



**7900 64th AVENUE EAST
Palmetto, FL**

ENVIRONMENTAL DUE DILIGENCE REPORT

January 2024

Prepared for:
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INTRODUCTION

Ardurra has prepared the following report summarizing the results of our environmental constraints due diligence study associated with an undeveloped property at 7900 64th Avenue East in Section 27, Township 33S, Range 18E in Palmetto, Manatee County. The associated Manatee County Parcel ID number is 657800009. This report presents a description of the subject parcel, a discussion of possible ecological constraints to development, and land cover and wetland maps depicting the on-site habitats. Findings in this report are based on a review of existing available information including wildlife databases, soil surveys, aerial photography, and Ardurra's observations from a field site evaluation conducted in January 2024.

METHODOLOGY

The following methods were employed to assess the referenced parcel:

- Field inspection of the site for identification of habitats, protected species, or other sensitive environmental features;
- Recent and historical aerial photograph interpretation of the subject property;
- Research of various State, Federal, and university databases regarding protected wildlife species.

The jurisdictional limits of onsite wetlands and surface waters have been delineated by scientists with Ardurra Group, Inc. (Ardurra) in accordance with Chapter 62-340, F.A.C. Refer to the attached 'FLUCCS Habitat Map' for the wetland and surface water locations within the subject parcel.

EXISTING CONDITIONS

The existing conditions of the project including upland and wetland plant communities were mapped in accordance with Florida Land Use Cover Forms and Classification System (FLUCCS, Florida Department of Transportation 1999).

Upland Descriptions

Fallow Cropland/Semi-Improved Pasture (± 14.00 ac.)

FLUCCS: 261, 213

CLC: 1833151, 183314

Native Upland Community: No

This classification is represented by the open parts of the site south of Buffalo Canal. Historically, this area was utilized for aquaculture (i.e., fish farming). However, the aquaculture operation has been abandoned for decades, and most of the aquaculture ponds have been graded over to convert the area to a semi-improved pasture. Some remnants of the old aquacultural ponds are still evident as depressions in the landscape. The area contains interspersed islands of Brazilian Pepper (FLUCCS 422) that have been allowed to grow throughout the site.



Brazilian Pepper (± 11.04 ac.)

FLUCCS: 422

CLC: 7300

Native Upland Community: No

This classification is used for pure stands of the invasive exotic species Brazilian pepper (*Schinus terebinthifolia*), which typically colonizes areas that have been disturbed by earthmoving and/or drainage changes. Onsite, areas mapped as FLUCCS 422 include tree islands within the aforementioned pasture, as well as a forested swathe paralleling an east-west internal ditch.

Live Oak (± 5.97 ac.)

FLUCCS: 427

CLC: 1123

Native Upland Community: Yes

This association is used for the upland portions of the property north of Buffalo Canal. All of these areas lie within the 100-year floodplain, but are inundated too infrequently to qualify as wetland per Ch. 62-340, F.A.C. These areas are covered by a closed canopy of live oak (*Quercus virginiana*) with a midstory of cabbage palm (*Sabal palmetto*). The groundcover is dominated by wild coffee (*Psychotria nervosa*) and beauty berry (*Callicarpa americana*). This area qualifies as a Native Upland Community under Manatee County Comprehensive Plan Policy 3.3.2.2 and would require designation as such in development plans alongside the percentage proposed for preservation.

Other Hardwoods (± 6.90 ac.)

FLUCCS: 438, 439

CLC: 1112

Native Upland Community: No

This classification is used for the forested uplands south of Buffalo Canal. These areas appear to have been historically cleared but have been allowed to regenerate in recent decades with forested regrowth due to lack of maintenance. The regrowth is dominated by successional species such as laurel oak (*Quercus laurifolia*), live oak, cabbage palm, Brazilian pepper (*Schinus terebinthifolia*), carrotwood (*Cupaniopsis anacardioides*), and elderberry (*Sambucus nigra*) with occasional American elm (*Ulmus americana*) and sugarberry (*Celtis laevigata*). The groundcover is dominated by wild coffee and Caesarweed (*Urena lobata*). Due to this area's clearing in recent decades and current prevalence of early growth, successional, and weedy species, this classification is not considered a Native Upland Community under Manatee County Comprehensive Plan Policy 3.3.2.2.

Utilities (± 1.02 ac.)

FLUCCS: 830

CLC: 1860

Native Upland Community: No



The 'Utilities' classification is used for an electrical transmission corridor located along the west property boundary. This corridor is regularly maintained by the utility entity, including mowing of vegetation. The corridor includes an access trail that is elevated from the surrounding landscape. Vegetation consists of weedy species, mostly dominated by Johnson grass (*Sorghum halepense*) and cogon grass (*Imperata cylindrica*).

Wetland and Other Surface Water Habitats

Ditch/Artificial Intermittent Stream (± 2.10 ac.)

FLUCCS: 510D

CLC: 4220

This classification is represented by Buffalo Canal, as well as some other internal ditching in the south part of the property. These features were excavated artificially through uplands and wetlands in order to improve drainage of the surrounding landscape. The vegetation community associated with these features is minimal, and mostly consists of nuisance species such as Brazilian Pepper and Johnson grass growing along the bank. In Buffalo Canal there are some submersed and aquatic plants along the toe of slope, such as water hyacinth (*Eichhornia crassipes*), alligator weed (*Alternanthera philoxeroides*), and creeping primrose (*Ludwigia repens*).

Natural Rivers and Streams (± 0.40 ac.)

FLUCCS: 510

CLC: 4100

This classification is used for a natural stream segment north of Buffalo Canal that may be a historic remnant of the historic Buffalo/Frog Creek and its tributary system. This stream segment flows throughout the onsite 'Live Oak' and 'Stream and Lake Swamp' habitats before falling into the Buffalo Canal. The stream appears to exhibit seasonal flow and was dry at the time of the January 2024 site visit. However, the stream exhibits clearly defined banks and distinct water marks. The stream is mostly unvegetated but does include some popash (*Fraxinus caroliniana*) and various wetland ferns growing along the banks.

Artificial/Farm Pond (± 0.32)

FLUCCS: 534, 742

CLC: 3210

This classification is used for a small borrow pond present in the southeast corner of the open field. This pond appears to have been artificially excavated for agricultural activities. The pond lacks a significant vegetation component.

Stream and Lake Swamps/Bottomland Forest (± 5.32 ac.)

FLUCCS: 615

CLC: 22331



The 'Stream and Lake Swamps' (a.k.a. 'Bottomland Forest) classification is used for all the wetlands onsite, which include significant areas north of Buffalo Canal as well as a small wetland area in the southeast part of the property that continues offsite. These wetlands appear to be part of the Buffalo/Frog Creek floodplain system and retain water following flood events frequently or long enough to develop wetland conditions per Ch. 62-340, F.A.C. These wetlands are dominated in the canopy by American elm, sugarberry, and laurel oak with occasional sweetbay magnolia (*Magnolia virginiana*). The groundcover includes species such as wild coffee, cinnamon fern (*Osmundastrum cinnamomea*), and dayflower (*Commelina spp.*). The upper six inches of the soil profile exhibit significant organic accumulation, and the ground surface exhibits hydrologic indicators such as alluvial sand deposition.

SOILS

According to the current Natural Resources Conservation Service (NRCS) web soil survey for Manatee County, there are three (3) soil types found within the project boundary. Please see the attached NRCS Soils Map. Soils found on site are listed below:

- 5 – Bradenton fine sand
- 13 – Chobee loamy fine sand
- 22 – Felda fine sand

Map Units 5 and 22 are low-lying, poorly drained soils that often exhibit high water tables and flooding in internal depressions. Natural depositions of shell and marine remains are found close to the surface. Map Unit 13 is classified as "Very Poorly Drained" and is typically associated with jurisdictional wetlands.

WETLANDS AND SURFACE WATERS

As discussed above, the site contains significant wetland areas classified as "Stream and Lake Swamps/Bottomland Forest". Most of these areas are north of Buffalo Canal, while one small area is located south of Buffalo Canal in the southeast corner of the property. The wetlands in the north of the property appear to directly connect to a natural flowing stream segment before discharging into Buffalo Canal and subsequently Frog Creek and Terra Ceia Bay. The wetland in the southeast corner of the property appears to connect through a wetland floodplain system to Cedar Drain Canal, which subsequently falls into Buffalo Canal and the same sequence described above. Consequently, we presume that all the wetlands on the property qualify as "Assumed Waters" under the State of Florida's Clean Water Act Section 404 program. Since the connections are direct surface connections, this jurisdiction is likely unaffected by the recent Supreme Court decision in *Sackett v. Environmental Protection Agency*.

If site development proposes to impact any of the wetlands on site, permit applications would likely be forwarded to the Florida Department of Environmental Protection (FDEP), which administers the Section 404 program for Assumed Waters. Permitting with the FDEP



is often a lengthy process that would require the applicant to provide detailed justification for the wetland impacts, including an alternatives analysis.

The area mapped as (natural) 'Streams and Waterways' (FLUCCS 510) north of Buffalo Canal would also be evaluated as a natural "Assumed Water" subject to FDEP jurisdiction and mitigation requirements.

The areas mapped as 'Canals/Ditches' (FLUCCS 510D) and 'Artificial Pond' (FLUCCS 534) would be jurisdictional features to the State ERP Program (administered by SWFWMD) but could likely be impacted without necessitating wetland mitigation or lengthy permitting procedures.

LISTED SPECIES

Ardurra's review of the project area for the potential presence of listed species included a field site visit conducted in January 2024 in addition to desktop research of available databases for documented listed species presence relative to the proposed project. Available databases queried include the Florida Native Areas Inventory (FNAI) Biodiversity Matrix, the USFWS Information for Planning and Consultation (IPaC) tool, the Florida Fish and Wildlife Conservation Commission (FFWWC) bald eagle nest locator, and the Cornell Lab of Ornithology "e-Bird" observations map.

Listed species known to occur in the region are listed in **Table 1**, along with their presumed likelihood to occur within the subject property and likelihood to be affected by proposed development.

Table 1. List of Potential Listed Species in Vicinity of Project Area (Per USFWS IPaC and FNAI Biodiversity Matrix Unit 24954)

Common Name	Scientific Name	Listing Status	Likelihood of Occurrence	Likelihood of Affect	Additional Details
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Bald and Golden Eagle Protection Act	Observed	Not Likely	Nest location MN029 is 1,200-ft to northeast. Eagle flew onto property during January 2024 evaluation and perched on utility pole. Property is outside 660-ft nest buffer.
Crested Caracara	<i>Caracara plancus audubonii</i>	FT	Moderate Potential	Not Likely	Caracara frequently sighted along Moccasin Wallow Rd 1 mile to north. Site does not contain extensive nesting habitat.
Eastern Black Rail	<i>Laterallus jamaicensis jamaicensis</i>	FT	Low Potential	Not Likely	No current survey guideline or standard protection measure. Adverse effects would be avoided with minimization of wetland impacts.
Eastern Indigo Snake	<i>Drymarchon couperi</i>	FT	Potential (FNAI)	Potential	Not observed.



Everglades Snail Kite	<i>Rostrhamus sociabilis plumbeus</i>	FE	Not Likely	Not Likely	Only reasonable habitat onsite is Buffalo Canal. No aquatic snails observed.
Gopher Tortoise	<i>Gopherus polyphemus</i>	ST	Potential (FNAI)	Potential	No burrows observed in January 2024 (<100% survey). Not likely to occur due to disturbed nature of site and height of water table/limestone relative to ground surface.
Monarch Butterfly	<i>Danaus plexippus</i>	Federal Candidate (Under Review)	Observed	Not Likely	Milkweed observed on site. No current survey guideline or standard protection measure.
Wood Stork	<i>Mycteria americana</i>	FT (Delisting Under Review)	Likely (FNAI)	Not Likely	Adverse effects would be avoided with minimization of wetland impacts and design of stormwater management system in compliance with State criteria.

Further details regarding each of the listed species identified through the desktop screening and field re-view are presented below.

Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle is currently federally protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d). A search of the Florida Fish and Wildlife Conservation Commission (FWC) bald eagle database was completed to determine whether any known bald eagle nests occur within the vicinity of the subject parcel. The database revealed that the closest documented bald eagle nest location (MN029) is approximately 1,200-ft to the northeast of the closest part of project boundary. During the January 2024 field evaluation, an adult bald eagle was observed perching within the property boundary on a utility pole and flying in the direction of nest MN029.

We presume this eagle is associated with MN029, for which the 660-ft protective buffer does not intersect the subject property. We presume that development activities on the subject site would not require consultation with the U.S. Fish & Wildlife Service (USFWS) related to bald eagle. However, should future eagle nesting activity be observed within 660 feet of the project boundary, consultation may become necessary.

Crested Caracara (*Caracara plancus audubonii*)

Audubon's crested caracara is currently listed as "Threatened" under the Endangered Species Act. Caracara and their nests are also jurisdictional to Florida Fish and Wildlife Conservation Commission (FFWCC) rulemaking authority and State Statute as a Federally-designated threatened species per Ch. 68A-27.003(1)(f)(1), F.A.C.

Caracara prefer to nest in cabbage palm trees surrounded by open habitats, such as pasture. The property contains only marginally suitable open land with scattered occurrence of cabbage palm.



Review of the Cornell Lab of Ornithology observations map (a resource currently used by the USFWS for federal consultation) revealed that caracara have been sighted approximately 1 mile north of the property along Moccasin Wallow Road. Caracara nesting in the region is generally found north and east of the subject property in settings with more expansive rural/agricultural uses. Nesting is presumed unlikely within the subject property.

Eastern Black Rail (*Laterallus jamaicensis jamaicensis*)

The eastern black rail is currently listed as "Threatened" under the Endangered Species Act. This bird is small and highly secretive, and typically inhabits wetlands with dense herbaceous vegetation to provide refugia. There is currently no survey guideline for the eastern black rail, and no individuals were documented during site visits by Ardurra scientists. We presume that adverse effects to this species would be avoided with avoidance and minimization of wetland impacts.

Eastern Indigo Snake (*Drymarchon corais couperi*)

The eastern indigo snake is listed as "Threatened" under the Endangered Species Act. The species occurs in a range of habitats, including pine flatwoods, scrubby flatwoods, dry prairie, edges of freshwater marshes, agricultural fields, and human-altered habitats. According to the FNAI biodiversity matrix, the eastern indigo snake has the "potential" to occur in the vicinity of the project area. During Ardurra's field reviews, no eastern indigo snakes were observed. However, the project may be required to implement the USFWS standard protection measures, including educational signage and a communication plan for reporting indigo snakes observed onsite during clearing/construction.

Everglades Snail Kite (*Rostrhamus sociabilis plumbeus*)

The Everglades snail kite is listed as "Endangered" under federal rule, and the USFWS has developed survey guidelines for projects that may occur in snail kite habitat. This species is dependent on large freshwater snails, which typically live and reproduce in large, deep wetlands or along lake and canal edges. Buffalo Canal is the only example of this habitat on the site. The on-site portion of Buffalo Canal did not appear to contain aquatic snails. As such, the project is not likely to affect this species.

Gopher Tortoise (*Gopherus polyphemus*)

The gopher tortoise is listed as "Threatened" under State rule. Due to the relative size and depth of their burrows, gopher tortoises typically require well-drained uplands with significant height of sandy soil above the water table. Uplands in the project site generally consists of a thin sand layer with loam, shell and/or limestone near the soil surface. These conditions are relatively unsuitable for tortoise denning. We presume it is unlikely that gopher tortoises would be present. No tortoises or tortoise burrows were observed by Ardurra in January 2024.

Should any gopher tortoise burrows be identified in the future within 25' of the limits of clearing, a relocation permit from FFWCC will be required to remove all gopher tortoises from those burrows and relocate them to permitted off-site recipient sites.



Monarch Butterfly (*Danaus plexippus*)

The monarch butterfly is currently listed as a “candidate species” for potential future protection under the Endangered Species Act. The candidacy is currently under federal review by the USFWS. Monarch butterflies occur throughout Florida, where they depend on their obligate host plant, milkweed (*Asclepias* spp.). During the January 2024 site visit, milkweed was observed on-site. However, there is currently no survey or protection requirement, and we presume it is unlikely that conservation measures will be enforced for residential developments any time in the near future.

Wood Stork (*Mycteria americana*) and State-Listed Wading Birds

The wood stork is currently listed as “Threatened” under the Endangered Species Act, although a proposal by USFWS to delist the species is currently pending federal review. Until a final ruling on delisting, developments are recommended to follow USFWS species conservation guidelines to minimize development-related impacts on wood stork. The guidelines outline that for cumulative impacts to wetlands and surface waters greater than 0.5 acres within a wood stork Core Foraging Area (CFA), a hydroperiod and foraging habitat compensation analysis be conducted to assure federal agencies that there is no net loss of foraging habitat for the wood stork as a result of development activities. According to USFWS data, the project falls within the CFA for the “Ayers Point – Dot Dash” nesting colony.

The most significant aquatic habitat on-site with an appropriate hydropattern for wood stork is the Buffalo Canal. Impacts to this canal are presumed unlikely for project development. Conversion of the existing property to a residential project would also likely involve the creation of new stormwater ponds with littoral shelves. The created ponds would more than offset presumed impacts to the canal, likely creating a net benefit for wood stork.

Multiple other wading birds are also listed as “Threatened” under State rule, including little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), and roseate spoonbill (*Platalea ajaja*). The same narrative regarding wood stork above is expected to apply to State-listed wading birds. Conversion of the existing property to a residential project with stormwater ponds is likely to result in no net adverse impacts.

SUMMARY

Based on the desktop review and field visits, we conclude the following environmental constraints may be encountered during project development:

Table 2. Anticipated Environmental Constraints

Constraint	Relevant Agency	Recommended Action
Wetlands	SWFWMD, FDEP*	ERP Submission w/ field review CWA 404 Permitting*
Artificial Surface Waters	SWFWMD	ERP Submission w/ field review

*if wetland impacts proposed



Development of the project will require an Individual Environmental Resource Permit (ERP) submission for the creation of the stormwater management system and for any proposed impacts to any of the on-site ditches, canals, streams, or wetlands. Further, if impacts are proposed to wetlands, the permit would likely be forwarded to the FDEP and begin the lengthy Section 404 permitting process.

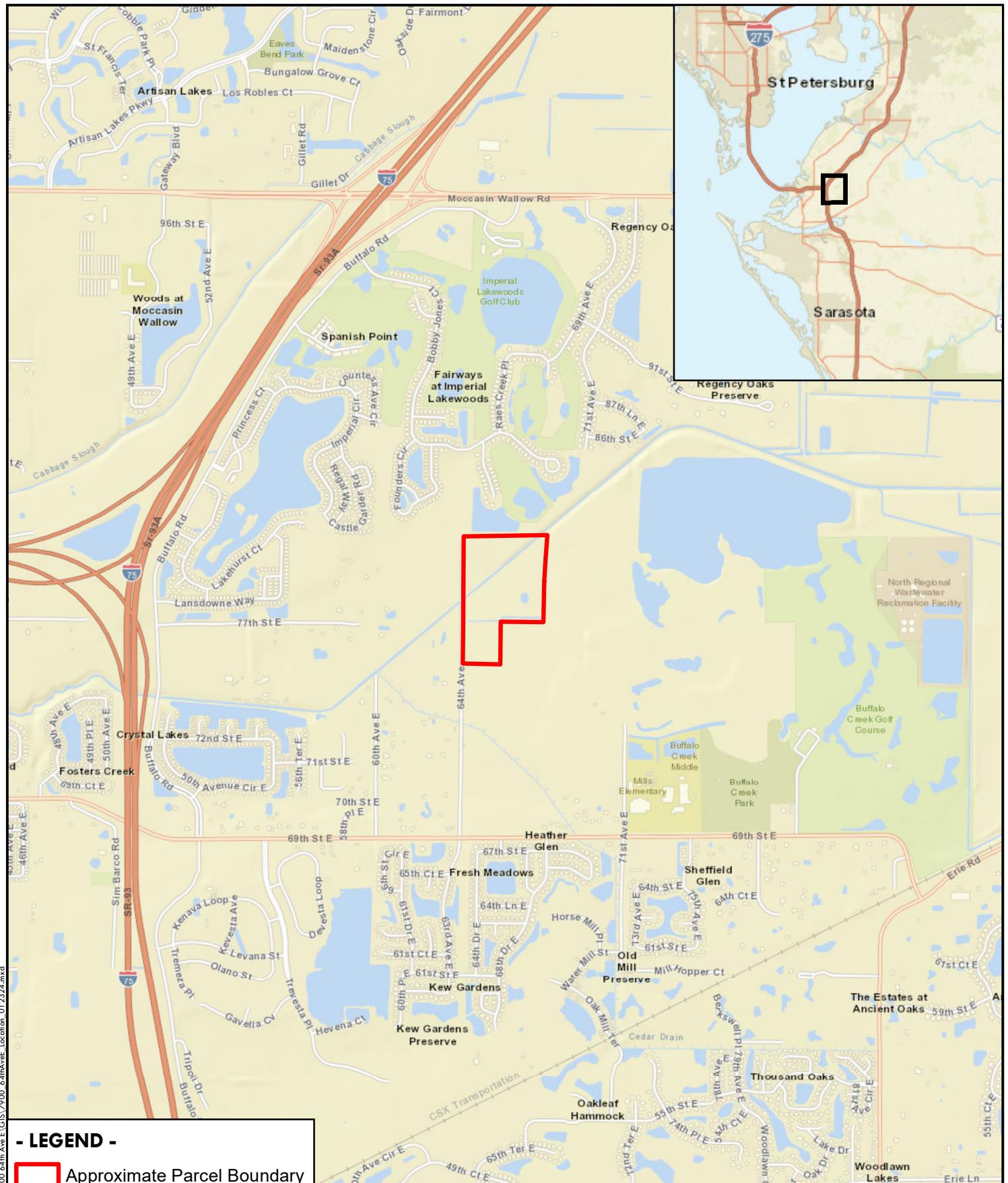
There do not appear to be any listed species currently present on the site. Consultation and/or incidental take permitting with the FFWCC may become required should any listed species be observed on site prior to permitting and construction.

If we can provide additional clarification or information, please do not hesitate to call.

Sincerely,



Joel Christian
Senior Scientist



- LEGEND -

 Approximate Parcel Boundary

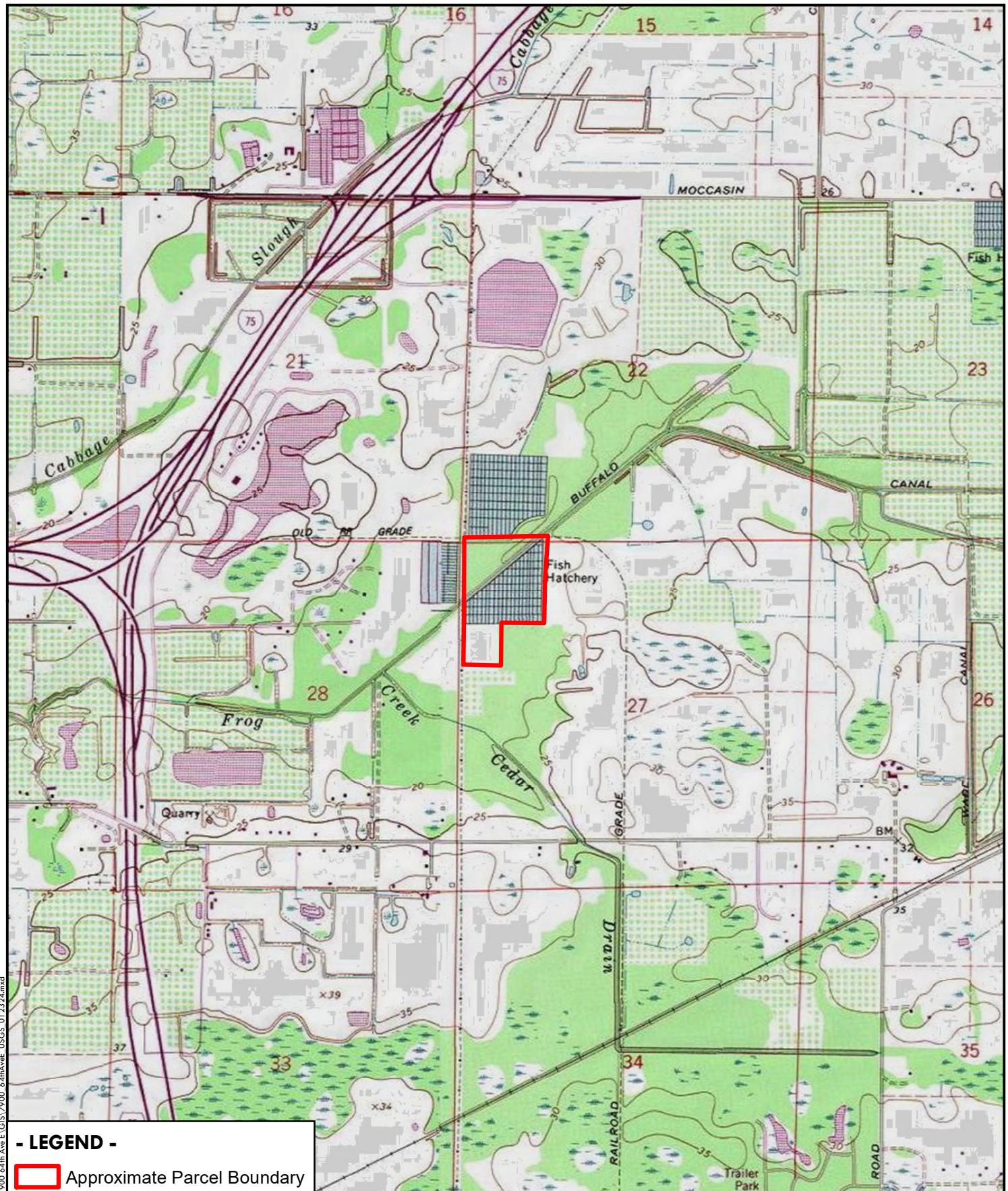


Client: US Real Estate Group, LLC
Project: 7900 64th Ave E
Location: Manatee County, Florida
TRS: Twp: 33S Rng: 18E Sec: 27
Title: Location Map
Source: ESRI World Street Map

Drawn By: KS
Date: 1/24/2024
Sheet: 1

SCALE: 1" = 2000'
 0 2,000 4,000





- LEGEND -

■ Approximate Parcel Boundary



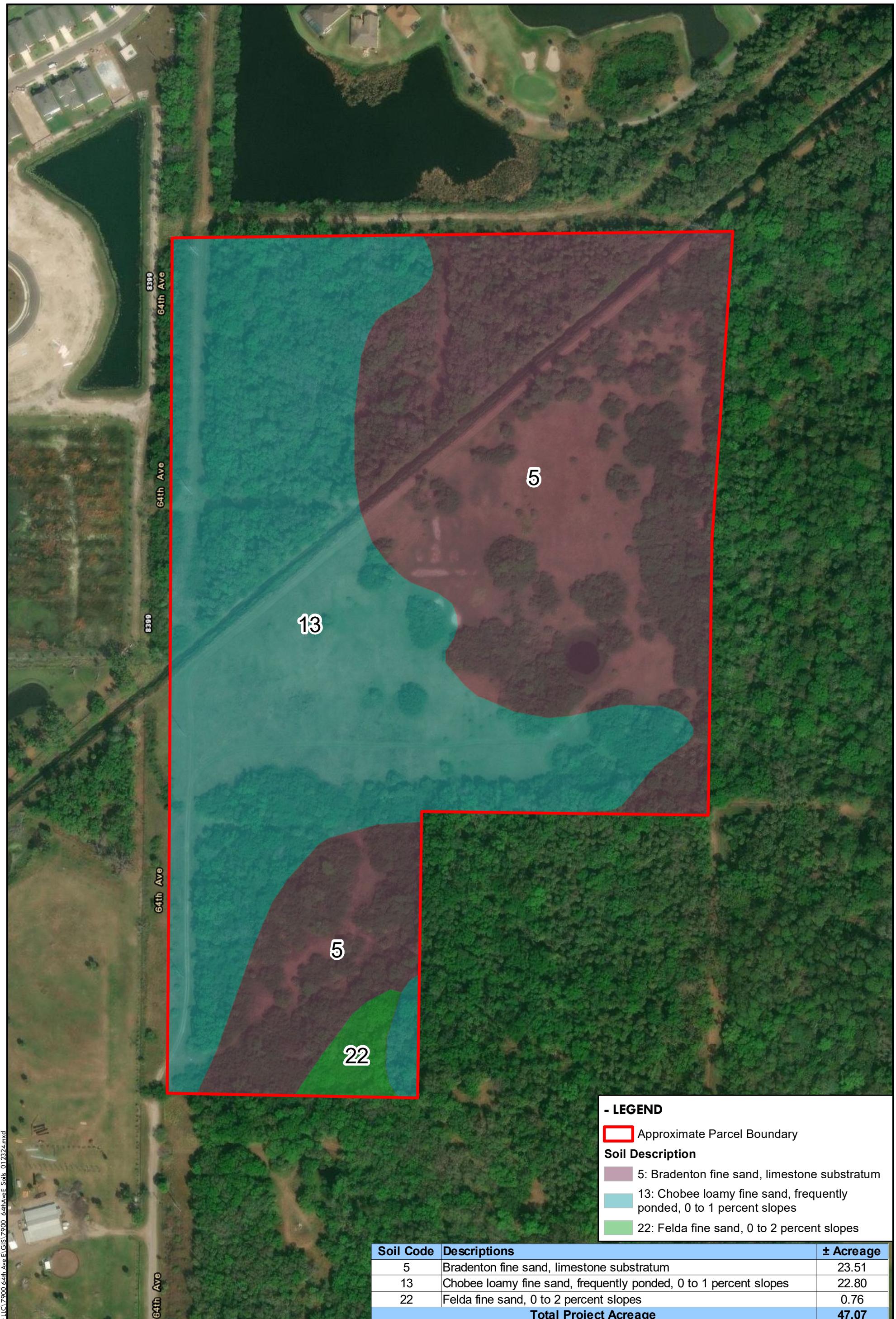
Client: US Real Estate Group, LLC
Project: 7900 64th Ave E
Location: Manatee County, Florida
TRS: Twp: 33S Rng: 18E Sec: 27
Title: USGS Quad Map
Source: USGS Topo Maps

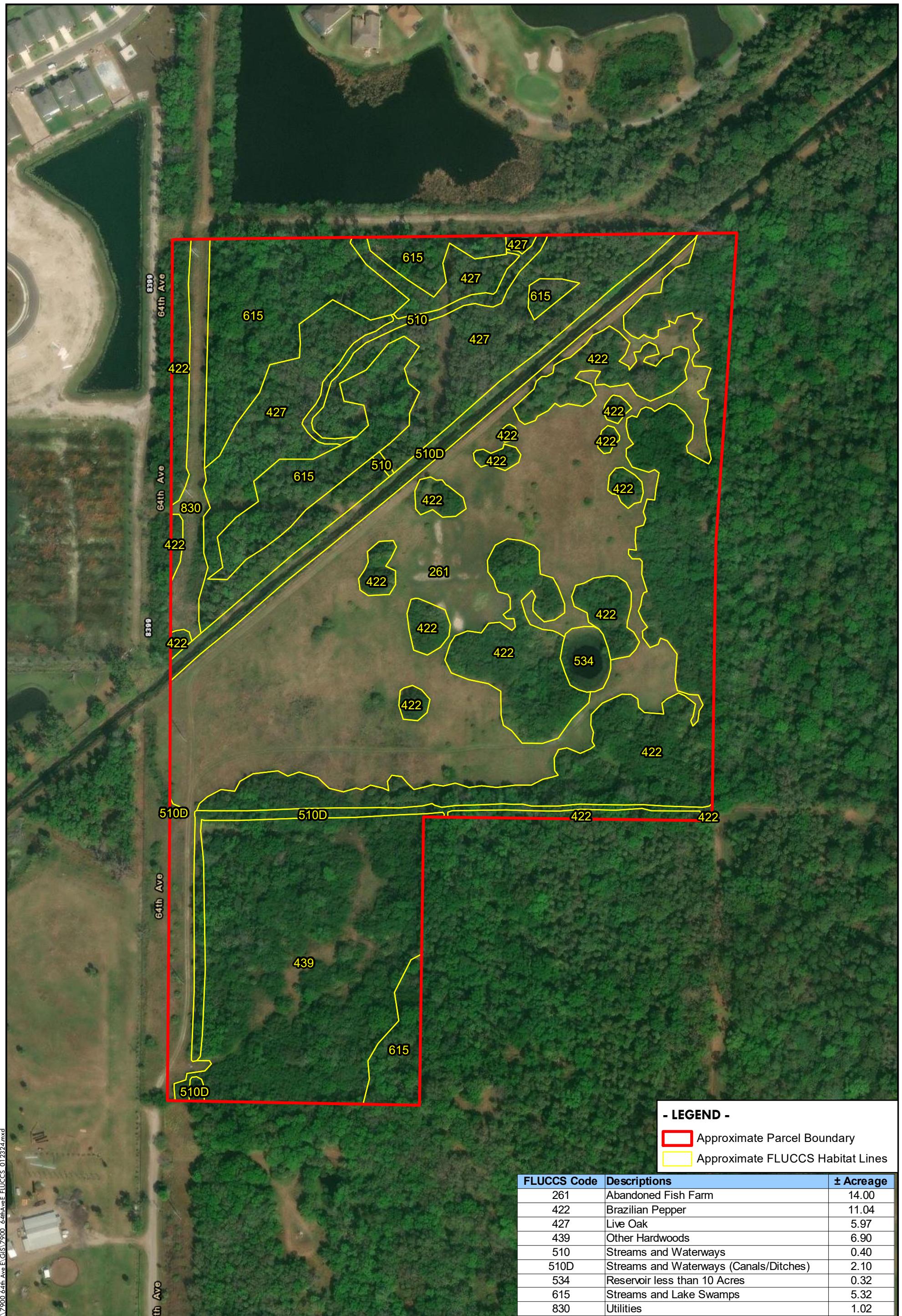
Drawn By: KS
Date: 1/24/2024
Sheet: 1

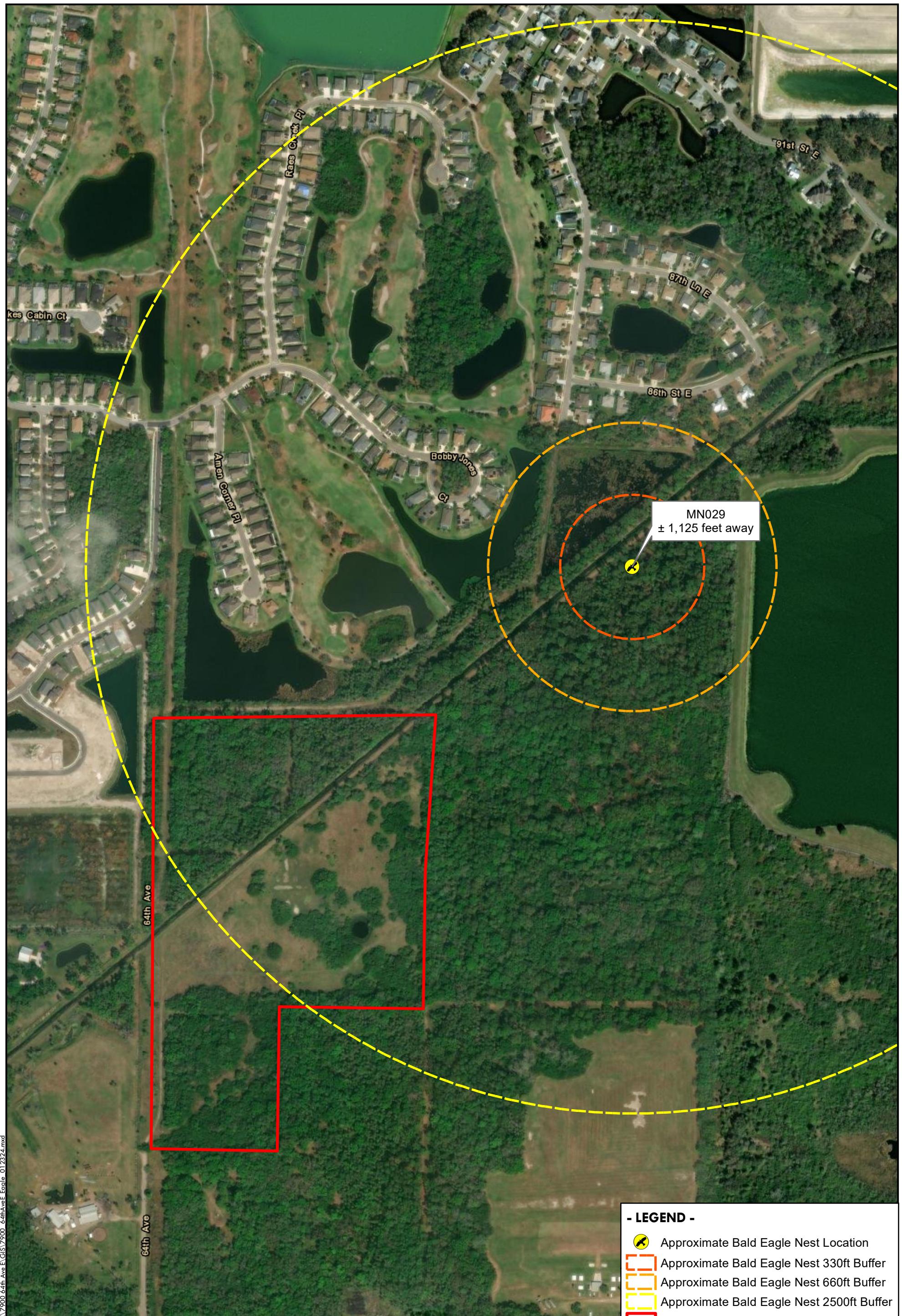


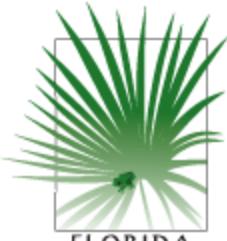
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FLORIDA
Natural Areas
INVENTORY

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
850-681-9364 fax
www.fnai.org

Florida Natural Areas Inventory

Biodiversity Matrix Query Results

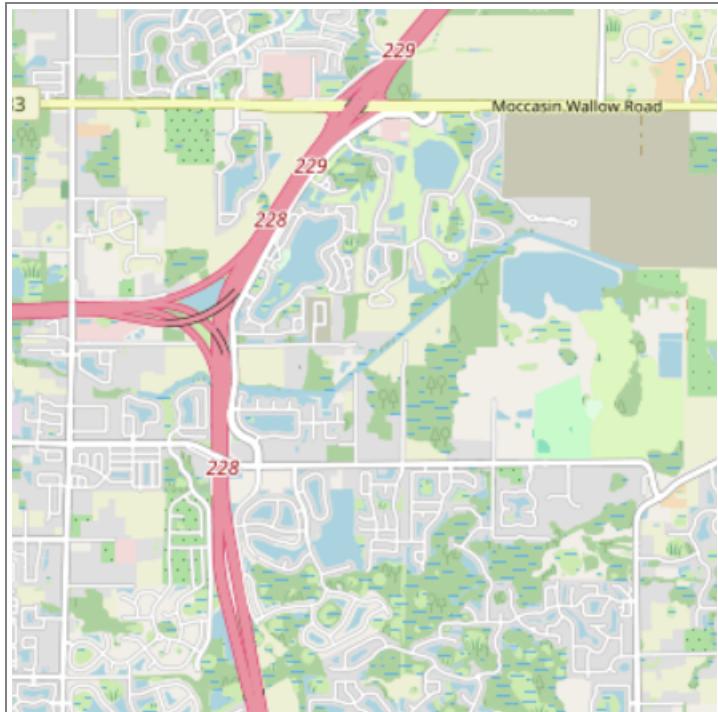
UNOFFICIAL REPORT

Created 1/24/2024

(Contact the FNAI Data Services Coordinator at 850.224.8207 or
kbrinegar@fnai.fsu.edu for information on an official Standard
Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

Report for 1 Matrix Unit: 24954



Descriptions

DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.

DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.

LIKELY - The species or community is *known* to occur in this vicinity, and is considered likely within this Matrix Unit because:

1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; or
2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.

POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.

Matrix Unit ID: 24954

0 Documented Elements Found

0 Documented-Historic Elements Found

2 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<i>Mycteria americana</i> Wood Stork	G4	S2	T	FT

Matrix Unit ID: 24954

13 Potential Elements for Matrix Unit 24954

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Bonamia grandiflora</i> Florida bonamia	G3	S3	T	E
<i>Calopogon multiflorus</i> many-flowered grass-pink	G2G3	S2S3	N	T
<i>Centrosema arenicola</i> sand butterfly pea	G2Q	S2	N	E
<i>Corynorhinus rafinesquii</i> Rafinesque's Big-eared Bat	G3G4	S1	N	N
<i>Drymarchon couperi</i> Eastern Indigo Snake	G3	S2?	T	FT
<i>Gopherus polyphemus</i> Gopher Tortoise	G3	S3	C	ST
<i>Lechea cernua</i> nodding pinweed	G3	S3	N	T
<i>Lithobates capito</i> Gopher Frog	G2G3	S3	N	N
<i>Mustela frenata peninsulae</i> Florida Long-tailed Weasel	G5T3?	S3?	N	N
<i>Nemastylis floridana</i> celestial lily	G2	S2	N	E
<i>Rhynchospora megaplumosa</i> large-plumed beaksedge	G2	S2	N	E
<i>Sciurus niger niger</i> Southeastern Fox Squirrel	G5T5	S3	N	N
<i>Zephyranthes simpsonii</i> redmargin zephyrlily	G2G3	S2S3	N	T

Disclaimer

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

Unofficial Report

These results are considered unofficial. FNAI offers a [Standard Data Request](#) option for those needing certifiable data.

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

7900 64th Ave

LOCATION

Manatee County, Florida



DESCRIPTION

None

Local office

Florida Ecological Services Field Office

📞 (772) 562-3909

📠 (772) 562-4288

✉️ fw4flesregs@fws.gov

1339 20th Street
Vero Beach, FL 32960-3559

<https://www.fws.gov/office/florida-ecological-services>

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of

Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Crested Caracara (audubon'''s) [fl Dps] <i>Caracara plancus audubonii</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8250	Threatened
Eastern Black Rail <i>Laterallus jamaicensis</i> ssp. <i>jamaicensis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Everglade Snail Kite <i>Rostrhamus sociabilis</i> <i>plumbeus</i> Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7713	Endangered
Whooping Crane <i>Grus americana</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/758	<u>EXPN</u>
Wood Stork <i>Mycteria americana</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon couperi</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	Threatened

Green Sea Turtle *Chelonia mydas* Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
<https://ecos.fws.gov/ecp/species/6199>

Loggerhead Sea Turtle *Caretta caretta* Threatened
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
<https://ecos.fws.gov/ecp/species/1110>

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Pygmy Fringe-tree <i>Chionanthus pygmaeus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1084	Endangered

Lichens

NAME	STATUS
Florida Perforate Cladonia <i>Cladonia perforata</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7516	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below.

Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely

to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

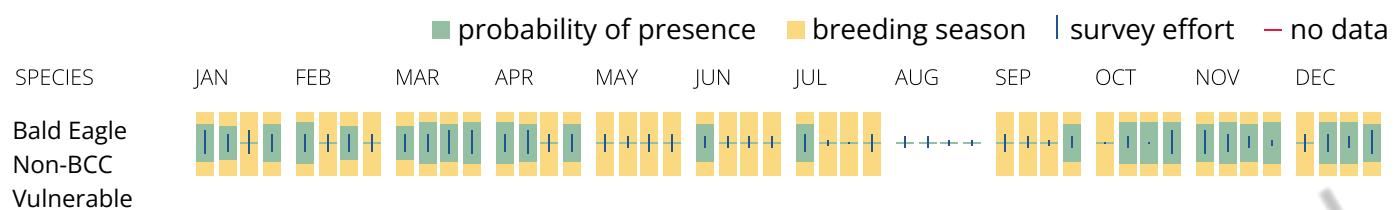
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON

American Kestrel <i>Falco sparverius paulus</i>	This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31
Bald Eagle <i>Haliaeetus leucocephalus</i>	This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Jul 31
Black Skimmer <i>Rynchops niger</i>	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Chimney Swift <i>Chaetura pelagica</i>	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Great Blue Heron <i>Ardea herodias occidentalis</i>	This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Jan 1 to Dec 31
Gull-billed Tern <i>Gelochelidon nilotica</i>	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9501	Breeds May 1 to Jul 31
Lesser Yellowlegs <i>Tringa flavipes</i>	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper <i>Calidris melanotos</i>	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Prairie Warbler <i>Dendroica discolor</i>	This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31

Red-headed Woodpecker *Melanerpes erythrocephalus* Breeds May 10 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Reddish Egret *Egretta rufescens* Breeds Mar 1 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/7617>

Short-billed Dowitcher *Limnodromus griseus* Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/9480>

Swallow-tailed Kite *Elanoides forficatus* Breeds Mar 10 to Jun 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/8938>

Willet *Tringa semipalmata* Breeds Apr 20 to Aug 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in

the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

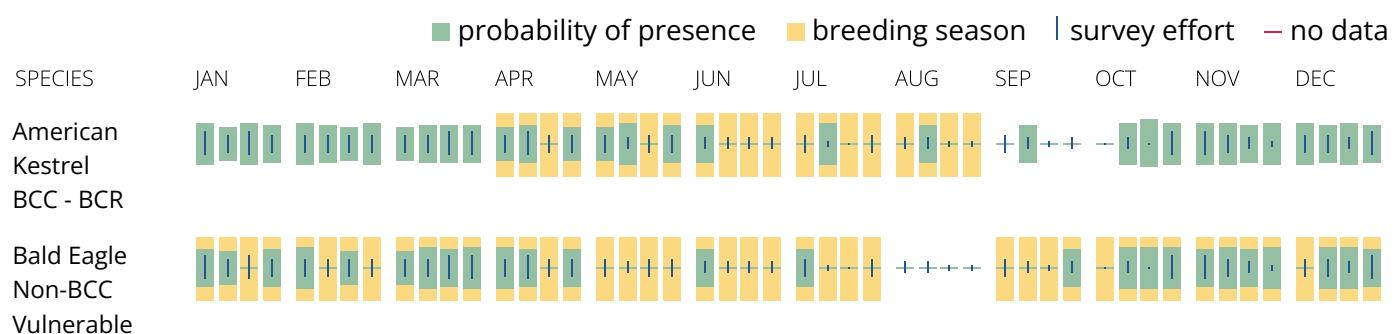
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

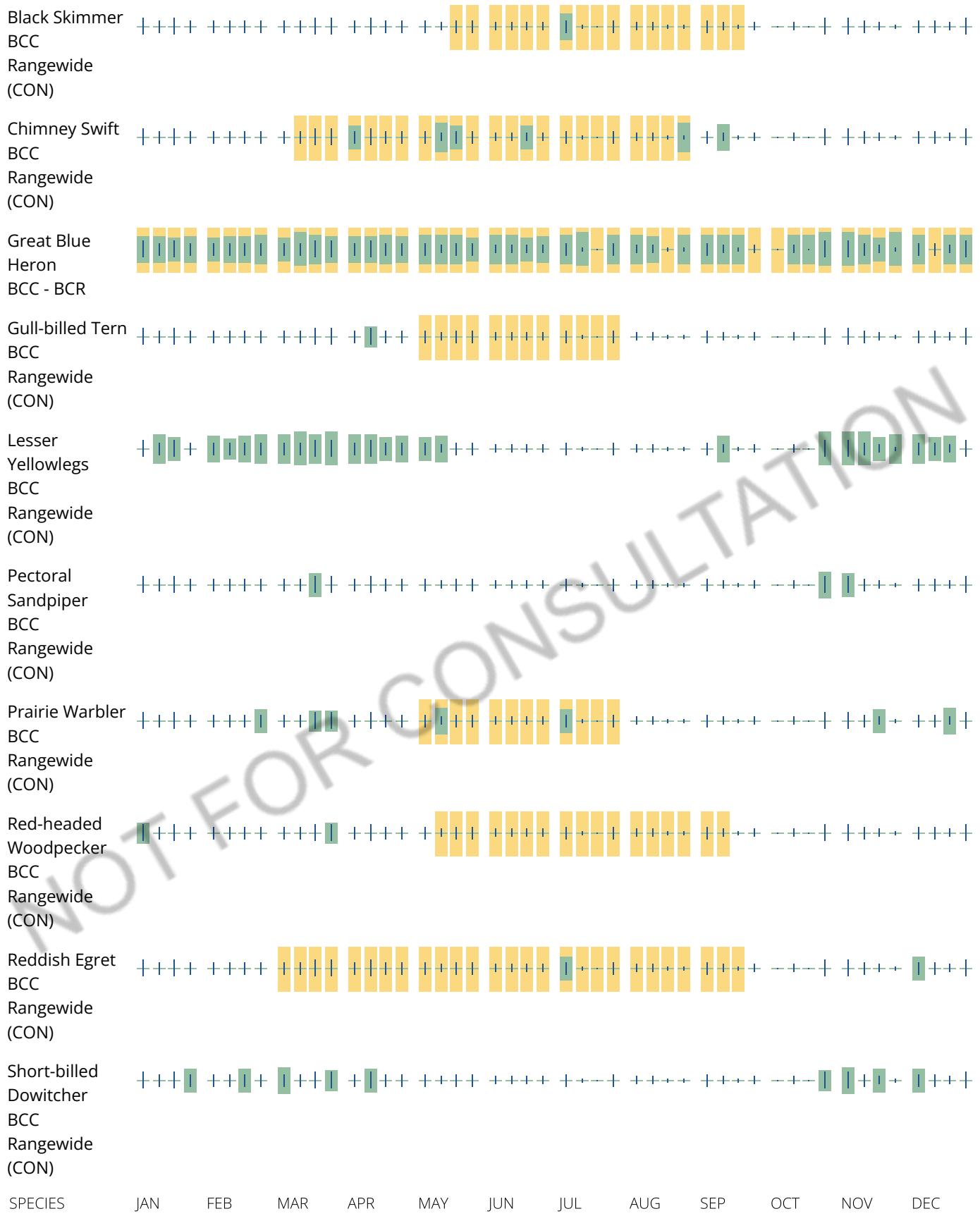
No Data (-)

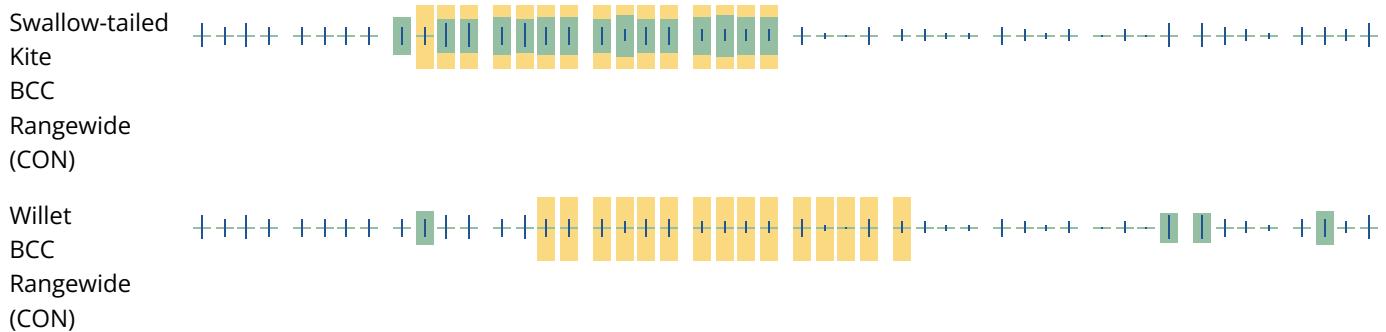
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.