

Orlando [Headquarters]
3025 East South Street
Orlando, FL 32803

Cocoa
400 High Point Drive
Suite 400
Cocoa, FL 32926

Jacksonville
11235 St. Johns Industrial Pkwy N
Suite 2
Jacksonville, FL 32246

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

Lantana
445 West Lantana Road
Suite 5
Lantana, FL 33462

Tallahassee
2560-1 Barrington Circle
Tallahassee, FL 32308

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

Denver
10701 Melody Drive
Suite 304
Northglenn, CO 80234

Raleigh
4338 Bland Road
Raleigh, NC 27609

Charlotte
5105 Monroe Road
Suite A
Charlotte, NC 28205

East Syracuse
6700 Old Collamer Road
Suite 112
East Syracuse, NY 13057

Bismarck
4501 Coleman Street
Suite 103
Bismarck, ND 58503

Austin
3801 N Capital of TX Highway
Suite E-240
Austin, TX 78746

Midland
5114 West County Road 12
Midland, TX 79706

San Antonio
7700 Broadway Street
Suite 104
San Antonio, TX 78209

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



Bio-Tech Consulting

Environmental and Permitting

June 24, 2025

Scott Harp, P.E.
Halff
902 North Sinclair Avenue
Tavares, Florida 34778

**Proj: Watermark – Howey-in-the-Hills, Lake County, Florida
Sections 35 and 35, Township 20 South, Range 25 East and
Sections 1 and 2, Township 21 South, Range 25 East
(BTC File #583-48)**

Re: Environmental Assessment/Site Constraints Analysis

Dear Mr. Harp:

The purpose of this document is to provide the St. Johns River Water Management District (SJRWMD) with the approximately 130.54-acre Watermark project site. This site is located in the City of Howey-in-the-Hills, just east of the intersection of State Road 19 and East Revels Road, within Sections 35 and 35, Township 20 South, Range 25 East and Sections 1 and 2, Township 21 South, Range 25 East; Lake County, Florida (**Figures 1, 2 and 3**). Bio-Tech Consulting, Inc. (BTC) conducted an environmental assessment of the Watermark project site in July of 2021 and March of 2024. 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 communities; and,**
- **Site constraints analysis.**

SOILS

According to the Soil Survey of Lake County, Florida, prepared by the U.S. Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS), eight (8) soil types exist within the project site (**Figure 4**). The soil types include the following:

- **Apopka sand, 0 to 5 percent slopes (#5)**
- **Apopka sand, 5 to 12 percent slopes (#6)**
- **Candler sand, 0 to 5 percent slopes (#8)**
- **Candler sand, 5 to 12 percent slopes (#9)**
- **Arents (#17)**
- **Myakka-Myakka, wet, sands, 0 to 2 percent slopes (#28)**
- **Tavares sand, 0 to 5 percent slopes (#45)**
- **Borrow Pits (#50)**

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

Apopka sand, 0 to 5 percent slopes (#5) is a nearly level to gently sloping, well drained sandy soil that has a sandy clay loam subsoil at a depth of about 55 inches. Typically, the surface layer of this soil type is dark gray sand about 6 inches thick. The water table for this soil type is at a depth of more than 84 inches. Permeability of this soil type is rapid in the sandy surface and subsurface layers and moderate or moderately rapid in the subsoil.

Apopka sand, 5 to 12 percent slopes (#6) is a sloping to strongly sloping, well drained sandy soil. Typically, the surface layer of this soil type is dark gray sand about 6 inches thick. The water table for this soil type is at a depth of more than 84 inches. Permeability of this soil type is rapid in the sandy surface and subsurface layers and moderate or moderately rapid in the subsoil.

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.

Myakka-Myakka, wet, sands, 0 to 2 percent slopes (#28) is a nearly level, poorly drained hydric soil that has a layer stained by organic material at a depth of less than 30 inches. The water table is normally at a depth of 10 to 40 inches during extended dry seasons. The surface and subsurface layers and the layer at a depth of 56 to 85 inches have rapid permeability, low water available water capacity, and very low natural fertility.

Tavares sand, 0 to 5 percent slopes (#45) is a nearly level to gently sloping soil, moderately well drained soil. It has a very dark grayish-brown sandy surface layer approximately 7 inches thick. Below this layer are 4 levels of sand beginning at 7 inches, 25 inches, 34 inches, and 61 inches. The water table for this soil type is at a depth of 40 to 60 inches for more than 6 months out of the year and below 60 inches during dry periods. This soil type is rapidly permeable throughout.

Borrow Pits (#50) are open excavations from which soil and shell fragments have been removed for use as fill material when constructing roads and streets and for building site development.

The Florida Association of Environmental Soil Scientists (FAESS) considers inclusions present within the Myakka-Myakka, wet, sands, 0 to 2 percent slopes (#2) and the Borrow Pits (#50) soil types associated with the subject site 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 Watermark project site currently supports seven (7) 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 types/vegetative communities within the subject property are classified as Open Land (190), Citrus Groves (221), Abandoned Groves (224), Hardwood – Conifer Mixed (434) and Mixed Hardwoods (438). The wetland/surface water land use types/vegetative communities within the subject property are classified as Lakes, less than 10 acres (524) and Vegetated Non-Forested Wetlands (640). The following provides a brief description of the land use types/vegetative communities identified on the site:

Uplands:

190 Open Land

The southeastern and northwestern portions of the property are most consistent with the Open Land (190) FLUCFCS classification. Vegetative species identified within this land use type include scattered live oak (*Quercus virginiana*), caesarweed (*Urena lobata*), dogfennel

(*Eupatorium capillifolium*), common ragweed (*Ambrosia artemisiifolia*), Mexican clover (*Richardia brasiliensis*), shrub verbena (*Lantana camara*), guineagrass (*Panicum maximum*), and begger ticks (*Bidens alba*).

221 Citrus Groves

The western portion of the property contained well-maintained citrus groves that appeared active and this land use type/vegetative community is most consistent with the Citrus Groves (221) FLUCFCS classification. Vegetative species identified within this land use type include *Citrus* spp., bahiagrass (*Paspalum notatum*), common ragweed (*Ambrosia artemisiifolia*), dogfennel (*Eupatorium capillifolium*), and guinea grass (*Megathyrsus maximus*).

224 Abandoned Groves

The majority of the site and remainder of the citrus groves on the property are not well maintained and appear inactive and this land use type/vegetative community is most consistent with Abandoned Groves (224) FLUCFCS classification. Vegetative species identified within this land use type include *Citrus* spp., bahiagrass (*Paspalum notatum*), common ragweed (*Ambrosia artemisiifolia*), dogfennel (*Eupatorium capillifolium*), guineagrass (*Megathyrsus maximus*), passionflower (*Passiflora* spp.), prairie cottonweed (*Froelichia floridana*), yellow buttons (*Balduina angustifolia*), and shrub verbena (*Lantana camera*).

434 Hardwood – Conifer Mixed

The northeastern portion of the site contained a small forested area that is best described as Hardwood – Conifer Mixed (434), per the FLUCFCS. Vegetative species identified within this land use type include live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), slash pine (*Pinus elliottii*), cabbage palm (*Sabal palmetto*), American beautyberry (*Callicarpa americana*), saw palmetto (*Serenoa repens*), bracken fern (*Pteridium aquilinum*), air-potato (*Dioscorea bulbifera*), caesarweed (*Urena lobata*), dogfennel (*Eupatorium capillifolium*), guineagrass (*Panicum maximum*), muscadine (*Vitis rotundifolia*), blackberry (*Rubus cuneifolius*), and common ragweed (*Ambrosia artemisiifolia*).

438 Mixed Hardwoods

The site contained a mixed hardwoods community type located along its eastern boundary that is most consistent with the Mixed Hardwoods (438) FLUCFCS classification. Vegetative species identified within this community type included live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), black cherry tree (*Prunus serotina*), cabbage palm (*Sabal palmetto*), chinaberry (*Melia*

azedarach), Brazilian pepper (*Schinus terebinthifolius*), saw palmetto (*Serenoa repens*), beggar-ticks (*Bidens alba*), lantana (*Lantana strigocamara*), caesarweed (*Urena lobata*), rose natalgrass (*Melinis repens*), common ragweed (*Ambrosia artemisiifolia*), muscadine grapevine (*Vitis rotundifolia*), and greenbrier (*Smilax* spp.).

Wetlands/Surface Waters:

524 Lakes, less than 10 acres

The south-central portion of the site included a portion of unnamed wetland/surface water that extends off-site to the south. This area is most consistent with the Lakes, less than 10 acres (524) FLUCFCS classification. Vegetative species identified within this community type included Carolina willow (*Salix caroliniana*), Peruvian primrosewillow (*Ludwigia peruviana*), maidencane (*Panicum hemitomon*), marsh pennywort (*Hydrocotyle umbellata*), spadeleaf (*Centella asiatica*), white fragrant waterlily (*Nymphaea odorata*), Brazilian pepper (*Schinus terebinthifolius*), groundsel tree (*Baccharis halimifolia*), wax myrtle (*Myrica cerifera*), spikerush (*Eleocharis* spp.), soft rush (*Juncus effusus*), beaksedge (*Rhynchospora* spp.), blackberry (*Rubus* spp.), broomsedge (*Andropogon virginicus*), caesarweed (*Urena lobata*), and common ragweed (*Ambrosia artemisiifolia*).

640 Vegetated Non-Forested Wetlands

The northeastern portion of the site also contained a small portion of a larger wetland system that is most consistent with the Vegetated Non-Forested Wetlands (640) FLUCFCS classification. Vegetative species identified within this community type include water oak (*Quercus nigra*), swamp bay (*Persea palustris*), air potato (*Dioscorea bulbifera*), greenbrier vine (*Smilax* spp.), swamp fern (*Blechnum serrulatum*), spikerush (*Eleocharis* spp.), Peruvian primrosewillow (*Ludwigia peruviana*), muscadine vine (*Vitis rotundifolia*), and blackberry (*Rubus cuneifolius*).

All on-site wetland/surface water areas were flagged utilizing pink BTC flagging tape (**Figure 8**). 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 (FWC's) Gopher Tortoise Permitting Guidelines (April 2023); an assessment for listed floral and faunal species was conducted at the site on July 26, 2021 and March 4, 2024 (**Figure 6A**). This assessment 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 FWC's Official Lists - Florida's Endangered and Threatened Species (December 2022) and listed species that have the potential to occur in Lake County (**see attached Table 1**).

No plant species listed as "Threatened" or "Endangered" by either The Florida Department of Agriculture and Consumer Services (FDACS) or U.S. Fish and Wildlife Service (USFWS) were identified on the site during the assessments conducted. One (1) species identified on the site is listed as commercially exploited by the FDACS. The harvesting of this species, saw palmetto (*Serenoa repens*), for commercial gain is prohibited. The FDACS protection of listed plant species centers on preventing the illegal collection, transport and sale of the listed plants. The FDACS will issue permits for collection purposes. There are no regulations that prohibits the destruction of state-listed flora species as a result of proposed development activities.

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

Reptiles and Amphibians

brown anole (*Norops sagrei*)
coachwhip (*Masticophis flagellum*)
curly-tailed lizard (*Leiocephalidae carinatus*)
eastern black racer (*Coluber constrictor*)
gopher tortoise (*Gopherus polyphemus*)
green anole (*Anolis carolinensis*)
six-lined racerunner (*Cnemidophorus sexlineatus sexlineatus*)

Birds

American Crow (*Corvus brachyrhynchos*)
Black Vulture (*Coragyps atratus*)
Blue Jay (*Cyanocitta cristata*)
Common Ground Dove (*Columbina passerine*)
Common Yellowthroat (*Geothlypis trichas*)

Birds (cont)

Great Egret (*Ardea alba*)
Northern Mockingbird (*Mimus polyglottos*)
Red-bellied Woodpecker (*Melanerpes carolinus*)
Red-shouldered Hawk (*Buteo lineatus*)

Mammals

coyote (*Canis latrans*)
eastern cottontail (*Sylvilagus floridanus*)
eastern gray squirrel (*Sciurus carolinensis*)
nine-banded armadillo (*Dasypus novemcinctus*)
southeastern pocket gopher (*Geomys pinetis*)

One (1) of the above wildlife species, the gopher tortoise (*Gopherus polyphemus*), is identified in the FWC's Official Lists - Florida's Endangered and Threatened Species (December 2022).

Observed Wildlife

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 USFWS, and as of September 2007 is now classified as "Threatened" by FWC, and as "Threatened" by Florida Committee on Rare and Endangered Plants and Animals (FCREPA). The basis of the "Threatened" classification by the FWC 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 known to occur in Lake 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 survey conducted.

During the site visits, BTC observed gopher tortoise burrows on-site. The subject site was surveyed for the presence of gopher tortoises through the use of pedestrian transects. The survey covered approximately 100% of the suitable habitat present within the subject site boundaries. Based on the survey results, a total of thirty-eight (38) Potentially Occupied gopher tortoise burrows (PO-active/inactive) were observed and recorded using a handheld GPS (**Figure 6A**). Utilizing the factored occupation rate of 0.614 (*Auffenburg-Franz*), there is an estimated population of twenty-four (24) tortoises on site.

The FFWCC provides three (3) options for developers that have gopher tortoises on their property. These options include: 1) avoidance (i.e., maintain at least a 25-foot distance from construction activities), 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 commencing.

If relocation efforts cannot be completed within 90 days of a formal gopher tortoise survey, FFWCC requires an additional survey to be conducted.

Potential Wildlife

The wildlife surveys conducted within the subject site boundaries do not preclude the potential for any listed species, currently or in the future. The following listed species were not observed on-site, but have the potential to occur: Bald Eagle and Eastern Indigo Snake.

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 FWC'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 FWC'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 FWC adopted a new Bald Eagle Management Plan that was written to closely follow the federal guidelines. In November of 2017, the FWC 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 (FWC) for the take of Bald Eagles or their nests in Florida was eliminated following revisions to F.A.C. 68A-16.002. 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 of FWC's database (2015-2016 Nesting Season) and Audubon's Eagle Watch program database (2024 Nesting Season) for recorded Bald Eagle nests within the surrounding 660 feet of the subject site (**Figure 6B**). This review identified no Bald Eagle nests within 660 feet of the subject site boundaries. Thus, no developmental constraints are expected with respect to Bald Eagle nests unless a new nest is found.

Eastern Indigo Snake (*Drymarchon couperi*)

Federally Listed as "Threatened" by USFWS

The Eastern 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 were observed within the site during the wildlife survey conducted by BTC. Based on the field assessment, this site will impact less than 25 acres of xeric habitat, however, it will potentially impact more than 25 active/inactive gopher tortoise burrows. Using the USFWS's August 13, 2013 Consultation Key for the Eastern indigo snake, a key determination would result in a finding of "may affect".

During the Environmental Resource Permit (ERP), State 404 or U.S. Army Corps of Engineers (USACOE) Dredge and Fill permit review process, the USFWS may determine that an Eastern indigo snake survey is required during the review of the project. The survey can be accomplished from October 1st thru April 30th for a minimum of five (5) surveys with 2 days of optimal weather (overnight low temperature above 60° F). It should also be noted that eastern indigo snake mitigation may be purchased in lieu of conducting the Eastern indigo snake survey. A FDEP 404 or USACOE Permit will likely require the following of the Service's Standard Protection Measures for the Eastern indigo snake which will include, but not limited to, posting Eastern indigo snake identification signage and educational material at the site, inspecting on-site holes and other refugia, as well as stopping construction to allow any Eastern indigo snake to safely vacate the project site. In addition, a FWC Conservation Permit to relocate Gopher tortoises will also contain permit conditions relating to the safety of indigo snakes and require that any encountered snakes be allowed to leave the property unharmed during the gopher tortoise relocation and during the development construction.

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 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 Simpson Property is located within three (3) USFWS Consultation Areas which included 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 the 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 cursory wildlife survey conducted by BTC. As no 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

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 % of 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).

Florida Scrub-Jays are most abundant in open, oak-dominated scrub communities of the interior and Atlantic coast sand ridges of the Peninsula. Florida Scrub-Jay habitat is broken down into three (3) types. These habitat types are the following:

- TYPE I HABITAT. Any upland plant community in which the percent cover of the substrate by scrub oak species is 15% or more.
- TYPE II HABITAT. Any plant community not meeting the definition of Type I habitat, in which one or more scrub oak species is represented.
- TYPE III HABITAT. Any upland or seasonally dry wetland within ¼ mile of any designated as Type I or Type II habitat.

In most cases, the Type I habitat is recognized as xeric oak scrub, scrubby pine flatwoods, scrubby coastal strand, or sand pine scrub. Usual classification schemes are not as useful in identifying or predicting habitat type; the presence of scrub oaks is the key indicator. The third habitat type includes many different plant communities where scrub oak species are not represented, but that are nearby or adjacent to Type I or Type II habitat. The subject site contains potential Type I and Type II Habitat based on the apparent sand pine scrub community that is present on-site and adjacent to the subject site to the west and north.

No Scrub-Jays were observed on the subject site during the cursory wildlife survey conducted by BTC. However, due to historic observations of this species within surrounding areas, it is likely that a formal Scrub-Jay survey will be required as confirmation to the regulatory agencies that this species is not utilizing the property. Surveys should be conducted during 1) Spring (March), 2) Fall (September and October) and 3) Mid-summer (July).

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 entire 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.

Based on the above, both a cursory sand skink survey (2021) and a formal sand skink survey (2024) have been conducted across those portions of the property that would provide potential habitat for this species. Accordingly, a Habitat Conservation Plan (HCP) application has been submitted to the USFWS and is currently under review.

SITE PLAN ANALYSIS

The extent of the wetlands/surface waters existing within the Watermark project site have been field delineated by BTC in accordance with local, state, and federal guidelines. At this time neither the St. Johns River Water Management District (SJRWMD) nor the US Army Corps of Engineers (USACE) have reviewed the project’s wetland/surface water limits. The on-site wetlands/surface waters are located within the Souther Ocklawaha River drainage basin (**Figure 9**).

Based on the site plan provided by Halff for the Watermark project site, the total area of wetlands/surface waters that exist within the limits of the subject project is approximately 1.16 acres (W-1 = ±0.35 ac; SW-1 = ±0.81 ac). As indicated on the submitted construction plans, the

proposed development will require 0.00 acres of wetland/surface water impacts in association with the project's overall layout.

A Project Wetland (WL) and Other Surface Water (SW) Summary (Table 1 – ERP Application) is attached with this submittal. Also included are Tables 2 and 3, which outline the proposed mitigation (if applicable). Per the submitted construction plans, there are no direct wetland/surface water impacts. As such, the total acreage of direct wetland/surface water impacts that require mitigation totals 0.00 acres. Development of the site and construction activities are proposed to commence upon the receipt of all requisite local, State and/or Federal permits.

Elimination and/or Reduction of Wetland Impacts

In considering alternative site plans with respect to the elimination or reduction of wetland/surface water impacts, it is believed that the project satisfies the District's criteria per Chapter 62-340.700(2)(a), F.A.C, as no direct wetland and/or other surface water impacts are proposed that would require minimization measures.

Secondary Impacts

The Basis of Review contains a four-part criterion that addresses additional impacts that may be caused by a project: (a) impacts to wetland functions that may result from the intended use of a project; (b) impacts to the upland nesting habitat of listed species that are aquatic or wetland dependent; (c) impacts to significant historical and archaeological resources that are closely linked and causally related to any proposed dredging or filling of wetland or other surface waters; and (d) wetland impacts that may be caused by future phases of the project or activities that are closely linked and causally related to the project.

According to Section 10.2.7(a), A.H., secondary impacts to habitat functions of wetlands will not be considered adverse provided a 25-foot, average, 15-foot minimum width upland buffer is maintained. As depicted on the submitted construction plans, a 15' minimum/25' average upland buffer has been provided landward of the project's post-development wetlands.

No nesting or denning by listed aquatic or wetland dependent fish or wildlife species was observed within the project site.

Based on the above provided information, it is believed that the applicant has demonstrated that the proposed project will have no unacceptable adverse secondary impacts to wetlands and water quality.

Cumulative Impacts

As the project is not proposing any wetland/surface water impacts that require mitigation, it is believed that the project will have no unacceptable adverse cumulative impacts to wetlands, water quality, or upland habitat for aquatic and wetland dependent fish or wildlife listed as endangered, threatened, or species of special concern.

Mitigation

No mitigation is required.

Erosion & Sediment Control

The applicant will implement and maintain erosion and sediment control measures both prior to and during the proposed project. This practice will ensure that no adverse water quality impacts to receiving waters and adjacent lands will occur during the proposed work. Control measures will retain sediment on-site and prevent potential violations of State standards. Practices incorporated will be in accordance with Chapter 6 of the Florida Land Development Manual: A Guide to Sound Land and Water Management. Details of the erosion and sediment control measures are included on the plans provided by Halff.

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,

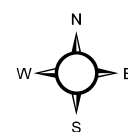
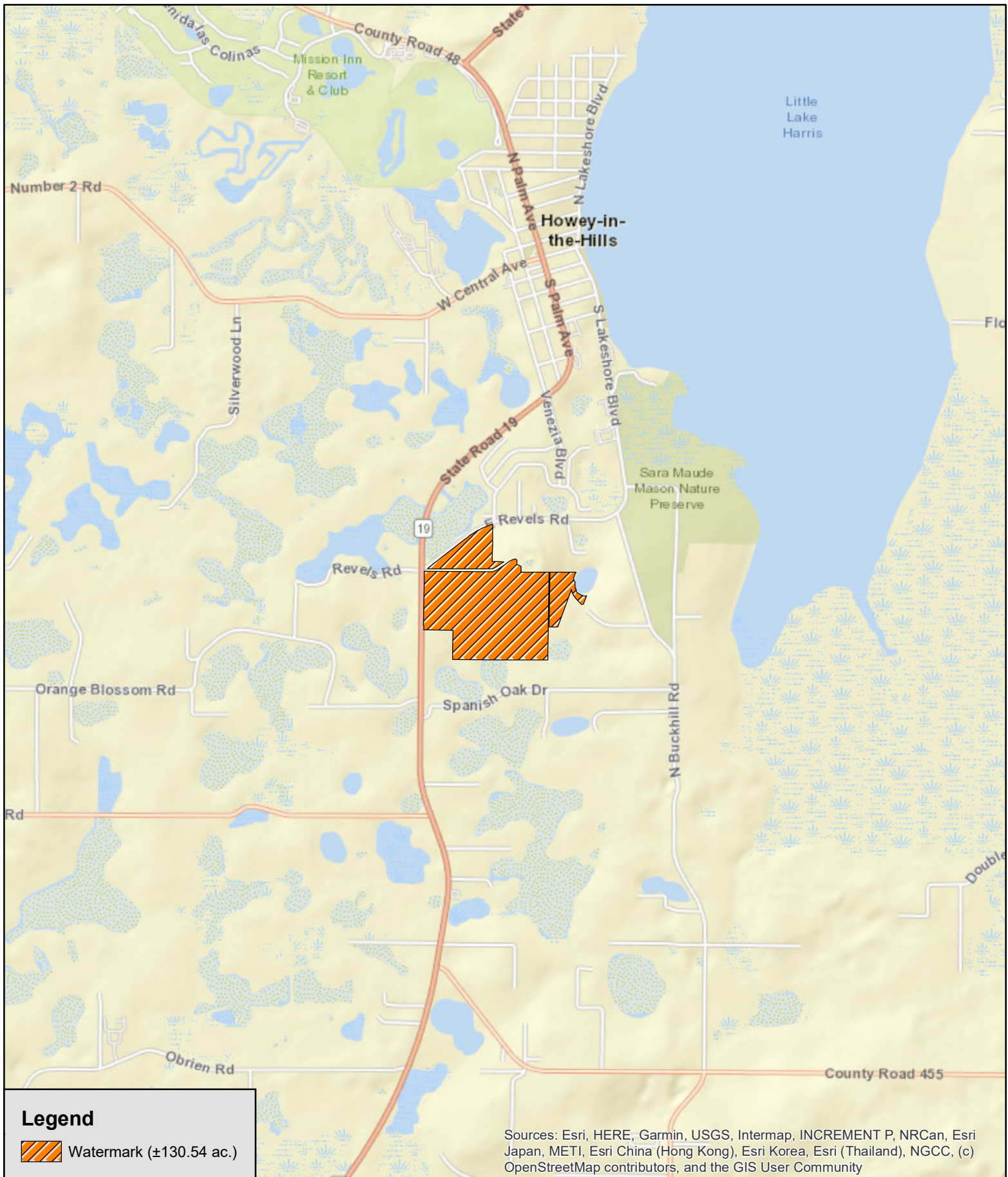


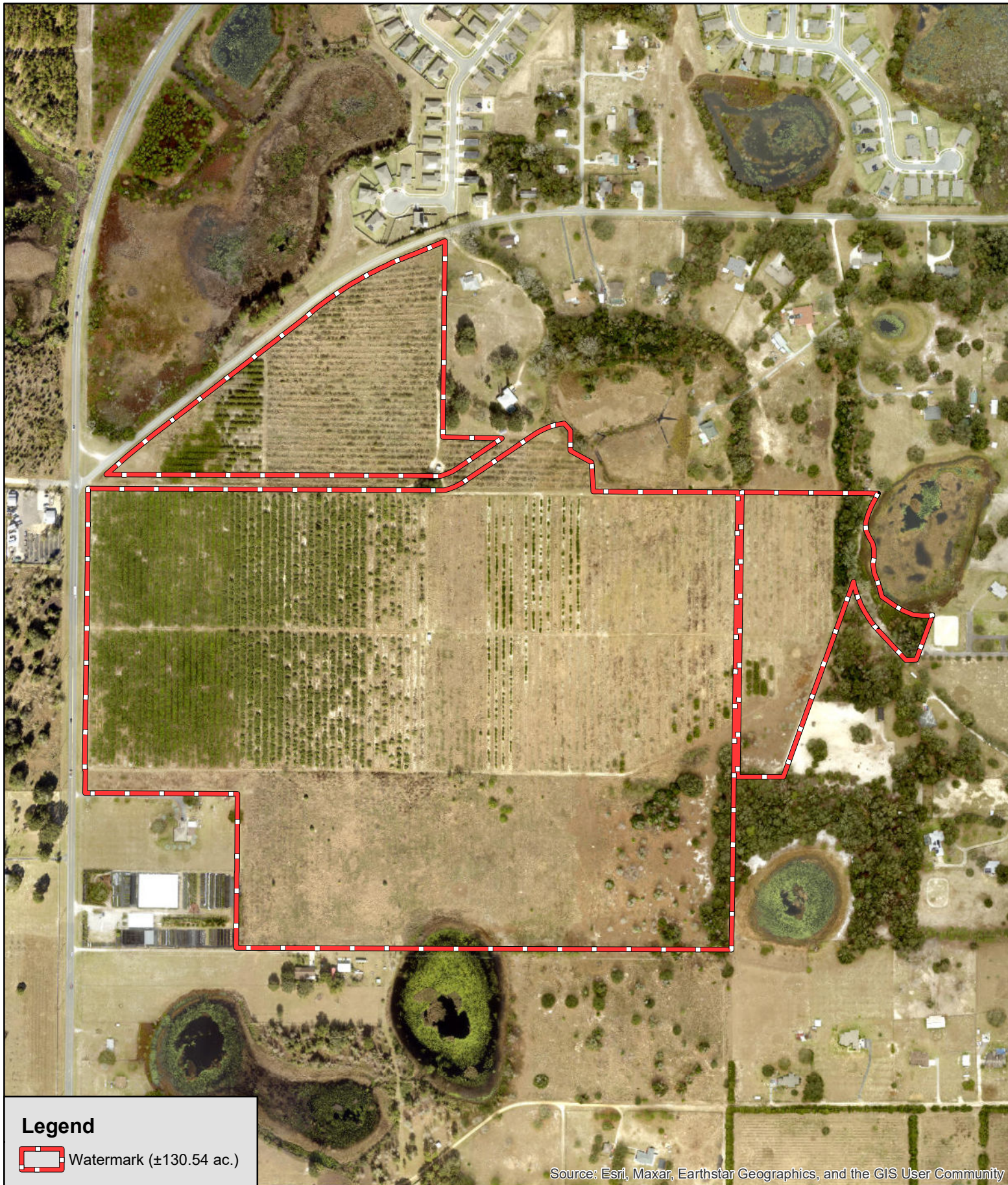
Stephen Butler
Vice President of Environmental Services



John Miklos
President

Attachments





Legend

 Watermark (±130.54 ac.)

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

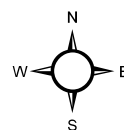


Bio-Tech Consulting

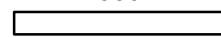
Environmental and Permitting

3025 East South Street Orlando, FL 32803
Phone 407.894.5969 Fax 407.894.5970
bio-techconsulting.com

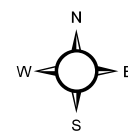
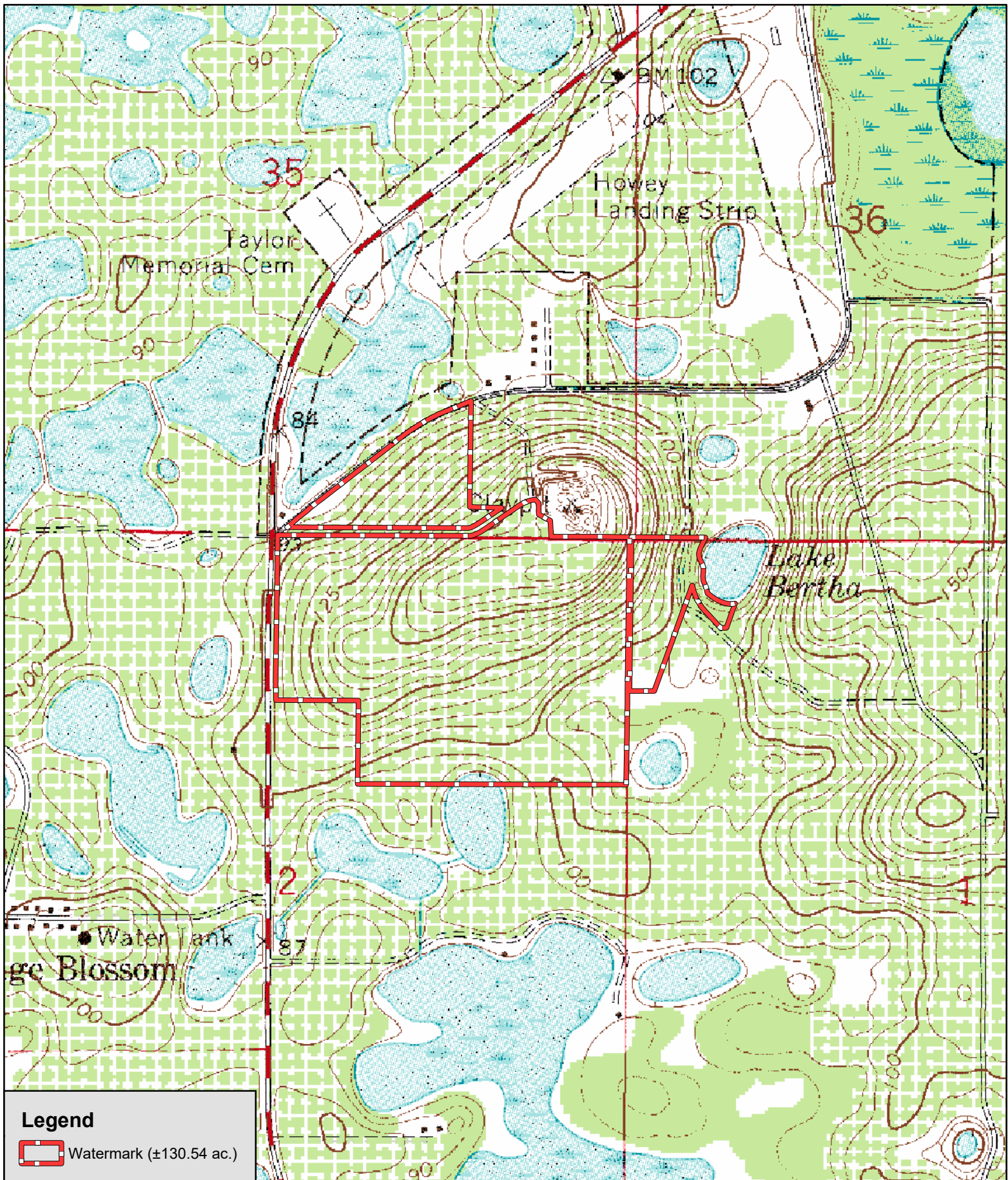
Watermark
Lake County, Florida
Figure 2
2023 Aerial Photograph



550

 Feet

Project #: 583-48
Produced By: ASG
Date: 6/24/2025





Legend

 Watermark (±130.54 ac.)

Lake County Soils

-  5 : Apopka sand, 0 to 5 percent slopes : 18.75 ac.
-  6 : Apopka sand, 5 to 12 percent slopes : 27.86 ac.
-  8 : Candler sand, 0 to 5 percent slopes : 41.37 ac.
-  9 : Candler sand, 5 to 12 percent slopes : 34.68 ac.

 17 : Arents : 0.17 ac.

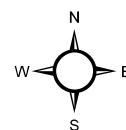
 28 : Myakka-Myakka, wet, sands, 0 to 2 percent slopes : 0.41 ac.

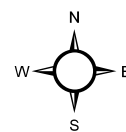
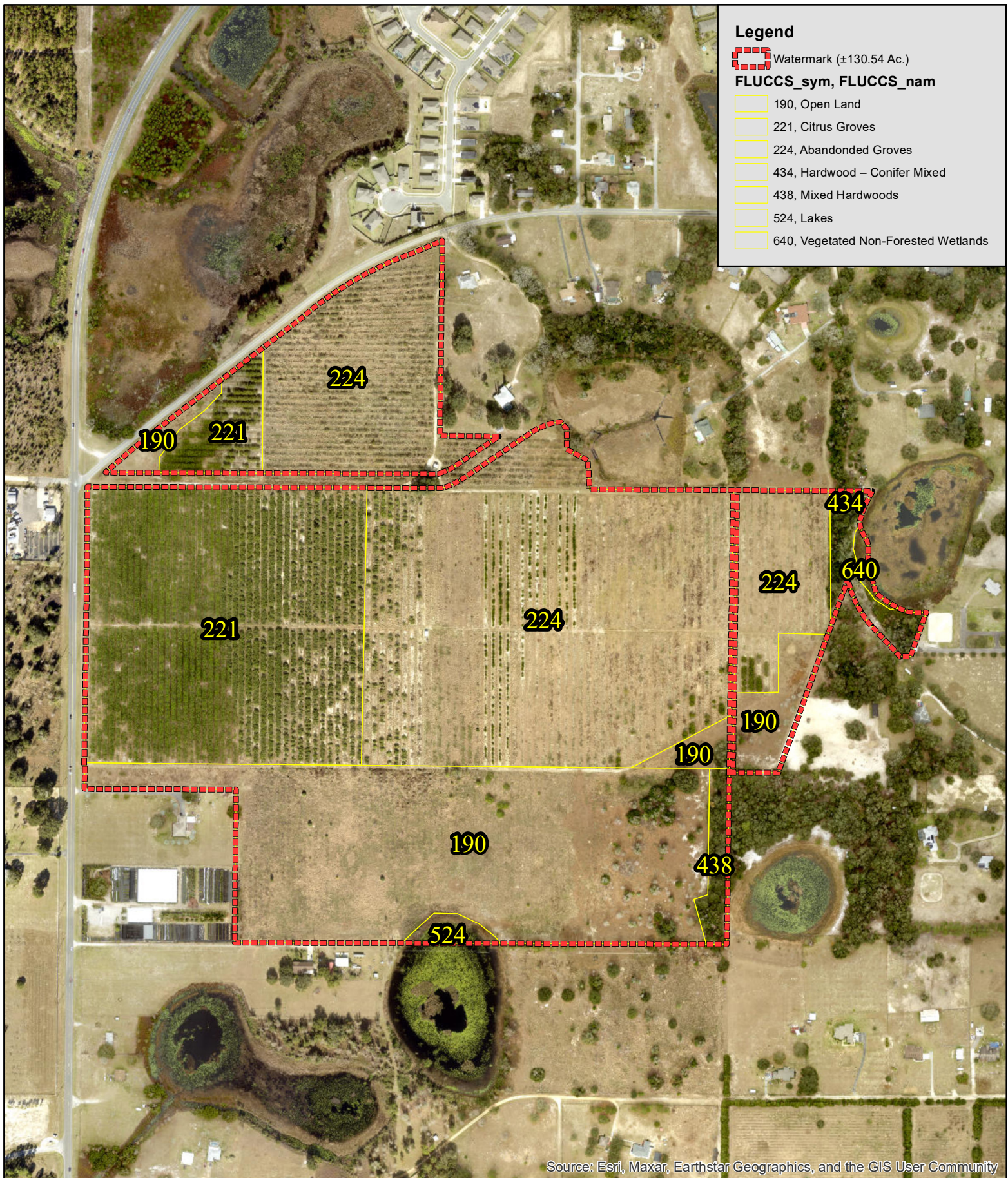
 45 : Tavares sand, 0 to 5 percent slopes : 6.60 ac.

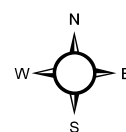
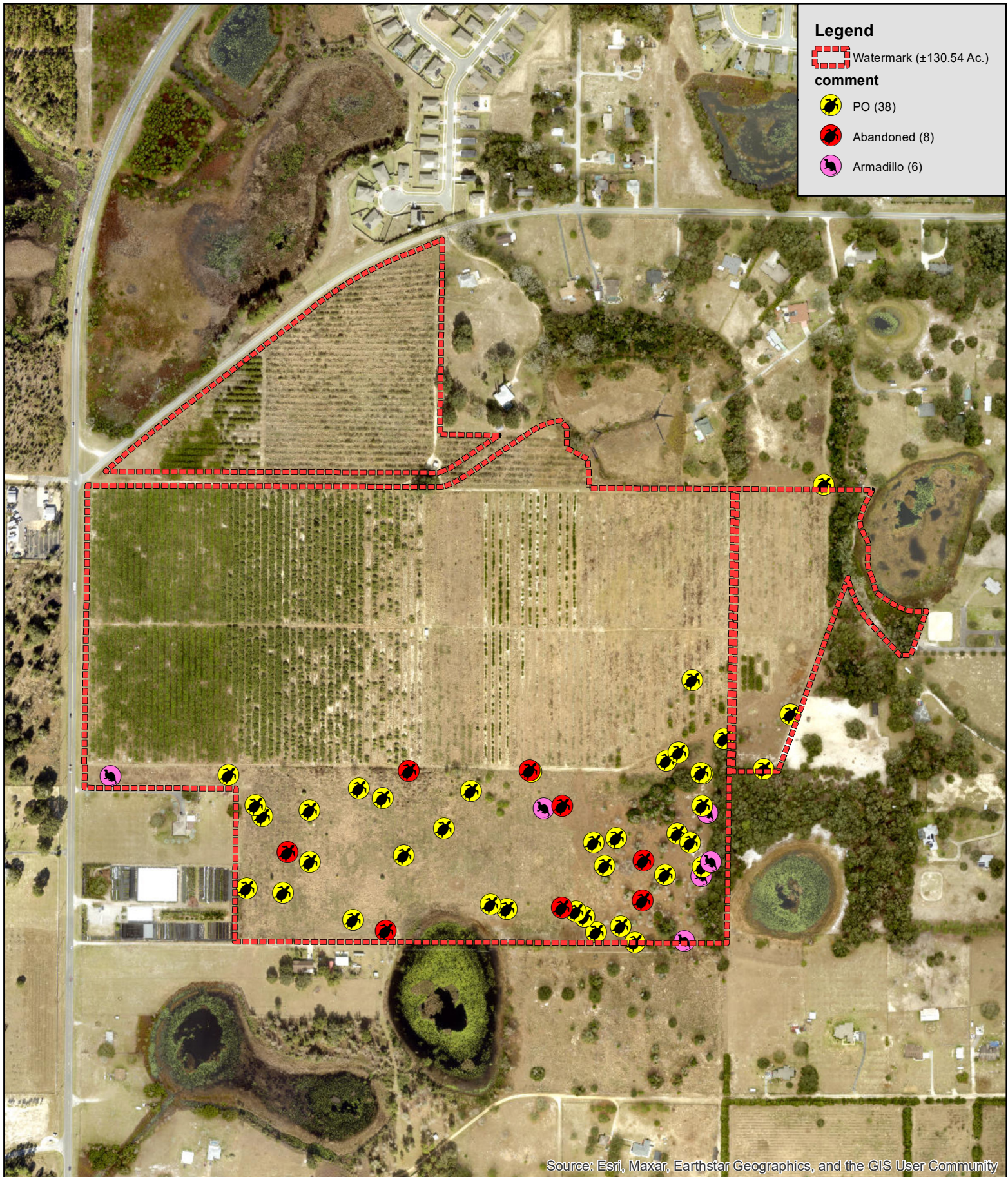
 50 : Borrow Pits : 0.03 ac.

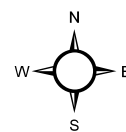
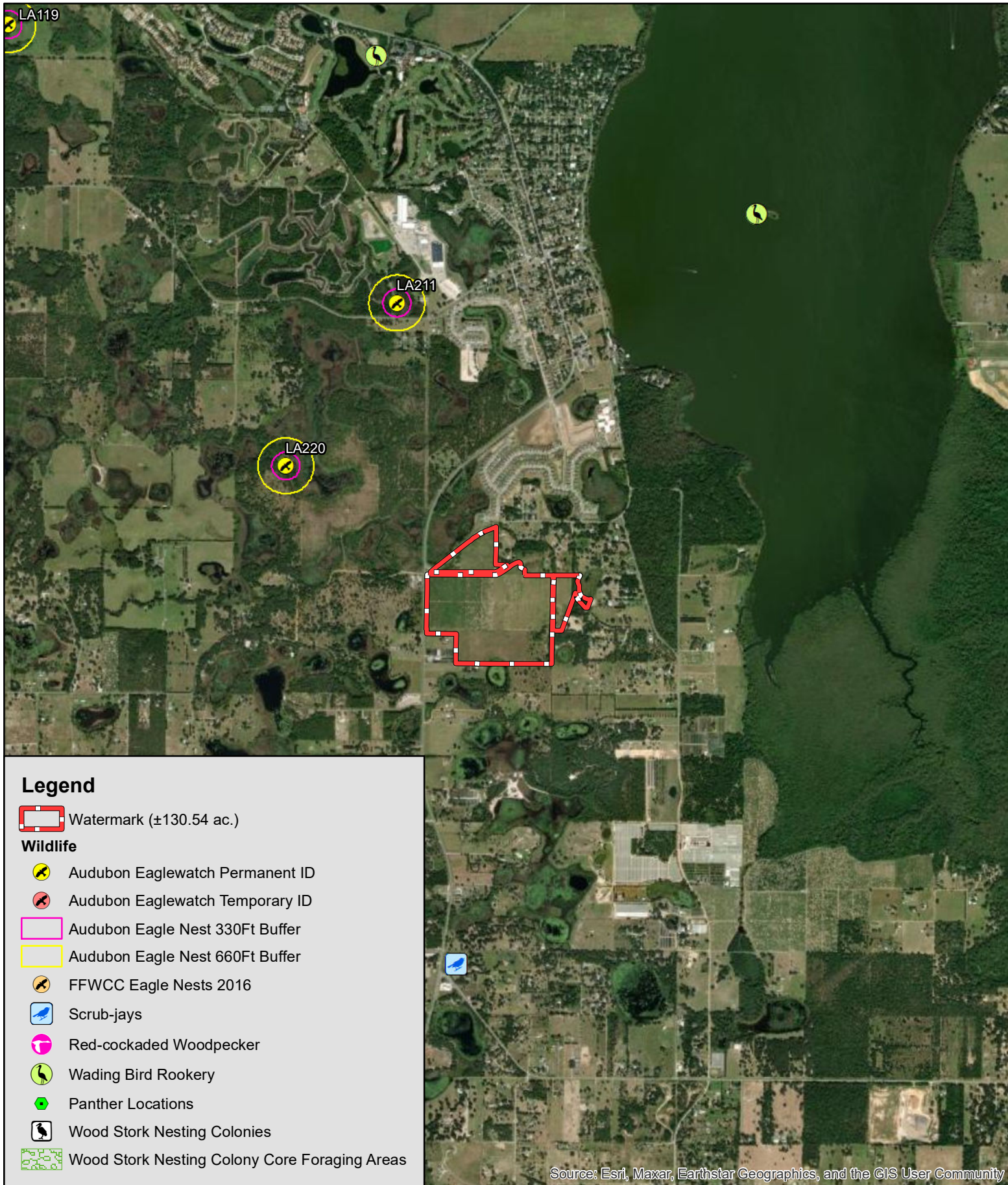
 99 : Water : 1.08 ac.

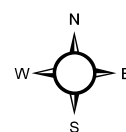
the GIS User Community

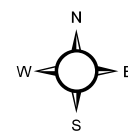
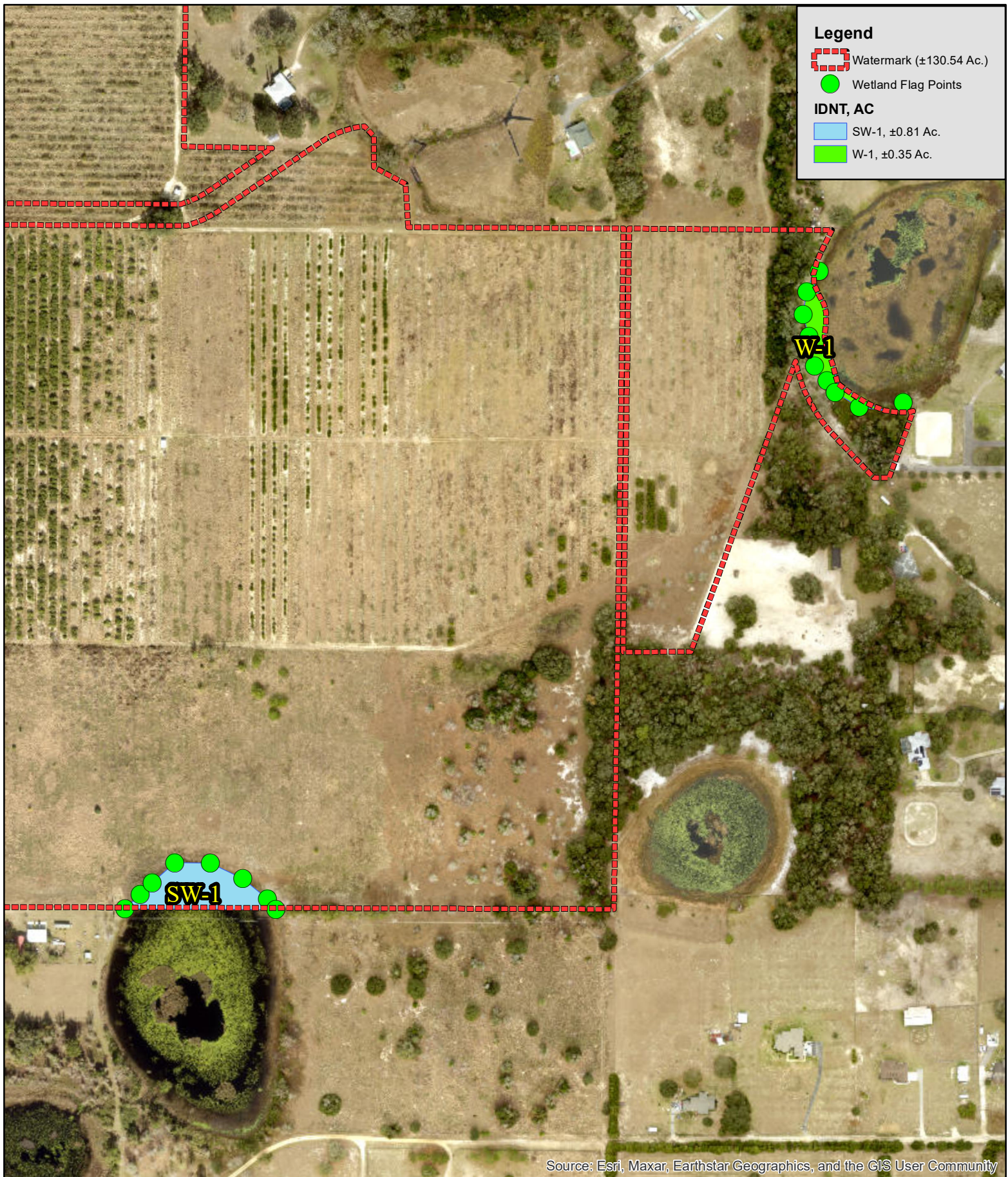


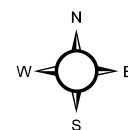
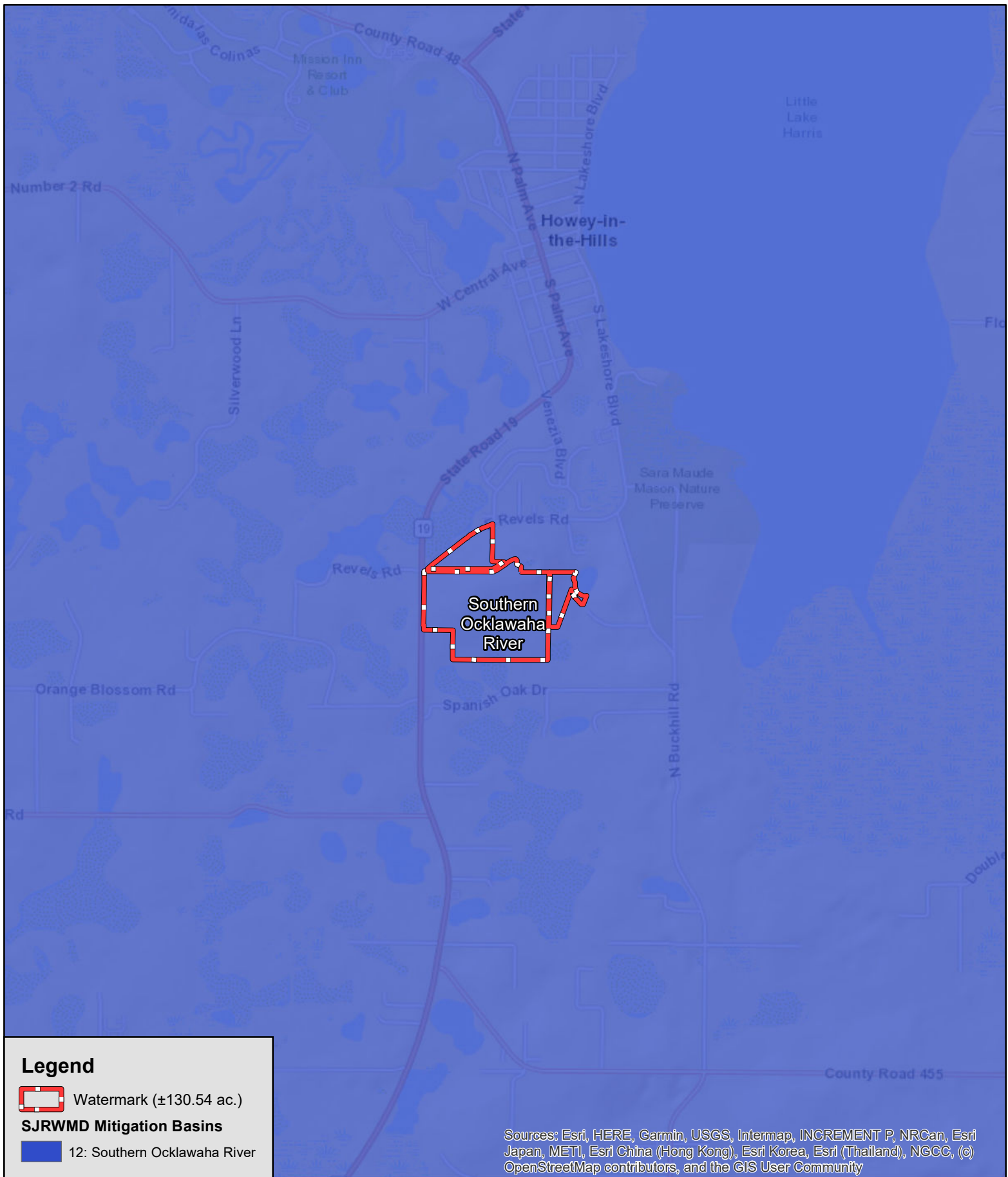










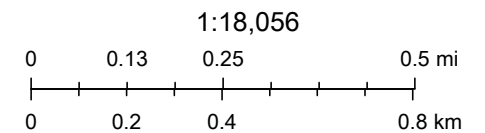


EagleWatch Map



7/6/2021, 7:57:47 AM

-  Bald Eagle Nest Locations
-  660ft Buffer Around Nest Locations
-  330ft Buffer Around Nest Locations



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ArcGIS Web AppBuilder
© 2021 Microsoft Corporation, © 2021 Maxar, ©CNES (2021) Distribution Airbus DS, © 2021 TomTom |

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>Antigone canadensis pratensis</i>	Florida Sandhill Crane	N	ST
<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 americana</i>	Whooping Crane	XN	FXN
<i>Mycteria americana</i>	Wood Stork	LT	FT
<i>Picoides borealis</i>	Red-Cockaded Woodpecker	LE	FE
MAMMALS			
<i>Trichechus manatus</i>	West Indian Manatee	LT	FT
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>Coeleataenia abscissa</i>	Cutthroat Grass	N	E
<i>Cucurbita okeechobeensis</i>	Okeechobee Gourd	LE	E
<i>Eriogonum longifolium</i> var <i>gnaphalifolium</i>	Scrub Buckwheat	LT	E
<i>Hartwrightia floridana</i>	Hartwrightia	N	T
<i>Hasteola robertorum</i>	Florida Hasteola	N	E
<i>Illicium parviflorum</i>	Star Anise	N	E
<i>Justicia cooleyi</i>	Cooley's Water-Willow	LE	E
<i>Lechea cernua</i>	Nodding Pinweed	N	T
<i>Matelea floridana</i>	Florida Spiny-Pod	N	E
<i>Monotropa hypopithys</i>	Pinesap	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>Paronychia chartacea</i> ssp <i>chartacea</i>	Paper-Like Nailwort	LT	E
<i>Pechuma plumula</i>	Plume Polypody	N	E
<i>Pechuma ptilota</i> var. <i>bourgeauana</i>	Comb Polypody	N	E
<i>Polygala lewtonii</i>	Lewton's Polygala	LE	E
<i>Polygonella myriophylla</i>	Small's Jointweed	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.

SECTION C: SUPPLEMENTAL INFORMATION FOR WORKS OR OTHER ACTIVITIES IN, ON, OR OVER WETLANDS AND/OR OTHER SURFACE WATERS

(Note: This section is not required if all the proposed activities are covered in Section B.)

Instructions: This section is for ERP applications that do not involve activities associated with an individual single-family residence, duplex, triplex or quadruplex. For those activities, please use Section B. This form is to be completed if the proposed work or activity will occur in, on, over, or within 25 feet of a wetland or other surface water. The supplemental information required by this section is in addition to the information required by Section A of the ERP application.

PART 1: WETLAND OR OTHER SURFACE WATER IMPACT SUMMARY

1. Describe the basic purpose of the project or activity: **Construction of a stormwater management system to service a residential development, known as Watermark.**
2. Total area of work (dredging, filling, construction, alteration, or removal) in, on, or over wetlands or other surface waters: sq. ft.; **0.00** ac.
3. Total volume of material in wetlands or other surface waters:
 - a. to be dredged: cubic yards,
 - b. to be filled: cubic yards.
4. Identify the seasonal high water level (SHWL) and wetland normal pool elevations for each wetland or surface water within the project site. For tidal wetlands and/or surface waters provide the elevation of mean high and mean low water. Include an aerial photograph showing the location of each sampling location, dates, datum, and methods used to determine these elevations. **TBD**
5. Name of waterbody(ies) (if applicable & if known) in which work will occur? **N/A**
6. Is the activity proposed in an Outstanding Florida Water or Aquatic Preserve?
☐ yes, name: ☒ no ☐ I don't know
7. Has there ever been a formal or informal wetland determination for the project site? If yes, provide the identifying number and/ or a copy of the jurisdictional map. **NO**
8. Provide a map(s) of the project area and vicinity delineating USDA/NRCS soil types. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS REPORT**
9. Provide recent aerials, legible for photointerpretation (no photocopies) with a scale of 1" = 400 ft, or more detailed, with project boundaries and wetland boundaries delineated on the aerial. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS REPORT**
10. Provide existing and proposed maps indicating vegetative community types based on Florida Land Use and Cover Classification System (FLUCCS) (FDOT 1999). For vegetated areas dominated by exotic vegetation, use the FLUCCS code representative of the native community type that was present prior to exotic infestation. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS REPORT**

11. Provide existing and proposed maps indicating vegetative community types based on the Florida Natural Areas Inventory Guide to the Natural Communities of Florida. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS REPORT**
12. Impact Summary Tables (located at the end of this section):
 - a. For all projects, complete Table 1, 2 and 3 as applicable. **SEE ATTACHED ERP TABLES**
 - b. For shoreline stabilization projects, provide the information requested in Table 4. **NA**
13. Adjacent property owners. The following information is required only for projects proposed to occur in, on or over wetlands that need a federal dredge and fill permit and/or authorization to use state owned submerged lands and is not necessary when applying solely for an Environmental Resource Permit. If the activity is located on state owned submerged lands and requires a lease or easement, provide a list of names and addresses from the latest county tax assessment roll of all property owners located within a 500 ft. radius of the proposed lease or easement boundary in mailing label format, or you may elect to send notice to those persons by certified mail, with the return-receipt card addressed to the DEP or water management district, as applicable, in accordance with subsection 18-21.005(3), F.A.C., and Section 253.115, F.S. For projects that need a federal dredge and fill permit, please provide the names, addresses and zip codes of property owners whose property directly adjoins the project (excluding applicant). Attach additional sheets if necessary.

1.	2.
3.	4.
5.	6.

PART 2: ENVIRONMENTAL CONSIDERATIONS

Note: for many questions, a state rule/Applicant's Handbook Volume I (AH I) section is cited to assist the applicant in addressing these questions. However, additional Federal criteria may apply.

1. Elimination or Reduction of Impacts (Avoidance and Minimization). Describe measures taken to eliminate or reduce impacts to wetlands and other surface waters (*Refer to AH I Section 10.2.1*). **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS REPORT**
2. Fish, Wildlife, Listed Species and their Habitats. Provide results of any wildlife assessments that have been conducted on the project site and provide any comments pertaining to the project from the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service (*Refer to AH I Section 10.2.2*). **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS REPORT**

3. Water quantity impacts to wetlands and other surface waters (*Refer to AH I Section 10.2.2.4 and AH II*).
 - a. Does the activity include a proposed stormwater water management system with a control elevation different than the wetland normal pool elevation(s) of existing or proposed created wetlands or other surface waters? **NO**
 - b. If yes to (a), provide documentation (e.g. drawdown assessment or other methods) that shows the proposed surface water management system will not change the hydroperiod of the existing or created wetland or other surface water.
4. Public Interest Test. Please describe how the proposed activity will ***not be contrary*** to the public interest, OR if such an activity significantly degrades or is located within an Outstanding Florida Water (OFW), that the regulated activity will be ***clearly in*** the public interest (*Refer to AH I Section 10.2.3*).
 - a. Please describe how the project will be designed to avoid adverse affects to public health, safety, or the welfare or the property of others. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS**
 - b. Please describe how the project will be designed to avoid adverse affects to the conservation of fish and wildlife, including endangered or threatened species, or their habitats. **ALL REQUIRED STATE & FEDERAL WILDLIFE PERMITS TO BE OBTAINED AS APPLICABLE**
 - c. Please describe how the project will be designed to avoid adverse affects to navigation or the flow of water or cause harmful erosion or shoaling. **NA**
 - d. Please describe how the project will be designed to avoid adverse affects to the fishing or recreational values or marine productivity in the vicinity of the activity. **NA**
 - e. Will the project be of a temporary or permanent nature? **PERMANENT**
 - f. Please describe how the project will be designed to avoid adverse impacts to significant historical and archaeological resources, under the provisions of section 267.061, F.S. **NA**
 - g. Please describe how the project will be designed to avoid adverse affects to the current condition and relative value of functions being performed by areas affected by the proposed regulated activity. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS AND SUBMITTED CONSTRUCTION PLANS**
5. Water Quality. Provide a description of how water quality will be maintained in wetlands and other surface waters that will be preserved or will remain undisturbed, both on and offsite. Please address both short-term (such as during construction) and long-term water quality considerations (*Refer to AH I Section 10.2.4*). **SEE SUBMITTED STORMWATER PLANS**
6. Class II Waters; Waters approved for shellfish harvesting (*Refer to AH I Section 10.2.5*).
 - a. Will the project occur in Class II that are NOT approved for shellfish harvesting? If yes, please provide a plan or procedure detailing the measures to be taken to meet the requirements of *AH I Section 10.2.5(a)*. **NO**

- b. Is the project located adjacent to or in close proximity to Class II waters? If yes, please provide a plan or procedure detailing the measures to be taken to meet the requirements of *AH I Section 10.2.5(b)*. **NO**
 - c. Is the project located in Class II or Class III waters that are classified as “approved”, “restricted”, “conditionally approved”, or “conditionally restricted”? If yes, demonstrate that the project meets the requirements of *AH I Section 10.2.5(c)*. **NO**
7. Vertical seawalls. Are vertical seawalls proposed in an estuary or lagoon as part of the project? If yes, please describe how the project meets the requirements of *AH I Section 10.2.6*. **NO**
8. Secondary Impacts (*AH I Section 10.2.7*).
 - a. Will an upland buffer, with a minimum width of 15' and an average width of 25', be provided between the proposed activities and existing wetlands or wetlands to be preserved, enhanced, restored, or created? Provide the location and dimension of all buffers on the plans. **YES** If not, demonstrate that secondary impacts will not occur or how they will be offset. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS REPORT AND SUBMITTED CONSTRUCTION PLANS**
 - b. If listed species are present or may be present then coordination with wildlife agencies is needed. Have you coordinated with the FFWCC and/or USFWS? If so, please provide correspondence from the wildlife agencies indicating concurrence with the species management plan(s). **COORDINATION WITH FFWCC AND/OR USFWS WILL BE CONDUCTED ACCORDINGLY.**
 - c. What measures will be taken to avoid impacts to wetland-dependent wildlife and/or listed species that use uplands for nesting or denning? **NO WETLAND-DEPENDENT LISTED SPECIES**
 - d. Describe whether there are any other relevant activities that are very closely linked and causally related to any proposed dredging or filling in wetlands or other surface waters that have the potential to cause impacts to significant historical and archaeological resources. **NONE**
 - e. Are there additional future phases or extensions of the proposed activities that are not shown? If yes, please describe. **NA**
9. Cumulative Impacts. Is the proposed mitigation located within the same drainage basin (*Refer to AH I Figures 10.2.8.1 – 10.2.8.5*) as the proposed wetland impacts? **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE PLAN ANALYSIS REPORT** If not, please submit a Cumulative Impact Evaluation in accordance with *AH I Section 10.2.8*.
10. Mitigation Plan (*Refer to AH I Section 10.3*).
 - a. If a mitigation bank is proposed to offset wetland/other surface water impacts, provide:
 - i. the name of the bank: . A letter of reservation from the banker will be required once the application has been evaluated.
 - ii. If the mitigation bank was assessed using UMAM, provide UMAM worksheets for impact area(s). If the bank was assessed using a method other than UMAM, then prepare the impact assessment using the same method.

b. If mitigation is proposed to offset wetland/other surface water impacts, please provide a mitigation plan that includes, at a minimum, the following:

i. ☐ Proposed mitigation narrative:

- (1) ☐ Describe the current and proposed condition for each type of mitigation component (restoration, enhancement, creation, preservation), including:
 - (a) ☐ Describe current and proposed vegetation
 - (b) ☐ Describe current and proposed hydrologic conditions for the proposed mitigation.
 - (c) ☐ Describe the soil types from NRCS maps and confirm if actual soil conditions appear to match.
- (2) ☐ Provide details of the proposed construction/mitigation activities including phasing and timing, as appropriate.
- (3) ☐ Identify measures that will be implemented during and after construction to avoid adverse impacts related to the proposed activities.
- (4) ☐ A mitigation implementation and monitoring schedule with dates.
- (5) ☐ Identify the success criteria.
- (6) ☐ Describe the anticipated site conditions in and around the mitigation area after the mitigation plan is successfully implemented.
- (7) ☐ Provide a comparison of current fish and wildlife habitat to expected habitat after the mitigation plan is successfully implemented.

ii. ☐ Provide a Management Plan that includes, as appropriate, aspects of operation and maintenance, including water management practices, vegetation establishment, exotic and nuisance species control, fire management, and control of access.

iii. ☐ Maps:

- (1) ☐ Soil map (include soil names/codes, hydrologic soil groups and hydric soil types).
- (2) ☐ Topographic map of the mitigation area and adjacent contributing and receiving areas.
- (3) ☐ Hydrologic features map of the mitigation area and adjacent contributing and receiving areas.
- (4) ☐ Vegetative communities map (using FLUCCS or other appropriate classification system).
- (5) ☐ For all maps, identify source.

iv. Provide the necessary supporting information for the application of sections 62-345.400 - .600 (Uniform Mitigation Assessment Method (UMAM)). To meet this requirement, submittal of UMAM worksheets is acceptable for impact and mitigation areas.

v. If onsite and/or offsite applicant-responsible mitigation is proposed, submit a draft Conservation Easement document or other form of restrictive covenant that provides for protection of the mitigation area in perpetuity. Standard forms, as described in subsection 62-330.301(6), F.A.C., are available from the Agency or on its website.

vi. If onsite and/or offsite applicant-responsible mitigation is proposed, submit a cost estimate for completing the mitigation, including monitoring and maintenance.

vii. If onsite and/or offsite applicant-responsible mitigation is proposed and the proposed mitigation exceeds \$25,000, please provide a draft financial assurance document.

- viii. Identify the entity responsible for monitoring, maintenance and long-term stewardship of the mitigation area (i.e. the landowner or homeowner association, not the consultant or contractor that will do the work).

PART 3: PLANS

PLANS: The information listed in the checklist below represent the typical information required on the submitted project plans. The Plans checklists in each application section are cumulative unless otherwise noted. Separate plans for each application section are not required.

1. ☒ Include the following on the construction plans and cross sections:
 - a. ☐ An Existing Conditions sheet showing the entire project and wetland/other surface water boundaries. Include the following: Acreage and type (herbaceous, forested or other surface water) of each wetland/other surface water.
 - b. ☐ A Proposed Conditions sheet showing the entire project and wetland/other surface water boundaries with construction plan overlay.
 - c. ☐ A Proposed Wetland Impact sheet that include the following:
 - i. ☐ Acreage and type (herbaceous, forested or other surface water) of each wetland/other surface water to be impacted.
 - ii. ☐ Proposed upland buffers with dimensions.
 - iii. ☐ Identify the seasonal high water and wetland normal pool elevations on the plans.
 - iv. ☐ Separately identify WMD/FDEP and USACE wetland/other surface water impacts if different.
 - d. ☐ Include wetland boundaries on all construction plan sheets.
2. ☐ If onsite and/or offsite applicant-responsible mitigation is proposed, submit mitigation permit plans and cross sections including, at a minimum:
 - a. ☐ existing conditions plan sheet identifying upland and wetland communities and acreage of each, topography, drainage patterns, and location of cross-section detail.
 - b. ☐ proposed conditions plan sheet identifying proposed improvements by type (restoration, enhancement, creation, preservation), acreage of each, topography, drainage patterns, and location of cross-section detail.
 - c. ☐ monitoring plan sheet including proposed improvements, monitoring transects, photostations, and mitigation signage (if applicable).
 - d. ☐ cross-section and/or profile detail(s) sheet(s) including representative section of each type of mitigation component. Include existing and proposed conditions and representative elevations.
 - e. ☐ planting schedule, plant species including common and scientific names divided into three sections (canopy, shrub, herbaceous) by mitigation component, quantity, spacing, size, and elevation range.

TABLE 1 - PROJECT WETLAND (WL) AND OTHER SURFACE WATER (SW) AND IMPACT SUMMARY

SEE ATTACHED TABLES WITHIN EA-ERP SUBMITTAL PACKAGE

WL & SW ID	UMAM ASSESSMENT AREA NAME(S)	WL & SW TYPE	WL & SW SIZE (acres)	WL & SW NOT IMPACTED (acres)	TEMPORARY WL & SW IMPACTS		PERMANENT WL & SW IMPACTS		MITIGATION ID
					IMPACT SIZE (acres)	IMPACT TYPE	IMPACT SIZE (acres)	IMPACT TYPE	
PROJECT TOTALS:									

Comments:

Codes (multiple entries per cell not allowed):

- Wetland & Surface Water ID: Include ID on submitted wetland and surface water impact maps
- Wetland Type: from an established wetland classification system

Form #62-330.060(1) - Joint Application for Environmental Resource Individual Permit/ Authorization to Use State-Owned Submerged Lands/ Federal Dredge and Fill Permit
Incorporated by reference in subsection 62-330.060(1), F.A.C. (10-1-2013)

- Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

TABLE 2 - PROJECT ON-SITE MITIGATION SUMMARY **SEE ATTACHED TABLES WITHIN EA-ERP SUBMITTAL PACKAGE**

MITIGATION ID	UMAM ASSESSMENT AREA NAME(S)	TARGET TYPE	CREATION	RESTORATION	ENHANCEMENT	WETLAND PRESERVE	UPLAND PRESERVE	OTHER
			AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)
PROJECT TOTALS								

COMMENTS:

Codes (multiple entries per cell not allowed):

- Target Type or Type=target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

TABLE 3 - PROJECT OFF-SITE MITIGATION SUMMARY **SEE ATTACHED TABLES WITHIN EA-ERP SUBMITTAL PACKAGE**

MITIGATION ID	UMAM ASSESSMENT AREA NAME(S)	TARGET TYPE	CREATION	RESTORATION	ENHANCEMENT	WETLAND PRESERVE	UPLAND PRESERVE	OTHER
			AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)
PROJECT TOTALS								

COMMENTS:

Codes (multiple entries per cell not allowed):

- Target Type or Type=target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

TABLE 4 - SHORELINE STABILIZATION

Stabilization	Linear Ft. New	Linear Ft. Replaced	Linear Ft. Repaired	Linear Ft. Removed	Slope H: V:	Toe Width (Ft.)
Natural Vegetation (living shoreline)					N/A	N/A
Rip Rap + Vegetation						
Rip Rap						
Seawall + Rip Rap						
Vertical Seawall						
Other Shoreline Stabilization Type						

Size of Rip Rap

Type of Rip Rap

TABLE 1. PROJECT WETLAND (WL) AND OTHER SURFACE WATER (SW) SUMMARY

WL & SW ID	WL & SW TYPE	WL & SW SIZE	WL & SW NOT IMPACTED	TEMPORARY WL & SW IMPACTS			PERMANENT WL & SW IMPACTS			MITIGATION ID
				WL & SW TYPE	IMPACT SIZE	IMPACT CODE	WL & SW TYPE	IMPACT SIZE	IMPACT CODE	
W-1	640	0.35	0.35							
SW-1	524	0.81	0.81							
PROJECT TOTALS		1.16	1.16		0.00			0.00		

Comments: FLUCFCS - Florida Land Use, Cover and Forms Classification System

CODES (multiple entries per cell not allowed):

Wetland Type: from an established wetland classification system (see Section E, 111b.)

Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

FORM NUMBER 40C-4.900(1)

Reviewer: _____

TABLE 2: PROJECT ON-SITE MITIGATION SUMMARY

MITIGATION ID	CREATION		RESTORATION		ENHANCEMENT		WETLAND PRESERVATION		UPLAND PRESERVATION		OTHER	
	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TYPE	AREA	TARGET	AREA	TARGET
PROJECT TOTALS:	0		0		0		0		0		0	

Comments:

CODES (multiple entries per cell not allowed):

Target Type or Type = target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

FORM NUMBER 40C-4.900(1)

Reviewer: _____

TABLE 3: PROJECT OFF-SITE MITIGATION SUMMARY

MITIGATION ID	CREATION		RESTORATION		ENHANCEMENT		WETLAND PRESERVATION		UPLAND PRESERVATION		OTHER	
	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TYPE	AREA	TARGET	AREA	TARGET
PROJECT TOTALS:	0		0		0		0		0		0	

Comments:

CODES (multiple entries per cell not allowed):

Target Type or Type = target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

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