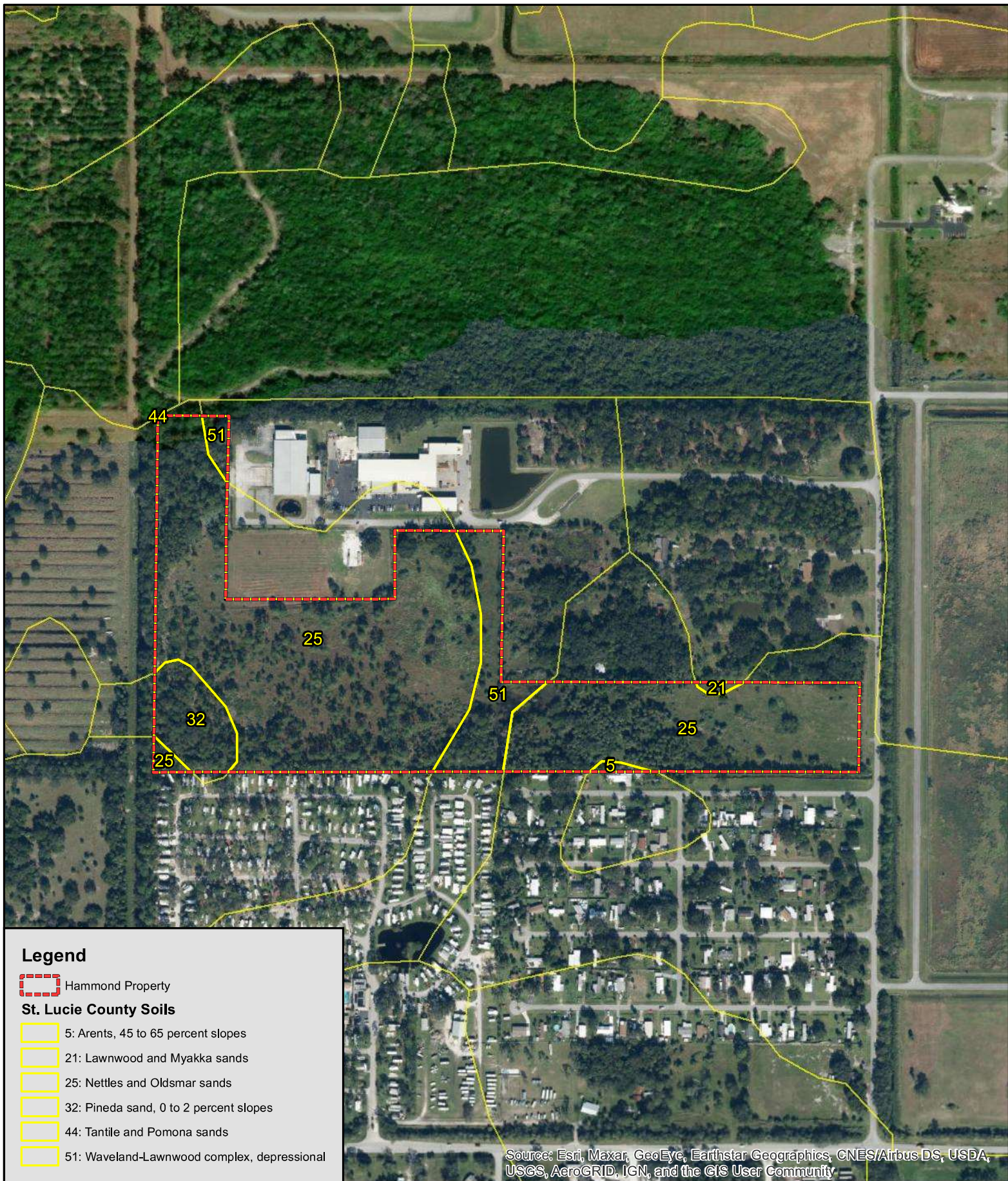




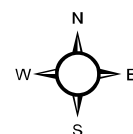














**Table 1:**

**Potentially Occurring Listed Wildlife and Plant Species in  
St. Lucie County**

Scientific Name	Common Name	Federal Status	State Status	Occurrence Status
<b>FISH</b>				
<i>Agonostomus monticola</i>	mountain mullet	N	N	C
<i>Awaous tajasica</i>	river goby	N	N	C
<i>Bairdiella sanctaeluciae</i>	striped croaker	N	N	C
<i>Gobiomorus dormitor</i>	bigmouth sleeper	N	N	C
<i>Gobionellus pseudofasciatus</i>	slashcheek goby	N	N	C
<i>Microphis brachyurus</i>	opossum pipefish	N	N	C
<i>Rivulus marmoratus</i>	mangrove rivulus	N	LS	C
<b>AMPHIBIANS</b>				
<i>Rana capito</i>	gopher frog	N	LS	P
<b>REPTILES</b>				
<i>Alligator mississippiensis</i>	American alligator	T(S/A)	LS	C
<i>Caretta caretta</i>	loggerhead	LT	LT	C
<i>Chelonia mydas</i>	green turtle	LE	LE	C
<i>Crotalus adamanteus</i>	eastern diamondback rattlesnake	N	N	C
<i>Dermochelys coriacea</i>	leatherback	LE	LE	C
<i>Drymarchon corais couperi</i>	eastern indigo snake	LT	LT	C
<i>Gopherus polyphemus</i>	gopher tortoise	N	LS	C
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	N	LS	C
<i>Sceloporus woodi</i>	Florida scrub lizard	N	N	C
<b>BIRDS</b>				
<i>Accipiter cooperii</i>	Cooper's hawk	N	N	P
<i>Aimophila aestivalis</i>	Bachman's sparrow	N	N	P
<i>Ajaia ajaja</i>	roseate spoonbill	N	LS	P
<i>Ammodramus savannarum floridanus</i>	Florida grasshopper sparrow	LE	LE	P
<i>Aphelocoma coerulescens</i>	Florida scrub-jay	LT	LT	C
<i>Aramus guarana</i>	limpkin	N	LS	P
<i>Ardea alba</i>	great egret	N	N	C
<i>Ardea herodias occidentalis</i>	great white heron	N	N	P
<i>Buteo brachyurus</i>	short-tailed hawk	N	N	P
<i>Caracara plancus</i>	crested caracara	LT	LT	C
<i>Charadrius melodus</i>	piping plover	LT	LT	P
<i>Dendroica discolor paludicola</i>	Florida prairie warbler	N	N	P
<i>Egretta caerulea</i>	little blue heron	N	LS	C
<i>Egretta rufescens</i>	reddish egret	N	LS	C
<i>Egretta thula</i>	snowy egret	N	LS	C
<i>Egretta tricolor</i>	tricolored heron	N	LS	C
<i>Elanoides forficatus</i>	swallow-tailed kite	N	N	P
<i>Eudocimus albus</i>	white ibis	N	LS	C
<i>Falco columbarius</i>	merlin	N	N	P
<i>Falco peregrinus</i>	peregrine falcon	LE	LE	P
<i>Falco sparverius paulus</i>	southeastern American kestrel	N	LT	P
<i>Fregata magnificens</i>	magnificent frigatebird	N	N	P
<i>Grus canadensis pratensis</i>	Florida sandhill crane	N	LT	P
<i>Haematopus palliatus</i>	American oystercatcher	N	LS	P
<i>Haliaeetus leucocephalus</i>	bald eagle	LT	LT	C
<i>Ixobrychus exilis</i>	least bittern	N	N	P
<i>Laterallus jamaicensis</i>	black rail	N	N	P

<i>Mycteria americana</i>	wood stork	LE	LE	C
<i>Nyctanassa violacea</i>	yellow-crowned night-heron	N	N	C
<i>Nycticorax nycticorax</i>	black-crowned night-heron	N	N	C
<i>Pandion haliaetus</i>	osprey	N	LS**	C
<i>Pelecanus occidentalis</i>	brown pelican	N	LS	C
<i>Picoides borealis</i>	red-cockaded woodpecker	LE	LT	C
<i>Picoides villosus</i>	hairy woodpecker	N	N	P
<i>Plegadis falcinellus</i>	glossy ibis	N	N	P
<i>Rallus longirostris scottii</i>	Florida clapper rail	N	N	P
<i>Rostrhamus sociabilis plumbeus</i>	snail kite	LE	LE	C
<i>Rynchops niger</i>	black skimmer	N	LS	C
<i>Speotyto cunicularia floridana</i>	Florida burrowing owl	N	LS	P
<i>Sterna antillarum</i>	least tern	N	LT	C
<i>Sterna caspia</i>	Caspian tern	N	N	P
<i>Sterna maxima</i>	royal tern	N	N	C
<i>Sterna sandvicensis</i>	sandwich tern	N	N	C
<i>Vireo altiloquus</i>	black-whiskered vireo	N	N	P
<b>MAMMALS</b>				
<i>Corynorhinus rafinesquii</i>	Rafinesque's big-eared bat	N	N	P
<i>Eubalaena glacialis</i>	black right whale	LE	LE	C
<i>Mustela frenata peninsulæ</i>	Florida long-tailed weasel	N	N	P
<i>Neofiber alleni</i>	round-tailed muskrat	N	N	P
<i>Peromyscus polionotus niveiventris</i>	southeastern beach mouse	LT	LT	C
<i>Podomys floridanus</i>	Florida mouse	N	LS	P
<i>Sciurus niger shermani</i>	Sherman's fox squirrel	N	LS	P
<i>Trichechus manatus</i>	manatee	LE	LE	C
<b>VASCULAR PLANTS</b>				
<i>Asclepias curtissii</i>	Curtiss' milkweed	N	LE	C
<i>Cheiroglossa palmata</i>	hand fern	N	LE	C
<i>Conradina grandiflora</i>	large-flowered rosemary	N	LE	C
<i>Dicerandra immaculata</i>	Lakela's mint	LE	LE	C
<i>Eugenia rhombea</i>	red stopper	N	LE	R
<i>Glandularia maritima</i>	coastal vervain	N	LE	C
<i>Glandularia tampensis</i>	Tampa vervain	N	LE	C
<i>Halophila johnsonii</i>	Johnson's seagrass	PT	N	C
<i>Harrisia simpsonii</i>	Simpson's prickly apple	N	LE	C
<i>Lechea cernua</i>	nodding pinweed	N	LT	C
<i>Peperomia obtusifolia</i>	blunt-leaved peperomia	N	LE	C
<i>Stillingia sylvatica ssp tenuis</i>	queen's delight	N	N	C
<i>Tephrosia angustissima var curtissii</i>	coastal hoary-pea	N	LE	C
<i>Vernonia blodgettii</i>	Blodgett's ironweed	N	N	C
<i>Zephyranthes simpsonii</i>	rain lily	N	LT	C
<b>NATURAL COMMUNITIES</b>				
Beach Dune		N	N	C
Coastal Strand		N	N	C
Floodplain Marsh		N	N	C
Maritime Hammock		N	N	C
Scrub		N	N	C
Shell Mound		N	N	C
<b>OTHER</b>				
Bird rookery		N	N	C
Manatee aggregation site		N	N	C

\*\* See Rank and Status Explanations and Definitions, Special Animal Listings - Federal and State Status

## **County Occurrence Status**

### **Vertebrates and Invertebrates:**

**C = (Confirmed)** Occurrence status derived from a documented record in the FNAI data base.

**P = (Potential)** Occurrence status derived from a reported occurrence for the county or the occurrence lies within the published range of the taxon.

**N = (Nesting)** For sea turtles only; occurrence status derived from documented nesting occurrences.

### **Plants, Natural Communities, and Other:**

**C = (Confirmed)** Occurrence status derived from a documented record in the FNAI data base or from a herbarium spec

**R = (Reported)** Occurrence status derived from published reports.