Natural Resource Management, Wetland, and Environmental Permitting Services



CENTRAL PARKWAY

Environmental Assessment Report

Prepared for:

FARRELL BUILDING

Prepared by:

EW Consultants, Inc.

March 2020

Natural Resource Management, Wetland, and Environmental Permitting Services

INTRODUCTION

This Environmental Assessment Report documents and summarizes natural resource features present on an approximately 6.8 +/- acre property located within the City of Stuart. The site is located on the north and south sides of Central Parkway, west of Rays Way, and east of Palermo Court.

The site is situated within Section 9, Township 38 South, Range 41 East, within the municipal limits of the City of Stuart, Martin County, Florida. A Location Map (Figure 1), USGS Quad Map (Figure 2), and Aerial Photo (Figure 3) depicting the site boundaries and immediate surrounding area are provided in the Appendix.

SOILS

A U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Resource Report was generated for the subject property and is provided in the Appendix. This report contains a soils map with the boundary of the property depicted as well as additional information and descriptions of soil types on the subject property. According to the soil survey data, three soil types are found on the subject property.

It is important to note that the description of these soils, in their natural state, according to the NRCS, was generated in the early 1970's, and therefore predates potential land alterations that have occurred since the publication of the Soil Survey.

NATURAL COMMUNITIES AND LAND COVER

The following is a summary of the land cover types and vegetative communities found on the subject site. Land cover and vegetative community classifications are mapped based on the Florida Land Use, Cover and Forms Classification System (FLUCFCS) developed by the Florida Department of Transportation. Field reconnaissance and aerial imagery interpretation were employed in the mapping of the vegetative communities on the subject property. The vegetative community descriptions include discussions of potential wildlife habitat provided by the various resources present in those communities. Detailed observations and occurrences of wildlife are discussed in subsequent sections of this report.

There were three different FLUCFCS classifications observed on the site which are described below. A land cover map of the observed community types is included as Figure 4 in the Appendix of this report. The land cover types observed on the property are described as follows:

<u>#190 – Open Lands</u>

The portions of the property that are dominated by herbaceous vegetation and lack any substantial canopy coverage have been included in this category. The dominant vegetation in these areas consists of guinea grass, cogon grass, bahia grass, sandspur grass, limpo grass, napier grass, St. Augustine grass, para grass, Caesar weed, beggars ticks, creeping oxeye, inchplant, grape vine, jack-in-the-bush, snake plant, ragweed, and dog fennel. Scattered trees and shrubs are also present in these areas and includes non-native Brazilian pepper and earleaf acacia along with native laurel oak and cabbage palm. Wildlife observations within the open lands were limited to agama lizard, crow, and mourning dove.

#510 – Ditches

There are two man-made ditches that are located on the property. A large drainage ditch with regularly-maintained embankments and open-water areas in its center extends along the western and southern boundaries of the site. Gambusia minnows and a little blue heron were observed in this drainage ditch during site reconnaissance. A second east-west oriented ditch is located north of Central Parkway. This ditch is overgrown by non-native vegetation and does not exhibit any areas of open water. No wildlife was observed in the east-west drainage ditch during site reconnaissance.

#740 – Disturbed Lands

The portions of the property that are dominated by canopy trees and other woody vegetation have been included in this category due to the dominance of non-native vegetation in these areas. Dominant vegetation includes non-native earleaf acacia, Brazilian pepper, indian laurel, java plum, carrotwood, lead tree, and neem tree. Native tree species include laurel oak, live oak, strangler fig, cabbage palm, and a hedgerow of planted southern red cedar. Wildlife observed within these portions of the property included red-shouldered hawk, mocking bird, mourning dove, southern black racer, and agama lizards.

LISTED SPECIES EVALUATION

WILDLIFE

The site reconnaissance conducted in February 2020 found indicators of common wildlife species for this area including mourning dove, red-shouldered hawk, mocking bird, little blue heron, southern black racer, gambusia minnows, and non-native agama lizards.

With regard to protected species and their potential for occurrence on the site, the following table summarizes the likelihood of occurrence of such species based on the observed habitat characteristics and field reconnaissance efforts.

Table 1 Known and Potentially Occurring Listed Faunal Species

Common Name	Scientific Name	Preferred Habitat	Sampling Method	Occurrence*	Listed Status** State/Federal
American alligator	Alligator mississippiensis	Wetland and aquatic habitat	Pedestrian transects	M	FT(S/A)
Audubon's crested caracara	Polyborus plancus audubonii	Open prairies and rangeland	Pedestrian transects	L	FT
Bald eagle	Haliaeetus leucocephalus	Nest in tall trees (usually pine) near coasts, rivers, lakes, and wetlands	Pedestrian transects	L	No longer listed, Nest trees protected
Burrowing owl	Athene cunicularia	Sandhills, ruderal communities, dry prairies	Pedestrian transects	L	ST
Eastern indigo snake	Drymarchon corais couperi	A diversity of upland/low land habitat, agricultural lands	Pedestrian transects	L	FT
Florida grasshopper sparrow	Ammodramus savannarum floridanus	Open prairies and rangeland	Pedestrian transects and playback tapes	L	FE
Florida panther	Felis concolor coryi	Large wilderness areas	Pedestrian transects	L	FE
Florida sandhill crane	Grus canadensis pratensis	Breed in emergent palustrine wetlands; forage pastures/prairies	Pedestrian transects; aerial nest survey	L	ST
Snail kite	Rostrhamus sociabilis plumbeus	Long hydroperiod wetlands/aquatic systems with <i>Pomacea</i> snails	Pedestrian transects	L	FE
Florida pine snake	Pituophis melanoleucus mugitus	Well drained sandy soils, moderate to open canopy	Pedestrian transects; inspection of burrow	L	ST

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Common Name	Scientific Name	Preferred Habitat	Sampling Method	Occurrence*	Listed Status**
Gopher tortoise	Gopherus polyphemus	Sandhills, xeric oak scrub, sand pine scrub, scrubby flatwoods; agricultural lands	Burrow survey of suitable habitat	М	ST
Sherman's fox squirrel	Sciurus niger shermani	Longleaf pine, turkey oak, sandhills, and flatwooods	Pedestrian transects	L	SSC
Little blue heron	Egretta caerulea	Breeding: marshes, swamps, ponds, estuaries, rivers; nest in shrubs and small trees	Pedestrian transects	O ₁	ST
Red-cockaded woodpecker	Picoides borealis	Mature pine woodlands	Pedestrian transects	L	FE
Roseate spoonbill	Platalea ajaja	Breeding: marshes, swamps, ponds, estuaries, rivers; nest in shrubs and small trees	Pedestrian transects	L	ST
Southeastern american kestrel	Falco sparverius paulus	Sandhill and open rangeland nest in cavities of dead trees and abandoned woodpecker nests	Pedestrian transects	L	ST
Tricolored heron	Egretta tricolor	Breeding: marshes, swamps, ponds, estuaries	Pedestrian transects	М	ST

Common Name	Scientific Name	Preferred Habitat	Sampling Method	Occurrence*	Listed Status**
Whooping crane	Grus americana	Breed in emergent palustrine wetlands; forage in pastures	Pedestrian transects	L	"Experimental population"
Wood stork	Mycteria americana	Estuarine or freshwater wetlands; nest in tops of trees in cypress or mangrove swamps	Pedestrian transects	М	FT

¹ Observed transient

Based on this summary, documented habitat, and field observations, the likelihood of nesting or resident occurrences of any State or Federally designated threatened or endangered species on the site is low.

The preferred nesting habitat for Florida sandhill cranes is native freshwater marsh habitat, which does not occur on this property. The open lands areas offer some potential for foraging however, this activity by sandhill cranes on the property would be transient in nature.

Bald eagles, while no longer listed, remain protected under the Bald and Golden Eagle Protection Act. No bald eagles were observed on site. According to the FFWCC database the closest documented bald eagle nests are located approximately 1.62 miles northwest, 2.07 miles southwest, and 2.18 miles northeast of the site.

Although the subject site is within the consultation area of the Audubon's crested caracara, use of the site by caracara for foraging and the potential of caracara nesting on site or in the areas surrounding the site is unlikely. Caracara nesting habitat is not present on the site or in the surrounding areas. No crested caracara or crested caracara nests were observed during the site review.

The wood stork is a federally listed threatened species that nests in naturally forested wetlands and forages in shallow open waters. No wood storks were observed during the site reconnaissance. Wood storks have been known to forage in shallow drainage ditches and therefore there is a

² Observed nesting and/or resident

^{*}O= Observed; $\overset{\circ}{H}$ = High probability; M= Medium; L= Low; FE = Federally Endangered; FT = Federally Threatened; FT(S/A) = Federally Threatened due to similarity of appearance; ST = State Threatened; SSC

⁼ State Species of Special Concern

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potential that wood storks may occasionally frequent the drainage ditch along the western and southern property boundaries for foraging opportunities. Their presence would be limited to foraging and therefore transient in nature. The property does not provide suitable nesting habitat for wood storks. The site is within the 18.6-mile core foraging area of wood stork rookeries as per USFWS database.

The site does not provide suitable nesting habitat for State Threatened wading birds however, it provides suitable foraging habitat for these species. A little blue heron was observed foraging within the drainage ditch along the western property boundary. The occasional presence of State listed wading birds foraging within the ditch is anticipated however, their presence would be transient in nature.

The burrowing owl is a small ground-dwelling owl found in open, treeless fields, where it spends most of its time on the ground or perched on low objects. The open lands portions of the site do provide potential nesting habitat for burrowing owls. Burrowing owls, burrowing owl burrows, or indicators of the presence of burrowing owls were not observed during the site review and their presence is not anticipated.

Gopher tortoises are listed as a Threatened species by the State of Florida. A gopher tortoise burrow survey of 100% of the property was completed in February 2020. No gopher tortoises, gopher tortoise burrows, or signs thereof were found on the property during this survey. Although no gopher tortoises or gopher tortoise burrows were observed during the February 2020 survey, this species has a moderate potential of migrating to the site from adjacent lands. As such, in advance of any land development activity, a 100% survey of potential habitat areas will be required and any gopher tortoises present will be relocated in accordance with FFWCC permitting requirements.

The eastern indigo snake can be found over a diversity of upland and wetland habitats, and is also known to occupy gopher tortoise burrows, which do not occur on the property. No eastern indigo snake or sign thereof have been observed on the site. Based on the review of publically available data, the nearest recent sighting of an eastern indigo snake is located over eight miles north, north of the St. Lucie River. Given the isolated nature of the site due to the surrounding urban development, eastern indigo snakes are not likely to occur on the subject property. As a precaution measure, USFWS-approved construction awareness and notification procedures will be implemented for the protection of this species during site development.

The American alligator is listed as Federally Threatened due to similarity of appearance with the American crocodile. Alligators are relatively common throughout the region in wetland and aquatic systems. Although none were observed, there is a moderate chance of occasional presence of alligators in the drainage ditches.

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Given the surrounding urban development and activity, the dominance of non-native vegetation and habitat, the property provides significantly reduced foraging and/or nesting habitat for state and/or federally listed wildlife species.

Coordination has been initiated with FFWCC. Please refer to the copy of the email sent to the FFWCC provided in the Appendix. Coordination has also been initiated with the USFWS via the IPaC (information for Planning and Consultation) regulatory review process. With the use of this online project planning tool an official list was requested from the USFWS. A copy of the automatically-generated list of trust resources IPaC resource list is provided as a copy in the Appendix.

WETLAND EVALUATION

The site review did not identify any areas that would be considered jurisdictional wetlands under State or Federal criteria. Final regulatory decisions as to the presence or absence of jurisdictional wetlands is determined by the relevant State (South Florida Water Management District) and Federal (U.S. Army Corps of Engineers) agencies.

The existing ditches on the site will be considered "other surface waters" by the South Florida Water Management District (SFWMD) and "non-wetland waters of the U.S." by the U.S. Army Corps of Engineers (USACE).

PRESERVE AREA AND UPLAND BUFFER EVALUATION

Although some scattered native vegetation is present on the site, the property does not contain any native upland habitats therefore no upland native habitat preserve areas should be required.

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SUMMARY

Vegetation

The property contains only scattered native vegetation but does not contain any native upland habitats.

Wetlands

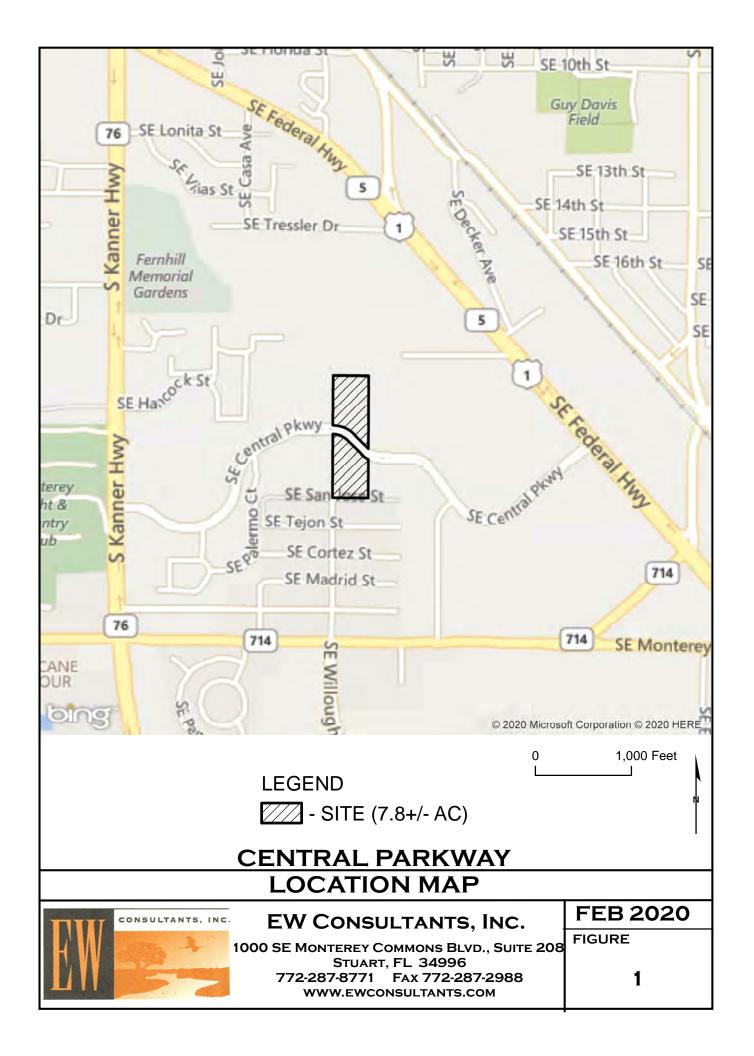
The site review did not identify any areas of the property that would be considered jurisdictional wetlands under State or Federal criteria. The presence or absence of jurisdictional wetlands is however subject to final determination by the relevant State and Federal agencies. The onsite manmade ditches will be considered "other surface waters" by the SFWMD and "non-wetland waters of the U.S." by the USACE.

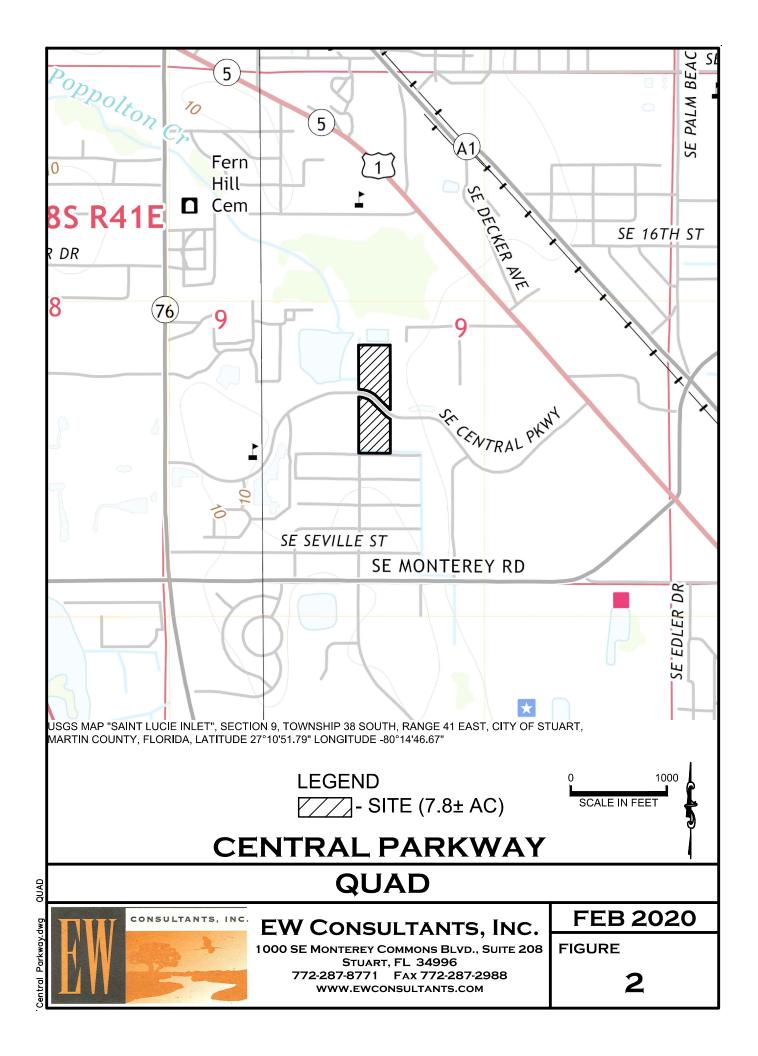
Listed Species

No signs of gopher tortoises were observed on the property. As potentially suitable gopher tortoise habitat exists in close proximity to the subject site, there is the potential for gopher tortoises to migrate onto the site. The gopher tortoise is listed by the Florida Fish and Wildlife Conservation Commission (FFWCC) as threatened, thus any development of the subject site that may impact gopher tortoises and/or their burrows would require FFWCC authorization. Prior to the commencement of construction activities, a 100% survey of the site is recommended to confirm the findings of this assessment.

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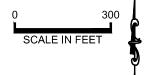
APPENDIX







MARTIN COUNTY AERIALS DATED 2019



CENTRAL PARKWAY

AERIAL



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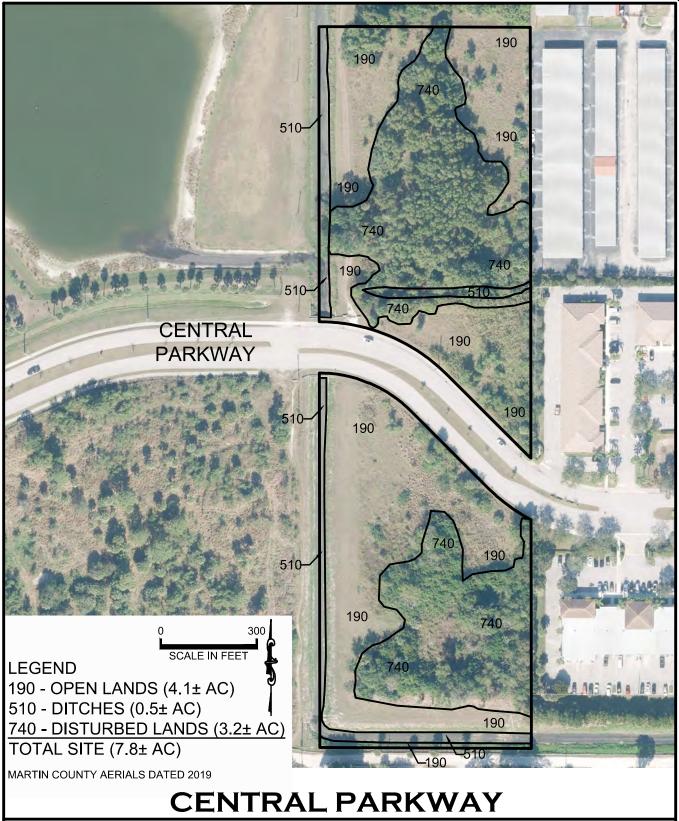
1000 SE MONTEREY COMMONS BLVD., SUITE 208 STUART, FL 34996 772-287-8771 FAX 772-287-2988 WWW.EWCONSULTANTS.COM

FEB 2020

FIGURE

3

wg AERIAL



FLUCFCS



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1000 SE MONTEREY COMMONS BLVD., SUITE 208 STUART, FL 34996 772-287-8771 FAX 772-287-2988 WWW.EWCONSULTANTS.COM

FEB 2020

FIGURE

4



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

... Gravelly Spot

Landfill

A Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Wery Stony Spot

Wet Spot
 Other

Special Line Features

Transportation

Δ

Rails

Interstate Highways

US Routes

Major Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Martin County, Florida Survey Area Data: Version 18, Sep 17, 2019

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Mar 8, 2019—Mar 28, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Waveland and Immokalee fine sands	3.3	42.7%
23	Urban land, 0 to 2 percent slopes	1.5	18.9%
41	Jonathan sand, 0 to 5 percent slopes	3.0	38.3%
Totals for Area of Interest	-	7.8	100.0%

From: <u>Jason hahner</u>

To: "ConservationPlanningServices@MyFWC.com"

Cc: Arnaud Roux

Subject: General Technical Assistance Request - Central Parkway Storage (Commercial Project)

Date: Friday, February 28, 2020 10:18:00 AM

Attachments: Central Parkway Storage Environmental Assessment 2-28-20.pdf

To whom it may concern:

This email is a General Technical Assistance request for the above-referenced property. The subject project area is approximately 7.8 +/- acres in size and is currently undeveloped. The owner is seeking development approvals for a multi-family residential project and we are requesting a search of the Florida Fish and Wildlife Conservation Commission database to identify the possible occurrences of State-listed species on the subject property.

The site is located within the municipal limits of the City of Stuart, Martin County, Florida. More specifically, the site is located west of Federal Highway (US1), on the north and south sides of Central Parkway, west of Rays Way, and east of Palermo Court. The site is situated within Section 9, Township 38 South, Range 41 East. A Location Map, Quad Map, and Aerial Map are provided as Figures 1-3, respectively. The property is bounded on the north by a manmade stormwater retention pond and undeveloped lands; to the west by a man-made drainage ditch, a man-made excavated lake, and undeveloped lands; to the south by a man-made drainage ditch and residential development; and to the east by mixed commercial development.

Field surveys have been conducted on the property, the results of which have been incorporated in an Environmental Assessment report (copy attached). No listed species of fauna or flora were observed on site. The project includes site clearing, excavation, filling, and grading to improve the property for development of the proposed storage facility and associated infrastructure.

I would appreciate if you would please reference "Central Parkway Storage" when you respond. If you have any questions, or need additional information, please do not hesitate to contact me.

Sincerely,

Jason Hahner
Environmental Scientist
EW CONSULTANTS, INC.

"Natural Resource Management, Wetland, and Environmental Permitting Services"

1000 SE Monterey Commons Blvd | Stuart, Florida 34996

772-287-8771 Phone | 772-287-2988 Fax | 561-284-9679 Cell

IPaC

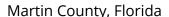
U.S. Fish & Wildlife Service

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.

Location





Local office

South Florida Ecological Services Field Office

(772) 562-3909

(772) 562-4288

1339 20th Street Vero Beach, FL 32960-3559

http://fws.gov/verobeach

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. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> 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 <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.
- 2. <u>NOAA Fisheries</u>, 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:

Mammals

NAME STATUS

Florida Bonneted Bat Eumops floridanus

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/8630

Endangered

Florida Panther Puma (=Felis) concolor coryi

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/1763

Endangered

Puma (=mountain Lion) Puma (=Felis) concolor (all subsp. except

coryi)

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6049

SAT

Southeastern Beach Mouse Peromyscus polionotus niveiventris

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/3951

Threatened

West Indian Manatee Trichechus manatus

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/4469

Threatened

Marine mammal

Birds

NAME STATUS

Audubon's Crested Caracara Polyborus plancus audubonii

No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8250

Threatened

Everglade Snail Kite Rostrhamus sociabilis plumbeus

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/7713

Endangered

Florida Grasshopper Sparrow Ammodramus savannarum

floridanus

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/32

Endangered

Florida Scrub-jay Aphelocoma coerulescens

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6174

Threatened

Ivory-billed Woodpecker Campephilus principalis

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/8230

Endangered

2/27/2020

Red Knot Calidris canutus rufa

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/1864

Threatened

Red-cockaded Woodpecker Picoides borealis

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/7614

Endangered

Whooping Crane Grus americana

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/758

EXPN

Wood Stork Mycteria americana

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/8477

Threatened

Reptiles

NAME

American Alligator Alligator mississippiensis

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/776

SAT

Eastern Indigo Snake Drymarchon corais couperi

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/646

Threatened

Hawksbill Sea Turtle Eretmochelys imbricata

There is **final** critical habitat for this species. Your location is outside

the critical habitat.

https://ecos.fws.gov/ecp/species/3656

Endangered

Leatherback Sea Turtle Dermochelys coriacea

There is **final** critical habitat for this species. Your location is outside

the critical habitat.

https://ecos.fws.gov/ecp/species/1493

Endangered

Loggerhead Sea Turtle Caretta caretta

There is final critical habitat for this species. Your location is outside

the critical habitat.

https://ecos.fws.gov/ecp/species/1110

Threatened

Insects

NAME STATUS

2/27/2020 IPaC: Explore Location

Florida Leafwing Butterfly Anaea troglodyta floridalis

There is **final** critical habitat for this species. Your location is outside the critical habitat.

https://ecos.fws.gov/ecp/species/6652

Endangered

Endangered

Endangered

Miami Blue Butterfly Cyclargus (=Hemiargus) thomasi

bethunebakeri

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/3797

Flowering Plants

NAME STATUS

Beach Jacquemontia Jacquemontia reclinata

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/1277

Four-petal Pawpaw Asimina tetramera Endangered

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/3461

Lakela's Mint Dicerandra immaculata Endangered

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6390

Tiny Polygala Polygala smallii Endangered

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/996

Lichens

NAME STATUS

Florida Perforate Cladonia Cladonia perforata

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.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act^{1} and the Bald and Golden Eagle Protection Act^{2} .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 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:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds
 http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of Conservation Concern</u> (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 <u>below</u>. 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 <u>E-bird data mapping tool</u> (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 <u>below</u>.

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

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED
FOR A BIRD ON YOUR LIST, THE
BIRD MAY BREED IN YOUR
PROJECT AREA SOMETIME WITHIN
THE TIMEFRAME SPECIFIED,
WHICH IS A VERY LIBERAL
ESTIMATE OF THE DATES INSIDE
WHICH THE BIRD BREEDS
ACROSS ITS ENTIRE RANGE.

"BREEDS ELSEWHERE" INDICATES
THAT THE BIRD DOES NOT LIKELY
BREED IN YOUR PROJECT AREA.)

American Kestrel Falco sparverius paulus

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 1 to Aug 31

American Oystercatcher Haematopus palliatus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/8935

Breeds Apr 15 to Aug 31

Bald Eagle Haliaeetus leucocephalus

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.

https://ecos.fws.gov/ecp/species/1626

Breeds Sep 1 to Jul 31

Black Skimmer Rynchops niger

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

Common Ground-dove Columbina passerina exigua

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Feb 1 to Dec 31

Least Tern Sterna antillarum

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Apr 20 to Sep 10

Limpkin Aramus guarauna

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Jan 15 to Aug 31

Magnificent Frigatebird Fregata magnificens

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Oct 1 to Apr 30

Prairie Warbler Dendroica discolor

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31

Prothonotary Warbler Protonotaria citrea

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 1 to Jul 31

Red-headed Woodpecker Melanerpes erythrocephalus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Sep 10

Ruddy Turnstone Arenaria interpres morinella

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds elsewhere

Semipalmated Sandpiper Calidris pusilla

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Swallow-tailed Kite Elanoides forficatus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/8938

Breeds Mar 10 to Jun 30

Willet Tringa semipalmata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds Apr 20 to Aug 5

Yellow Warbler Dendroica petechia gundlachi

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds May 20 to Aug 10

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 and understand the FAQ "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 (1)

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.

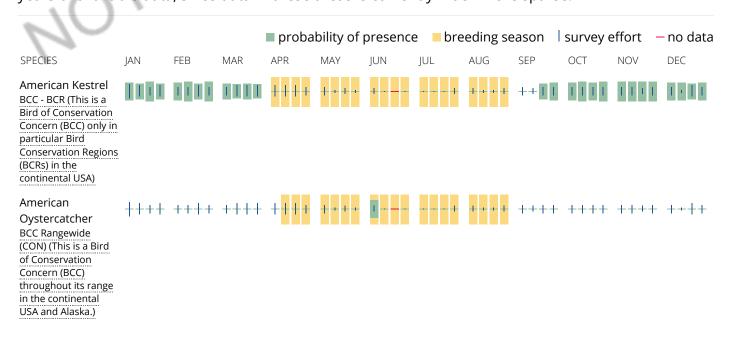
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

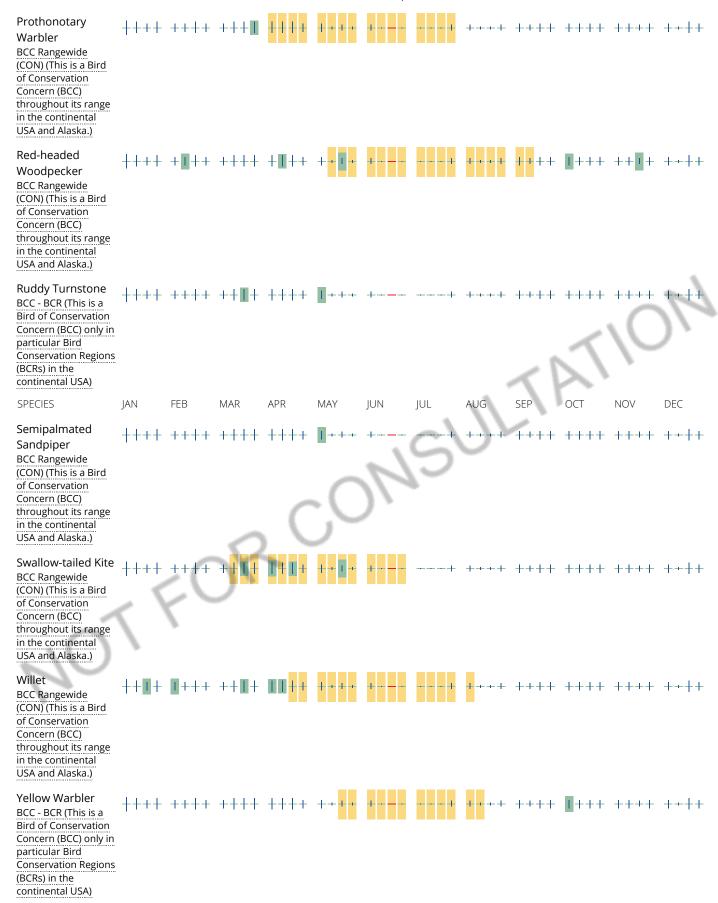
A week is marked as having no data if there were no survey events for that week.

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 and/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 migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> 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 <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey, banding, and citizen science datasets</u> 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 (<u>Eagle Act</u> 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 <u>AKN Phenology Tool</u>.

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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen</u> 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, migrating or present year-round in my project 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 refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. 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 <u>Birds of Conservation Concern</u> (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 <u>Eagle Act</u> 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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

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.

Marine mammals

Marine mammals are protected under the <u>Marine Mammal Protection Act</u>. Some are also protected under the Endangered Species Act¹ and the Convention on International Trade in Endangered Species of Wild Fauna and Flora².

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries³ [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

- 1. The Endangered Species Act (ESA) of 1973.
- 2. The <u>Convention on International Trade in Endangered Species of Wild Fauna and Flora</u> (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
- 3. <u>NOAA Fisheries</u>, 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 marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

West Indian Manatee Trichechus manatus https://ecos.fws.gov/ecp/species/4469

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> 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

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of Engineers District</u>.

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 NVI 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

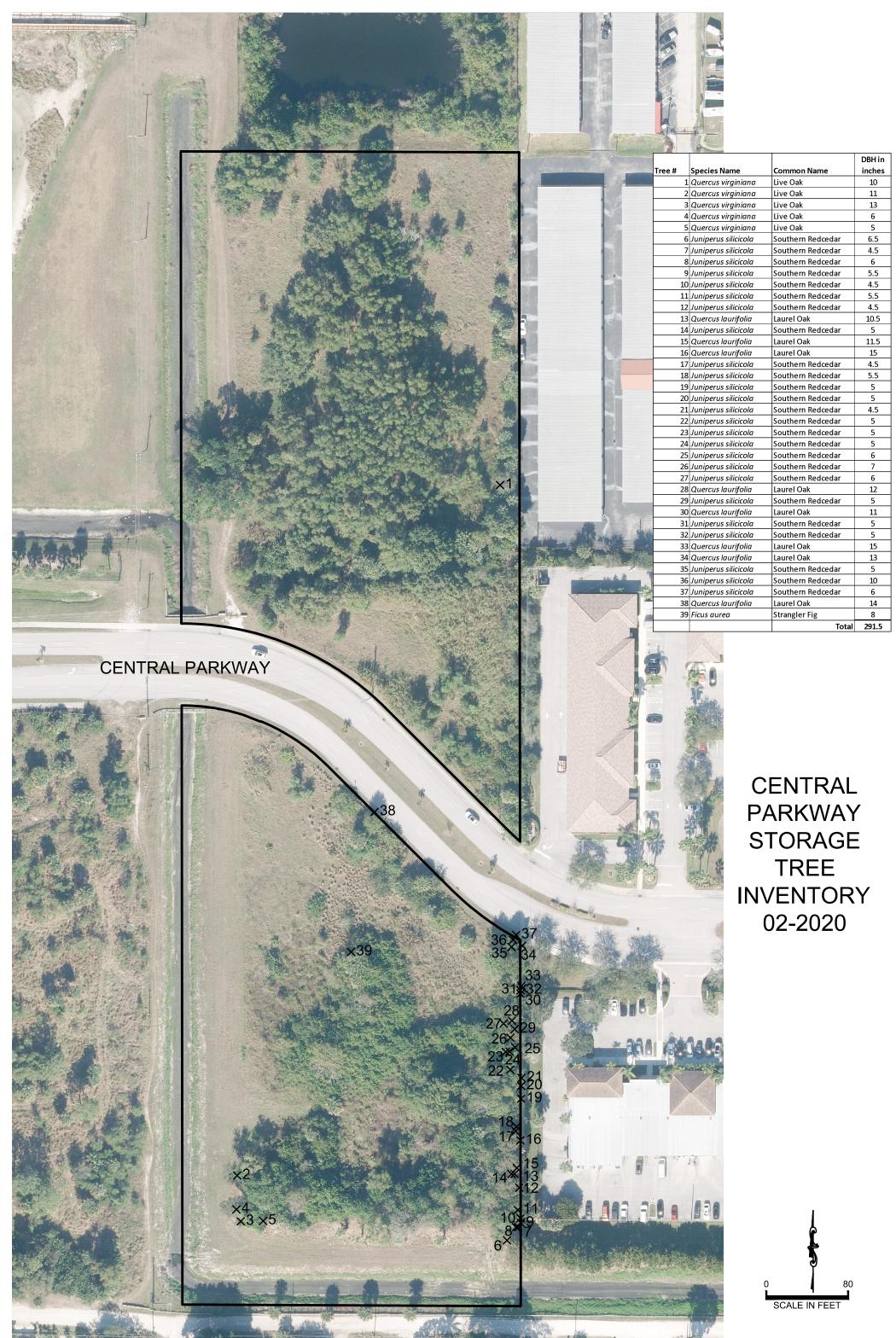
Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid 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.

NOT FOR CONSULTATION



NOTE: The native tree information presented in for the sole use of project landscape architect for site planning and tree mitigation purposes. It is NOT to be provided to any government agency as a finished product unless authorized by a representative of EW Consultants, Inc. This MARTIN COUNTY AERIALS information does not represent a survey.

DATED 2019