



February 23, 2022

Steve Feccia
KB Home Orlando, LLC
9102 Southpark Center Loop, #100
Orlando, Florida 32819

Proj: Thompson Grove Site – Howey-in-the-Hills, Lake County, FL
Parcel IDs #23-20-25-0004-000-00800, #24-20-25-0003-000-00600
and #24-20-25-0003-000-00601
Sections 23 and 24, Township 20 South, Range 25 East
(BTC File #125-203)
Re: Environmental Assessment Report

Dear Mr. Feccia,

During February of 2022, Bio-Tech Consulting, Inc. (BTC) conducted an environmental assessment of the approximately 88.85-acre Thompson Grove Site. This site is located in the City of Howey-in-the-Hills, just northeast of the intersection of State Road 19 and County Road 48, within Sections 23 and 24, Township 20 South, Range 25 East; Lake County, Florida (Figures 1, 2 and 3). This 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 and surface water communities; and,
- Determination of environmental permitting constraints.

SOILS

According to the Soil Survey of Lake County, Florida, prepared by the U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS), six (6) soil types exist within the project site (Figure 4). The 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

- **Candler sand, 0 to 5 percent slopes (#8)**
- **Candler sand, 5 to 12 percent slopes (#9)**
- **Arents (#17)**
- **Lake sand, 0 to 5 percent slopes (#21)**
- **Lake sand, 5 to 12 percent slopes (#22)**
- **Oklawaha muck (#32)**

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

Candler sand, 0 to 5 percent slopes (#8) is a nearly level to gently sloping, excessively drained soil found on the rolling uplands of Florida's central ridge. The surface layer of this soil type generally consists of dark gray sand about 7 inches thick. The water table for this soil type is at a depth of more than 120 inches. Permeability is very rapid throughout the profile of this soil type.

Candler sand, 5 to 12 percent slopes (#9) is a sloping to strongly sloping, excessively drained soil found on the rolling uplands of Florida's central ridge. Typically, the surface layer of this soil type consists of dark gray sand about 5 to 6 inches thick. The water table for this soil type is at a depth of more than 120 inches. Permeability is very rapid throughout the profile of this soil type.

Arents (#17) are deeply disturbed soils consisting of loamy soil material that has been mixed, reworked and leveled or shaped by earth-moving equipment. These units are mostly 12 to 60 inches thick. The water table for this soil type is at a depth of 30 to 60 inches except in low-lying areas, where it is at a depth of 10 to 30 inches, and in a few dry areas, where it is at a depth of more than 60 inches.

Lake sand, 0 to 5 percent slopes (#21) is a nearly level to gently sloping, well drained to excessively drained soil. Typically, the surface layer of this soil type consists of dark brown sand about 7 inches thick. The water table for this soil type is at a depth of more than 120 inches. Permeability is very rapid throughout the profile of this soil type.

Lake sand, 5 to 12 percent slopes (#22) is a sloping to strongly sloping, well drained to excessively drained soil. Typically, the surface layer of this soil type consists of dark brown sand about 7 inches thick. The water table for this soil type is at a depth of more than 120 inches. Permeability is very rapid throughout the profile of this soil type.

Oklawaha muck (#32) is a nearly level, very deep, very poorly drained fibrous soils found on floodplains, freshwater marshes, and depressions. The surface layer of these soil types generally consists of very dark brown unrubbed and rubbed muck, sapric material about 9 inches thick. The water table for this soil type is normally at the surface, and the soils are covered shallow water except during extended dry periods, when the water table falls to a depth of about 6 inches. Permeability of this soil type is slow. Slopes are less than 2%.

The Florida Association of Environmental Soil Scientists (FAESS) considers the main component of the Oklawaha muck (#32) soil type associated with the property to be hydric. The FAESS also considers an inclusion within the Oklawaha muck (#32) soil type associated with the property to be hydric. This information can be found in the Hydric Soils of Florida Handbook, Third Edition, March 2000.

LAND USE TYPES/VEGETATIVE COMMUNITIES

The Thompson Grove Site currently supports two (2) land use types/vegetative communities. The land use types/vegetative communities were identified utilizing the Florida Land Use, Cover and Forms Classification System, Level III (FLUCFCS, FDOT, January 2004) (Figure 5). The upland land use type/vegetative community within the subject property consisted of Disturbed Lands (740). The wetland/surface water land use type/vegetative community within the subject property consisted of Mixed Wetland Hardwoods (617). The following provides a brief description of the land use types/vegetative communities identified on the site:

Uplands:

740 - Disturbed Lands

The majority of the site consisted of historic citrus groves that have recently been cleared and this area is most consistent with the Disturbed Lands (740) FLUCFCS classification. Vegetative species identified within this area included citrus trees (*Citrus* sp.), American pokeweed (*Phytolacca americana*), caesarweed (*Urena lobata*), dogfennel (*Eupatorium capillifolium*), common ragweed (*Ambrosia artemisiifolia*), Mexican clover (*Richardia brasiliensis*), lantana (*Lantana camara*), rose natalgrass (*Melinis repens*), muscadine grape (*Vitis rotundifolia*), guineagrass (*Panicum maximum*), and begger ticks (*Bidens alba*).

Wetlands/Surface Waters:

617 - Mixed Wetland Hardwoods

A forested wetland area is located within the eastern portion of the property on the shoreline of Little Lake Harris and would best be classified as Mixed Wetland Hardwoods (617), per the FLUCFCS. Vegetative species observed within this area included cypress (*Taxodium* spp.), cabbage palm (*Sabal palmetto*), sweet gum (*Liquidambar styraciflua*), Carolina willow (*Ludwigia bonariensis*), laurel oak (*Quercus laurifolia*), Chinese tallow (*Triadica sebifera*), wax myrtle (*Myrica cerifera*), Peruvian primrosewillow (*Ludwigia peruviana*), cherry laurel (*Prunus caroliniana*), buttonbush (*Cephalanthus occidentalis*), maidencane (*Panicum hemitomon*), southern shield fern (*Thelypteris kunthii*), marsh pennywort (*Hydrocotyle umbellata*), greenbriar

(*Smilax* spp.), Virginia creeper (*Parthenocissus quinquefolia*), blackberry (*Rhubus* spp.), caesarweed (*Urena lobata*), arrow root (*Maranta arundinacea*), and old world climbing fern (*Lygodium microphyllum*).

All on-site wetland/surface water areas were flagged utilizing orange flagging tape (Figure 6). The limits of these on-site wetlands/surface waters can only be verified through a field review by the pertinent regulatory agencies.

WILDLIFE AND PROTECTED SPECIES

Using 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's) Gopher Tortoise Permitting Guidelines (April 2008 – revised July 2020); an assessment for “listed” floral and faunal species was conducted at the site on February 14, 2021. This assessment, which covered approximately 50% of the project site's developable area, included both direct observations and indirect evidence, such as tracks, burrows, tree markings and vocalizations that 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 (June 2021) that have the potential to occur in Lake County (Table 1). The following is a list of those wildlife species identified during the evaluation of the site:

Reptiles and Amphibians

brown anole (*Norops sagrei*)
curly-tailed lizard (*Leiocephalidae carinatus*)
eastern racer (*Coluber constrictor*)
gopher tortoise (*Gopherus polyphemus*)
green anole (*Anolis carolinensis*)

Birds

American Crow (*Corvus brachyrhynchos*)
Black Vulture (*Coragyps atratus*)
Northern Cardinal (*Cardinalis cardinalis*)
Red-shouldered Hawk (*Buteo lineatus*)

Mammals

eastern cottontail (*Sylvilagus floridanus*)
eastern gray squirrel (*Sciurus carolinensis*)
nine-banded armadillo (*Dasybus novemcinctus*)

One (1) of the above wildlife species is identified in the FFWCC's Official Lists - Florida's Endangered Species, Threatened Species and Species of Special Concern (June 2021). This species is the gopher tortoise (*Gopherus polyphemus*) which is currently listed as "Threatened" by the State. 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

Gopher tortoises (*Gopherus polyphemus*) have been identified within portions of the upland areas on-site. Currently the gopher tortoise (*Gopherus polyphemus*) is classified as a "Category 2 Candidate Species" by USFWS, and as of September 2007, is now classified as "Threatened" by FFWCC, and as "Threatened" by FCREPA. 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 xeric pine-oak hammock, scrub, pine flatwoods, pastures and abandoned citrus groves. Several other protected species known to occur in Some County have a possibility of occurring in this area, as they are gopher tortoise commensal species. These species include the eastern indigo snake (*Drymarchon corais couperi*), Florida mouse (*Peromyscus floridanus*), and the gopher frog (*Rana capito*). However, none of these species were observed during the surveys conducted.

The subject site was surveyed for the existence of gopher tortoises through the use of pedestrian transects. This survey covered approximately 50% of the suitable habitat present within the subject site boundaries and those properties within 25-feet. Two (2) potentially occupied gopher tortoise burrows were observed and recorded using GPS technology (Figure 7). By extrapolating the burrow count to cover 100% of the suitable habitat, it is estimated that up to four (4) burrows may be present on-site. Based on four (4) potentially occupied burrows, it is estimated that all four (4) burrows may be occupied by a gopher tortoise. This is based on the small number of burrows on-site which can lead to a 100% occupancy rate on properties with ten (10) burrows or less. Therefore, for the purpose of estimating costs associated with the subject project, as many as four (4) gopher tortoises are estimated to occupy these burrows.

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.

Independent to the costs associated with gopher tortoise relocations (i.e., recipient site fees, excavation, silt fencing, transportation costs, etc.), FFWCC will be assessing a one-time mitigation fee for all on-site gopher tortoises that are captured and relocated. Based on the estimated five (5) gopher tortoises, a one-time mitigation fee of \$220.00 (10 or fewer gopher tortoises) would be required to be paid to FFWCC prior to obtaining any permit (i.e., off-site relocation permit). This FFWCC mitigation fee requirement began after April 2009.

Eastern Indigo Snake (*Drymarchon couperi*)

Federally Listed as “Threatened” by USFWS

The indigo snake (*Drymarchon couperi*) is a federally threatened species. The basis for this listing was a result of 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 and primarily occurs in sandhill habitat in northern Florida and southern Georgia.

No evidence of eastern indigo snakes was observed within the site during the wildlife survey conducted by BTC. However, the site contains gopher tortoise burrows and at least twenty-five (25) acres of suitable upland habitat to support this species. In addition, based on the USFWS’s August 2017 Consultation Key for the Eastern Indigo Snake, since the development of the site will likely result in the removal of greater than twenty-five (25) acres of potential eastern indigo snake habitat, a key determination would likely result in a finding of “may affect.” As such, based on the required permit conditions that would allow the above finding, a survey specific to eastern indigo snakes may be required. The survey can be accomplished from October 1st thru April 30 for a minimum of five (5) surveys with 2 days of optimal weather (overnight low temperature above 60° F).

At a minimum, the Corps permit will be conditioned for the use of the USFWS’s “Standard Protection Measures for the Eastern Indigo Snake.” It will also be conditioned “such that all gopher tortoise burrows, active or inactive, will be excavated prior to site manipulation in the vicinity of the burrow. If an eastern indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity.” Any permit will also be conditioned “such that holes, cavities, and snake refugia other than gopher tortoise burrows will be inspected each morning before planned site manipulation of a particular area, and, if occupied by an eastern indigo snake, no work will commence until the snake has vacated the vicinity of proposed work.” As long as the above mentioned “Standard Protection Measures” are adhered to, the development activities associated with the site would result in a key determination of “may affect but not likely to adversely affect” (NLAA) the eastern indigo snake.

It should also be noted that eastern indigo snake mitigation may be purchased in lieu of conducting the indigo snake survey. Additionally, during site clearing, the USFWS may also require following the recommendations in the Service's Standard Protection Measures for the Eastern Indigo Snake which may include posting eastern indigo snake identification signage and educational material at the site.

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 (Florida Administrative Code 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 review for any FFWCC recorded Bald Eagle nests and Audubon Florida EagleWatch recorded Bald Eagle nests on or within the vicinity of the site. This review revealed that there are no Bald Eagle nests (current 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 (Figure 8 and Audubon EagleWatch). 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 (Figure 9). Generally, these consultation areas only become an issue if USFWS consultation is required, which is typically associated with federal permitting under Section 10 and Section 404 of the Clean Water Act (CWA). 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 Thompson Grove Site is located within three (3) USFWS Consultation Areas which include the Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*), Florida Scrub-jay (*Aphelocoma coerulescens*) and the sand skink (*Neoseps reynoldsi*). The following provides a brief description of these respective species, its habitat and the potential for additional review:

Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*)

Federally Listed as “Endangered” by USFWS

The subject site falls within the USFWS Consultation Area for the 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 Everglade Snail Kites were observed within the project site during the wildlife survey conducted by BTC. As little suitable habitat exists within the limits of the site, it is not anticipated that a formal survey would be required by the USFWS or another agency to determine if any Everglade Snail Kites 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 ft.) tall, covering 50 to 90 % the area; bare ground or sparse vegetation less than 15 cm (6 in) tall covering 10 to 50% of the area; and scattered trees with no more than 20% canopy cover (Fitzpatrick et al. 1991).

No Florida Scrub-jays were observed on the subject site during the cursory survey conducted by BTC. As little suitable habitat exists within the limits of the site, it is not anticipated that a formal survey would be required by the USFWS or another agency to determine if any Florida Scrub-jays utilize any portions of the site.

Sand Skink (*Neoseps reynoldsi*)

Federally Listed as “Threatened” by USFWS

The subject site falls within the Sand Skink Consultation Area for the USFWS. The sand skink is listed as “Threatened” by the USFWS. The sand skink exists in areas vegetated with sand pine (*Pinus clausa*) - rosemary (*Ceratiola ericoides*) scrub or a long leaf pine (*Pinus palustris*) - turkey oak (*Quercus laevis*) association. Habitat destruction is the primary threat to this species’ survival. Citrus groves, residential, commercial and recreational facilities have depleted the xeric upland habitat of the sand skink. All properties within the limits of this consultation area that are located at elevations greater than 80’ and contain suitable (moderate-to-well drained soils) soils are believed by USFWS to be areas of potential sand skink habitat.

The results of the wildlife survey showed no evidence (i.e., sinusoidal tracks) that indicate the presence of the sand skink. However, the site is within the USFWS Sand Skink Consultation Area, the majority of the site is above the 80-foot above sea level requirement and the majority of the uplands within the site contain appropriate soil types for the sand skink. Due to these factors, it is advisable to conduct a formal sand skink survey, as it may be required by federal, state, and/or local government permitting agencies. The survey will need to be conducted between March 1 and May 15, in which 2’ x 2’ boards will be placed in the open sandy areas at a density of approximately forty (40) boards per acre and checked once per week for four (4) consecutive weeks. The main objective of the survey is to determine whether sand skinks inhabit the subject site.

WETLAND JURISDICTION AND PERMITTING

The Thompson Grove Site contains wetlands/surface waters within the eastern portion of the property. All on-site wetland/surface water areas were flagged utilizing orange flagging tape (see Figure 6). The limits of these on-site wetlands/surface waters can only be verified through a field review by the pertinent regulatory agencies. Development of the subject property will require permitting with the St. John's River Water Management District (SJRWMD) and either the Florida Department of Environmental Protection (FDEP) or the United States Army Corps of Engineers (USACE). The site resides within the Southern Ocklawaha River drainage basin.

St. Johns River Water Management District (SJRWMD)

The Environmental Resource Permit (ERP) program regulates activities involving the alteration of surface water flows. This includes new activities in uplands that generate stormwater runoff from upland construction, as well as dredging and filling in wetlands and other surface waters. An ERP will be required through the SJRWMD for all wetland and/or other surface water impacts (both direct and secondary) in association with any development activity. Impacts to the project's wetland and other surface water communities would be permittable by SJRWMD 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 ERP process.

Florida Department of Environmental Protection (FDEP)

State 404 Program

Section 404 of the Clean Water Act (CWA) requires that federal authorization be obtained for all activities that propose the placement of dredged or fill material in "Waters of the United States" (WOTUS). The regulatory program established by CWA Section 404 is jointly implemented by the United States Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE) and applies to regulated activities associated with development, water resource projects (dams, levees, etc.), infrastructure, and mining. Guidelines that outline the conditions under which the implementing agency may, or may not, issue a permit are described in CWA Section 404(b)(1) Guidelines. Included in those guidelines is the mandate that discharges of dredged or fill material into WOTUS are not permissible if (a) a practicable alternative exists that is less damaging to the aquatic environment, or (2) the nation's waters would be significantly degraded. Under that mandate, in most cases, the applicant's burden to justify impacts to jurisdictional wetlands includes an alternative sites analysis, in which the applicant is required to justify that the subject site is the most viable in the vicinity for the project, and will result in lesser environmental impacts compared to alternative site locations. The applicant is then required to demonstrate on-site avoidance and minimization of impacts, to the maximum practicable extent, while allowing for the project purpose.

CWA Section 404(b)(1) Guidelines also define conditions under which a State may assume the permitting authority under CWA Section 404. In December of 2020, the Florida Department of Environmental Protection (FDEP) assumed federal permitting authority for most wetland and surface water resources regulated exclusively under Section 404 of the Clean Water Act. The State 404 Program is a separate program and process from the existing State ERP Program described in the SJRWMD section above, and applies only to those waters not regulated under other federal legislation. Wetlands and surface water resources associated with tidal waters or traditional navigable waters are regulated under Section 10 of the Rivers and Harbors Act. For those waters (“retained waters”), including wetlands and/or other surface waters that fall within the 300-foot guideline established from the ordinary high-water mark or mean high tide line of the Section 10 waters, the USACE will retain federal permitting authority. It should be noted that regulated activities proposed in waters assumed by the State 404 Program are still required to meet all standards mandated under the CWA Section 404(b)(1) guidelines.

With respect to the subject property, as the on-site wetlands and surface waters are associated with Section 10 waters, the federal permitting authority will remain with the USACE. Currently, FDEP considers all wetland and/or surface water resources to be federally jurisdictional unless the applicant provides documentation proving otherwise.

United States Army Corps of Engineers (USACE)

The United States Army Corps of Engineers (USACE) will have jurisdiction over work within wetlands and surface waters within the subject property as these are Section 10 waters. The USACE does not have jurisdiction over upland development. If the site plan includes impacts to wetlands and/or surface waters that USACE has jurisdiction over then this site will be required to apply for a permit through the USACE. Impacts to the project’s wetland and/or other surface water communities that USACE has jurisdiction over would be permissible by USACE 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.

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 on Table 1 (attached), 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,

A handwritten signature in black ink, appearing to read 'Olivia Hecimovich', written in a cursive style.

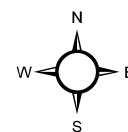
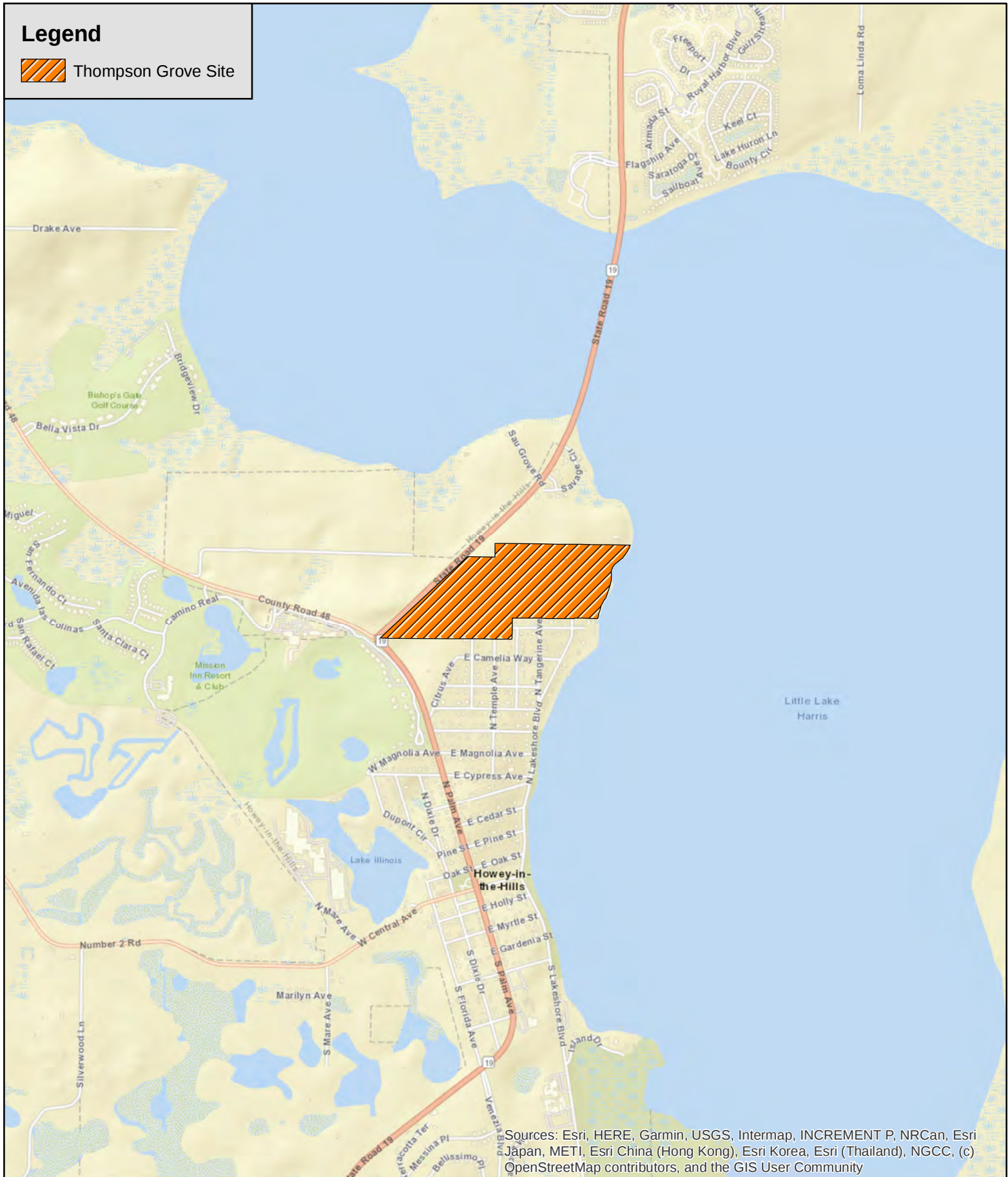
Olivia Hecimovich
Field Biologist

attachments

Legend



Thompson Grove Site

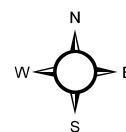


Legend

 Thompson Grove Site (± 88.85 Ac.)

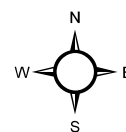


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Legend

 Thompson Grove Site

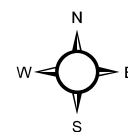


Legend

 Thompson Grove Site

Lake County Soils

-  8: Candler sand, 0 to 5 percent slopes
-  9: Candler sand, 5 to 12 percent slopes
-  17: Arents
-  21: Lake sand, 0 to 5 percent slopes
-  22: Lake sand, 5 to 12 percent slopes
-  32: Oklawaha muck



Legend

 Thompson Grove Site

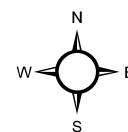
FLUCFCS

 617 : Mixed Wetland Hardwoods

 740 : Disturbed Lands

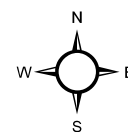
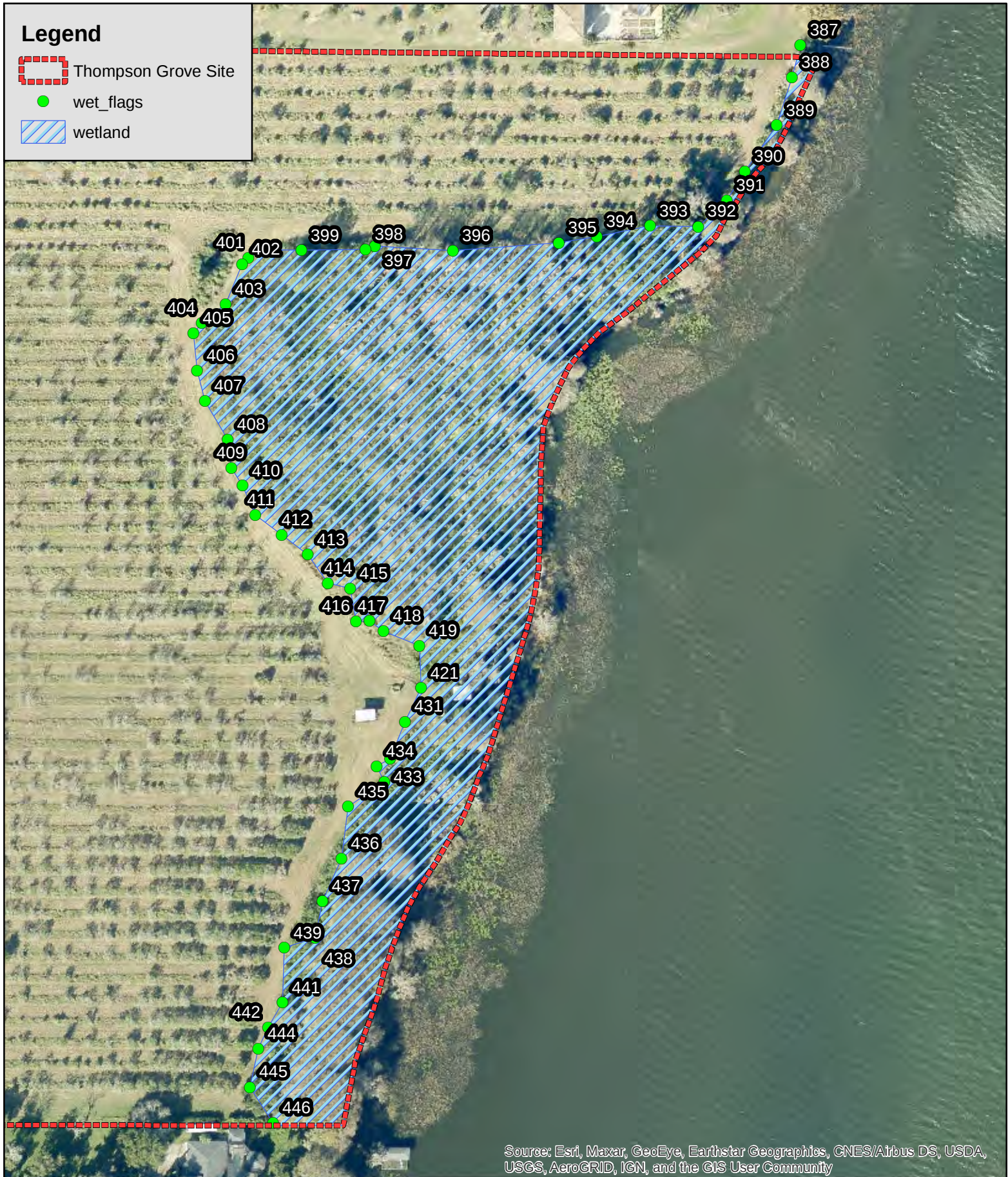


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Legend

-  Thompson Grove Site
-  wet_flags
-  wetland



Legend

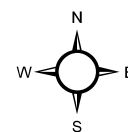


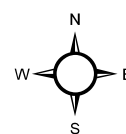
Thompson Grove Site

GT Burrows - Activity Class



PO





Legend



Thompson Grove Site



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

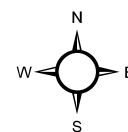


Table 1 :	Potentially Occuring Listed Wildlife and Plant Species in Lake County, Florida		
Scientific Name	Common Name	Federal Status	State Status
FISH			
<i>Pteronotropis welaka</i>	bluenose shiner	N	ST
REPTILES			
<i>Alligator mississippiensis</i>	American alligator	SAT	FT(S/A)
<i>Drymarchon corais couperi</i>	eastern indigo snake	LT	FT
<i>Gopherus polyphemus</i>	gopher tortoise	C	ST
<i>Lampropeltis extenuata</i>	short-tailed snake	N	ST
<i>Pituophis melanoleucus mugitus</i>	Florida pine snake	N	ST
<i>Plestiodon reynoldsi</i>	sand skink	LT	FT
BIRDS			
<i>Aphelocoma coerulescens</i>	Florida scrub-jay	LT	FT
<i>Athene cunicularia floridana</i>	Florida burrowing owl	N	ST
<i>Egretta caerulea</i>	little blue heron	N	ST
<i>Egretta tricolor</i>	tricolored heron	N	ST
<i>Falco sparverius paulus</i>	southeastern American kestrel	N	ST
<i>Grus canadensis pratensis</i>	Florida sandhill crane	N	ST
<i>Haliaeetus leucocephalus</i>	bald eagle	N	**
<i>Mycteria americana</i>	wood stork	LT	FT
<i>Pandion haliaetus</i>	osprey	N	SSC*
<i>Picoides borealis</i>	red-cockaded woodpecker	LE	FE
<i>Sterna antillarum</i>	least tern	N	ST
MAMMALS			
<i>Sciurus niger shermani</i>	Sherman's fox squirrel	N	SSC
<i>Trichechus manatus</i>	West Indian manatee	LE	FE
VASCULAR PLANTS			
<i>Bonamia grandiflora</i>	Florida bonamia	LT	E
<i>Carex chapmanii</i>	Chapman's Sedge	N	T
<i>Centrosema arenicola</i>	Sand Butterfly Pea	N	E
<i>Chionanthus pygmaeus</i>	pygmy fringe tree	LE	E
<i>Clitoria fragrans</i>	scrub pigeon-wing	LT	E
<i>Coelorachis tuberculosa</i>	Piedmont Jointgrass	N	T
<i>Cucurbita okeechobeensis</i>	Okeechobee Gourd	LE	E
<i>Drosera intermedia</i>	spoon-leaved sundew	N	T
<i>Eriogonum longifolium</i> var <i>gnaphalifolium</i>	scrub buckwheat	LT	E
<i>Hartwrightia floridana</i>	hartwrightia	N	T
<i>Hasteola robertiorum</i>	Florida hasteola	N	E
<i>Illicium parviflorum</i>	star anise	N	E
<i>Monotropa hypopithys</i>	pinemap	N	E
<i>Najas filifolia</i>	narrowleaf naiad	N	T
<i>Nemastylis floridana</i>	Celestial Lily	N	E
<i>Nolina brittoniana</i>	Britton's beargrass	LE	E
<i>Panicum abscissum</i>	Cutthroat Grass	N	E
<i>Paronychia chartacea</i> ssp <i>chartacea</i>	paper-like nailwort	LT	E
<i>Polygala lewtonii</i>	Lewton's polygala	LE	E
<i>Prunus geniculata</i>	scrub plum	LE	E

<i>Pteroglossaspis ecristata</i>	Giant Orchid	N	T
<i>Salix floridana</i>	Florida willow	N	E
<i>Sideroxylon alachuense</i>	Silver Buckthorn	N	E
<i>Stylisma abdita</i>	scrub stylisma	N	E
<i>Vicia ocalensis</i>	ocala vetch	N	E
<i>Warea amplexifolia</i>	clasping warea	LE	E
<i>Warea carteri</i>	Carter's warea	LE	E

FEDERAL LEGAL STATUS

LE-Endangered: species in danger of extinction throughout all or a significant portion of its range.

LT-Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.

SAT-Endangered due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.

C-Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.

XN-Non-essential experimental population.

N-Not currently listed, nor currently being considered for listing as Endangered or Threatened.

STATE LEGAL STATUS - ANIMALS

FE- Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service

FT- Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service

FXN- Federal listed as an experimental population in Florida

FT(S/A)- Federal Threatened due to similarity of appearance

ST- State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.

SSC-Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)

N-Not currently listed, nor currently being considered for listing.

**** 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)**

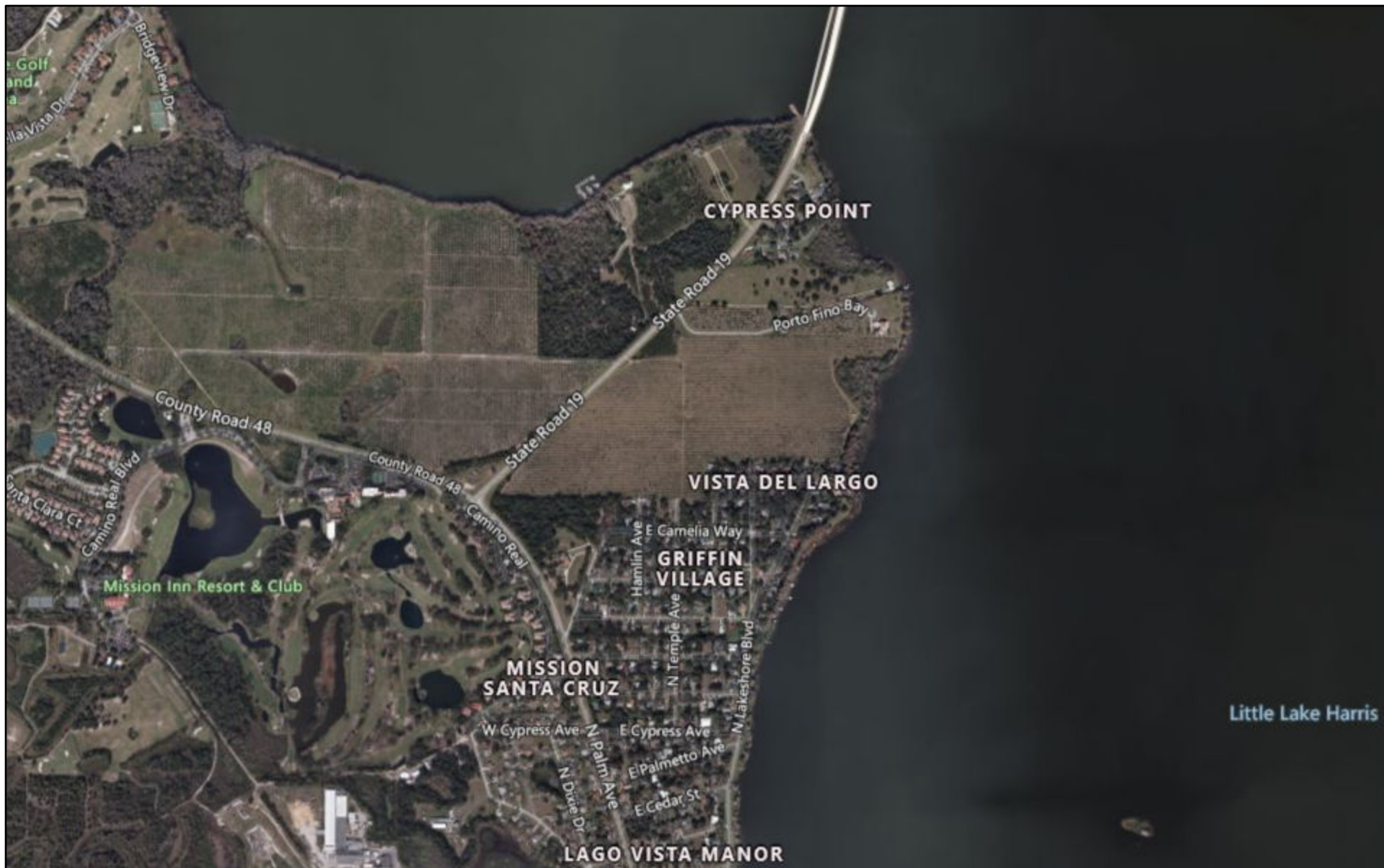
STATE LEGAL STATUS - PLANTS

E-Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.

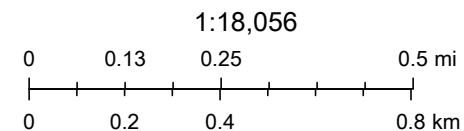
T-Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.

N-Not currently listed, nor currently being considered for listing.

EagleWatch Map



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