

**SELMON**  
**EXPRESSWAY**

South Selmon PD&E Study

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**Natural Resources  
Evaluation**

May 2021

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## ES. Executive Summary

The Tampa Hillsborough Expressway Authority (THEA) is conducting a Project Development and Environment (PD&E) Study to evaluate capacity improvements along the Selmon Expressway in Hillsborough County, Florida (South Selmon PD&E Study). The project limits extend from Himes Avenue to the beginning of the six-lane section near Whiting Street, approximately 4.5 miles.

This Natural Resource Evaluation (NRE) Report was prepared as a component of the PD&E Study to evaluate **Protected Species and Habitat, Wetlands and Other Surface Waters, and Essential Fish Habitat**. This NRE Report documents the results of the evaluation in order to support decisions related to the proposed alternatives and to summarize potential impacts to natural resources that could occur as a result of the proposed project.

### ES.1 Protected Species and Habitat

This NRE complies with Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended. The proposed project was evaluated for potential impacts to federal and State of Florida (state) endangered or threatened fish, wildlife, or plants (listed species) and habitat of such species that has been designated as critical habitat under Section 7(a) of the ESA. This evaluation was performed in accordance with Part 2, Chapter 16 **Protected Species and Habitat** of the Florida Department of Transportation (FDOT) *PD&E Manual* (July 1, 2020).

Federal listed and protected species, state listed wildlife, and state listed plants were reviewed for their potential to occur within the study area.

### ES.2 Federal Wildlife

Nine federal species listed by the U.S. Department of Interior Fish and Wildlife Service (USFWS) potentially occur within the study area. Federal listed species reviewed included fishes (Gulf sturgeon, smalltooth sawfish), reptiles (loggerhead, green and Kemp's ridley sea turtles), birds (wood stork, piping plover, rufa red knot), and mammals (West Indian/Florida manatee). None were observed during preliminary field surveys.

The study area was evaluated for Critical Habitat as defined by Congress 50 CFR § 17.94 and CFR § 226. Neither USFWS nor National Oceanic and Atmospheric Administration (NOAA) Fisheries designated critical habitat was present. Therefore, the proposed project would not result in the **destruction or adverse modification of critical habitat**.

Federal effects determinations were based on existing conditions, anticipated project impacts, agency guidelines, and THEA implementation measures and commitments. The proposed project would be expected to result in the effects determinations listed in **Table ES-1** for federal listed species.

**Table ES-1: Project Effect Determinations for Federal Listed Species**

Scientific Name	Common Name	Federal Listing	Project Effect Determination
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	Threatened	<i>May affect, not likely to adversely affect</i>
<i>Pristis pectinata</i>	Smalltooth sawfish	Endangered	<i>May affect, not likely to adversely affect</i>
<i>Caretta caretta</i>	Loggerhead sea turtle	Threatened	<i>No effect</i>
<i>Calidris canutus rufa</i>	Rufa red knot	Threatened	<i>No effect</i>
<i>Charadrius melodus</i>	Piping plover	Threatened	<i>No effect</i>
<i>Chelonia mydas</i>	Green sea turtle	Threatened	<i>No effect</i>
<i>Lepidochelys kempii</i>	Kemp’s ridley sea turtle	Endangered	<i>No effect</i>
<i>Mycteria americana</i>	Wood stork	Threatened	<i>No effect</i>
<i>Trichechus manatus latirostris</i>	West Indian/Florida manatee	Threatened	<i>May affect, not likely to adversely affect</i>

Migratory birds and their habitat, including the non-listed, but federally protected bald eagle and osprey were present within the study area. Both receive protection through the Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703-712).

No osprey nests were observed. If an active nest is discovered, it will be afforded protection in accordance with the MBTA and Chapter 68A-16.003 of the F.A.C.; therefore, the project would not impact the osprey.

A bald eagle nest was identified within the study area. This project will be consistent with the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d), as amended. Due to location, nest disturbance could be unavoidable as a result of construction. This nest will be resurveyed during permitting and design to determine the activity status, and if deemed inactive, a survey will be conducted to confirm a replacement nest has not been built within 660 feet of the project ROW. THEA will coordinate with the USFWS in accordance with the *National Bald Eagle Management Guidelines* (2007) and relevant federal laws. The project will be consistent with the provisions codified by these federal laws.

**ES.3 State Wildlife**

Six state listed wildlife managed by the Florida Fish and Wildlife Conservation Commission (FWC) could potentially occur within the study area. Likelihood of occurrence was based on presence of suitable habitat as defined in *Florida’s Imperiled Species Management Plan*, as amended (2018), and listing status was in accordance with *Florida’s Endangered and Threatened Species List* (FWC 2018).

State protected species reviewed included one reptile (gopher tortoise), two wading birds (little blue heron, tricolored heron), and three shorebirds (American oystercatcher, black skimmer, least tern). None were observed during preliminary field surveys. Based on existing conditions, anticipated project impacts, agency guidelines, and THEA implementation measures and commitments, the proposed project would be expected to result in the effects determinations listed in **Table ES-2** for state listed wildlife.

**Table ES-2: Project Effect Determinations for State Listed Species**

Scientific Name	Common Name	State Listing	Project Effect Determination
<i>Gopherus polyphemus</i>	Gopher tortoise	Threatened	No adverse effect anticipated
<i>Egretta caerulea</i>	Little blue heron	Threatened	No adverse effect anticipated
<i>Egretta tricolor</i>	Tricolored heron	Threatened	No adverse effect anticipated
<i>Haematopus palliatus</i>	American oystercatcher	Threatened	No effect anticipated
<i>Rynchops niger</i>	Black skimmer	Threatened	No effect anticipated
<i>Sternula antillarum</i>	Least tern	Threatened	No effect anticipated

**ES.4 Plants**

Given the hardened and developed conditions within this densely urban corridor, listed plants would not be expected. A determination of **no effect** would be anticipated for federal and state listed plants.

**ES.5 Wetlands and Other Surface Waters**

An evaluation was performed in accordance with the FDOT *PD&E Manual*, Part 2, Chapter 9 - **Wetlands and Other Surface Waters**. Wetlands and other surface waters were identified and potential impacts estimated based on the proposed alternatives and probable construction techniques considered at the time of this review. Other surface waters included the channelized Hillsborough River north of the Garrison and Seddon Channels. Wetlands included mangrove habitat along a segment of the Hillsborough River shoreline. Seagrasses were not present.

*De minimis* impacts would be expected to unvegetated substrate within the Hillsborough River due to installation of pilings. Mangrove shading could occur as a result of bridge widening associated with each of the proposed alternatives. Approximately 0.05 acres of mangrove impact could occur due to shading.

Potential impacts were evaluated based on existing habitat conditions at the time of this NRE using the Uniform Mitigation Assessment Method (UMAM) (Chapter 62-345, F.A.C.). Based on the UMAM analysis, the proposed project could have a total UMAM functional loss of 0.01.

Mangrove mitigation evaluated as part of this NRE included onsite mitigation and mitigation banks. Final mitigation requirements would be determined during permitting based on the preferred



alternative and using the UMAM scoring of impacts at that time. The proposed project would be permitted pursuant to Section 373.4137, Florida Statute (F.S), to satisfy mitigation requirements in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

### ES.6 Essential Fish Habitat

This NRE complies with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1996 and is in agreement with the FDOT *PD&E Manual* - Part 2, Chapter 17 - **Essential Fish Habitat**.

The proposed alternatives would extend the area of shading over the Hillsborough River; however, no seagrasses were present. Installation of pilings would likely be necessary within the Hillsborough River to support the widened bridge structure. Although piling number and location would vary based on the preferred alternative, installation of pilings would occur within unconsolidated mud bottom within the Hillsborough River. Impacts associated with pilings in other surface waters would be *de minimis*.

Mangrove habitat shading would occur to construct the Selmon Expressway Bridge over the Hillsborough River. Shading impacts would vary based on the final design, but shading could occur over approximately 0.05 acres of mangroves. Mangrove impacts that result from construction of the proposed project would be mitigated pursuant to the requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

Based on existing conditions, anticipated project impacts, agency guidelines, and THEA implementation measures and commitments, the proposed project would have minimal impact on EFH.

### ES.7 Stormwater Management Facilities

This document does not incorporate discussion of proposed stormwater management facilities. Stormwater management facility options are still being evaluated and will be included via an addendum once pond sites are established.

## 1.0 Introduction and Summary of Project

The Tampa Hillsborough Expressway Authority (THEA) conducted a Project Development and Environment (PD&E) Study to evaluate capacity improvements along the Selmon Expressway [State Road (SR) 618] in Hillsborough County, Florida. The project limits extend from Himes Avenue to the beginning of the six-lane section near Whiting Street, approximately 4.5 miles. The objective of the PD&E Study was to assist THEA in reaching a decision on a conceptual design that would safely and efficiently accommodate future travel demand within the existing THEA right-of-way (ROW).

The purpose of this Natural Resource Evaluation (NRE) analysis is to demonstrate due diligence in accordance with state and federal regulations. The analysis in this NRE Report conforms to Florida Department of Transportation's (FDOT) Natural Resources Evaluation Outline and Guidance, including applicable federal and State of Florida (state) laws, which is consistent with the FDOT *PD&E Manual* (July 1, 2020). These documents outline the official **Protected Species and Habitat, Wetlands and Other Surface Waters**, and **Essential Fish Habitat (EFH)** policies and procedures for the purpose of meeting the requirements of Title 23 of the Code of Federal Regulations (CFR) Part 772 and applicable federal and state laws, including the National Environmental Policy Act (NEPA).

## 2.0 Project Description

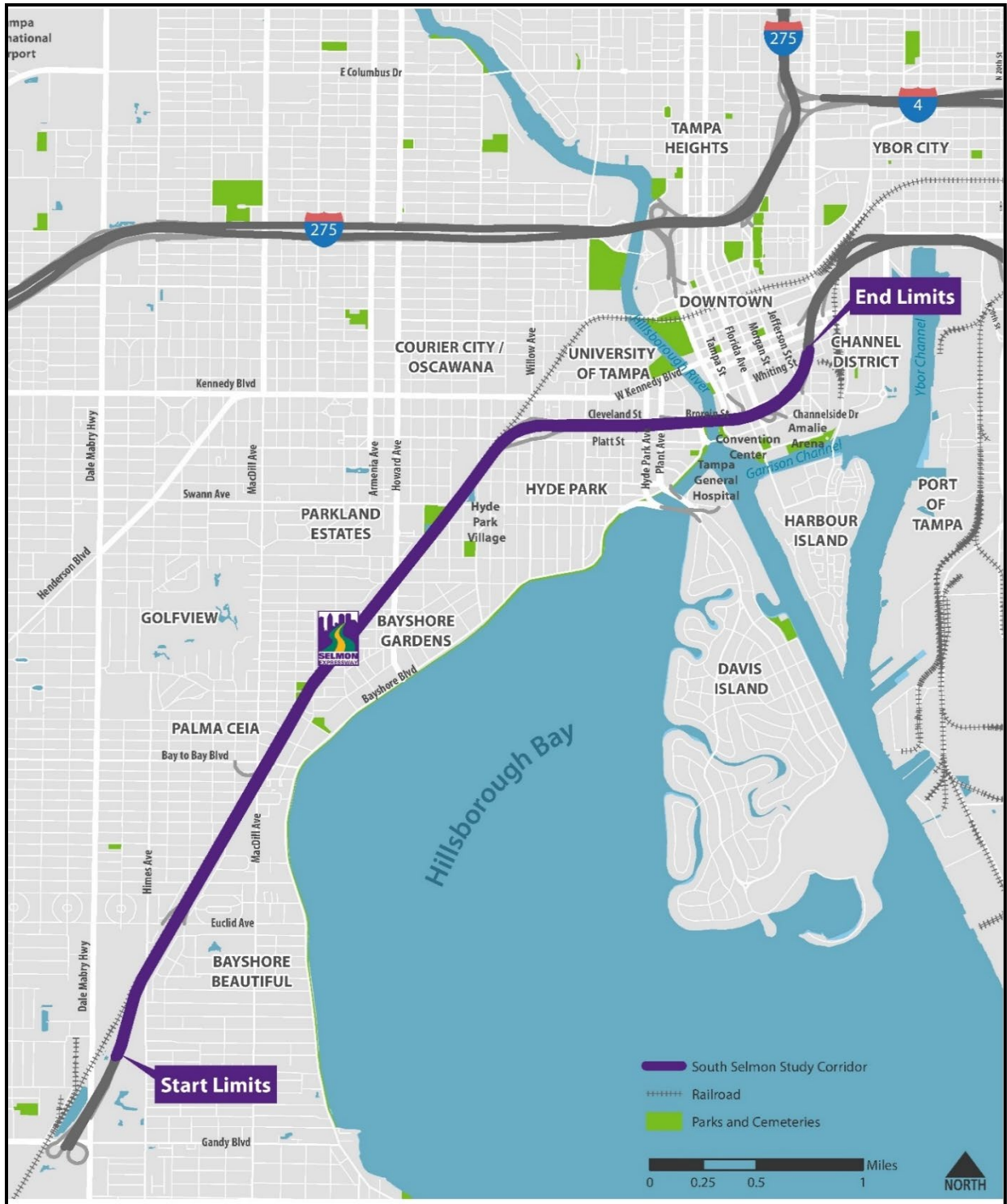
The PD&E Study evaluated the need to provide capacity improvements along approximately 4.5 miles of the Selmon Expressway from Himes Avenue to the beginning of the six-lane section near Whiting Street in Hillsborough County, Florida, as shown in **Figure 1**. Capacity improvements evaluated included widening inside to the median, adding inside paved shoulders, and adding lanes by widening to the outside or constructing elevated lanes along the median. The ability of technology to improve efficiency and capacity was also evaluated. The improvements would be accommodated within existing ROW.

The Selmon Expressway is a limited access, tolled facility providing east-west connectivity from Interstate 75 (I-75) to downtown Tampa and United States Highway 92 (US 92). The Selmon Expressway within the project limits currently consists of two 12-foot-wide travel lanes in each direction separated by a 38-foot paved median with a concrete barrier wall. The outside shoulders are eight feet wide and contain either shoulder gutter with guardrail or shoulder gutter with barrier wall. The facility is elevated through downtown Tampa and includes structures over the Hillsborough River and multiple local roadways.

### 2.1 Purpose and Need

The primary purposes of the South Selmon PD&E Study were to reduce congestion and improve safety along the corridor. Bottlenecks occur regularly at on- and off- ramp locations even though the existing capacity of the mainline currently meets demand, and there is a high frequency of crashes within the project limits. An additional goal of this study was how to address transportation demand, which is expected to increase and contribute to congestion and safety issues and do so within existing THEA ROW.

Figure 1: Project Location



The on- and off- ramps experience frequent bottlenecks backing up onto the mainline due to deficient acceleration/deceleration lanes. Successive on- ramps, as well as off- ramps that split into multiple lanes, contribute to congestion, and add safety conflict points. Successive on- ramps include Morgan Street and Tampa Street. Off- ramps that split into multiple lanes past the exit include Brorein Street, Channelside Drive/Florida Avenue, Plant Avenue, Willow Avenue, and Bay-to-Bay Boulevard. Additionally, periodic off-ramp closures at the downtown exits create bottlenecks.

Over the five-year period from 2013 to 2017, a total of 237 crashes occurred on the Selmon Expressway mainline or its ramps. The merge and weave areas on Selmon Expressway create safety conflict points. In addition to crashes on the Selmon Expressway, several intersection points at the on- and off- ramps experience frequent crashes that can cause backups onto the mainline. High-crash locations include the eastbound off- ramp to Channelside Drive and Morgan Street and the eastbound and westbound off-ramps to Willow Avenue (*THEA: Arterial Safety Analysis March 2019*).

While the existing capacity meets current demand, future transportation demand is expected to exceed the existing capacity and increase the existing congestion and safety issues. Traffic along this portion of the Selmon Expressway has nearly doubled in the last 10 years (*THEA: 2017 Traffic and Revenue Report*). The existing Level of Service (LOS) is C from the eastern project limit to Willow Avenue and it is projected to fail by 2033. The existing LOS is D from Willow Avenue to Whiting Street (northern project limit), and it is projected to fail by 2025. The University of Florida Bureau of Economic and Business Research (BEER) estimates the 2019 population of Hillsborough County (County) at 1.47 million and the medium 2045 projection for population growth at 1.96 million, an increase of 33 percent.

This facility is vital to accommodating the economic and social demands of the region as population and employment opportunities in the region grow. The Selmon Expressway provides regional connectivity between several densely populated areas and regional attractors, including Pinellas County and St. Petersburg via the Gandy Boulevard Bridge, MacDill Air Force Base, Downtown Tampa, Port Tampa Bay, and Brandon. It also serves as an Alternative to Interstate 4 (I-4), I-75, and Interstate 275 (I-275) during road closures and is a critical corridor for hurricane evacuations.

## 2.2 Project Alternatives

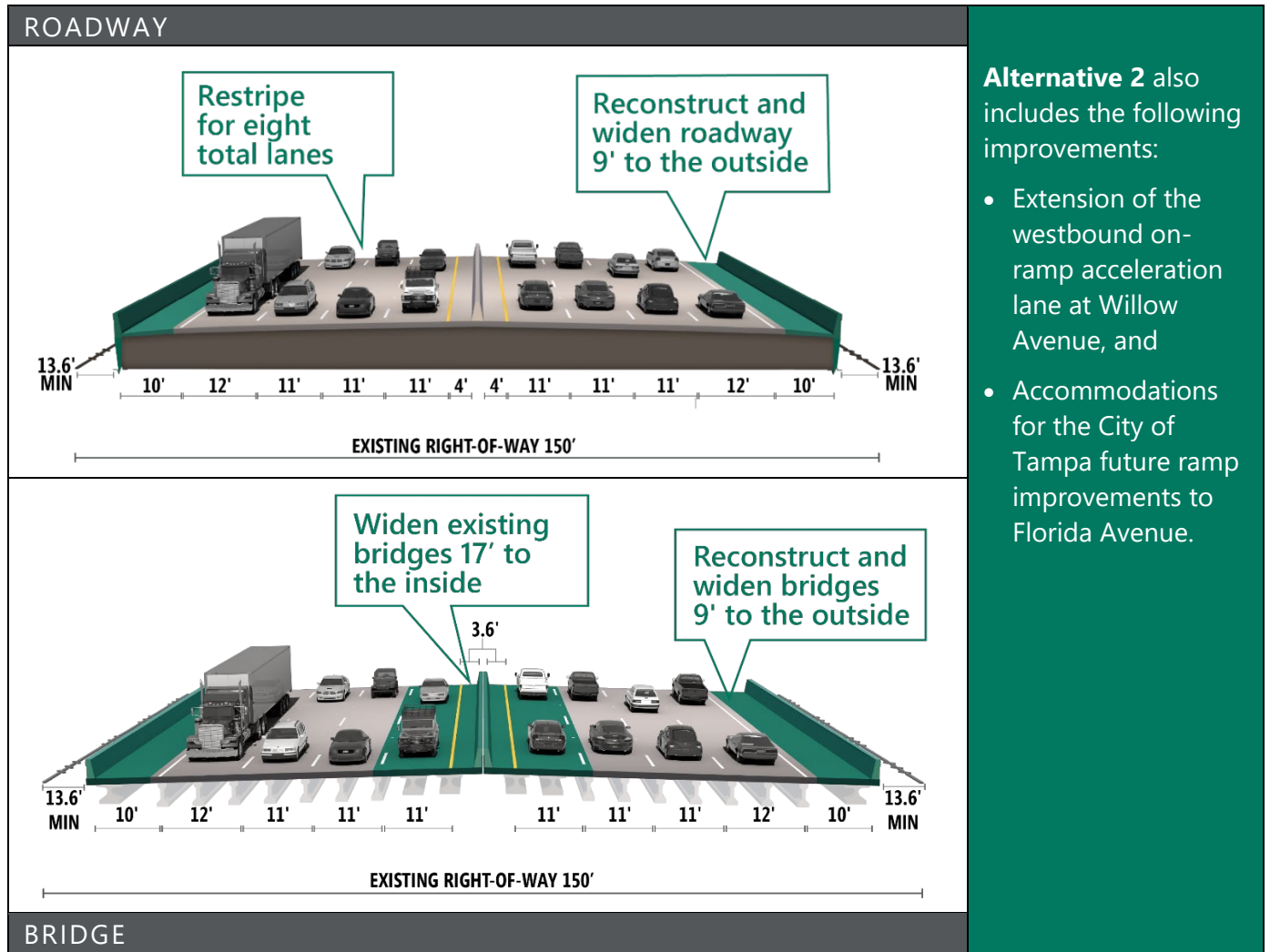
Five preliminary alternative configurations (Alternatives 1 through 5) were considered for this PD&E Study. However, Alternative 1 was eliminated because it would require demolition of interim improvements and significant reconstruction to widen to the outside in the ultimate phase. Alternatives 3 and 4 were eliminated from further evaluation based on the results of the traffic analysis and Alternative 5 was eliminated based on excessive construction costs. An additional alternative, Alternative 6, was added to address concerns related to inside widening. Alternatives evaluated in this NRE Report are described below.

### 2.2.1 Alternative 2 – Eight lanes at-grade with outside widening

Alternative 2 proposes to utilize the improvements provided by the South Selmon Safety Project by restriping the existing lanes and inside paved shoulders and widening 9-feet to the outside in both directions to accommodate an eight-lane section. The typical section for Alternative 2 consists of three

11-foot lanes and one 12-foot outside lane in each direction with four-foot inside shoulders and 10-foot outside shoulders (**Figure 2**). The existing outside barrier wall would be removed and a new retaining wall with barrier would be constructed in order to accommodate the 10-foot outside shoulder. The existing median barrier wall would remain. Alternative 2 requires inside and outside widening of the existing bridges along the corridor to match the proposed roadway section.

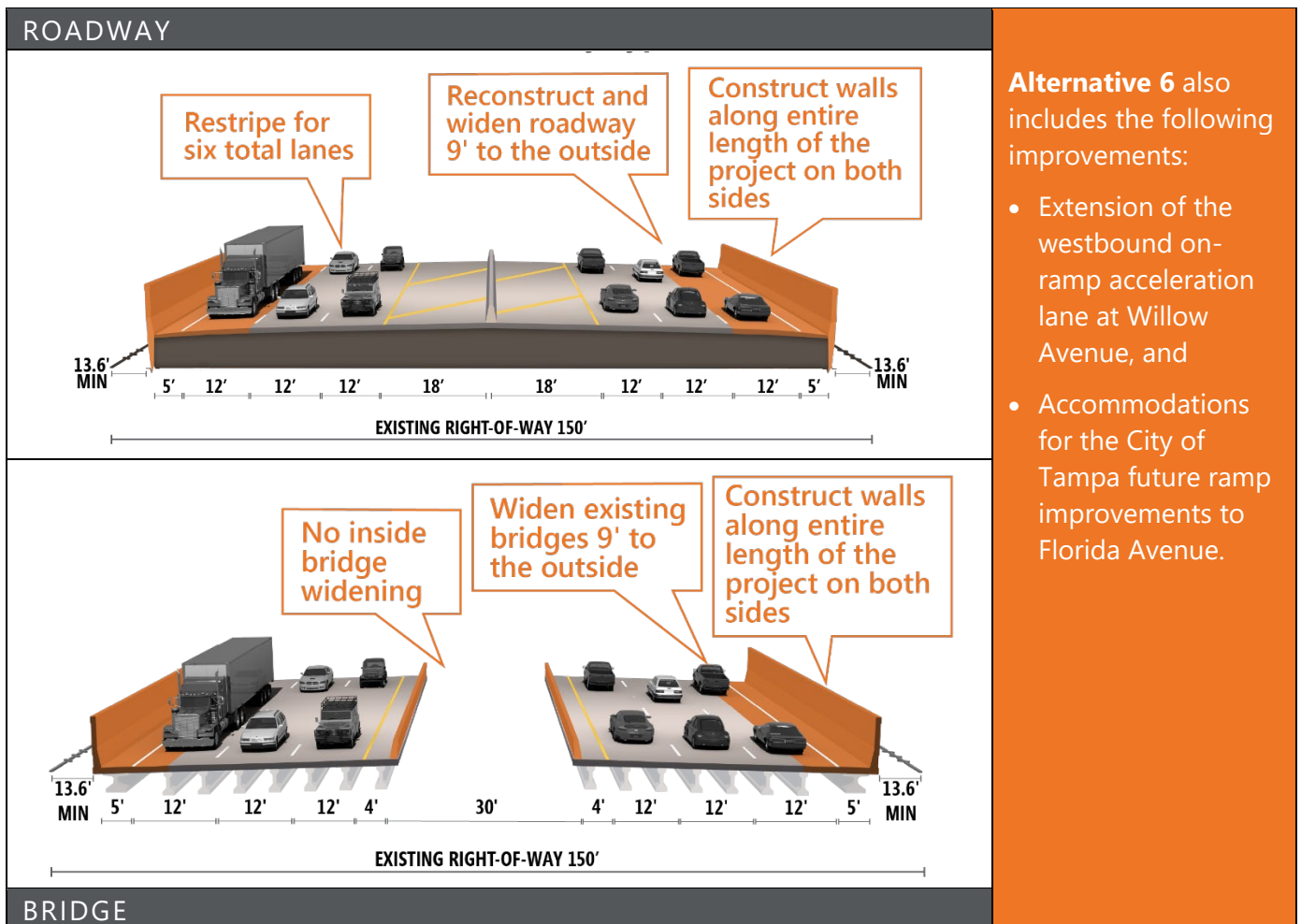
**Figure 2: Alternative 2 – Roadway and Bridge**



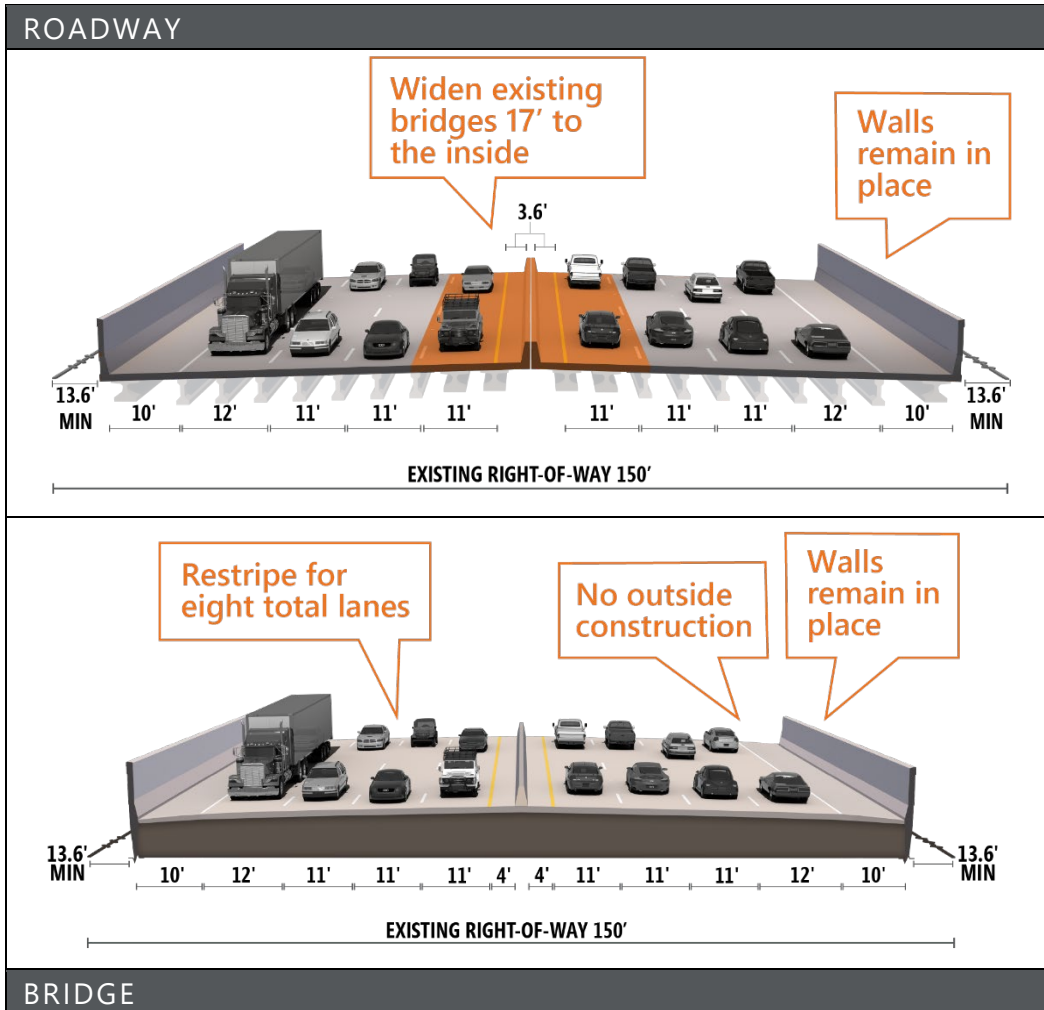
**2.2.2 Alternative 6 – Six lanes at-grade with outside widening**

Alternative 6 was developed to provide the same outside widening footprint as shown in Alternative 2 (widening 9 feet to the outside in both directions). In the interim phase (**Figure 3**), Alternative 6 provides for a 6-lane section by widening to the outside and therefore does not require inside bridge widening at all overpass locations. Alternative 6 in the ultimate phase (**Figure 4**) would be able to accommodate a future 8 lane section without outside widening. The roadway typical section in the interim phase for Alternative 6 consists of three 12-foot lanes in each direction with 18-foot inside shoulders (utilizing improvements provided by the South Selmon Safety Project) and five-foot outside shoulders. The existing outside barrier wall would be removed and a new retaining wall with barrier would be constructed in order to accommodate the outside widening. The existing median barrier wall would remain. Existing bridges along the corridor would be widened to the outside to the same extent as shown in Alternative 2. Unless it is required to maintain ingress and egress at the interchanges, all overpass bridges would not be widened to the inside during the interim phase and would maintain the existing 4-foot inside shoulder. Bridges that require both inside and outside widening would provide a 10-foot minimum inside shoulder (Himes, Euclid, El Prado, and Platt).

**Figure 3: Alternative 6 – Interim Roadway and Bridge**



**Figure 4: Alternative 6 – Ultimate Roadway and Bridge**



**Alternative 6** also includes the following improvements:

- Extension of the westbound on-ramp acceleration lane at Willow Avenue, and
- Accommodations for the City of Tampa future ramp improvements to Florida Avenue.

## 3.0 Existing Conditions

### 3.1 Introduction

For the purpose of this NRE, the project study area (study area) included a 500-foot buffer beyond the existing road ROW (i.e. project limits). **Figure 5** depicts the study area. Existing conditions were evaluated within the study area, including land use, soils, topography, and biological features.

### 3.2 Land Use

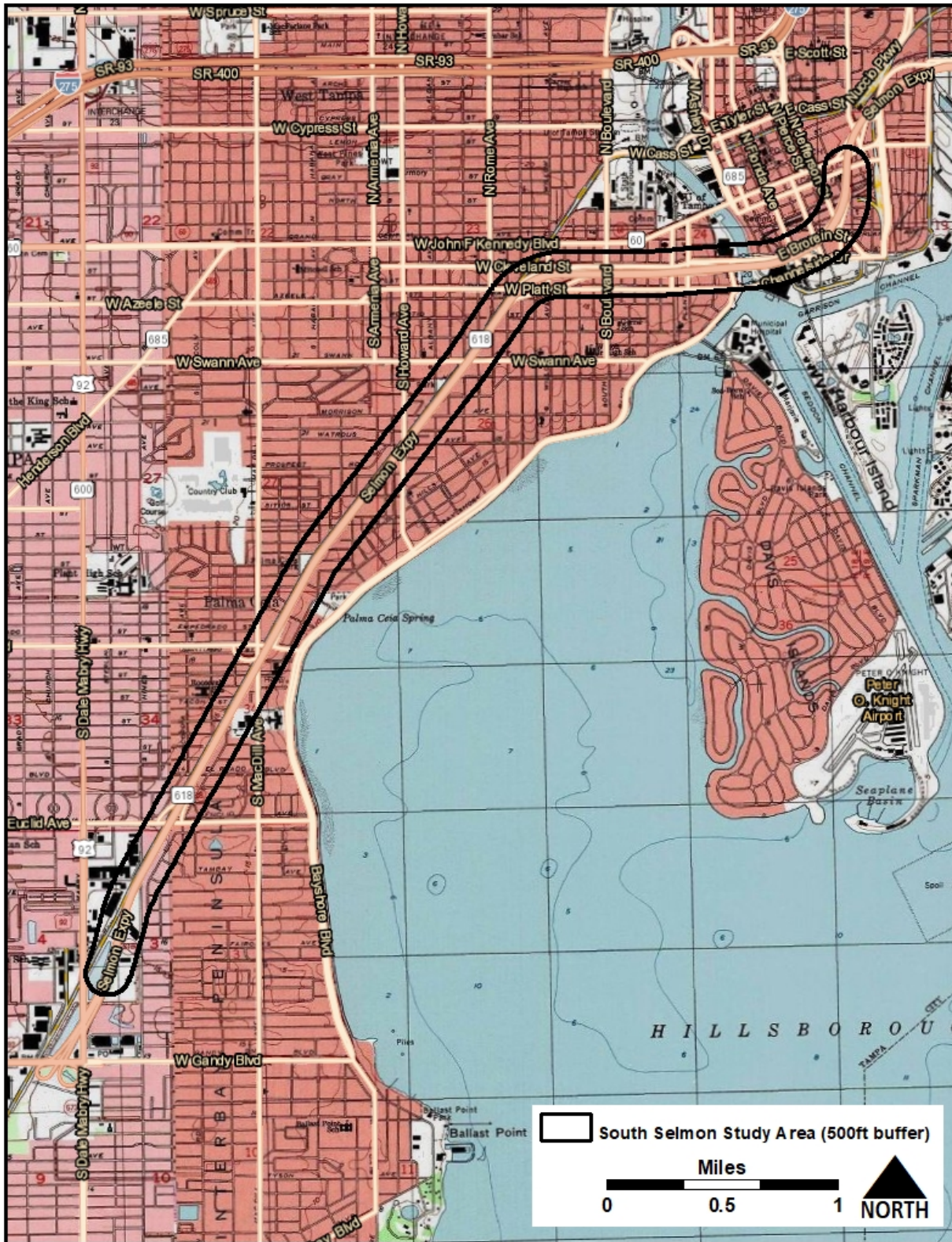
Land use was categorized using the Florida Land Use, Cover and Forms Classification System (FLUCFCS) (FDOT, 1999). The Southwest Florida Water Management District (SWFWMD) Land Use Land Cover data (2017) and aerial imagery were reviewed for existing land use within the study area. In addition, wetland and other surface water characterizations were based on the Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et.al. 1979).

The proposed project is located in the City of Tampa (City) and intersects the Central Business District (CBD) and historic Hyde Park Urban Village. The City is urbanized and built out along the Selmon Expressway corridor. From East Jackson Street to West Platt Street, adjacent land use is primarily commercial, institutional and public/semi-public. Notably, the Tampa Convention Center, Amalie Arena and associated parking are located in this area. South of West Platt Street, land use along Selmon Expressway is primarily residential with commercial and institutional uses near major roads. In addition, three public parks are located adjacent to Selmon Expressway: Hyde Park south of Swann Avenue, Palma Ceia Park at San Miguel Street, and Himes Avenue Sports Complex. A railroad was colocated along the Expressway beginning around West Cleveland Street and extended beyond the southern project limit.

Water features within the study area included stormwater ponds with emergent littoral zones in the south and a tidal segment of the Hillsborough River in the north. The land use classifications are listed in **Table 1** with their approximate acreage and percentage within the study area. **Figures 6a** and **6b** provide aerial imagery overlain by the land use types within the study area.



Figure 5: Project Study Area



**Table 1: Existing Land Uses within the South Selmon PD&E Study Area**

<b>FLUCFCS Classification</b>	<b>FLUCFCS<sup>1</sup> Description</b>	<b>USFWS<sup>2</sup> Classification</b>	<b>Acreage within Study Area</b>	<b>Percentage within Study Area</b>
130	Residential High Density	-	253.62	38.70
140	Commercial and Services	-	181.99	27.77
150	Industrial	-	9.12	1.39
170	Institutional	-	22.69	3.46
180	Recreational	-	28.42	4.34
510	Streams and Waterways	<i>R<sub>1</sub>UB<sub>3</sub></i>	2.54	0.39
530	Reservoirs	<i>PEM</i>	1.84	0.28
540/612	Estuarine/Mangrove	<i>E<sub>1</sub>UB<sub>3</sub> / E<sub>2</sub>FO<sub>3</sub></i>	4.41	0.67
641	Freshwater Marsh	<i>PEM</i>	5.69	0.87
644	Vegetated Non-Forested Wetland	<i>PEM</i>	1.92	0.29
810	Transportation	-	143.19	21.85

<sup>1</sup> Florida Land Use, Cover and Forms Classification System (FLUCFCS) FDOT (1999)/ SWFWMD LULC (2017);

<sup>2</sup> USFWS: U.S. Department of Interior Fish and Wildlife Service - Cowardin, et al. (1979)

E1UB3: Estuarine, Subtidal, Unconsolidated Bottom, Mud  
R1UB3: Riverine, Tidal, Unconsolidated mud bottom

E2FO3: Estuarine, Intertidal, Forested, Broad-leaved Evergreen  
PEM: Palustrine Emergent

Figure 6a: Existing Land Use

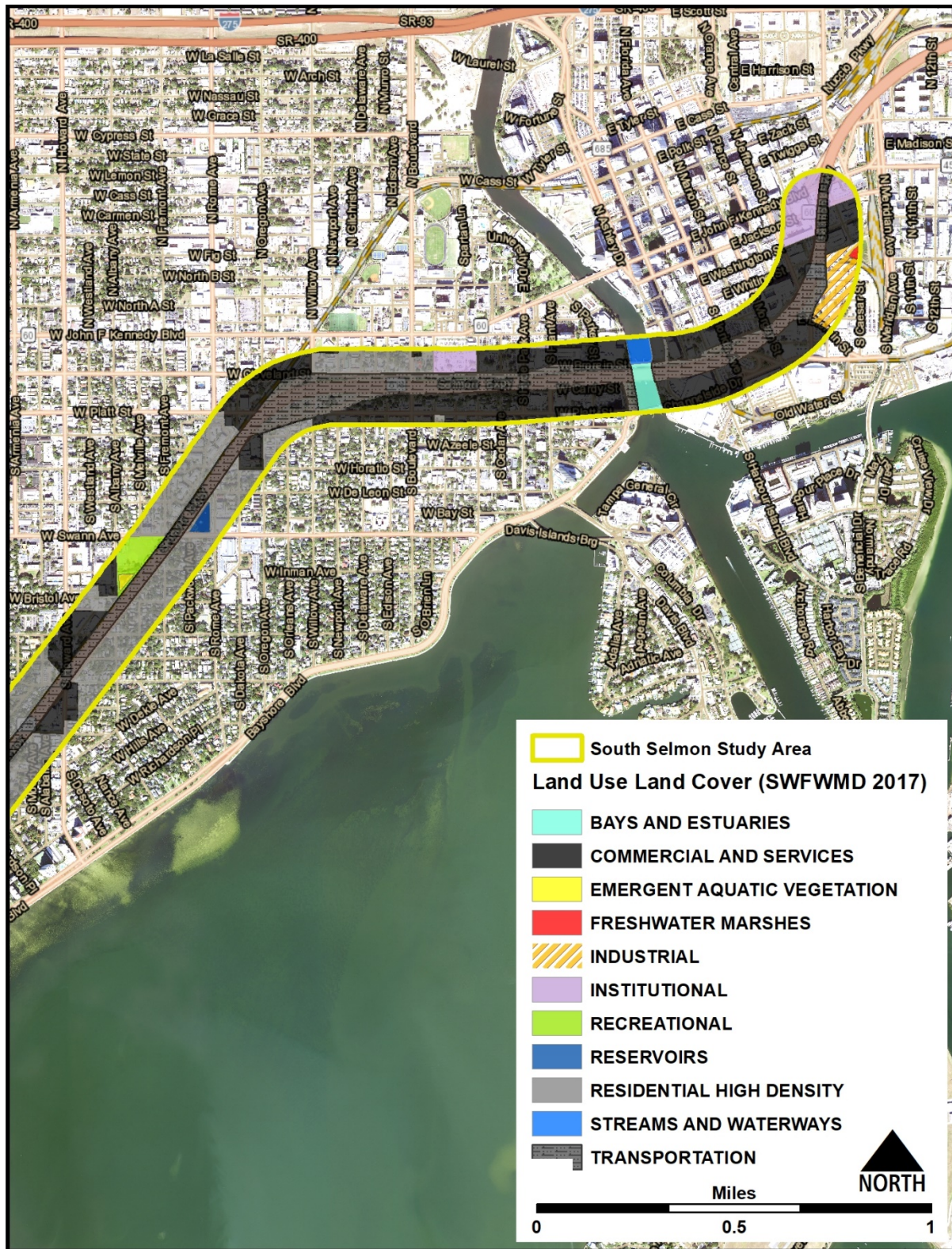
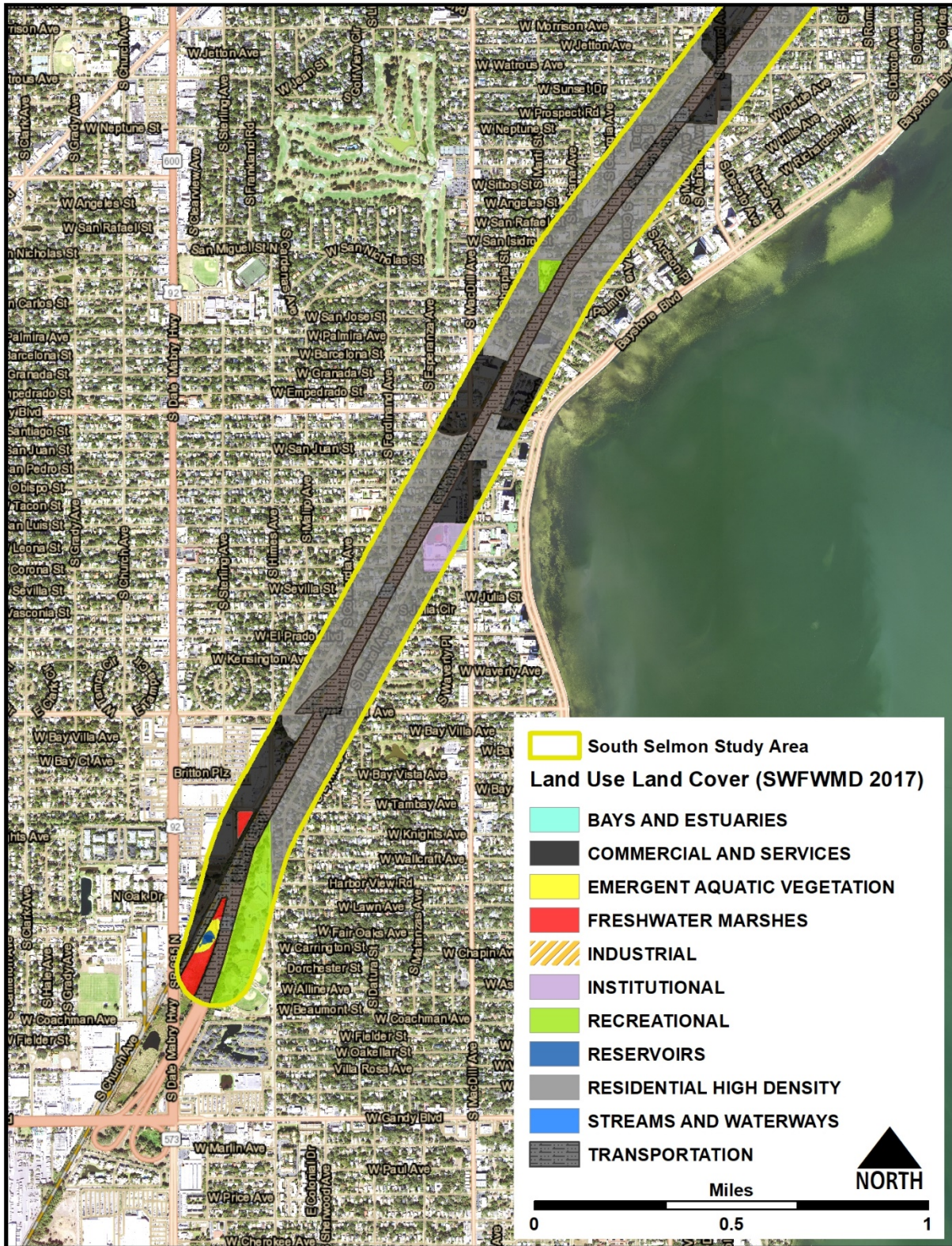


Figure 6b: Existing Land Use



### 3.3 Soil and Topography

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Soil Survey of Hillsborough County, Florida issued in May 1989 and the NRCS Web Soil Survey were reviewed for general climate and near surface soil information. Based on the Web Soil Survey (Spatial Data 2019/Tabular Data 2020), the study area contains seven soil types. **Figure 7** provides an aerial image depicting the soil types within the study area. The general soil types within the study area are described in **Table 2** with their corresponding NRCS map unit number, hydric classification, drainage class, and the approximate acreage and percentage found within the study area.

According to the Soil Survey, the mean annual rainfall for Hillsborough County is approximately 50 inches with 60 percent falling in the summer months, June through September. The climate of the area is generally subtropical with an annual average temperature of approximately 72 degrees Fahrenheit.

**Table 2: Soil Types within the South Selmon PD&E Study Area**

Map Unit	Soil Type	Hydric Yes/No	Drainage Class	Acres within Study Area	Percentage of Study Area
22	Immokalee-Urban Land Complex	No	Poorly Drained	19.3	2.9
27	Malabar Fine Sand, 0-2% Slopes	Yes	Poorly Drained	5.5	0.8
32	Myakka-Urban Land Complex	No	Poorly Drained	270.5	41.3
34	Ona-Urban Land Complex	No	Poorly Drained	38.2	5.8
55	Tavares-Urban Land Complex, 0-5% Slopes	No	Poorly Drained	128.1	19.5
56	Urban Land, 0-2% Slopes	Unranked	NA	124.3	19.0
58	Wabasso-Urban Land Complex	No	Poorly Drained	55.8	8.5
99	Water	No	--	13.8	2.1

Source: NRCS Web Soil Survey (Spatial 2019/Tabular 2020) and Soil Survey of Hillsborough County, Florida (1989)

The United States Geologic Survey (USGS), 7.5 Minute “Gandy Bridge, Florida” (2015) Quadrangle topographic map, dated 2015, and the “Tampa, Florida” Quadrangle topographic map, dated 2015 were reviewed as part of this study (**Figure 5**).

The majority of the project corridor falls within the “Tampa, Florida” Quadrangle topographic map with the project begin location falling within the “Gandy Bridge, Florida” Quadrangle topographic map. Review of the “Tampa, Florida” Quadrangle topographic map shows the project corridor of the South Selmon Expressway in existence as of the 1956 map. The corridor is shown as urban developed land. As per the “Tampa, Florida” Quadrangle topographic map, the elevation is approximately 15 to 20 feet National Geodetic Vertical Datum of 1929 (NGVD 29) but is near sea level at the Hillsborough River crossing.

Figure 7: Soil Survey Map



### 3.4 Biological Features

Biological features were present within this urbanized landscape, including the channelized Hillsborough River north of Garrison and Seddon Channels, stormwater management ponds, sodded medians, and ROW containing ruderal vegetation, planted palms and shade trees. Mangroves were observed along the eastern shoreline of the Hillsborough River within the study area, including beneath the Selmon Expressway Bridge. Seagrasses were not present. In addition to the Hillsborough River, the ROW contained a mixture of native plants, landscaped ornamentals, and non-native vegetation growing on disturbed soil along steep slopes. Stormwater management ponds with littoral vegetation were present at the Selmon Expressway crossover at South Dale Mabry Highway, behind Lowes Home Improvement, and north of West Swann Avenue. Wetlands and Other Surface Waters are discussed in **Section 5.0**.

### 4.0 Protected Species and Habitat

This NRE complies with Section 7(a) of the Endangered Species Act (ESA) of 1973, as amended. Section 7(a) (2) of the Act requires every federal agency, in consultation with and with the assistance of the Secretary, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. Federal protections are administered through the U.S. Department of Interior Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS). Section 7(a) (3) of the ESA authorizes a prospective permit applicant to request the issuing federal agency to enter into early consultation with the USFWS and/or the NMFS to determine whether the proposed project is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

The state affords protections to listed animals through the Florida Fish and Wildlife Conservation Commission (FWC) pursuant to Chapter 68A-27, F.A.C. The state affords protections to listed plants through the Florida Department of Agriculture and Consumer Services (FDACS) Division of Plant Industry pursuant to Chapter 5B-40, F.A.C.

#### 4.1 Agency Coordination and Methodology

Through the Advance Notification (AN) process, THEA informed numerous federal, state, and local agencies of the PD&E study and its scope. An AN package was prepared in accordance with the FDOT PD&E Manual, Part 1, Chapter 3, as applicable.

The federal, state, and local agencies having a concern in this project due to jurisdictional review are identified in **Table 3**. These agencies were contacted by THEA through the AN process in May 2020. The study was conducted utilizing information obtained from comments made by various regulatory agencies in response to the AN. Relevant agency correspondence is provided in **Appendix A**.

**Table 3. Advanced Notification Agencies**

<b>Federal Agencies</b>
U.S. Army Corps of Engineers (USACE) – Jacksonville District
U.S. Coast Guard (USCG) – Permits Division
NMFS, Habitat Conservation Division
U.S. Department of Interior – USFWS
<b>State Agencies</b>
Florida Department of Environmental Protection (FDEP) – ETAT Representative
FDEP – State Clearinghouse
FDOS DHR
FFWC – ETAT Representative
<b>Regional Agencies</b>
SWFWMD – Environmental Resources Bureau Regulation Division
Environmental Protection Commission (EPC) of Hillsborough County
City of Tampa – Mobility Division
Port Tampa Bay

The study area reviewed as part of this NRE included a 500-foot buffer around the mainline ROW (**Figure 5**). This area was evaluated for potential impacts to federal and state, threatened or endangered species (listed species), habitat resources, and federally protected species in accordance with Part 2, Chapter 16 Protected Species and Habitat of the FDOT *PD&E Manual* (2020). Through examination of the proposed alternatives, the objective of this assessment was to evaluate if any listed or protected species would utilize the study area and to determine if protected species, or their habitat, would potentially be adversely impacted by the proposed project. Each species is discussed based on recent data and field reviews, as well as anticipated construction effects in accordance with agency guidelines.

The methodology used to complete the protected species and habitat assessment included review of federal and state agency databases, USFWS Consultation Areas, the Florida Natural Areas Inventory (FNAI) Biodiversity Matrix (November 2019) and the USFWS Information, Planning, & Consultation System (IPaC) Resource List (May 2020). A Geographic Information System (GIS) desktop analysis was performed prior to conducting the field surveys to establish baseline information and inform onsite evaluations. The following electronic sources were reviewed using GIS:

- Hillsborough County Aerial Imagery (2017)
- FDEP Outstanding Florida Water (2019)
- FWC Eagle Nest database (2016/17)
- FWC Florida Shorebird database (2018)
- FWC Manatee Synoptic Surveys ('91-2014)



- FNAI Florida Conservation Lands (2014)
- SWFWMD Land Use Land Cover (2017)
- SWFWMD Seagrass Survey Data (2010/2016)
- USFWS Wood Stork Nesting Colonies / Core Foraging Areas (2018)
- USFWS Threatened and ESA Critical Habitat (2019)
- USFWS Consultation Areas (2019): West Indian/Florida manatee, piping plover

The IPaC Resource List is provided as **Appendix B**.

Preliminary wildlife surveys were conducted in support of this NRE on September 16, 2019 to evaluate habitat quality and document the presence or potential presence of terrestrial and/or aquatic wildlife. Surveys were conducted along the road ROW by vehicle and in-water surveys were conducted by kayak and snorkeling. Habitat and wildlife observations were located using a Trimble GeoXT 6000 Series GPS and mapped using ArcMap 10.5.1. **Figure 8** depicts species that have been recorded in the region. **Table 4** lists federal and state listed and protected wildlife observed or potentially occurring within the study area.

Each potential species was designated as having a low, moderate or high likelihood of occurrence based on range, habitat type, location, patch size, and connectivity, as defined below.

<b>Low</b>	Species documented within Hillsborough County, but with a low likelihood to occur within the study area due to the limited presence of suitable habitat
<b>Moderate</b>	Species documented within Hillsborough County or nearby counties and for which suitable habitat was present within the study area; however, no confirmed records exist.
<b>High</b>	Species highly likely to occur within the study area based on known habitat ranges and the existence of suitable habitat within the study area. Species are known to occur within or adjacent to the study area or have been documented nearby

Figure 8: Wildlife Map



**Table 4: Potential Wildlife within the Project Study Area**

Scientific Name	Common Name	Federal Listing <sup>1</sup> (USFWS)	State Listing <sup>1</sup> (FWC)	Habitat Preference	Likelihood of Occurrence
<i>Fish</i>					
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	T	T	Freshwater streams, bays, and estuaries	Low
<i>Pristis pectinata</i>	Smalltooth sawfish	E	E	Coastal waters and estuarine habitats (mangroves)	Low
<i>Reptiles and Amphibians</i>					
<i>Caretta caretta</i>	Loggerhead sea turtle	T	T	Tidal waters, bays, and estuaries (juveniles); nest on beaches	Low
<i>Chelonia mydas</i>	Green sea turtle	T	T	Bays, estuaries, seagrasses (juveniles); nest on beaches	Low
<i>Lepidochelys kempii</i>	Kemp's ridley sea turtle	E	E	Shallow waters w/sandy or muddy bottoms; nest on beaches	Low
<i>Gopherus polyphemus</i>	Gopher tortoise	C	T	Upland habitat with well-drained sandy soil and herbaceous forage	Low
<i>Birds</i>					
<i>Calidris canutus rufa</i>	Rufa red knot	T <sup>3</sup>	T	Migratory; intertidal habitat, coastal inlets, estuaries and bays	Low
<i>Charadrius melodus</i>	Piping plover	T <sup>3</sup>	T	Open, sandy and gravel shorelines and tidal flats	Low
<i>Egretta caerulea</i>	Little blue heron	<sup>3</sup>	T	Marshes, creeks, and rivers	Moderate
<i>Egretta tricolor</i>	Tricolored heron	<sup>3</sup>	T	Marshes, creeks, and rivers	Moderate
<i>Haematopus palliatus</i>	American oystercatcher	<sup>3</sup>	T	Barren beaches and sandbars; shell rakes; salt marshes; sand flats	Low
<i>Haliaeetus leucocephalus</i>	Bald eagle	<sup>2, 3</sup>		Gulf coast, bays, lakes, rivers, forested habitat, marshes	High
<i>Mycteria americana</i>	Wood stork	T <sup>3</sup>	T	Estuarine/tidal water, marshes, streams, ponds, ditches	Low
<i>Rynchops niger</i>	Black skimmer	<sup>3</sup>	T	Estuaries, bays, marsh, tidal creeks, beaches, sandbars, shell	Low
<i>Pandion haliaetus</i>	Osprey	<sup>3</sup>		Throughout coastal Florida	High
<i>Sternula antillarum</i>	Least tern	<sup>3</sup>	T	Beaches, dunes, coastal land, and marsh habitat	Low
<i>Mammals</i>					
<i>Trichechus manatus latirostris</i>	West Indian/Florida manatee	T	T	Bays and estuaries, rivers, streams, springs	Moderate

<sup>1</sup> Species designations as of March 2020. E = Endangered; T = Threatened; C = Candidate for federal listing.

<sup>2</sup> Protected by the Bald & Golden Eagle Protection Act.

<sup>3</sup> Protected by the Migratory Bird Treaty Act.

## 4.2 Federal Listed Species and Designated Critical Habitat

Based on the results of the desktop analysis and preliminary field surveys, federal listed and protected species potentially occurring within the study area are listed in **Table 4**. The likelihood of occurrence for each species was determined based on the methodology in **Section 4.1**. Federal listed wildlife observed within the study area or which have the potential to occur include fishes (Gulf sturgeon, smalltooth sawfish), reptiles (sea turtles), birds (wood stork, piping plover, rufa red knot), and mammals (West Indian/Florida manatee). In addition, the FWC-listed gopher tortoise has been recognized as a candidate species for federal listing. State listed species are discussed in **Section 4.3**.

The non-listed, but federally protected bald eagle and osprey were also present in this area. A bald eagle nest was confirmed within the study area. The eagle receives protections through the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668d), as amended, and both the eagle and osprey receive protection through the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-711). The bald eagle and osprey are discussed in **Section 4.4**.

Wildlife habitat was limited within the study area but included fragmented upland areas variously impacted by urban development, roads, and nuisance and exotic species; mangrove habitat abutting the Hillsborough River; and tidal waters within the Hillsborough River.

The study area was evaluated for Critical Habitat as defined by Congress 17 CFR § 35.1532 and CFR § 226. Review of GIS data obtained from the USFWS confirmed there was no designated USFWS or NOAA Fisheries critical habitat within the study area. Therefore, the proposed project would not result in the ***destruction or adverse modification of critical habitat***.

### 4.2.1 Fish

#### Atlantic Sturgeon Gulf Subspecies (*Acipenser oxyrinchus desotoi*)

The federal status for the Atlantic sturgeon is threatened. The sturgeon (Gulf subspecies) commonly referred to as the Gulf sturgeon is an anadromous fish that breeds in freshwater after migrating up rivers from marine and estuarine environments. Gulf sturgeon are known to forage in the Gulf of Mexico and associated estuaries. Breeding populations generally occur in north Florida. Non-breeding populations have been found in Tampa Bay and a sturgeon washed up on Davis Island in March 2018. Critical habitat for the Gulf sturgeon was not designated within the study area.

The Gulf sturgeon was not observed during preliminary field surveys. Impacts to Gulf sturgeon spawning habitat would not be expected. *De minimis* project impacts to potential foraging habitat of non-breeding sturgeon would occur due to mangrove shading and piling installation. Shading would occur to a narrow band of mangroves along the eastern shoreline of the Hillsborough River as a result of bridge widening associated with each of the proposed alternatives. Mangrove impacts would be mitigated pursuant to requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344. Pile driving within unconsolidated mud bottom would occur within the Hillsborough River.

THEA will notify the USFWS prior to construction-related pile driving in order to mitigate potential wildlife impacts and will adhere to the NMFS/USFWS - Construction Special Provisions - Gulf Sturgeon Protection Guidelines (2012) (**Appendix C**) to protect the sturgeon during construction. Erosion control measures and Best Management Practices (BMP) will be required to protect the Hillsborough River. BMPs will be installed and maintained according to the NMFS/USFWS guidelines to avoid wildlife entrapment. Based on these commitments, and given the low likelihood of occurrence within the study area, it is anticipated that the proposed project ***may affect, but is not likely to adversely affect*** the Gulf sturgeon.

### Smalltooth sawfish (*Pristis pectinate*)

The federal status for the smalltooth sawfish is endangered. The sawfish utilizes shallow coastal and brackish waters, including seagrass beds, oyster bars, mangroves, inshore bars, and sea-walled canals. Critical habitat for the smalltooth sawfish was not designated within the study area.

The smalltooth sawfish was not observed during preliminary field surveys and impacts to smalltooth sawfish habitat would not be expected as a result of the proposed project. Shading would occur to a narrow band of mangroves along the eastern shoreline of the Hillsborough River as a result of bridge widening associated with each of the proposed alternatives. Mangrove impacts would be mitigated pursuant to requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344. Pile driving within unconsolidated mud bottom would occur within the Hillsborough River.

THEA will notify the USFWS prior to construction-related pile driving in order to mitigate potential wildlife impacts and will adhere to the NMFS Smalltooth Sawfish Construction Conditions (2006) to protect the sawfish during construction (**Appendix C**). Erosion control measures and BMPs will be required to protect the Hillsborough River. BMPs will be installed and maintained according to NMFS guidelines to avoid wildlife entrapment. Based on these commitments, and given the unlikely occurrence within the study area, it is anticipated that the proposed project ***may affect, but is not likely to adversely affect*** the smalltooth sawfish.

## 4.2.2 Reptiles

### Sea turtles

Sea turtles utilize estuarine environments for shelter and feeding and sandy beaches for nesting. Sea turtles listed as either threatened or endangered have been observed in and around Tampa Bay including the loggerhead (*Caretta caretta*), green (*Chelonia mydas*), and Kemp's ridley (*Lepidochelys kempi*) sea turtles; therefore, potential presence was assumed. Sea turtle nesting habitat did not exist within the study area and refuge opportunities within the bounds of the walled navigation channel were minimal. However, sea turtles, in particular juvenile sea turtles, could be present in the Hillsborough River on a transient basis.

Sea turtles were not observed during preliminary field surveys and impacts to sea turtles would not be expected. Pile driving within unconsolidated mud bottom would occur within the Hillsborough River. THEA will notify the USFWS prior to construction-related pile driving in order to mitigate potential

wildlife impacts and will adhere to the NMFS Sea Turtle Construction Conditions (2006) to protect turtles during construction (**Appendix C**). Erosion control measures and BMPs will be required to protect the Hillsborough River. BMPs will be installed and maintained according to the NMFS guidelines to avoid wildlife entrapment. Based on these commitments and given the low likelihood of occurrence within the study area, the proposed project would have ***no effect*** on sea turtles.

### 4.2.3 Birds

#### Wood Stork (*Mycteria americana*)

The federal status for the wood stork is threatened. This transient wading bird forages in shallow water containing high prey densities and utilizes freshwater and estuarine habitats for nesting, foraging, and roosting. Wood storks typically nest in rookeries and construct nests in forested wetlands, including mangrove forests. The USFWS recognizes a 15-mile Core Foraging Area (CFA) around wood stork rookeries in central Florida and states the need to protect suitable foraging habitat (SFH), defined as calm, open waters, uncluttered by dense vegetation with a seasonal water level between 2 and 15 inches.

The wood stork was not observed during preliminary field surveys. SFH was not present and nesting colonies would not be expected. The study area falls within the 15-mile CFA of eight wood stork colonies (i.e. Cypress Creek, Cross Creek, Northlakes Sagebrush, Lake Forest, Sheldon – Citrus Park, East Lake – Bellow Lake, Alligator Lake, and Ferman Corporation). The nearest rookery, East Lake – Bellows Lake, is located 5 miles to the northeast. Based on guidance from the USFWS Wd Stork Effect Determination Key (2008) (**Appendix D**), the proposed project would have ***no effect*** on the wood stork.

#### Piping Plover (*Charadrius melodus*)

The federal status for the piping plover is threatened. Individuals from piping plover breeding populations over-winter in Florida, but nesting does not occur (USFWS). The proposed project is within the USFWS Consultation Area for the piping plover and the piping plover has been recorded in Hillsborough County. Critical habitat for the piping plover was not designated within the study area.

The piping plover was not observed during preliminary field surveys. Plovers forage along tidal shorelines, which were infrequent within the study area. Shading impacts would occur to riprap shoreline containing mangrove fringe along the eastern shore of the Hillsborough River as a result of bridge widening associated with each of the proposed alternatives. This mangrove area did not contain a natural shoreline and was abutted by a seawall and urban trail. Given the unlikely presence of the plover within the study area, the proposed project would have ***no effect*** on the piping plover.

#### Rufa red knot (*Calidris canutus rufa*)

The federal status for the rufa red knot is threatened. Foraging habitats used by the red knot include tidal shorelines and mangroves. This migratory shorebird breeds in the High Arctic during the summer before migrating south to wintering grounds. Migratory stops for the red knot are known along the Atlantic and Gulf of Mexico coasts of North America (USFWS 2015). According to the USFWS, the core of the southeast wintering zone for the red knot shifts between Florida (central Gulf coast), Georgia and

South Carolina. The species is most commonly observed in Florida during April and between August and October but the red knot has been documented in Florida throughout the year. Critical habitat for the rufa red knot was not present within the study area.

The rufa red knot was not observed during preliminary field surveys. This species typically forages along beaches and mudflats that contain an abundance of invertebrate prey. Neither habitat type was present. Shading impacts would occur to a narrow, riprap shoreline containing mangrove fringe along the eastern shoreline of the Hillsborough River as a result of bridge widening needed for each of the proposed alternatives. This mangrove area did not contain natural shoreline and was abutted by a seawall and an urban trail. Given the unlikely presence of the species within the study area, the proposed project would have ***no effect*** on the rufa red knot.

#### **West Indian/ Florida manatee (*Trichechus manatus*) / (*T. manatus latirostris*)**

The federal status for the West Indian/ Florida manatee is threatened and manatees are protected under the Marine Mammal Protection Act. The manatee utilizes coastal Florida waters, bays, estuaries, and rivers and prefers shallow waters with floating and aquatic vegetation. The proposed project is within the USFWS Manatee Consultation Area although no federal sanctuaries, refuges, or critical manatee habitats exist within the study area. The manatee has been documented within Hillsborough Bay (FWC 2014).

The manatee was not observed during field surveys. Since seagrasses were not present, impacts to manatee foraging habitat would not occur. However, manatees could be expected within the Hillsborough River on a transient basis and there are records of them using the river as far upstream as the dam. Pile driving within unconsolidated mud bottom within the Hillsborough River would occur as a result of bridge widening associated with each of the proposed alternatives.

THEA will notify the USFWS prior to construction-related pile driving in order to mitigate potential wildlife impacts. The USACE Standard Manatee Conditions for In-Water Work (2011) (**Appendix C**) will be implemented during construction to eliminate the possibility of construction-related manatee injury or death and these guidelines will be incorporated as part of the final project design. Additionally, THEA will notify the USFWS prior to any construction-related pile driving in order to avoid any adverse impacts to manatees. Erosion control measures and BMPs will be required to protect the Hillsborough River during construction. BMPs will be installed and maintained according to the USACE guidelines to avoid wildlife entrapment. Based on this assessment and on guidance from the USACE Effect Determination Key for the Manatee in Florida (2013), as amended (USFWS 2019) (**Appendix D**), it is anticipated that the proposed project ***may affect, but is not likely to adversely affect*** the West Indian/Florida manatee.

### **4.3 State Listed Species**

Based on the results of the desktop analysis and preliminary field surveys, state listed wildlife managed by the FWC potentially occurring within the study area are listed in **Table 4** with their protection status (FWC, 2018). The likelihood of occurrence for each species was determined based on the above-mentioned methodology and presence of suitable habitat as defined by *Florida's Imperiled Species*

*Management Plan*, as amended (2018). Listing status was in accordance with *Florida's Endangered and Threatened Species List* (FWC 2018).

State listed species known to occur or with the potential to utilize habitat within the study area included one reptile (gopher tortoise), two wading birds (little blue heron, tricolored heron), and three shorebirds (American oystercatcher, black skimmer, least tern). None were observed during preliminary field surveys.

### 4.3.1 Reptiles and Amphibians

#### Gopher tortoise (*Gopherus polyphemus*)

The state protection status for the gopher tortoise is threatened. The tortoise is a candidate for federal listing. Tortoises occupy a variety of habitats, preferring areas with well-drained sandy soils and herbaceous forage. Habitats supportive of gopher tortoise populations include, but are not limited to, dry fields and disturbed open lands such as transmission line easements, road shoulders and railroad corridors. Although potential low-quality gopher tortoise habitat was observed, gopher tortoise burrows were not identified within the study area and their presence would be unlikely due to the highly urbanized conditions.

The proposed project alternatives will utilize existing cleared and sodded ROW for the road widening and ancillary project improvements. Additionally, THEA will resurvey the study area, including any future pond sites during permitting and design phases of the proposed project and prior to construction. The gopher tortoise and any potentially occupied burrow discovered in or within 25 feet of the project construction corridor will require coordination with the FWC to secure a gopher tortoise relocation permit. Due to the cleared, disturbed, maintained, and/or developed study area and the state requirement to relocate gopher tortoises, **no adverse effect is anticipated.**

### 4.3.2 Birds

#### Wading Birds

State threatened wading birds that have the potential to utilize the study area include the little blue heron (*Egretta caerulea*) and tricolored heron (*Egretta tricolor*). Wading birds were not observed during preliminary field surveys. Shading impacts would occur to a narrow, riprap shoreline containing mangroves along the eastern shoreline of the Hillsborough River as a result of bridge widening associated with each of the proposed alternatives. Periodic foraging or loafing within this area would be possible within the mangroves and along the shoreline. However, the mangrove area did not contain a natural shoreline and it was abutted by a seawall and an urban trail. Since impacts to mangroves would be limited to shading and since these impacts would be mitigated pursuant to the requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344, **no adverse effect is anticipated.**



## Nesting Shorebirds

State threatened shorebirds with potential to utilize the study area include the American oystercatcher (*Haematopus palliatus*), least tern (*Sternula antillarum*), and black skimmer (*Rynchops niger*). Nesting by these species is documented along island shorelines within Hillsborough Bay (**Figure 8**). Nesting shorebirds, in particular the least tern, have been known to utilize exposed gravel or shell in construction areas for nesting. The American oystercatcher typically nests from March through August, the least tern from April through September, and the black skimmer from May through early September (FWC). Although nesting shorebirds have been recorded nearby, they would not be expected to nest within the study area due to lack of suitable nesting substrate and the high-use recreational activity associated with the river and adjacent trail. Since the proposed project would avoid impacting active shorebird nests, ***no effect is anticipated.***

## 4.4 Other Protected Species or Habitats

### 4.4.1 Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle was removed from the USFWS List of Endangered and Threatened Wildlife effective August 8, 2007. The eagle continues to receive protections through the BGEPA (16 U.S.C. 668-668d) and through the MBTA (16 U.S.C. 703-711). Two eagle nests were identified within the vicinity of the proposed project, including Nest ID HL026 and HL077. Nest ID HL026 was outside the study area along Hillsborough Bay. Nest ID HL077 was confirmed within the study area. This nest was located on a cell tower north of Gandy Boulevard and west of the Selmon Expressway (27.902297, -82.504360). Due to location, nest disturbance could be unavoidable as a result of construction. To minimize disturbance to nesting eagles, active nests are protected by a 100-foot buffer and human activities are variously restricted within 330 feet and 660 feet of an active eagle nest during the nesting season (October 1 - May 15).

Since a bald eagle nest was recorded within 100 feet of the existing ROW, coordination will be initiated with the USFWS in accordance with the USFWS *National Bald Eagle Management Guidelines* and the BGEPA and MBTA. THEA will resurvey during the permitting and design phase to confirm nest activity status. If deemed inactive, a survey will be conducted to determine if a replacement nest has been built within 660 feet of the project ROW. If nest impacts are unavoidable, THEA will coordinate to obtain the required permits through the USFWS. Based on the current nest location and activity status, a USFWS Bald Eagle Incidental Take Permit (i.e. Non-Purposeful Take) could be required for construction of each of the project alternatives.

### 4.4.2 Osprey (*Pandion haliaetus*)

Ospreys are afforded protection under the MBTA and active nests are state protected by Chapter 68A of the F.A.C. Ospreys require nest sites in open areas for unobstructed access that are safe from ground predators. They readily build nests on manmade structures such as telephone poles and nest platforms designed especially for these birds. Nesting season typically occurs between December and February. Although both active and inactive osprey nests are federally protected, only active nests require a federal incidental take permit. Under state rules, inactive osprey nests may be removed as determined

by the absence of eggs or flightless young at the nest. Typically, a replacement nesting structure located in the immediate vicinity is required to be erected.

Ospreys are common in this area. Surveys to locate active osprey nests will be conducted during the permitting and design phase of the proposed project and permits will be acquired if active nest impacts are unavoidable. Because the proposed project would be consistent with federal and state requirements, it is anticipated that the proposed project would not impact the osprey.

#### 4.5 Federal and State Listed Plants

Given the predominantly hardened, disturbed, and developed conditions within this densely urban corridor, protected plants would not be expected. If a protected plant were observed within the study area at the time of permitting or construction, coordination with the FDACS would be initiated. A determination of ***no effect*** is anticipated for federal and state listed plants.

### 5.0 Wetland and Other Surface Water Evaluation

Pursuant to Presidential Executive Order 11990 entitled Protection of Wetlands, the U.S. Department of Transportation (USDOT) has developed a policy, Preservation of the Nation's Wetlands (USDOT Order 5660.1A), dated August 24, 1978, which requires all federally funded highway projects to protect wetlands to the fullest extent possible. In accordance with this policy, as well as the FDOT *PD&E Manual*, Part 2, Chapter 9 **Wetlands and Other Surface Waters**, project alternatives were evaluated to determine potential impacts to these resources.

#### 5.1 Agency Coordination and Methodology

The federal, state, and local agencies having a concern in this project due to jurisdictional review are identified in **Table 3**. These agencies were contacted by THEA through the AN process in May 2020. The study was conducted utilizing information obtained from comments made by various regulatory agencies in response to the AN. Agency correspondence is provided in **Appendix A**. Coordination with local, state and federal agencies will continue throughout the permit and design process and into the construction phase.

A GIS desktop analysis was performed prior to conducting mangrove and other surface water delineations to establish baseline information and inform the onsite evaluations. Information data sources utilized for the analysis included the following:

- ESRI ArcGIS World Image Service (2013 to 2015)
- Hillsborough County Aerial Imagery (2017)
- SWFWMD Land Use Land Cover (2017)
- U.S.D.A. NRCS Web Soil Survey of Hillsborough County – Spatial Data (2019)
- USFWS National Wetland Inventory (2020)
- USGS Topographic Maps (© 2013 National Geographic Society)

Preliminary mangrove delineations were conducted in September 16, 2019. Delineations were completed in accordance with the Corps of Engineers Wetland Delineation Manual (1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (2010), Rule 62-340, F.A.C., Delineation of the Landward Extent of Wetlands and Surface Waters, and the Florida Wetlands Delineation Manual (1995).

## 5.2 Assessment of Impacts

The proposed project alternatives would extend the area of shading over the Hillsborough River, including over mangrove habitat, although each alternative would result in slightly different shadows. Shading impacts to the Hillsborough River would be expected to be *de minimis* as a result of both project alternatives. Mangrove shading could require mitigation. Installation of pilings would likely be necessary within the Hillsborough River to support the widened bridge structure. Although piling location would vary based on the preferred alternative, installation of pilings would occur within unconsolidated mud bottom within the Hillsborough River. Other surface water impacts associated with pilings would be *de minimis*.

### 5.2.1 Wetland and Other Surface Water Characterizations

Wetlands and other surface waters were present. These included the tidal, channelized segment of the Hillsborough River north of Garrison and Seddon Channels and Hillsborough Bay. Seagrasses were not present. Mangrove habitat was present along the eastern shoreline of the Hillsborough River, partially beneath the existing Selmon Expressway Bridge and extending south along the river (**Figure 9**). Stormwater management areas with littoral vegetation were observed at the Selmon Expressway crossover at South Dale Mabry Highway, behind Lowes Home Improvement, and north of West Swann Avenue.

The following habitat designations were assigned to the jurisdictional waters.

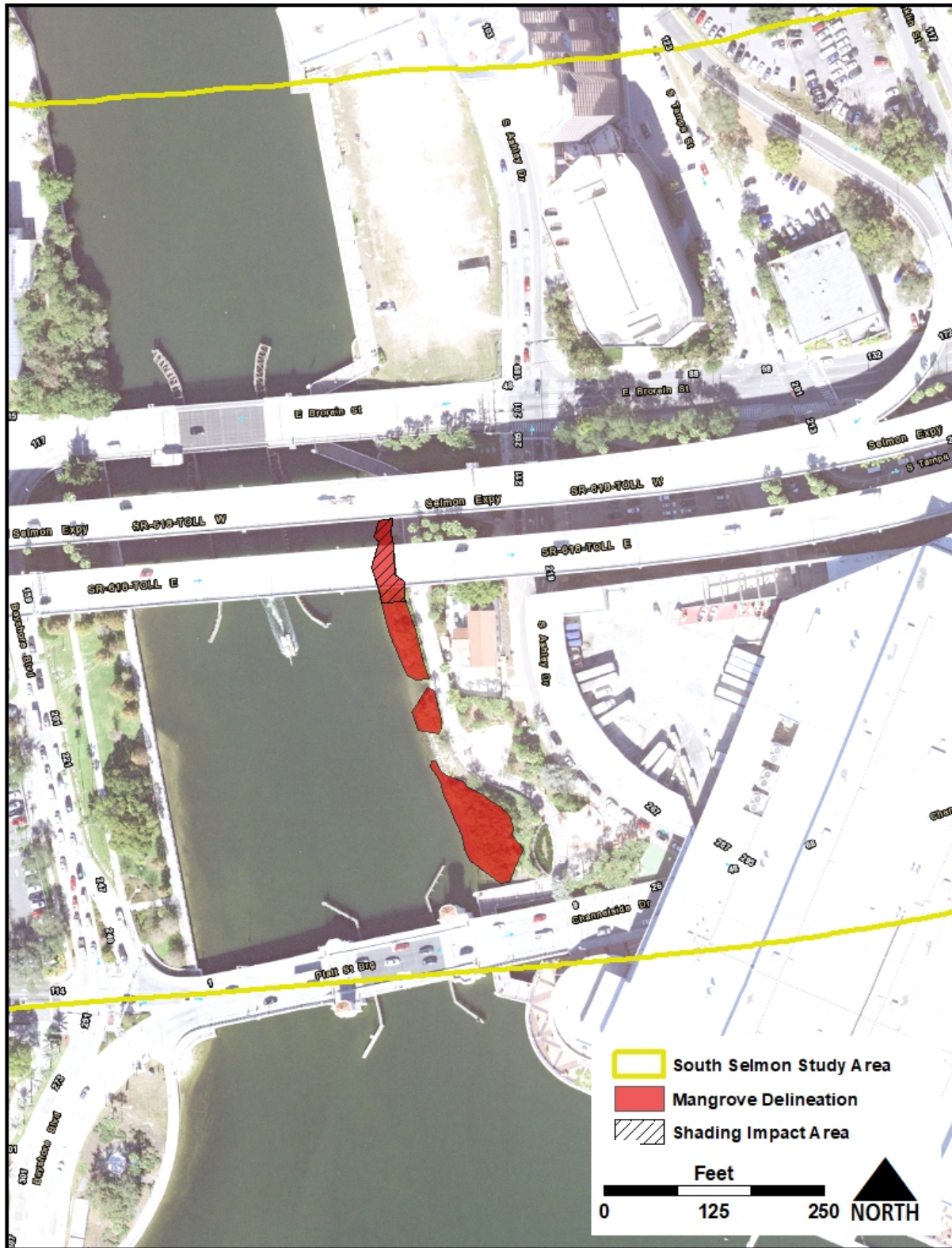
**Hillsborough River**                      FLUCFCS: 510 (Hillsborough River north of Selmon Expressway)  
    USFWS: R1UB3 (Riverine, Tidal, Unconsolidated Bottom, Mud)  
    USFWS: E1UB3 (Estuarine, Subtidal, Unconsolidated Bottom, Mud)

The Hillsborough River is a navigation channel within the study area. North of the Selmon Expressway, the entire river was open water bounded by seawall. From the Selmon Expressway south, the western shore was seawall and the eastern shore contained riprap with mangrove fringe. Bottom sediments within the study area consisted of unconsolidated muds. No seagrass was present.

**Estuarine/Mangrove**                      FLUCFCS: 540/612  
    USFWS: E2FO3 (Estuarine, Intertidal, Forested, Broad-leaved Evergreen)

Mangroves were present along the eastern shoreline of the Hillsborough River, including red mangroves (*Rhizophora mangle*), white mangroves (*Laguncularia racemosa*) and black mangroves (*Avicennia germinans*). The shoreline was reinforced with riprap and contained drift debris, sand, and rocks.

Figure 9: Wetlands and Other Surface Waters Map



### 5.2.2 Wetland and Other Surface Water Impact Assessment

Other surface waters included the channelized Hillsborough River north of the Garrison and Seddon Channels. Seagrasses were not present. Installation of pilings would likely be necessary within the Hillsborough River to support the widened bridge structure. Although piling number and location would vary based on the preferred alternative, installation of pilings would occur within unconsolidated mud bottom within the Hillsborough River. Impacts associated with pilings would be *de minimis*.

A narrow mangrove fringe was delineated along the eastern shore of the Hillsborough River. Additional shading would be expected as a result of bridge widening associated with each of the proposed alternatives.

Impacts to wetlands were evaluated using the Uniform Mitigation Assessment Method (UMAM) (Chapter 62-345, F.A.C.). UMAM provides a standardized procedure for assessing the ecological functions of jurisdictional wetlands and other surface waters, the amount those functions are reduced due to the proposed project’s potential impacts, and the type and quantity of mitigation necessary to offset that loss. UMAM has three parameters, including:

- Location and landscape support (i.e. position in relation to surroundings);
- Water environment (i.e. water quality and quantity); and
- Vegetative community structure (i.e. plant cover).

As listed in **Table 5**, a total mangrove impact area of approximately 0.05 (2,178 square feet) acres could be expected as a result of shading. This impact area would be more or less depending on the preferred alternative selected including considerations associated with structure height and width. The UMAM assessment is provided as **Appendix E**.

**Table 5: UMAM Scores for Wetlands and Other Surface Water Impacts<sup>1</sup>**

Type	Location and Landscape		Water Environment		Vegetation		Impact Area (acres)	Delta	FL
	Current	With	Current	With	Current	With			
Mangrove	3	2	6	5	6	3	0.05	0.17	0.01

<sup>1</sup> A UMAM for the Hillsborough River was not performed as mitigation for pilings would not be expected to be required.

### 5.2.3 Mitigation Requirements

Mitigation would be required for impacts to mangrove habitat. The USACE would require mitigation for jurisdictional impacts authorized under the Federal Register (2008). As stated in 33 CFR Part 332, preference for compensatory mitigation will be given for the purchase of mitigation bank credits if a project falls within an approved service area of a mitigation bank and if that bank offers the appropriate type and number of credits. For the state, impacts to mangroves resulting from construction of the

proposed project would require mitigation pursuant to the requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

Based on the UMAM analysis of the mangrove shading, the proposed project could be expected to have a total UMAM functional loss of 0.01.

### 5.3 Mitigation Alternatives

Mitigation would be required for impacts to mangrove habitat. The proposed project is within the Tampa Bay/Anclote River Watershed and the Hillsborough River Watershed. To avoid the need to address cumulative wetland impacts, mitigation should be compensated within the watershed of impact.

Mangrove mitigation options evaluated as part of this study included onsite opportunities and private mitigation banks. Both direct and secondary impacts would be considered when assessing mitigation needs. On-site mangrove mitigation opportunities were limited due to the hardened and urbanized shoreline, but could include living seawalls or reef balls installed as mangrove planters in areas of appropriate depth and with adequate sunlight. Private mitigation banks offer an alternative mitigation option when available and mitigation banks would be preferred by the permitting agencies.

Several mitigation banks service this area; however, mangrove credits were limited. The impact area was at the boundary of the service area for the Tampa Bay Mitigation Bank (mangrove credits not available) and within the service area for the Mangrove Point Mitigation Bank (not approved by USACE); neither bank sold mangrove credits at the time of this evaluation. The potential project impact area is also covered by the Nature Coast Mitigation Bank service area, which did offer mangrove and herbaceous estuarine mitigation credits at the time of this evaluation. The Nature Coast Mitigation Bank service area recognized by the SWFWMD includes the Upper Coastal and Tampa Bay Basins; the service area recognized by the USACE includes the Upper Coastal Basin. Final mitigation requirements would be determined during permitting based on the preferred alternative and using the UMAM habitat scoring of impacts at that time.

#### 5.3.1 Avoidance and Minimization

The proposed project alternatives will utilize existing, already disturbed and cleared sodded right-of-way for the road widening and ancillary project improvements. Wetland impacts will be avoided and minimized to the extent practicable during project design and permitting. However, unavoidable mangrove impacts could be expected due to shading. In addition, indirect secondary impacts also require consideration. Regulatory agencies generally assume indirect secondary impacts based on reduction of functional habitat value within a 25-foot buffer on impacted wetlands. Secondary impacts will also require mitigation. Temporary impacts due to construction will be minimized utilizing best management practices (BMPs), maintaining a stormwater pollution prevention plan (SWPPP), and implementing FDOT design standards.

Degradation of water quality resulting from construction or excess stormwater runoff from the proposed project has the potential to adversely impact the Hillsborough River and downstream

habitats. Direct, secondary and temporary impacts to habitat and water quality will be avoided and then minimized through the use of erosion control measures and BMPs during construction. Measures to minimize project impacts could include construction phasing, sediment barriers, floating turbidity screenings, silt fences, and other construction techniques identified during design and permitting in cooperation with the regulatory agencies.

Implementation of FDOT design standards, including those measures designed to protect aquatic environments, will be used as outlined in the following manuals:

- Standard Specifications for Road and Bridge Construction (Section 7, 104, and 110) (FDOT 2016)
- State of Florida Erosion and Sediment Control Manual (E&SC Manual) (July 2013)
- FDOT Plans Preparation Manual (PPM) (January 2016)

Based on the above considerations and in accordance with Section 404 of the Clean Water Act (CWA), Protection of Wetlands – Executive Order 11990 and USDOT Order 5660.1A, the proposed project alternatives represent the most practicable alignment for the proposed project. This determination considers all practicable measures to minimize harm to wetlands resulting from the proposed action. Although the project will not fully avoid wetland impacts, given the intent to confine work within the existing right-of-way, minimization of impacts will occur and mitigation of direct and secondary wetland impacts will be provided to reduce long-term adverse impacts to mangroves in this area.

## 6.0 Essential Fish Habitat

An EFH Assessment has been conducted in accordance with Part 2, Chapter 17 - **Essential Fish Habitat** - of the FDOT *PD&E Manual* and the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) of 1996. This section evaluates potential impacts to EFH associated with the proposed alternatives over the Hillsborough River. The purpose of this EFH Assessment is to enhance coordination among the NMFS, Fishery Management Councils (FMCs), and affected state and federal agencies.

### 6.1 Magnuson-Stevens Act

EFH is defined by the MSFCMA of 1976, as amended in 1996. The Magnuson-Stevens Act was enacted by the U.S. Congress to protect marine fish stocks and their habitat, to prevent and stop overfishing, and to minimize by-catch. Congress defined EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (16 USC 1802 (10)). The MSFCMA (Public Law 94-265, as amended) was established, along with other goals, to promote the protection of EFH in the review of projects conducted under federal permits, licenses, or other authorizations that affect or have the potential to affect such habitat. Section 302 of the MSFCMA established eight FMCs. The Gulf of Mexico FMC is responsible for the management standards for fishery resources in federal waters within the Gulf of Mexico from Florida to Texas and for implementation of the national standards in Fishery Management Plans (FMP). In 1996, new habitat conservation provisions were added to the MSFCMA mandating the identification of EFH for all fish species federally managed by the FMCs and NMFS.

## 6.2 Agency Coordination

Communication was initiated with the NMFS regarding marine resources in the Hillsborough River (personal comm., April 2020). The NMFS recommended an EFH Assessment to evaluate shading impacts to mangroves along the Hillsborough River. NMFS communication is included as **Appendix A**.

The EFH Assessment was performed in accordance with the requirements of the MSFCMA of 1996. This analysis included an in-water field survey September 16, 2019 during which time an EFH assessment, seagrass survey, and mangrove delineation was conducted. The limits of mangrove habitat were recorded using a Trimble GeoXT 6000 Series GPS. The EFH assessment included visual observation of bare bottom habitats in the Hillsborough River within the study area to confirm seagrass absence. Mangroves were inspected for benthic organisms and other aquatic species.

## 6.3 EFH Involvement

The intent of this EFH Assessment was to evaluate and describe how the proposed project ***may affect*** EFH designated by the NMFS and the GMFMC within the Hillsborough River and contiguous estuarine habitats.

The GMFMC separates EFH into estuarine (e.g. saltmarsh and brackish marsh; mangrove; SAV; algal flats, mud, sand, shell, and rock substrates; and the estuarine water column) and marine components. Pursuant to § 305(b)(2) of the Magnuson-Stevens Act, federal agencies must consult with NMFS regarding any of its actions authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken that may adversely affect EFH. Measures recommended by the NMFS or any FMC to protect EFH are advisory, not proscriptive. An effective EFH consultation is vital to ensuring that federal actions are consistent with the Magnuson-Stevens Act resource management goals.

The GMFMC manages 55 species for the Gulf of Mexico area. The GMFMC has identified and described EFH for 26 of the managed species (**Table 6**). Guidance provided by NOAA (2004), states the following must accompany an EFH Assessment:

- Description of the action,
- Analysis of the potential adverse effects of the action on EFH and managed species,
- Federal agency(s) conclusions regarding the effects of the action on EFH, and
- Proposed mitigation, as applicable.



**Table 6: Gulf of Mexico EFH – Managed Species<sup>1</sup> Potential Occurrence**

Fishery Management Plan	Species	Potential Presence in Hillsborough River	Comments
<b>Shrimp</b>	Brown shrimp ( <i>Penaeus aztecus</i> )	Low	Common in central/western Gulf of Mexico
	White shrimp ( <i>P. setiferus</i> )	Low	Common in central/western Gulf of Mexico
	Pink shrimp ( <i>P. duorarum</i> )	High	Occur throughout Tampa/Boca Ciega Bays
<b>Red Drum</b>	<i>Sciaenops ocellatus</i>	High	Occur throughout Tampa/Boca Ciega Bays
<b>Coastal Migratory Pelagic Resources</b>	King mackerel ( <i>Scomberomorus cavalla</i> )	None	An off-shore species
	Spanish mackerel ( <i>S. maculatus</i> )	Low	Off-shore/deep-water species; juveniles may inhabit estuaries; not estuarine-dependent
	Cobia ( <i>Rachycentron canadum</i> )	Low	Off-shore/deep-water species; juveniles inhabit estuaries; not estuarine-dependent
	Dolphin/dorado ( <i>Coryphaena hippurus</i> )	None	An off-shore, high salinity species
	Little tunny ( <i>Euthynnus alletteratus</i> )	None	An off-shore/deep-water species
<b>Stone Crab</b>	Florida stone crab ( <i>Menippe mercenaria</i> )	Low	Prefers higher salinities
<b>Spiny Lobster</b>	Spiny lobster <i>Panulirus argus</i>	None	Prefer off-shore coral reefs
<b>Coral Complex</b>	Multiple groups/species	Low	NA
<b>Reef Fish</b>	Red grouper ( <i>Epinephelus morio</i> )	None	Generally an off-shore species
	Black grouper ( <i>Mycteroperca bonaci</i> )	None	Generally an off-shore species
	Gag grouper ( <i>M. microlepis</i> )	Low	Prefer high salinities
	Scamp grouper ( <i>M. phenax</i> )	None	Prefer deeper waters (12 – 189 meters)
	Red snapper ( <i>Lutjanus campechanus</i> )	None	Prefer deeper waters (17 – 200 meters)
	Vermillion snapper ( <i>Rhomboplites aurorubens</i> )	None	Prefer deeper waters (20 – 200 meters)
	Gray snapper ( <i>L. griseus</i> )	High	Post-larvae & juvenile in most estuaries
	Yellowtail snapper ( <i>Ocyurus chrysurus</i> )	Low	Juveniles use <i>Thalassia</i> beds and mangroves
	Lane snapper ( <i>L. synagris</i> )	High	Mangrove & grassy estuarine areas

Fishery Management Plan	Species	Potential Presence in Hillsborough River	Comments
	Greater amberjack ( <i>Seriola dumerili</i> )	None	An off-shore species
	Lesser amberjack ( <i>S. fasciata</i> )	None	An off-shore species
	Tilefish ( <i>Lopholatilus chamaeleonticeps</i> )	None	An off-shore/deep-water species
	Gray triggerfish ( <i>Balistes capriscus</i> )	None	An off-shore species

<sup>1</sup> "Generic Amendment for EFH requirements - Fishery Management Plans of the Gulf of Mexico (GOM): Shrimp Fishery of the GOM, Red Drum Fishery of the GOM; Reef Fish of the GOM; Coastal Migratory Pelagic Resources in the GOM and South Atlantic; Stone Crab Fishery of the GOM; Spiny Lobster in the GOM and South Atlantic; Coral and Reefs of the GOM" Gulf of Mexico Fishery Management Council, October 1998. Ratings are none, low, and high and based on species abundance and distribution data provided by NMFS.

### 6.4 Analysis of Effects on EFH

Each of the proposed alternatives would extend the area of shading over the Hillsborough River. Although each would result in slightly different shadows, shading impacts to the Hillsborough River would be expected to be *de minimis* as a result of both proposed alternatives. Installation of pilings would likely be necessary within the Hillsborough River to support the widened bridge structure. Although piling number and location would vary based on the preferred alternative, installation of piles would occur within unconsolidated mud bottom within the Hillsborough River. Impacts associated with pilings would be *de minimis*. The following habitat designations were assigned to the marine waters containing potential EFH within the study area.

#### 6.4.1 Habitats

Tampa Bay contains EFH utilized by federally managed species and their prey. The channelized segment of the Hillsborough River within the study area includes the tidal waters north of Garrison and Seddon Channels and Hillsborough Bay, which are contiguous with Tampa Bay. Seagrasses were not present.

**Hillsborough River** FLUCFCS: 510 (Hillsborough River north of Selmon Expressway)  
 USFWS: R1UB3 (Riverine, Tidal, Unconsolidated Bottom, Mud)  
 USFWS: E1UB3 (Estuarine, Subtidal, Unconsolidated Bottom, Mud)

The Hillsborough River is a navigation channel within the study area. North of the Selmon Expressway, the entire river was open water bound by seawalls. From the Selmon Expressway south, the western shore was seawall and the eastern shoreline riprap with mangrove habitat. Bottom sediments within the study area consisted of unconsolidated muds.

**Estuarine/Mangrove** FLUCFCS: 540/612  
 USFWS: E2FO3 (Estuarine, Intertidal, Forested, Broad-leaved Evergreen)

Mangroves were present on the eastern shoreline of the Hillsborough River, including red, white and black mangroves. The mangrove shoreline was reinforced with riprap and contained drift debris, sand, and rock. Mangroves were growing within this shoreline; some mangroves extended into the river.

### 6.4.2 Fisheries

Marine species were not observed during the in-water field surveys. However, fisheries known to exist in the Tampa Bay region include the red drum (*Sciaenops ocellatus*), coastal migratory pelagics, and reef fish, pink shrimp (*Farfantepenaeus duorarum*), stone crab (*Minippe mercenaria*), and spiny lobster (*Panulirus argus*).

**Red Drum** is a nearshore species found in estuaries throughout the Gulf of Mexico including within Tampa Bay. They inhabit a range of habitats including estuaries, tidal inlets, tidal flats, seagrass habitats, oyster reefs, and deeper water habitats. The red drum is a euryhaline species able to adapt to a range of salinities and temperatures. The red drum lives the majority of its lifecycle in nearshore waters and estuarine habitats. Estuaries provide nursery habitat for the red drum.

*De minimis* project impacts could be expected due to mangrove shading and installation of pilings. While the red drum could potentially use the Hillsborough River, impacts to red drum foraging or nursery habitat would not be expected as a result of the proposed project. Mangrove impacts resulting from temporary and permanent shading as a result of bridge widening associated with each of the proposed alternatives would be mitigated pursuant to the requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

Pile driving within unconsolidated mud bottom would likely occur within the Hillsborough River. THEA will notify the NMFS prior to construction-related pile driving in order to mitigate potential wildlife impacts. Erosion control measures and BMPs will be required to protect the Hillsborough River during construction. BMPs will be installed and maintained according to the NMFS guidelines to avoid wildlife entrapment. Based on the above information, impacts to red drum would be ***minimal***.

The **Reef Fish** FMP includes various species of snappers, groupers, triggerfishes, jacks, tilefishes, and wrasses. Although the FMP covers 42 species, stock assessments have only been conducted on 11 species. Gray (mangrove) snapper (*Lutjanus griseus*) is abundant in Tampa Bay. Gray snapper spawn offshore but eggs and larvae move by currents into estuarine, seagrass, and mangrove habitats. Larvae, juveniles, and smaller adults are common in seagrass habitats and around mangrove roots, pilings, seawalls, and jetties. Juvenile snappers forage during the day in seagrass beds (Bortone and Williams 1986) and feed primarily on penaeid shrimp and crabs (Rutherford et. al.1989a). Adult gray snapper are nocturnal predators that consume fish, shrimp, and crabs. (Harrigan et al. 1989; Hettler 1989).

*De minimis* project impacts could occur due to mangrove shading and piling installation. While reef fish could potentially use the Hillsborough River, impacts to foraging or nursery habitat would not be expected as a result of the proposed project. Mangrove impacts resulting from temporary and permanent shading from bridge widening associated with each of the proposed alternatives would be

mitigated pursuant to the requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

Pile driving within unconsolidated mud bottom would likely occur within the Hillsborough River. THEA will notify the NMFS prior to construction-related pile driving in order to mitigate potential wildlife impacts. Erosion control measures and BMPs will be required to protect the Hillsborough River during construction. BMPs will be installed and maintained according to the NMFS guidelines to avoid wildlife entrapment. Based on the above information, impacts to these species would be **minimal**.

The **Coastal Migratory Pelagics** FMP includes all estuaries along the U.S. and Mexico border south to the boundary between the GMFMC and the South Atlantic Fishery Management Council (SAFMC). The GMFMC and the SAFMC joint FMP includes king mackerel (*Scomberomorus cavalla*), Spanish mackerel (*S. maculatus*) and cobia (*Rachycentron canadum*). Species included in the fishery, but not in the management unit include cero (*S. regalis*), little tunny (*Euthynnus alletteratus*), dolphin (*Coryphaena hippurus*), and bluefish (*Pomatomus saltatrix*). Spanish mackerel, although not considered estuarine-dependent are known to occur in Tampa Bay (FWC, 2019). These species would be unlikely to utilize the study area; therefore, **no impact** to coastal migratory pelagics would be expected.

Four **shrimps** are included in the species management unit of the shrimp FMP including brown shrimp (*Farfantepenaeus aztecus*), white shrimp (*Litopenaeus setiferus*), pink shrimp (*F. duorarum*), and royal red shrimp (*Pleoticus robustus*). **Pink shrimp** are abundant in Tampa Bay. They occupy a variety of habitats including seagrass habitats. Juvenile shrimp are commonly found in almost every estuary around the Gulf. Seagrasses were not present; therefore, **no impact** to shrimps would be expected.

**Spiny lobster** has been found off shore from Tampa Bay. Although the FMP covers the Gulf regions north to Tarpon Springs, the spiny lobster is not expected to occur within the study area. The proposed project should have **no impact** on this species.

As of October 2011, the **Stone crab** fishery in Florida waters is no longer jointly managed by the GMFMC and the state, but rather is solely managed by the state. Although there is no formal FMP for stone crab, it contributes significantly to the Florida fishery and is important in the assessment of EFH. There are two species of stone crabs found in Florida, including the Florida stone crab (*Menippe mercenaria*) and the Gulf stone crab (*M. adina*). These species interbreed creating a hybrid crab that displays traits from each species (FWC, 2019). The Florida stone crab is found throughout Florida and is abundant in southwest Florida preferring hard bottom habitats with rocky outcrops and seagrasses. The gulf stone crab is more common in the northern and western Gulf of Mexico and prefers mud flats, oyster reefs, rock jetties, and other submerged habitats. The stone crab occurs extensively in Tampa Bay. *De minimis* project impacts could be expected due to mangrove shading and installation of pilings. These impacts would not be expected to impact stone crab habitat; therefore, the proposed project should have **no impact** on stone crabs.

### 6.5 Project Impact Analysis

Impacts would occur within the Hillsborough River. Construction of the proposed project alternatives would extend the area of shading over the river although each alternative would result in slightly different impact shadows. Installation of pilings would be likely within the Hillsborough River to support the widened bridge structure. Although piling number and location would vary based on the preferred alternative, installation of all pilings would occur within unconsolidated mud bottom within the Hillsborough River. No seagrass was present. Impacts associated with shading and pilings within the Hillsborough River would be *de minimis*.

Mangrove habitat was present along the eastern shoreline of the Hillsborough River. Shading of mangrove habitat would occur as a result of construction of the Selmon Expressway Bridge over the Hillsborough River. A total mangrove shading impact area of approximately 0.05 acres (2,178 square feet) could be expected. This impact area would be more or less depending on the preferred alternative selected, including considerations associated with structure height and width.

Impacts to EFH will be avoided and minimized to the greatest extent practical during project design. No populations of the 26 representative fish, shrimp, and crab species or the coral complex listed by the GMFMC would be expected to be adversely affected by the proposed project. Mangrove impacts that result from the construction of the proposed project will be mitigated pursuant to Section 373.4137 F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

Given the above analysis, it has been determined that this project will not have adverse effects to EFH.

### 7.0 Anticipated Permits

Coordination with relevant regulatory agencies would be anticipated to construct the proposed project. The permits that would be expected for the proposed project are listed in **Table 7**.

**Table 7: Anticipated Permits**

Agency	Permit Type	Concurrent Coordination
USCG	Section 9 – Bridge Permit	USACE
Port Tampa Bay	Standard Work Permit	
USACE	Section 404 – NWP#14 or NWP#15 Section 10 / Section 408	USFWS and NMFS USCG and Port Tampa Bay
SWFWMD	Environmental Resource Permit	
FDEP	National Pollutant Discharge Elimination System	
EPC of Hillsborough County	Miscellaneous Impacts in Wetlands	City of Tampa

### 7.1 U.S. Coast Guard

A Section 9 USCG Bridge Permit would be required for bridge construction over the Hillsborough River because the waterway is subject to tidal influence and is considered a navigable waterway of the United States. The purpose of this permit is to preserve the public right of navigation, prevent interference with interstate and foreign commerce, and provide for the reasonable needs of navigation. The proposed alternatives meet the minimum USCG vertical and horizontal clearance guidelines for this waterway.

### 7.2 Port Tampa Bay

The proposed project crosses the Hillsborough River, which is under the jurisdiction of Port Tampa Bay. A Standard Work Permit to perform work in Water of the Hillsborough County Port District would be required prior to construction of the Selmon Expressway Bridge over the Hillsborough River.

### 7.3 U.S. Army Corps of Engineers

Due to anticipated impacts to Waters of the United States, the proposed project would require coordination with the USACE, Tampa Permits Section. Because impacts to tidal waters are not expected to exceed 1/3 acre, a Section 404 Individual Permit would not be expected. Instead, the proposed project would likely qualify as a Nationwide Permit (NWP) #14 (Transportation Projects) or as NWP #15 (U.S. Coast Guard Approved Bridges). The Hillsborough River is a Section 10 waterbody and the Rivers and Harbors Act of 1899 requires authorization from the USACE and a Department of the Army Permit for construction of structures in, on, or over a navigable water, including dredging, excavation, filling, rechannelization, or any other modification. In addition, the Hillsborough River is a designated Federal Navigation Channel requiring coordination with the USACE Navigation Division through a Section 408 review. As part of the advanced notification review, the USACE generated project reference number SAJ-2020-01942 for future correspondences concerning this project.

### 7.4 Southwest Florida Water Management District

The proposed project is within the Tampa Bay/Anclote River and Hillsborough River Watersheds and under the state regulatory jurisdiction of the SWFWMD. Due to the project size, wetland and other surface water impacts, and new impervious surface, the proposed project would require an Individual Permit. The proposed project would be permitted pursuant to Section 373.4137, F.S. to satisfy mitigation requirements in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344.

### 7.5 Florida Department of Environmental Protection

The 40CFR Part 122 prohibits point source discharges of stormwater to Waters of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. Under the state's delegated authority to administer the NPDES program, construction that results in greater than one acre of disturbance must obtain coverage under either a Generic Permit contained in Chapter 62-621, F.A.C. or an Individual Permit issued pursuant to Chapter 62-620, F.A.C. A component of the NPDES permit requires a Stormwater Pollution Prevention Plan.

## 7.6 Hillsborough County Environmental Protection Commission

A permit for impacts to mangroves would be coordinated through the EPC of Hillsborough County – Wetlands Division in accordance with Hillsborough County’s Land Development Code § 4.01.07 and through the miscellaneous activities in wetlands (MAIW) authorization provided in Section 1-11.10 Wetlands, Rules of the EPC.

## 8.0 Conclusions

### 8.1 Protected Species and Habitat

#### 8.1.1 Federal Listed Species and Critical Habitat

Coordination for federal species effects determinations will be completed through the USFWS. Federal listed wildlife observed within the study area or which have the potential to occur include fishes (Gulf sturgeon, smalltooth sawfish), reptiles (loggerhead, green and Kemp’s ridley sea turtles sea turtles), birds (wood stork, piping plover, rufa red knot), and mammals (West Indian/Florida manatee). None were observed during preliminary field surveys. The proposed project would be expected to result in the effects determinations listed in **Table 8** for federal listed species.

The study area was evaluated for Critical Habitat as defined by Congress 17 CFR § 35.1532 and CFR § 226. Neither USFWS nor NOAA Fisheries designated critical habitat was not present. Therefore, the proposed project would not result in the **destruction or adverse modification of critical habitat**.

**Table 8: Project Effect Determinations for Federal Listed Species**

Scientific Name	Common Name	Federal Listing	Project Effect Determination
<i>Acipenser oxyrinchus desotoi</i>	Gulf Sturgeon	Threatened	May affect, not likely to adversely affect
<i>Pristis pectinata</i>	Smalltooth sawfish	Endangered	May affect, not likely to adversely affect
<i>Caretta caretta</i>	Loggerhead sea turtle	Threatened	No effect
<i>Calidris canutus rufa</i>	Rufa red knot	Threatened	No effect
<i>Charadrius melodus</i>	Piping plover	Threatened	No effect
<i>Chelonia mydas</i>	Green sea turtle	Threatened	No effect
<i>Lepidochelys kempii</i>	Kemp’s ridley sea turtle	Endangered	No effect
<i>Mycteria americana</i>	Wood stork	Threatened	No effect
<i>Trichechus manatus latirostris</i>	West Indian/Florida manatee	Threatened	May affect, not likely to adversely affect

Migratory birds and their habitat, including the non-listed, but federally protected bald eagle and osprey were present within the study area. Both receive protection through the MBTA (16 U.S.C. 703-711). A bald eagle nest was present within the study area and disturbance of the nest could occur as a result of construction. The project would be consistent with the BGEPA (16 U.S.C. 668-668d), as amended. THEA will also coordinate with the USFWS in accordance with the *National Bald Eagle Management Guidelines* (2007). No osprey nests were observed. If an active osprey nest is discovered, it will be afforded protection in accordance with the MBTA and Chapter 68A of the F.A.C.; therefore, the project would not impact the osprey.

**8.1.2 State Listed Wildlife**

State listed species known to occur or with the potential to utilize habitat within the study area included one reptile (gopher tortoise), two wading birds (little blue heron, tricolored heron), and three shorebirds (American oystercatcher, black skimmer, least tern). None were observed during preliminary field surveys. Effects to state listed species are coordinated through the FWC. The proposed project would be expected to result in the effects determinations listed in **Table 9** for state listed species.

**8.1.3 Federal and State Listed Plants**

Given the hardened and developed conditions within this densely urban corridor, protected plants would not be expected. A determination of **no effect** is anticipated for federal and state listed plants.

**Table 9: Project Effect Determinations for State Listed Species**

Scientific Name	Common Name	State Listing	Project Effect Determination
<i>Gopherus polyphemus</i>	Gopher tortoise	Threatened	No adverse effect anticipated
<i>Egretta caerulea</i>	Little blue heron	Threatened	No adverse effect anticipated
<i>Egretta tricolor</i>	Tricolored heron	Threatened	No adverse effect anticipated
<i>Haematopus palliatus</i>	American oystercatcher	Threatened	No effect anticipated
<i>Rynchops niger</i>	Black skimmer	Threatened	No effect anticipated
<i>Sternula antillarum</i>	Least tern	Threatened	No effect anticipated

**8.2 Wetlands and Other Surface Waters**

Wetlands and other surface waters were evaluated, and potential impacts estimated based on the proposed alternatives and probable construction techniques considered at the time of this review. Other surface waters included the channelized Hillsborough River north of the Garrison and Seddon Channels. Wetlands included mangrove habitat along a segment of the Hillsborough River shoreline. Seagrasses were not present.



*De minimis* impacts would be expected to unvegetated substrate within the Hillsborough River due to installation of pilings. Mangrove habitat shading could occur as a result of bridge widening associated with each of the proposed alternatives.

A total mangrove impact of approximately 0.05 acres (2,178 square feet) could be expected as a result of shading. Based on the UMAM analysis of the mangrove shading, the proposed project could have a total UMAM functional loss of 0.01.

Potential mangrove mitigation evaluated as part of this NRE included onsite mitigation and mitigation banks. Final mitigation requirements would be determined during permitting based on the preferred alternative and using the UMAM scoring of impacts at that time. The proposed project would be permitted pursuant to Section 373.4137, Florida Statute (F.S), to satisfy mitigation requirements in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344. The proposed project is within the Tampa Bay/Anclote River and Hillsborough River Watersheds. To avoid the need to address cumulative wetland impacts, mitigation should be compensated within the watershed of impact.

Based on the above considerations and in accordance with Section 404 of the Clean Water Act (CWA), Protection of Wetlands – Executive Order 11990 and USDOT Order 5660.1A, the proposed project alternatives represent the most practicable alignment for the proposed project. This determination considers all practicable measures to minimize harm to wetlands resulting from the proposed action.

### 8.3 Essential Fish Habitat

Mangrove habitat was present along the eastern shoreline of the Hillsborough River, and as a result, an EFH assessment was performed. Construction of the proposed project alternatives would extend the area of shading over the river and the mangroves, although each alternative would result in slightly different impact shadows. A total mangrove impact area of approximately 0.05 acres (2,178 square feet) could be expected. Mangrove impacts that result from construction of the proposed project would be mitigated pursuant to the requirements set forth in Section 373.4137, F.S. in accordance with Part (4) of Chapter 373, F.S. and 33 USC §1344. Installation of pilings would be likely within the Hillsborough River to support the widened bridge structure. No seagrasses were present. Although piling number and location would vary based on the preferred alternative, installation of pilings would occur within unconsolidated bottom within the Hillsborough River. Impacts associated with shading and pilings within the Hillsborough River would be *de minimis*. Given the above, the proposed project is expected to have ***minimal*** impact on EFH.

## 9.0 Implementation Measures and Commitments

### 9.1 Implementation Measures

Measures required to be implemented per construction procedure, standard specifications, or other agency requirements issued in a later project phase are listed below to help address project effects and facilitate efficient review of this NRE Report.

- Water quality impacts from construction will be avoided and minimized through the implementation of BMPs including, but not limited to, construction phasing, sediment barriers, floating turbidity curtains, silt fences, and other techniques identified during design and permitting by the regulatory agencies and later during construction by the selected contractor.
- If a gopher tortoise or a potentially occupied burrow is discovered in or within 25 feet of the project construction corridor during pre-construction gopher tortoise surveys, THEA will coordinate to secure an FWC Gopher Tortoise Relocation Permit.
- THEA will conduct a bald eagle nest survey during design and permitting and will coordinate with the USFWS to obtain a Bald Eagle Incidental Take Permit (i.e. Non-Purposeful Take) if impacts to the bald eagle nest cannot be avoided in accordance with the BGEPA and MBTA and the USFWS Bald Eagle Management Guidelines.
- Osprey nest surveys will be conducted during the permitting phase of the proposed project. If an osprey nest is identified, THEA will coordinate with the USFWS and/or the FWC depending on the activity status of the nest.

## 9.2 Commitments

To protect listed wildlife, wildlife habitat, plants, wetlands, and other surface waters, THEA will abide by standard resource protection measures in addition to the following commitments:

- THEA will require the construction contractor to adhere to the most current NMFS's Construction Special Provisions - Gulf Sturgeon Protection Guidelines for the protection of the Gulf Sturgeon.
- THEA will require that the construction contractor to adhere to the most current NMFS's Sea Turtle and Smalltooth Sawfish Construction Conditions during project construction.
- THEA will implement the USACE Standard Manatee Conditions for In-Water Work (most current version). These guidelines will be incorporated as part of the final project design. Additional special conditions for manatees will be addressed during construction and include the following:
  - Barges will be equipped with fender systems that provide a minimum standoff distance of four feet between wharves, bulkheads and vessels moored together to prevent crushing manatees. Existing slow speed or no wake zones will apply to work boats and barges associated with construction; and
  - The spacing between the bridge pilings will be at least 60 inches to allow for manatee movement in between the pilings. If a minimum of 60-inch spacing is not provided between piles, further coordination will be conducted with the USFWS.
  - Any culverts larger than eight inches and less than eight feet in diameter will be grated to prevent manatee entrapment.
- THEA will implement a Marine Wildlife Watch Plan (MWWP) for the West Indian/Florida manatee during project construction to eliminate the possibility of construction-related manatee injury or death. These guidelines will be incorporated into the final project design.
- THEA will coordinate with the NMFS, USFWS, and/or USACE regarding potential impacts associated with pile driving activities needed for bridge construction over the Hillsborough River.

- The size/style of piles, quantity of piles, number of piles driven per day, number of strikes per pile, and other information needed to determine potential hydroacoustic impacts to marine wildlife is currently unknown.
- THEA will inform the construction contractor of the requirement to use a ramp-up procedure during the installation of piles. This procedure allows for a gradual increase in noise level to give sensitive species ample time to flee prior to initiation of full noise levels. This approach can reduce the likelihood of secondary or sub-lethal effects from sound impulses associated with pile driving.
- No nighttime in-water work will be performed. In-water work will be conducted from official sunrise until official sunset times.

## 10.0 References

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## Appendix A – Agency Correspondence

**From:** [Barnett, Brian](#)  
**To:** [Castillo, G.Noemi](#)  
**Cc:** [Goff, Jennifer](#); [Hight, Jason](#); [Raininger, Christine](#)  
**Subject:** RE: South Selmon Capacity Study - Agency Notification Letter  
**Date:** Friday, May 15, 2020 11:19:59 AM  
**Attachments:** [image001.png](#)

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Ms. G. Noemi Castillo,

Florida Fish and Wildlife Conservation Commission (FWC) staff received HDR Engineering, Inc.'s request for review regarding the proposed South Selmon Capacity Study for the Selmon Expressway in Hillsborough County. We have no comments, recommendations, or objections related to state-listed species and their habitat or other fish and wildlife resources to offer on this project.

The liability to not impact or cause "take" of listed species, migratory wildlife, and other regulated species of wildlife is the responsibility of the Tampa Hillsborough Expressway Authority for this project. Please refer to the Florida Administrative Code, 68A-27 for definitions of "take" and a list of species. If listed species are observed onsite in the future, FWC staff are available to provide decision support information or assist in obtaining the appropriate permits.

If you need further information or review, please let us know. Requests for further information or review can be sent to [FWCConservationPlanningServices@MyFWC.com](mailto:FWCConservationPlanningServices@MyFWC.com) and we will ensure your request is received by the appropriate staff. Thank you for contacting the FWC.

Brian Barnett  
Transportation Biologist  
Florida Fish and Wildlife Conservation Commission  
(772) 579-9746  
730 35<sup>th</sup> Ave. SW  
Vero Beach, FL 32968  
[Brian.Barnett@MyFWC.com](mailto:Brian.Barnett@MyFWC.com)

---

**From:** Castillo, G.Noemi <Noemi.Castillo@hdrinc.com>  
**Sent:** Friday, May 15, 2020 9:35 AM  
**To:** Barnett, Brian <Brian.Barnett@MyFWC.com>  
**Cc:** Goff, Jennifer <jennifer.goff@MyFWC.com>; Hight, Jason <Jason.Hight@MyFWC.com>  
**Subject:** RE: South Selmon Capacity Study - Agency Notification Letter

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**From:** Goff, Jennifer [<mailto:jennifer.goff@MyFWC.com>]  
**Sent:** Thursday, May 14, 2020 12:56 PM  
**To:** Castillo, G.Noemi <[Noemi.Castillo@hdrinc.com](mailto:Noemi.Castillo@hdrinc.com)>; Hight, Jason <[Jason.Hight@MyFWC.com](mailto:Jason.Hight@MyFWC.com)>  
**Cc:** Schnell, Steven <[Steve.Schnell@hdrinc.com](mailto:Steve.Schnell@hdrinc.com)>; Anna Quinones <[anna.quinones@tampaxway.com](mailto:anna.quinones@tampaxway.com)>; Conservation Planning Services <[conservationplanningservices@MyFWC.com](mailto:conservationplanningservices@MyFWC.com)>; Barnett, Brian <[Brian.Barnett@MyFWC.com](mailto:Brian.Barnett@MyFWC.com)>; Raininger, Christine <[Christine.Raininger@MyFWC.com](mailto:Christine.Raininger@MyFWC.com)>  
**Subject:** RE: South Selmon Capacity Study - Agency Notification Letter

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Noemi,

We have received your letter and, if necessary, may provide comments. While we will do our best to expedite this review, we cannot guarantee comments within 15 days. If our staff have any questions, they will reach out to you directly.

Sincerely,  
Jennifer

Jennifer Goff, Director  
Office of Conservation Planning Services  
Florida Fish and Wildlife Conservation Commission  
620 South Meridian Street  
Tallahassee, FL 32399-1600  
Office: (850) 488-3831  
Cell: (561) 670-6076  
web site: [www.myfwc.com](http://www.myfwc.com)

---

**From:** Castillo, G.Noemi <[Noemi.Castillo@hdrinc.com](mailto:Noemi.Castillo@hdrinc.com)>  
**Sent:** Thursday, May 14, 2020 12:49 PM  
**To:** Hight, Jason <[Jason.Hight@MyFWC.com](mailto:Jason.Hight@MyFWC.com)>; Goff, Jennifer <[jennifer.goff@MyFWC.com](mailto:jennifer.goff@MyFWC.com)>  
**Cc:** Schnell, Steven <[Steve.Schnell@hdrinc.com](mailto:Steve.Schnell@hdrinc.com)>; Anna Quinones <[anna.quinones@tampaxway.com](mailto:anna.quinones@tampaxway.com)>  
**Subject:** South Selmon Capacity Study - Agency Notification Letter

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**From:** [State Clearinghouse](#)  
**To:** [Castillo, G.Noemi](#)  
**Subject:** SAI# FL202005168950C  
**Date:** Monday, May 18, 2020 9:22:33 AM

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To: Noemi Castillo

Re: Florida State Clearinghouse Project Review

Project SAI#: FL202005168950C

Date Received: 05/15/20

Project Description: U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION - PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY TO EVALUATE CAPACITY IMPROVEMENTS ALONG SELMON EXPRESSWAY-STATE ROAD 618 IN TAMPA, HILLSBOROUGH COUNTY, FLORIDA.

The Florida State Clearinghouse has received the above-referenced project and has forwarded it to the appropriate state agencies for review. Please refer to the State Application Identifier (SAI) number in all correspondence with the Florida State Clearinghouse regarding this project. Applicants should expect to receive their State Clearance Letter 30-60 days from the received date. Additional information can be found at [http://dep.state.fl.us/secretary/oip/state\\_clearinghouse/manual2.htm](http://dep.state.fl.us/secretary/oip/state_clearinghouse/manual2.htm).

Please submit all future project applications and correspondence by email to [state.clearinghouse@dep.state.fl.us](mailto:state.clearinghouse@dep.state.fl.us). If your submittal is too large to send via email or if you need other assistance, contact Chris Stahl at (850) 717-9076.



**From:** [Swanson, Sherri](#)  
**To:** [Swanson, Sherri](#)  
**Subject:** FW: State Clearance Letter for FL202005168950C - Project Development and Environment (PD&E) Study to Evaluate Capacity Improvements Along Selmon Expressway-State Road 618 in Tampa, Hillsborough County, Florida.  
**Date:** Monday, July 6, 2020 8:28:17 AM

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**From:** Stahl, Chris [mailto:Chris.Stahl@dep.state.fl.us]  
**Sent:** Thursday, July 2, 2020 10:34 AM  
**To:** Castillo, G.Noemi <Noemi.Castillo@hdrinc.com>  
**Cc:** State\_Clearinghouse <State.Clearinghouse@dep.state.fl.us>  
**Subject:** State Clearance Letter for FL202005168950C - Project Development and Environment (PD&E) Study to Evaluate Capacity Improvements Along Selmon Expressway-State Road 618 in Tampa, Hillsborough County, Florida.

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July 2, 2020

G. Noemi Castillo  
HDR Engineering, Inc.  
4830 W. Kennedy Blvd, Suite 400  
Tampa, Florida 33609

RE: U.S. Department of Transportation - Federal Highway Administration - Project Development and Environment (PD&E) Study to Evaluate Capacity Improvements Along Selmon Expressway-State Road 618 in Tampa, Hillsborough County, Florida.  
SAI # FL202005168950C

Dear Noemi:

Florida State Clearinghouse staff has reviewed the proposal under the following authorities: Presidential Executive Order 12372; § 403.061(42), Florida Statutes; the Coastal Zone Management Act, 16 U.S.C. §§ 1451-1464, as amended; and the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, as amended.

The Southwest Florida Water Management District has reviewed the proposed action and submitted comments. As a courtesy, these have been attached to this letter and are incorporated hereto.

If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the

project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The applicant shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333. Project activities shall not resume without verbal and/or written authorization. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes. If you have any questions, please contact Rachel Thompson, Historic Sites Specialist, by email at [Rachel.Thompson@dos.myflorida.com](mailto:Rachel.Thompson@dos.myflorida.com), or by telephone at 850.245.6453 or 800.847.7278.

Based on the information submitted and minimal project impacts, the state has no objections to the proposed project and, therefore, it is consistent with the Florida Coastal Management Program (FCMP). The state's final concurrence of the project's consistency with the FCMP will be determined during any environmental permitting processes, in accordance with Section 373.428, Florida Statutes. Thank you for the opportunity to review the proposed project. If you have any questions or need further assistance, please don't hesitate to contact me at (850) 717-9076.

Sincerely,

*Chris Stahl*

Chris Stahl, Coordinator  
Florida State Clearinghouse  
Florida Department of Environmental Protection  
3800 Commonwealth Blvd., M.S. 47  
Tallahassee, FL 32399-2400  
ph. (850) 717-9076  
[State.Clearinghouse@floridadep.gov](mailto:State.Clearinghouse@floridadep.gov)

**To:** [Swanson, Sherri](#)  
**Subject:** FW: South Selmon Capacity Study - Agency Notification Letter - SAJ-2020-01942  
**Date:** Friday, May 29, 2020 11:47:53 AM  
**Attachments:** [image001.png](#)

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**From:** Hogan-Charles, Melinda G CIV USARMY CESAJ (USA) [mailto:Melinda.G.Hogan-Charles@usace.army.mil]  
**Sent:** Tuesday, May 26, 2020 8:58 AM  
**To:** Castillo, G.Noemi <Noemi.Castillo@hdrinc.com>  
**Cc:** Schnell, Steven <Steve.Schnell@hdrinc.com>; Anna Quinones <anna.quinones@tampaxway.com>  
**Subject:** RE: South Selmon Capacity Study - Agency Notification Letter - SAJ-2020-01942

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Ms. Castillo,

Thank you for the opportunity to provide comments on the proposed improvements along the Selmon Expressway. A review of the project, indicates that the proposed improvements would cross the Hillsborough River. The Hillsborough River is a Section 10 waterbody for the Corps of Engineers, therefore any proposed work in, on or above the Hillsborough River would require a Department of the Army Permit. In addition, the Hillsborough River is a Federal Navigation Channel. If you are proposing work in, on, or above the Hillsborough River would require coordination with the Corps Navigation Division to ensure that there are no impacts to the designated federal channel. I have attached two Nationwide Permits which will assist with your planning of the project. Please refer to Nationwide 14 Linear Transportation Projects and Nationwide 15 U.S. Coast Guard Approved Bridges. I recommend you request a Pre-Application meeting once you have a proposed design plan for the project. I have attached a Pre-Application form and please note that a DA number has been generated for your project. Please reference this number SAJ-2020-01942 on all future correspondences to the Corps concerning this project.

Should you have additional questions and or comments, please feel free to contact me.

Thank you,  
Mindy

Mindy Hogan-Charles  
Chief, Tampa Permits Section  
U.S. Army Corps of Engineers  
Jacksonville District, Tampa Permits Section  
10117 Princess Palm Avenue, Suite 120  
Tampa, Florida 33610

**From:** [David Rydene - NOAA Federal](#)  
**To:** [Castillo, G.Noemi](#)  
**Cc:** [Schnell, Steven](#); [Anna Quinones](#)  
**Subject:** Re: South Selmon Capacity Study - Agency Notification Letter  
**Date:** Monday, May 18, 2020 10:41:47 AM  
**Attachments:** [image001.png](#)

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NMFS staff has reviewed the letter concerning capacity improvements to the Selmon Expressway (SR 618) in Hillsborough County, Florida. NMFS principal concern is the widening of the Selmon Expressway Bridge over the Hillsborough River in downtown Tampa. It appears that shoreline mangroves at this location might experience minor shading impacts due to the bridge widening, which should be addressed in the Essential Fish Habitat Assessment within the Natural Resources Evaluation. In terms of the Endangered Species Act (ESA), there is a potential for bridge construction activities, including in-water pile driving, to affect ESA-listed species under NMFS's purview (smalltooth sawfish and green, loggerhead, and Kemp's ridley sea turtles).

On Thu, May 14, 2020 at 12:35 PM Castillo, G.Noemi <[Noemi.Castillo@hdrinc.com](mailto:Noemi.Castillo@hdrinc.com)> wrote:

Good afternoon

The Tampa Hillsborough Expressway Authority (THEA) is conducting a Project Development and Environment (PD&E) Study to evaluate capacity improvements along Selmon Expressway [State Road (SR) 618] in Hillsborough County, Florida. The project limits extend from the eastern project limit of the Selmon Expressway West Extension Project to the beginning of the six-lane section near Whiting Street, a distance of approximately 4.5 miles. HDR, on behalf of THEA, is currently working on the environmental review and NEPA documentation.

Please receive the attached letter. We are attempting to identify key issues that will need to be addressed in the NEPA process and would like to receive your comments and input relative to the proposed improvements, as they relate to your specific area of expertise or regulatory jurisdiction. Please note that we are including an EFH Assessment in the NRE, as per your email discussion with Sherri Swanson of HDR.

In order to sufficiently address key project issues and maintain the project schedule, your written comments by email or letter are requested within 15 days of receiving this letter. Please send your comments and information about the project to this email or the address included in the attached letter, and include South Selmon Capacity Study Project in the subject line.

Thank you

Noemi

G. Noemi Castillo, PE (FL and NY)

**D** 813-282-2328 **M** 917.887.3670



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--

David Rydene, Ph.D.  
Fish Biologist  
National Marine Fisheries Service  
Habitat Conservation Division  
263 13th Avenue South  
St. Petersburg, FL 33701  
Office (727) 824-5379  
Cell (813) 992-5730  
Fax (727) 824-5300

**From:** [Swanson, Sherri](#)  
**To:** [Swanson, Sherri](#)  
**Subject:** RE: South Selmon Capacity Study - Agency Notification Letter  
**Date:** Monday, June 1, 2020 10:14:03 AM  
**Attachments:** [image001.png](#)

---

**From:** Overton, Randall D CIV [mailto:Randall.D.Overton@uscg.mil]  
**Sent:** Friday, May 29, 2020 3:49 PM  
**To:** Castillo, G.Noemi <Noemi.Castillo@hdrinc.com>  
**Cc:** Schnell, Steven <Steve.Schnell@hdrinc.com>; Anna Quinones <anna.quinones@tampaxway.com>; Stratton, A Eugene CIV <A.Eugene.Stratton@uscg.mil>; D07-DG-DISTRICTSTAFF-DPB <D07-DG-DISTRICTSTAFF-DPB@uscg.mil>  
**Subject:** RE: South Selmon Capacity Study - Agency Notification Letter

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A Coast Guard bridge permit will be required for modifications (widening) to the Selmon Expressway[State Road (SR) 618] Bridge crossing the Hillsborough River. The existing navigational clearance over the Hillsborough River must not be encroached upon by the proposed widening project.

Please contact me with questions, concerns, or clarification.  
Thank you,

**Randall Overton, M.P.A.**  
Chief, Permits Division  
Coast Guard Seventh District Bridge Administration  
909 SE 1st Ave Suite 432  
Miami, FL 33131  
(305) 205-0795 Cell  
(305) 415-6736 Office

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**From:** Castillo, G.Noemi <Noemi.Castillo@hdrinc.com>  
**Sent:** Thursday, May 14, 2020 11:08 AM  
**To:** Overton, Randall D CIV <Randall.D.Overton@uscg.mil>; Tate, William G CIV <William.G.Tate@uscg.mil>; Stratton, A Eugene CIV <A.Eugene.Stratton@uscg.mil>  
**Cc:** Schnell, Steven <Steve.Schnell@hdrinc.com>; Anna Quinones <anna.quinones@tampaxway.com>  
**Subject:** [Non-DoD Source] South Selmon Capacity Study - Agency Notification Letter

Good morning

The Tampa Hillsborough Expressway Authority (THEA) is conducting a Project Development and



Environment (PD&E) Study to evaluate capacity improvements along Selmon Expressway [State Road (SR) 618] in Hillsborough County, Florida. The project limits extend from the eastern project limit of the Selmon Expressway West Extension Project to the beginning of the six-lane section near Whiting Street, a distance of approximately 4.5 miles. HDR, on behalf of THEA, is currently working on the environmental review and NEPA documentation.

Please receive the attached letter. We are attempting to identify key issues that will need to be addressed in the NEPA process and would like to receive your comments and input relative to the proposed improvements, as they relate to your specific area of expertise or regulatory jurisdiction. In order to sufficiently address key project issues and maintain the project schedule, your written comments by email or letter are requested within 15 days of receiving this letter. Please send your comments and information about the project to this email or the address included in the attached letter, and include South Selmon Capacity Study Project in the subject line.

Thank you

Noemi

G. Noemi Castillo, PE (FL and NY)

**D** 813-282-2328 **M** 917.887.3670

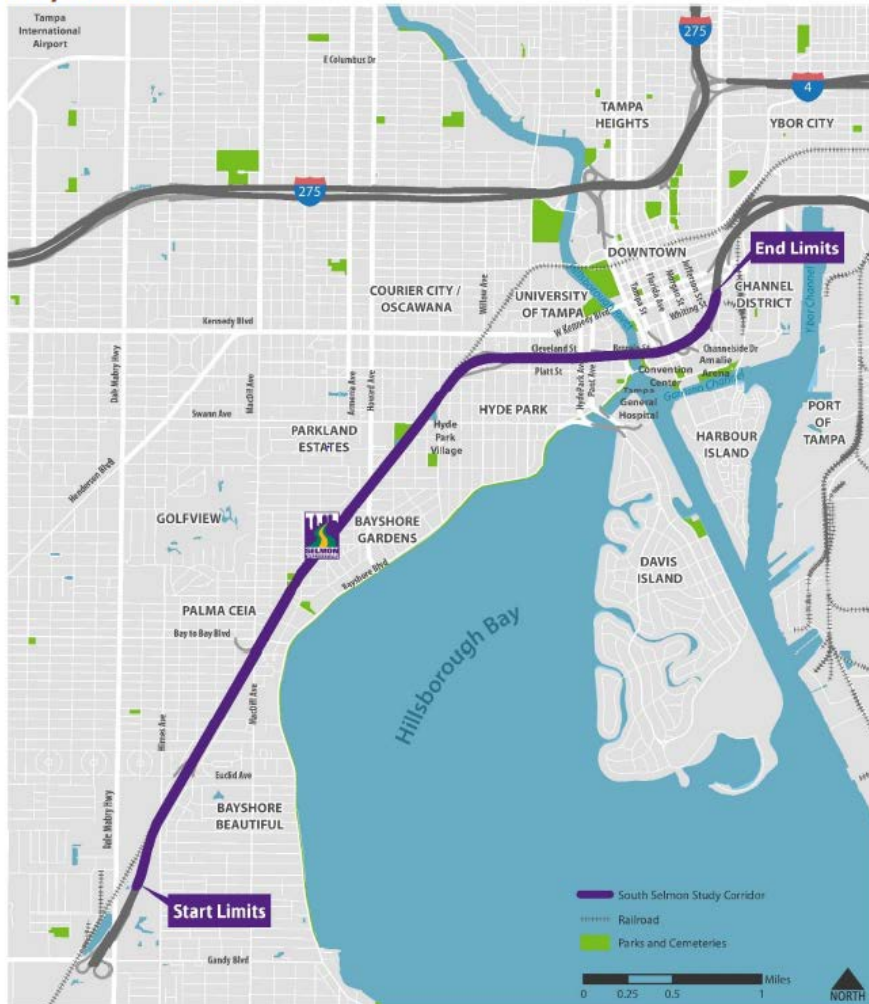


[hdrinc.com/follow-us](http://hdrinc.com/follow-us)



Location Map

Project Location



Summary

<p><b>Project Name / Number</b></p> <p>South Selmon Capacity Study PA #407667</p>	<p><b>Review Screen</b></p>
<p><b>Location</b></p> <p>Downtown Tampa</p>	<p>Planning</p>
<p><b>County</b></p> <p>Hillsborough</p>	<p>Programming</p> <p><b>X Advance Notification</b></p> <p><b>Review Period</b></p> <p>05/14/2020 to 05/29/2020</p>



## Project Description

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The Tampa Hillsborough Expressway Authority (THEA) is conducting a Project Development and Environment (PD&E) Study to evaluate capacity improvements along Selmon Expressway [State Road (SR) 618] in Hillsborough County, Florida. The project limits extend from the eastern project limit of the Selmon Expressway West Extension Project to the beginning of the six-lane section near Whiting Street, a distance of approximately 4.5 miles, as shown on the attached figure. Capacity improvements being evaluated include widening inside to the median, adding inside paved shoulders, and potentially adding lanes to the outside or constructing elevated lanes along the median. The ability of technology to improve efficiency and capacity will also be evaluated. The improvements will primarily be accommodated within existing right-of-way.

The Selmon Expressway is a limited access, tolled facility providing east-west connectivity from Interstate 75 (I-75) to downtown Tampa and United States Highway 92 (US 92). It currently consists of four 12-foot wide travel lanes, 8-foot inside shoulders, and either shoulder gutter and guardrail or shoulder gutter and retaining wall to the outside shoulders in each direction. The facility is elevated through downtown Tampa and includes structures over Hillsborough River and multiple roadway facilities.

The objective of the PD&E Study is to assist THEA in reaching a decision on the conceptual design for the project corridor along the Selmon Expressway to safely and efficiently accommodate future travel demand. The environmental review will assess and document the potential impacts to social and economic, cultural, natural and physical environmental resources as required by the National Environmental Policy Act (NEPA). As part of the NEPA process, we are coordinating with agencies and tribes with oversight or interest in the project area. To accomplish this we would like to receive your comments, relative to the proposed improvements, as they relate to your specific area of expertise or regulatory jurisdiction.

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## Purpose and Need

The primary purposes of the South Selmon Capacity Study are to reduce congestion and improve safety along the corridor. Bottlenecks occur regularly at on- and off-ramp locations even though the existing capacity of the mainline currently meets demand, and there is a high frequency of crashes within the project limits. An additional goal of this project is to address transportation demand which is expected to increase and contribute to congestion and safety issues.

The on- and off-ramps experience frequent bottlenecks backing up onto the mainline due to deficient acceleration/deceleration lanes. Successive on-ramps, as well as off-ramps that split into multiple lanes, contribute to congestion and add safety conflict points. Successive on-ramps include Morgan Street and Tampa Street. Off-ramps with multiple lanes include Channelside Drive, Willow Avenue, and Bay-to-Bay Boulevard. Additionally, periodic off-ramp closures at the downtown exits create bottlenecks.

While the existing capacity meets current demand, future transportation demand is expected to exceed the existing capacity and increase the existing congestion and safety issues. Traffic along this portion of the Selmon Expressway has nearly doubled in the last 10 years (THEA: 2017 Traffic and Revenue Report). The existing Level of Service (LOS) is C from the eastern project limit to Willow Avenue and it is projected to fail by 2033. The existing LOS is D from Willow Avenue to Whitney Street (northern project limit), and it is projected to fail by 2025. The University of Florida Bureau of Economic and Business Research (BEBR) estimates the 2018 population of Hillsborough County at 1.4 million and the medium 2045 projection for population growth at 1.95 million, an increase of 38 percent.

This facility is vital to accommodating the economic and social demands of the region as population and employment opportunities in the region grow. The Selmon Expressway provides regional connectivity between several densely populated areas and regional attractors, including Pinellas County and St. Petersburg via the Gandy Boulevard Bridge, MacDill Air Force Base, Downtown Tampa, Port Tampa Bay, and Brandon. It also serves as an Alternative to Interstate 4 (I-4), I-75, and Interstate 275 (I-275) during road closures and is a critical corridor for hurricane evacuations.

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## Alternatives Under Consideration

There is only one alternative for the proposed project.

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## Summary of Public Comments

Summary of Public Comments is not available at this time.

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## SWFWMD Comments

### Purpose and Need Statement

Understood (without comments)



**Coastal and Marine**

<b>Degree of Effect:</b>	None	<b>X Minimal</b>	Moderate	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	No Involvement	PD&E Support Document	<b>X Permit Required</b>
	Tech Memo Required	To Be Determined: Further Coordination Required	

**Identify Resources and level of importance:**

**Direct Effects:**

Hillsborough County is listed as a coastal county under the Coastal Zone Management Act.

**Comment on effects to resources:**

**Direct Effects:**

SWFWMD has assigned a Degree of Effect (DOE) of “Minimal” based upon the routine nature associated with permitting requirements for the proposed roadway improvement project.

Impacts to wetlands and/or surface waters located within the project boundaries will require additional noticing to be sent to coordinating agencies, such as Florida Fish and Wildlife Conservation Commission, and Department of State, Division of Historic Resources. This noticing will be completed by the District upon initial receipt of the application. Should one of the coordinating agencies request additional information as part of the permitting process, this information will become a completeness item and may require final CZM noticing once the permit application is deemed complete by District staff.

**Contamination**

<b>Degree of Effect:</b>	None	Minimal	<b>X Moderate</b>	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	No Involvement	PD&E Support Document	Permit Required
	Tech Memo Required	<b>X To Be Determined: Further Coordination Required</b>	

**Identify Resources and level of importance:**

**Direct Effects:**

The SWFWMD utilized FDEP’s Map Direct Geographic Information System (GIS) to identify contamination sources within 500-feet of the existing project right of way. The following contamination sites of particular interest to the SWFWMD were located:

Petroleum Contamination Monitoring (PCTS) Discharges: Twenty-nine (29) reported locations. Facility ID’s 9300209, 9200229, 8625550, 8841757, 8625623, 8520511, 8508936, 8627356, 8943542, 9812652, 8626337, 8945166, 9064007, 8627646, 8626535, 9809189, 9202226, 8624822, 8624766, 8627499, 9201192, 9101617, 9807097, 9301000, 8838723, 9101430, 9807787, 8627167, and 9807222.



Drycleaning Solvent Program Cleanup Sites: Two (2) reported locations.  
ERIC ID's: ERIC\_4694 and ERIC\_4735

Waste Cleanup CLOSED Responsible Party Sites: Five (5) reported locations.  
Site ID's: 36938, 65090, 225867, 315942 and 303123

Similar information can be obtained from the FDEP Map Direct

From the SWFWMD's GIS, this proposed roadway improvement project lies within a Sensitive Karst Area and one sinkhole was reported within a mile northwest of this project, on the south side of the S. Armenia Ave./W. Swann Ave. intersection. Also, numerous well construction permits have been issued within 500-feet of the project area.

Well construction permit information can be obtained from the SWFWMD's Permits Map Viewer, Well Construction Permit Search and Water Use Permit Search web sites as follows:

<http://www18.swfwmd.state.fl.us/search/search/wcpsimple.aspx>

<http://www18.swfwmd.state.fl.us/search/search/searchwupsimple.aspx>

**Comment on effects to resources:**

**Direct Effects:**

If encountered and disturbed during construction, any contaminated site could result in surface and / or groundwater water pollution. While the proposed roadway improvement project footprint may not directly impact contaminated sites, proposed storm water management systems (if applicable) and other project construction activities should avoid these areas.

**Recommended avoidance, minimization and mitigation opportunities:**

**Direct Effects:**

To minimize groundwater and surface water pollution potential, the following actions should be considered by the THEA:

- Conduct an Environmental Audit at the appropriate level to identify specific facilities of interest and to develop a plan for their proper removal or abandonment;
- Coordinate with FDEP & USEPA, and prepare an appropriate Contamination Assessment Report;
- Avoid known contaminated sites where possible in the selection of the project alignment. If discovered during the recommended soils investigation, contamination should be remediated properly so as to eliminate the potential for ground water contamination;
- If applicable, avoid / minimize all construction activity in proximity to known sinkholes along or near the project's alignment;
- Confirm the presence or absence of existing potable supply wells, both public and domestic (refer to the GIS well information above), and identify precisely all potential sources of contamination within the path of construction or in proximity of the proposed surface water management systems;
- Thoroughly evaluate potential stormwater treatment pond sites for the presence of contamination and eliminate contaminated sites as potential pond sites;
- Design and construct stormwater management facilities to avoid breaching the upper confining unit;
- Temporary drainage & erosion control through areas of potential contamination may be important considerations for the THEA and their construction contractor.

Contamination sources such as existing fuel storage tanks, fuel pumps, and septic tanks shall be removed or abandoned properly. In addition, existing wells in the path of construction shall be properly plugged and abandoned by a licensed well contractor – Reference: Rule 40D-3.531, Florida Administrative Code, available at <http://www.swfwmd.state.fl.us/permits/rules/>.



**Additional Comments:**

The SWFWMD has assigned a Degree of Effect (DOE) based on the potential need for increased coordination or effort associated with the SWFWMD’s proprietary or regulatory interests and obligations. For this project, a DOE of “Moderate” was assigned to this issue due to the present belief that future ERP permitting is expected to be non-routine for:

- Potential pollution sources (particularly the Petroleum Contamination Monitoring Discharges sites, Drycleaning Solvent Program Cleanup sites, and Waste Cleanup CLOSED Responsible Party sites).

However, the expected permitting effort by the THEA should be straight forward and a normal effort is expected on the part of SWFWMD’s regulatory staff.

**Floodplains**

<b>Degree of Effect:</b>	None	Minimal	<input checked="" type="checkbox"/> Moderate	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	No Involvement	PD&E Support Document	<input checked="" type="checkbox"/> Permit Required
	Tech Memo Required	To Be Determined: Further Coordination Required	

**Identify Resources and level of importance:**

**Direct Effects:**

The SWFWMD utilized its Geographic Information System (GIS) to identify floodplain areas within 500-feet of the project area. The GIS identifies the FEMA 100-year floodplain at the Hillsborough River crossing within 500-feet of the existing project right of way.

As of May, 2020, the following FIRM Panel Number for the proposed roadway improvement project can be obtained from the FEMA Map Service Center at:

<https://msc.fema.gov/portal>

- Panel # 12057C0344H: Effective Date – 08/28/2008
- Panel # 12057C0342H: Effective Date – 08/28/2008
- Panel # 12057C0361H: Effective Date – 08/28/2008
- Panel # 12057C0353H: Effective Date – 08/28/2008
- Panel # 12057C0354H: Effective Date – 08/28/2008

From the SWFWMD’s GIS, this proposed roadway improvement project encompasses other topographic depression (historic basin storage) areas that are not currently identified as floodplain areas on the referenced FIRM Panel Numbers. Floodplain limits and elevations for these historic basin storage areas will need to be established using the SWFWMD’s 100-year, 24-hour storm event.

**Comment on effects to resources:**

**Direct Effects:**

Potential impacts for the proposed project will depend upon the required filling, encroachment or alteration of existing (or future) Zone A and AE Floodplains, Historic Basin Storage areas and (if applicable) Floodways.



**Recommended avoidance, minimization and mitigation opportunities:**

**Direct Effects:**

Encroachment within any floodplain, floodway or historic basin storage area may decrease stormwater storage which could increase flooding depth and duration. The SWFWMD may require compensation for fill (or other encroachments) into floodplains, floodways and historic basin storage areas up to the 100-year event if such encroachment(s) will adversely affect conveyance, storage, water quality or adjacent lands (Reference: Sections 3.3 and 3.7 of the District's "Applicant's Handbook Volume II", available at <http://www.swfwmd.state.fl.us/permits/rules>).

The THEA may reduce the degree of effect for flooding by:

- restricting the filling / encroachment into floodplain, floodway and historic basin storage areas to only those areas that are necessary;
- constructing stormwater treatment ponds outside floodplain, floodway and historic basin storage areas;
- providing equivalent compensation for lost floodplain, floodway and historic basin storage.

**Additional Comments:**

The SWFWMD has assigned a Degree of Effect based on the potential need for increased coordination or effort associated with the SWFWMD's proprietary or regulatory interests and obligations. For this project, a DOE of "Moderate" was assigned to this issue due to the present belief that future Environmental Resource Permit (ERP) permitting is expected to be non-routine for expected impacts to Zone A and AE floodplains and historic basin storage areas within the proposed areas of:

- Roadway construction.
- Alterations of existing surface water storage and conveyance facilities.
- New stormwater management ponds.

However, the expected permitting effort by THEA should be straight forward and a normal effort is expected on the part of SWFWMD's regulatory staff.

**Historic and Archaeological Sites**

<b>Degree of Effect:</b>	<input checked="" type="checkbox"/> None	Minimal	Moderate	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	No Involvement	PD&E Support Document	<input checked="" type="checkbox"/> Permit Required
	Tech Memo Required	To Be Determined: Further Coordination Required	

**Identify Resources and level of importance:**

**Direct Effects:**

SWFWMD's responsibility in the ETDM review process is to identify only those historical and archeological sites located on District owned/controlled lands. From review of the SWFWMD's Geographic Information System (GIS), there are no District owned / controlled lands within one (1) mile of the proposed roadway improvements.





It should be noted, however, that impacts to all historical and archaeological sites shall be considered in evaluation of the application for an environmental resource permit.

**Comment on effects to resources:**

**Direct Effects:**

Pursuant to Subsection 10.2.3.6 of the Environmental Resource Permit Applicant’s Handbook Volume I, work proposed in, on, or over wetlands and/or surface water will require communications from the Department of State, Division of Historical Resources (DHR) indicating there will be no impacts to significant historical or archaeological resources. “The applicant may be required to perform an archeological survey and to develop and implement a plan as necessary to demarcate and protect the significant historical or archeological resources, if such resources are reasonably expected to be impacted by the regulated activity.” [Subsection 10.2.3.6 ERP AP Vol. I].

**Infrastructure**

<b>Degree of Effect:</b>	None	Minimal	<b>X Moderate</b>	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	No Involvement	PD&E Support Document	Permit Required
	Tech Memo Required	<b>X To Be Determined: Further Coordination Required</b>	

**Identify Resources and level of importance:**

**Direct Effects:**

The following information (regarding SWFWMD owned / controlled / cooperative data collection sites) was obtained from the SWFWMD’s GIS system, and was analyzed for information within the existing project right of way:

SITE\_ID: 18789  
 SITE\_NAME: Pope 185 Fldn  
 SITE\_PRIMARY\_TYPE\_DESC: Well  
 WELL\_STATUS\_DESC: Active  
 LATITUDE: 27 56 35.06  
 LONGITUDE: 82 28 21.32

**Comment on effects to resources:**

**Direct Effects:**

Construction activities related to the project and associated storm water management facilities have the potential to damage the District’s data collection stations or to impair their collection functions.

**Recommended avoidance, minimization and mitigation opportunities:**

**Direct Effects:**

Communication with the District’s Data Collection Bureau (Brooksville) during the design phase can greatly reduce the potential for impacts to these data collection sites.

**Additional Comments:**



The SWFWMD has assigned a Degree of Effect (DOE) based on the potential need for increased coordination or effort associated with the SWFWMD's proprietary or regulatory interests and obligations. A DOE of "Moderate" was assigned to these issues due to the fact that SWFWMD funded data collection sites are located within the existing project right of way.

The SWFWMD requests that THEA avoid disturbing the data collection sites. Coordination with the District's Data Collection Bureau in Brooksville will be helpful in protecting these infrastructure components.

**Recreation Areas**

<b>Degree of Effect:</b>	<input checked="" type="checkbox"/> None	Minimal	Moderate	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	No Involvement	PD&E Support Document	<input checked="" type="checkbox"/> Permit Required
	Tech Memo Required	To Be Determined: Further Coordination Required	

**Identify Resources and level of importance:**

**Direct Effects:**

SWFWMD's responsibility in the ETDM review process is to identify only those recreation areas located on District owned/controlled lands. From the SWFWMD's Geographic Information System (GIS), there are no District owned / controlled lands within one (1) mile of the proposed roadway improvement project. It should be noted, however, that impacts to all recreation areas shall be considered in the evaluation of the application for an environmental resource permit.

**Special Designations**

<b>Degree of Effect:</b>	<input checked="" type="checkbox"/> None	Minimal	Moderate	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	<input checked="" type="checkbox"/> No Involvement	PD&E Support Document	Permit Required
	Tech Memo Required	To Be Determined: Further Coordination Required	

**Water Quality and Quantity**

<b>Degree of Effect:</b>	None	Minimal	<input checked="" type="checkbox"/> Moderate	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

	No Involvement	PD&E Support Document	<input checked="" type="checkbox"/> Permit Required
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<b>Coordination Document:</b>	Tech Memo Required	To Be Determined: Further Coordination Required
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**Identify Resources and level of importance:**

**Direct Effects**

Water Quality:

The following information was obtained from the SWFWMD’s Geographic Information System (GIS) and supplemented with information from the FDEP’s Statewide Comprehensive Verified List of Impaired Waters and Statewide Comprehensive Delist List, accessible at:

<https://floridadep.gov/dear/watershed-assessment-section/documents/comprehensive-verified-list>

<https://floridadep.gov/dear/watershed-assessment-section/documents/comprehensive-delist-list>

The project occupies four (4) drainage basins within 500-feet of the existing project right of way: Rattlesnake Ditch (WBID 1640), Interbay Peninsula (WBID 1609), Hillsborough River (WBID 1443E) and Ybor City Drain (WBID 1584A1). As of May, 2020, the none of these waterbodies are classified as impaired for nutrient related pollutants by FDEP. However, the adjacent Tampa Bay is designated as a Category 4b waterbody (impaired, but no TMDL required).

Water Quantity:

Floodplain issues for this roadway project were addressed in a previous section of this document.

**Comment on effects to resources:**

**Direct Effects:**

Water Quality:

Untreated or under-treated runoff generated by the proposed roadway improvement project could impact the four (4) WBIDs and Tampa Bay identified in the previous section. As of May, 2020, none of the four WBIDs are currently classified as “Verified impaired” by the FDEP for nutrient related pollutants. However, Tampa Bay has been designated as a Category 4b waterbody (impaired, but no TMDL required). Therefore, net improvement (for nutrients) will be required for discharges to Tampa Bay.

Water Quantity:

Potential impacts from the proposed roadway project will depend upon the required filling, encroachment or alteration of existing (or future) Zone A or Zone AE Floodplains, Historic Basin Storage areas and (if applicable) Floodways. Un-attenuated or under-attenuated runoff could cause flooding impacts to existing off-site stormwater management systems and drainage conveyance facilities.

**Recommended avoidance, minimization and mitigation opportunities:**

**Direct Effects:**

The SWFWMD will require that stormwater management systems that discharge directly or indirectly into waters not meeting standards, including impaired waters, provide a net improvement condition in the water body in terms of the pollutants that contribute to the water body’s impairment. A higher level of treatment may be necessary (Reference: Section 4.1.g of the District’s “Applicant’s Handbook Volume II”, available at <http://www.swfwmd.state.fl.us/permits/rules>). If applicable, reductions in pollutant loading from stormwater runoff via stormwater treatment facilities or other BMPs will be required to implement future TMDLs and BMAPs should they be finalized and adopted.

If equivalent stormwater quality treatment is to be considered, the THEA must reasonably demonstrate the following:

- The alternate, contributing areas are hydrologically equivalent to the new and existing, directly-connected impervious watershed areas that would otherwise contribute to the treatment system;
- The pollution source and loading characteristics are reasonably equivalent, and
- The treatment benefits occur in the same receiving waters and in the same general locality as the existing point(s) of discharge from the new project area.



It is recommended that the THEA consider stormwater quality treatment together with water quality impacts to wetlands and other surface waters when designing the stormwater water management components of this project.

Water quantity concerns must be addressed for the project in accordance with Part III of the SWFWMD's Applicant Handbook Volume II. This includes making provisions to allow runoff from up-gradient areas to be conveyed to down-gradient areas without adversely affecting the stage point or manner of discharge and without degrading water quality (refer to Section 3.8 of the SWFWMD's Applicant Handbook II, available at <http://www.swfwmd.state.fl.us/permits/rules/>).

The SWFWMD's Applicant Handbook Volume II document describes design approaches and criteria that will provide reasonable assurances that the proposed storm water management systems will meet the conditions for issuance of an Environmental Resource Permit (ERP). Parameters frequently over or under estimated include: seasonal high water levels, seasonal high groundwater table elevations, soil vertical & horizontal hydraulic conductivity, depth to the soil confining units, historic basin storage, floodplain storage, conveyance way hydraulic capacity, peak discharge rates and timing, tailwater conditions in the receiving system, total discharged volume, and off-site hydrograph timing impacts. Site-specific design data is preferable to "book values."

The District recommends that the THEA consider providing a pond siting report that addresses the above referenced design approaches and criteria. For those improvements that may affect existing cross drainage facilities, an updated bridge hydraulics report(s) should be prepared and submitted with the ERP application.

**Additional Comments:**

The SWFWMD has assigned a Degree of Effect based on the potential need for increased coordination or effort associated with the SWFWMD's proprietary or regulatory interests and obligations. For the proposed roadway improvement project, a DOE of "Moderate" was assigned to this issue due to the present belief that future ERP permitting is expected to be non-routine for:

- Potential impacts to existing and future Zone A & AE floodplains within the proposed project area.
- Potential impacts to impaired waters noted previously.

However, the expected permitting effort by the THEA should be straight forward and a normal effort is expected on the part of SWFWMD's regulatory staff.

Impacts to existing permitted stormwater management systems may decrease performance in terms of flood management and stormwater treatment. As of May, 2020, the SWFWMD GIS indicated twenty (20) ERP's have been applied for within the existing right of way for this project. Similar information can be obtained from the SWFWMD's Permits Map Viewer and Environmental Resource Permit Search web sites as follows:

- [http://www21.swfwmd.state.fl.us/maps/pages/viewer\\_erp.html](http://www21.swfwmd.state.fl.us/maps/pages/viewer_erp.html)
- <http://www18.swfwmd.state.fl.us/erp/erp/search/ERPSearch.aspx>

Previous permits that may be of interest to THEA in the future design phases of the proposed roadway project are as follows:

Environmental Resource Permits (18):

- 02417.000 - City of Tampa - Swann Avenue
- 02417.001 - City of Tampa - Swann Avenue
- 11759.000 - FDOT-S.R. 600-GANDY BLVD/EUCLID AVENUE
- 11759.001 - FDOT-S.R. 600-Gandy Blvd (SPN 10130-3543)
- 11759.002 - DOT-S.R. 600-GANDY BLVD. #10130-3543



- 11759.003 - DOT-SR 600(DALE MABRY)GANDY TO EUCLID
- 11759.004 - Selmon West Extension (THEA Project No. O-16-01515)
- 11759.006 - Selmon Western Extension Major Modification
- 19654.001 - Hills Co - Selmon Expressway
- 19654.007 - Selmon Expressway - Open Road Tolling
  
- 19654.008 - FDOT-Lee Roy Selmon Expwy-d/b Morgan St to 22nd St (416361-2)
- 21192.001 - Tampa Hillsborough County - West Toll Plaza Interim Improvements
- 21192.002 - W TOLL PLAZA INTERIM IMPROVEMENTS
- 21192.003 - South Selmon Expressway Median Safety
- 28373.000 – Carson Building
  
- 30449.001 - Crescent Heights Condominiums
- 42679.000 - Waterfront District
- 42679.001 - Waterfront District Phase 1 Infrastructure

For this AN package review, the District has assigned a pre-application file (**PA #407667**) for the purpose of tracking its participation in the review of this project. File **PA# 407667** is maintained as part of the Water Management Information System (WMIS) available through the SWFWMD, [www.watmatters.org](http://www.watmatters.org). Please refer to this pre-application file whenever contacting District regulatory staff regarding this project.

**Wetlands and Surface Waters**

<b>Degree of Effect:</b>	None	<b>X Minimal</b>	Moderate	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	No Involvement	PD&E Support Document	<b>X Permit Required</b>
	Tech Memo Required	To Be Determined: Further Coordination Required	

**Identify Resources and level of importance:**

**Direct Effects:**

Review of the aerials from the District’s ArcMap GIS indicate the land usage adjacent to the South Selmon is high impact urban with the main area of possible wetlands and surface waters associated with the Hillsborough River near the east terminus of the project.

**Indirect Effects:**

This Capacity Study analysis used roughly a 200-foot buffer from the proposed roadway improvements associated with the South Selmon Expressway. While there are minimal wetlands and surface waters located within the 200-foot buffer, there may be additional wetlands that are located outside of that buffer.

**Comment on effects to resources:**

**Direct Effects:**

The SWFWMD has assigned a Degree of Effect based on the potential need for increased coordination or effort associated with the SWFWMD’s proprietary or regulatory interests and obligations. For this project, a DOE of “**Minimal**” was assigned to this issue due to the fact the wetlands will need to be delineated, quantified, and labeled on the construction plans as part of the permit review. However, the



expected permitting effort by THEA should be straight forward and a normal effort is expected on the part of SWFWMD's regulatory staff.

The surface water impacts may have a de minimis impact on fish and wildlife habitat; therefore, wetland mitigation may not be required to offset the impacts. For the wetlands, an analysis utilizing the Uniform Mitigation Assessment Method (UMAM) to determine the wetland mitigation required to offset the wetland impacts will be required. This project is located within the Tampa Bay and Coastal Areas ERP Basin. Mitigation banks located within this basin may be used to offset wetland impacts. The project appears to be located within the service areas for Nature Coast Mitigation Bank (43042778.000), Mangrove Point Mitigation Bank (43035355.002), and Tampa Bay Mitigation Bank (43020546.042). Wetland mitigation should be offset within the watershed basin where the wetland impact is located unless a cumulative impact analysis is accepted by the District.

The District will require a delineation of the landward extent of wetland and surface water features by a qualified environmental scientist, pursuant to Chapter 62-340, F.A.C, as located within the defined project limits. The District recommends that the THEA submit a Formal Wetland Determination Petition prior to the ERP application submittal.

An Environmental Resource Permit is required for the proposed roadway improvements. However, the final determination of the type of permit will depend upon the final design configuration.

**Recommended avoidance, minimization and mitigation opportunities:**

**Indirect Effects:**

Construction of the stormwater management system may require ponds to be constructed outside of the reviewed buffer as utilized through this report. Coordination with the District is recommended to eliminate wetland and/or surface water impacts during this phase.

The roadway improvements associated with the South Selmon Capacity Study has the potential to impact the 25-foot defined wetland buffer as they relate to the wetlands, mainly with the Hillsborough River, adjacent to and within the existing / proposed Right Of Way (ROW). The removal of the wetland buffer increases the possibility for secondary impacts to occur to the wetlands during and post-construction.

**Wildlife and Habitat**

<b>Degree of Effect:</b>	None	<b>X Minimal</b>	Moderate	Substantial
	Enhanced	N/A No Involvement		Potential Dispute

<b>Coordination Document:</b>	No Involvement	PD&E Support Document	<b>X Permit Required</b>
	Tech Memo Required	To Be Determined: Further Coordination Required	

**Identify Resources and level of importance:**

**Direct Effects:**



The replacement of the bridge over the Hillsborough River associated with the roadway improvement may result in surface water and wetland impacts, which will result in additional noticing being sent to FFWCC for their comments.

**Comment on effects to resources:**

**Direct Effects:**

The Florida Manatee has been observed in Tampa Bay. The Florida Manatee is a listed threatened species and will require additional measures to be in place in order to protect this mammal during the construction process for this site. A Specific Condition will be used in the ERP outlining the standard operating procedure during the alteration to the bridge, if necessary. Please be advised that stormwater outfall pipes and structures extending below the Mean High Water Line, exceeding 8 inches in diameter, will require manatee grating to be installed over the waterward end to ensure no manatees can become entrapped. [FWC “*Grates and Other Manatee Exclusion Devices for Culverts and Pipes (February 2011)*” [http://myfwc.com/media/415238/manatee\\_grates.pdf](http://myfwc.com/media/415238/manatee_grates.pdf)]

A Degree of Effect of “Minimal” was assigned to this issue due to the fact there may need to be some additional coordination with FFWCC.

An Environmental Resource Permit (ERP) may be required for this project. However, the final determination of the type of permit will depend upon the final design configuration.

**Federal Consistency Review:**

Located in Coastal Zone	Consistent	Consistent with Comments	Inconsistent
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**Comments:**

This project may have the potential for wetland and/or surface water impacts along the proposed route shown through this review. If an Individual ERP is required, a noticing letter will be sent to corresponding agencies at the receipt of the application for the permit. The agencies will have 21-days to request additional information or to add conditions for the permit. The requested information will become completeness items for the permit. Upon deeming a permit application complete during the ERP review, a 10 Day Noticing period (wetland/surface water impacts less than 1 acre) or a 30 day Noticing period (wetland/surface water impacts greater than 1 acre) may be required as part of the Coastal Zone Management Act if comments were provided from corresponding agencies during the permit review.





## **Appendix B – IPaC Resource List**



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
North Florida Ecological Services Field Office  
7915 Baymeadows Way, Suite 200  
Jacksonville, FL 32256-7517  
Phone: (904) 731-3336 Fax: (904) 731-3045

In Reply Refer To:

May 21, 2020

Consultation Code: 04EF1000-2020-SLI-0764

Event Code: 04EF1000-2020-E-01293

Project Name: Selmon Expressway Capacity Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
  - Migratory Birds
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**North Florida Ecological Services Field Office**

7915 Baymeadows Way, Suite 200

Jacksonville, FL 32256-7517

(904) 731-3336

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## Project Summary

Consultation Code: 04EF1000-2020-SLI-0764

Event Code: 04EF1000-2020-E-01293

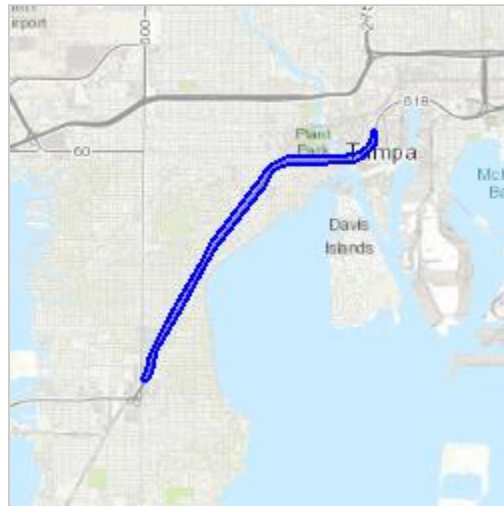
Project Name: Selmon Expressway Capacity Project

Project Type: TRANSPORTATION

Project Description: Project Development and Environment (PD&E) Study to evaluate capacity improvements along the Selmon Expressway in Hillsborough County, Florida

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/27.922959916609017N82.49078689004494W>



Counties: Hillsborough, FL

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## Endangered Species Act Species

There is a total of 15 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [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.

## Mammals

NAME	STATUS
West Indian Manatee <i>Trichechus manatus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <b><i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i></b> Species profile: <a href="https://ecos.fws.gov/ecp/species/4469">https://ecos.fws.gov/ecp/species/4469</a>	Threatened

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## Birds

NAME	STATUS
<p>Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i>            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/10477">https://ecos.fws.gov/ecp/species/10477</a></p>	<p>Proposed Threatened</p>
<p>Florida Scrub-jay <i>Aphelocoma coerulescens</i>            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/6174">https://ecos.fws.gov/ecp/species/6174</a></p>	<p>Threatened</p>
<p>Piping Plover <i>Charadrius melodus</i>            Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered.            There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat.            Species profile: <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a></p>	<p>Threatened</p>
<p>Red Knot <i>Calidris canutus rufa</i>            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a></p>	<p>Threatened</p>
<p>Wood Stork <i>Mycteria americana</i>            Population: AL, FL, GA, MS, NC, SC            No critical habitat has been designated for this species.            Species profile: <a href="https://ecos.fws.gov/ecp/species/8477">https://ecos.fws.gov/ecp/species/8477</a></p>	<p>Threatened</p>

## Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon corais couperi</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/646">https://ecos.fws.gov/ecp/species/646</a>	Threatened
Gopher Tortoise <i>Gopherus polyphemus</i> Population: eastern No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6994">https://ecos.fws.gov/ecp/species/6994</a>	Candidate
Hawksbill Sea Turtle <i>Eretmochelys imbricata</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3656">https://ecos.fws.gov/ecp/species/3656</a>	Endangered
Leatherback Sea Turtle <i>Dermochelys coriacea</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1493">https://ecos.fws.gov/ecp/species/1493</a>	Endangered
Loggerhead Sea Turtle <i>Caretta caretta</i> Population: Northwest Atlantic Ocean DPS There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/1110">https://ecos.fws.gov/ecp/species/1110</a>	Threatened

## Flowering Plants

NAME	STATUS
Brooksville Bellflower <i>Campanula robinsiae</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5809">https://ecos.fws.gov/ecp/species/5809</a>	Endangered
Florida Bonamia <i>Bonamia grandiflora</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2230">https://ecos.fws.gov/ecp/species/2230</a>	Threatened
Florida Golden Aster <i>Chrysopsis floridana</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5352">https://ecos.fws.gov/ecp/species/5352</a>	Endangered
Pygmy Fringe-tree <i>Chionanthus pygmaeus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/1084">https://ecos.fws.gov/ecp/species/1084</a>	Endangered

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



# Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

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 [below](#).

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1. The [Migratory Birds Treaty Act](#) of 1918.
  2. The [Bald and Golden Eagle Protection Act](#) of 1940.
  3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

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, 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
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	Breeds Apr 1 to Aug 31
American Oystercatcher <i>Haematopus palliatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8935">https://ecos.fws.gov/ecp/species/8935</a>	Breeds Apr 15 to Aug 31

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NAME	BREEDING SEASON
<p><b>Bald Eagle <i>Haliaeetus leucocephalus</i></b>            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.  <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a></p>	Breeds Sep 1 to Jul 31
<p><b>Black Skimmer <i>Rynchops niger</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/5234">https://ecos.fws.gov/ecp/species/5234</a></p>	Breeds May 20 to Sep 15
<p><b>Common Ground-dove <i>Columbina passerina exigua</i></b>            This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Feb 1 to Dec 31
<p><b>Dunlin <i>Calidris alpina arctica</i></b>            This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds elsewhere
<p><b>Least Tern <i>Sterna antillarum</i></b>            This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA</p>	Breeds Apr 20 to Sep 10
<p><b>Lesser Yellowlegs <i>Tringa flavipes</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.  <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a></p>	Breeds elsewhere
<p><b>Limpkin <i>Aramus guarauna</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Jan 15 to Aug 31
<p><b>Magnificent Frigatebird <i>Fregata magnificens</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Oct 1 to Apr 30
<p><b>Prairie Warbler <i>Dendroica discolor</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 1 to Jul 31
<p><b>Prothonotary Warbler <i>Protonotaria citrea</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds Apr 1 to Jul 31
<p><b>Red-headed Woodpecker <i>Melanerpes erythrocephalus</i></b>            This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</p>	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
<b>Reddish Egret <i>Egretta rufescens</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/7617">https://ecos.fws.gov/ecp/species/7617</a>	Breeds Mar 1 to Sep 15
<b>Ruddy Turnstone <i>Arenaria interpres morinella</i></b> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
<b>Semipalmated Sandpiper <i>Calidris pusilla</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
<b>Short-billed Dowitcher <i>Limnodromus griseus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9480">https://ecos.fws.gov/ecp/species/9480</a>	Breeds elsewhere
<b>Swallow-tailed Kite <i>Elanoides forficatus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/8938">https://ecos.fws.gov/ecp/species/8938</a>	Breeds Mar 10 to Jun 30
<b>Whimbrel <i>Numenius phaeopus</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9483">https://ecos.fws.gov/ecp/species/9483</a>	Breeds elsewhere
<b>Willet <i>Tringa semipalmata</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
<b>Wilson's Plover <i>Charadrius wilsonia</i></b> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Aug 20
<b>Yellow Warbler <i>Dendroica petechia gundlachi</i></b> 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.

### **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.

### **No Data (—)**

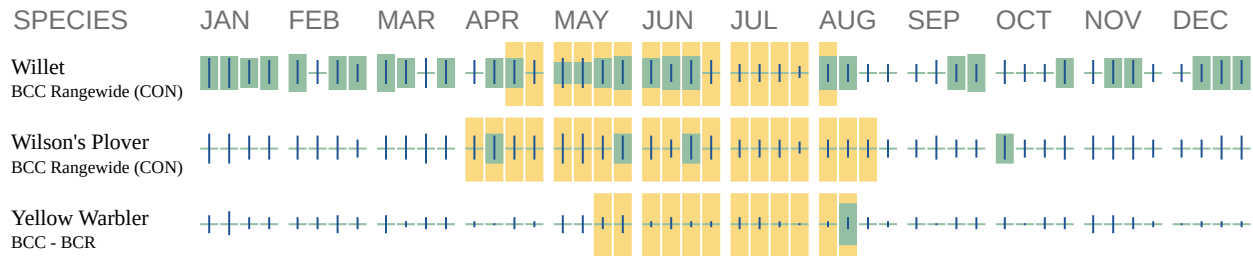
A week is marked as having no data if there were no survey events for that week.

### **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.

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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>

## Migratory Birds FAQ

**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 [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 [AKN Phenology 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 to 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 [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**

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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.

### **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.

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## **Appendix C – Wildlife Protection Measures**

CONSTRUCTION SPECIAL PROVISIONS  
GULF STURGEON PROTECTION GUIDELINES  
(PURSUANT TO NMFS AND USFWS)

The Gulf sturgeon (*Acipenser oxyrinchus desotoi*) is listed under the Endangered Species Act as threatened. It is managed under the joint jurisdiction of the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS). Potential habitat for the Gulf sturgeon is located within the limits of this project.

The following special provisions will be incorporated into any construction contract where involvement with sturgeon may occur:

The FDOT has coordinated with the NMFS and USFWS early in the project development stage. The following provisions are intended to avoid/ protect known spawning habitats, nursery areas, feeding areas and thermal refuges.

1. The Florida Department of Transportation (FDOT) shall advise all FDOT project personnel and Contractor personnel on the project that there are civil and criminal penalties for harming, harassing or killing sturgeon. The FDOT and the Contractor will be held responsible for any sturgeon harmed, harassed, or killed as a result of the project activity.
2. The FDOT shall provide information to all FDOT and Contract personnel for identification of sturgeon.
3. Appropriate work shift personnel will be instructed in the appearance, habits, biology, migratory patterns, and preservation of sturgeon. At least one of these trained personnel will be on site during construction activities to maintain a constant surveillance for these species, assure the cessation of activities (such as dredging, excess turbidity, and construction barge activity), which may endanger these species, and assure that uninhibited passage for the animals is provided.
4. Post signs on site warning of the presence of sturgeon, of their endangered status and federal protection, and precautions needed.
5. Turbidity from construction activity will be adequately controlled to prevent degradation of the quality and transparency of the water. When sturgeon are present, turbidity curtains of appropriate dimension will be used to restrict the animals' access to the work area. Pollution booms or turbidity curtains should use tangle resistant or hemp rope when anchoring, or employ surface anchors' to prevent entangling sturgeon. Continuous surveillance will be maintained in order to free animals which may become trapped in silt or turbidity barriers.
6. No dredging of the river bottom will be conducted for barge access.

7. Drilled shaft pile construction will be used whenever prudent and feasible as determined by FDOT.
8. Care shall be taken in lowering equipment or material below the water surface and into the stream bed. These precautions will be taken to ensure no harm occurs to any sturgeon which may enter the construction area undetected.
9. Construction debris shall not be discarded into the water.
10. If the use of explosives is necessary, the following protection measures will be employed for projects in FDOT's District 3
  - a. In riverine areas:
    - No blasting will occur in known spawning, staging, feeding, or nursery areas.
    - In-water explosive work should be avoided between the months of April to October.
    - If explosive work becomes necessary within the April to October time frame, a non-lethal "Fish Scare" charge will be detonated one minute prior to detonation of the underwater blast.
  - b. In estuarine areas:
    - No blasting will occur in known spawning, staging, feeding, or nursery areas.
    - In-water explosive work should be avoided between the months of October to April.
    - If explosive work becomes necessary within the October to April time frame, a non-lethal "Fish Scare" charge will be detonated one minute prior to detonation of the underwater blast.
  - c. In the event that a sturgeon is killed during blasting, the NMFS and the USFWS will be notified immediately.

National Marine Fisheries Service  
by email at:  
takereport.nmfsser@noaa.gov

US Fish and Wildlife Service  
1601 Balboa Ave.  
Panama City, Florida 32405  
Tel: (850) 769-0552

11. Any sturgeon carcass will be secured on site or held in a freezer until an agency representative arranges for its transport for analysis.
12. Following completion of the project, a report summarizing any involvement with sturgeon will be prepared for USFWS and NMFS.

## MANATEE and MARINE TURTLE CONSTRUCTION CONDITIONS FOR IN-WATER WORK

The permittee shall comply with the following conditions intended to protect manatees and marine turtles from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of marine turtles, manatees and manatee speed zones, and the need to avoid collisions with (and injury to) these protected marine species. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees and marine turtles cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee or marine turtle movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of marine turtles and manatee(s). All in-water operations, including vessels, must be shutdown if a marine turtle or manatee comes within 50 feet of the operation. Activities will not resume until the animal(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the animal(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a marine turtle or manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922, and to FWC at [ImperiledSpecies@myFWC.com](mailto:ImperiledSpecies@myFWC.com). Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service (for north Florida, Jacksonville 1-904-731-3336 or for south Florida Vero Beach 1-772-562-3909).
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at [MyFWC.com/manatee](http://MyFWC.com/manatee). Questions concerning these signs can be sent to the email address listed above.
- g. Lighting on offshore or onshore equipment including dredge, crew boats, and all ancillary vessels shall be minimized through reduction, shielding, lowering, and appropriate placement to avoid excessive illumination of the water's surface and visibility from adjacent marine turtle nesting beaches while meeting all Coast Guard, EM 385-1-1, and OSHA requirements. Light intensity of all fixtures on the vessels shall be reduced to the minimum standard required by OSHA for General Construction areas, in order not to misdirect marine turtles. Lights used to survey nearshore or inlet waters for manatees and sea turtles shall be mounted as low as possible and aimed to minimize visibility from adjacent nesting beaches. Shields shall be affixed to the light housing and be large enough to block light from all lamps from being transmitted outside the construction area.



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**NATIONAL MARINE FISHERIES SERVICE**  
Southeast Regional Office  
263 13th Avenue South  
St. Petersburg, FL 33701

## **SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS**

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

Revised: March 23, 2006

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## STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

- a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.
- b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
- c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.
- d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.
- e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or in Vero Beach (1-772-562-3909) for south Florida, and emailed to FWC at [ImperiledSpecies@myFWC.com](mailto:ImperiledSpecies@myFWC.com).
- f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at [http://www.myfwc.com/WILDLIFEHABITATS/manatee\\_sign\\_vendors.htm](http://www.myfwc.com/WILDLIFEHABITATS/manatee_sign_vendors.htm). Questions concerning these signs can be forwarded to the email address listed above.

# CAUTION: MANATEE HABITAT

All project vessels

**IDLE SPEED / NO WAKE**

When a manatee is within 50 feet of work  
all in-water activities must

**SHUT DOWN**

Report any collision with or injury to a manatee:



**Wildlife Alert:**

**1-888-404-FWCC(3922)**

cell \*FWC or #FWC

## Appendix D – Effect Determination Keys



**THE CORPS OF ENGINEERS, JACKSONVILLE DISTRICT, U. S. FISH AND  
WILDLIFE SERVICE, JACKSONVILLE ECOLOGICAL SERVICES FIELD  
OFFICE AND STATE OF FLORIDA EFFECT DETERMINATION KEY FOR  
THE WOOD STORK IN CENTRAL AND NORTH PENINSULAR FLORIDA  
September 2008**

**Purpose and Background**

The purpose of this document is to provide a tool to improve the timing and consistency of review of Federal and State permit applications and Federal civil works projects, for potential effects of these projects on the endangered wood stork (*Mycteria americana*) within the Jacksonville Ecological Services Field Office (JAFL) geographic area of responsibility (GAR see below). The key is designed primarily for Corps Project Managers in the Regulatory and Planning Divisions and the Florida Department of Environmental Protection or its authorized designee, or Water Management Districts. The tool consists of the following dichotomous key and reference material. The key is intended to be used to evaluate permit applications and Corps' civil works projects for impacts potentially affecting wood storks or their wetland habitats. At certain steps in the key, the user is referred to graphics depicting known wood stork nesting colonies and their core foraging areas (CFA), footnotes, and other support documents. The graphics and supporting documents may be downloaded from the Corps' web page at <http://www.saj.usace.army.mil/permit> or at the JAFL web site at <http://www.fws.gov/northflorida/WoodStorks>. We intend to utilize the most recent information for both the graphics and supporting information; so should this information be updated, we will modify it accordingly. **Note: This information is provided as an aid to project review and analysis, and is not intended to substitute for a comprehensive biological assessment of potential project impacts. Such assessments are site-specific and usually generated by the project applicant or, in the case of civil works projects, by the Corps or project co-sponsor.**

**Explanatory footnotes provided in the key must be closely followed whenever encountered.**

**Scope of the key**

This key should only be used in the review of permit applications for effects determinations on wood storks within the JAFL GAR, and not for other listed species. Counties within the JAFL GAR include Alachua, Baker, Bradford, Brevard, Citrus, Clay, Columbia, Dixie, Duval, Flagler, Gilchrist, Hamilton, Hernando, Hillsborough, Lafayette, Lake, Levy, Madison, Manatee, Marion, Nassau, Orange, Pasco, Pinellas, Putnam, St. Johns, Seminole, Sumter, Suwannee, Taylor, Union, and Volusia.

The final effect determination will be based on project location and description, the potential effects to wood storks, and any measures (for example project components, special permit conditions) that avoid or minimize direct, indirect, and/or cumulative

impacts to wood storks and/or suitable wood stork foraging habitat. Projects that key to a “no effect” determination do not require additional consultation or coordination with the JAFL. Projects that key to “NLAA” also do not need further consultation; however, the JAFL staff will assist the Corps if requested, to answer questions regarding the appropriateness of mitigation options. Projects that key to a “may affect” determination equate to “likely to adversely affect” situations, and those projects should not be processed under the SPGP or any other programmatic general permit. For all “may affect” determinations, Corps Project Managers should request the JAFL to initiate formal consultation on the Wood stork.

### **Summary of General Wood Stork Nesting and Foraging Habitat Information**

The wood stork is primarily associated with freshwater and estuarine habitats that are used for nesting, roosting, and foraging. Wood storks typically nest colonially in medium to tall trees that occur in stands located either in swamps or on islands surrounded by relatively broad expanses of open water (Ogden 1991; Rodgers et al. 1996). Successful breeding sites are those that have limited human disturbance and low exposure to land based predators. Nesting sites protected from land-based predators are characterized as those surrounded by large expanses of open water or where the nest trees are inundated at the onset of nesting and remain inundated throughout most of the breeding cycle. These colonies have water depths between 0.9 and 1.5 meters (3 and 5 feet) during the breeding season.

In addition to limited human disturbance and land-based predation, successful nesting depends on the availability of suitable foraging habitat. Such habitat generally results from a combination of average or above-average rainfall during the summer rainy season, and an absence of unusually rainy or cold weather during the winter-spring breeding season (Kahl 1964; Rodgers et al. 1987). This pattern produces widespread and prolonged flooding of summer marshes that tends to maximize production of freshwater fishes, followed by steady drying that concentrate fish during the season when storks nest (Kahl 1964). Successful nesting colonies are those that have a large number of foraging sites. To maintain a wide range of foraging opportunities, a variety of wetland habitats exhibiting short and long hydroperiods should be present. In terms of wood stork foraging, the Service (1999) describes a short hydroperiod as one where a wetland fluctuates between wet and dry in 1 to 5-month cycles, and a long hydroperiod where the wet period is greater than five consecutive months. Wood storks during the wet season generally feed in the shallow water of short-hydroperiod wetlands and in coastal habitats during low tide. During the dry season, foraging shifts to longer hydroperiod interior wetlands as they progressively dry down (though usually retaining some surface water throughout the dry season).

Because of their specialized feeding behavior, wood storks forage most effectively in shallow-water areas with highly concentrated prey. Typical foraging sites for the wood stork include freshwater marshes, depressions in cypress heads, swamp sloughs, managed impoundments, stock ponds, shallow-seasonally flooded roadside or agricultural ditches, and narrow tidal creeks or shallow tidal pools. Good foraging conditions are characterized by water that is relatively calm, open, and having water depths between 5 and 15 inches (5 and 38 cm). Preferred foraging habitat includes wetlands exhibiting a mosaic of submerged and/or emergent aquatic vegetation, and shallow, open-water areas subject to hydrologic

regimes ranging from dry to wet. The vegetative component provides nursery habitat for small fish, frogs, and other aquatic prey, and the shallow, open-water areas provide sites for concentration of the prey during daily or seasonal low water periods.

## WOOD STORK KEY

**Although designed primarily for use by Corps Project Managers in the Regulatory and Planning Divisions, and State Regulatory agencies or their designees, project permit applicants and co-sponsors of civil works projects may find this key and its supporting documents useful in identifying potential project impacts to wood storks, and planning how best to avoid, minimize, or compensate for any identified adverse effects.**

- A. Project within 2,500 feet of an active colony site<sup>1</sup>.....*May affect*  
Project more than 2,500 feet from a colony site.....go to B
- B. Project does not affect suitable foraging habitat<sup>2</sup> (SFH).....*no effect*  
Project impacts SFH<sup>2</sup>.....go to C
- C. Project impacts to SFH are less than or equal to 0.5 acre<sup>3</sup>.....*NLAA*<sup>4</sup>  
Project impacts to SFH are greater than or equal to 0.5 acre.....go to D
- D. Project impacts to SFH not within a Core Foraging Area<sup>5</sup> (see attached map) of a colony site, and no wood storks have been documented foraging on site.....*NLAA*<sup>4</sup>  
Project impacts to SFH are within the CFA of a colony site, or wood storks have been documented foraging on a project site outside the CFA .....go to E
- E. Project provides SFH compensation within the Service Area of a Service-approved wetland mitigation bank or wood stork conservation bank preferably within the CFA, or consists of SFH compensation within the CFA consisting of enhancement, restoration or creation in a project phased approach that provides an amount of habitat and foraging function equivalent to that of impacted SFH (see *Wood Stork Foraging Habitat Assessment Procedure*<sup>6</sup> for guidance), is not contrary to the Service's *Habitat Management Guidelines For The Wood Stork In The Southeast Region* and in accordance with the CWA section 404(b)(1) guidelines.....*NLAA*<sup>4</sup>  
Project does not satisfy these elements.....*May affect*

<sup>1</sup> An active nesting site is defined as a site currently supporting breeding pairs of wood storks, or has supported breeding wood storks at least once during the preceding 10-year period.

<sup>2</sup> Suitable foraging habitat (SFH) is described as any area containing patches of relatively open (< 25% aquatic vegetation), calm water, and having a permanent or seasonal water depth between 2 and 15 inches (5 to 38 cm). SFH supports and concentrates, or is capable of supporting and concentrating small fish, frogs, and other aquatic prey. Examples of SFH include, but are not limited to, freshwater marshes and stock ponds, shallow, seasonally flooded roadside or agricultural ditches, narrow tidal creeks or shallow tidal pools, managed impoundments, and depressions in cypress heads and swamp sloughs. See above *Summary of General Wood Stork Nesting and Foraging Habitat Information*.

<sup>3</sup> On an individual basis, projects that impact less than 0.5 acre of SFH generally will not have a measurable effect on wood storks, although we request the Corps to require mitigation for these losses when appropriate. Wood Storks are a wide ranging species, and individually, habitat change from impacts to less than 0.5 acre of SFH is not likely to adversely affect wood storks. However, collectively they may have an effect and therefore regular monitoring and reporting of these effects are important.

<sup>4</sup> Upon Corps receipt of a general concurrence issued by the JAFL through the Programmatic Concurrence on this key, "NLAA" determinations for projects made pursuant to this key require no further consultation with the JAFL.

<sup>5</sup> The U.S. Fish and Wildlife Service (Service) has identified core foraging area (CFA) around all known wood stork nesting colonies that is important for reproductive success. In Central Florida, CFAs include suitable foraging habitat (SFH) within a 15-mile radius of the nest colony; CFAs in North Florida include SFH within a 13-mile radius of a colony. The referenced map provides locations of known colonies and their CFAs throughout Florida documented as active within the last 10 years. The Service believes loss of suitable foraging wetlands within these CFAs may reduce foraging opportunities for the wood stork.

<sup>6</sup>This draft document, *Wood Stork Foraging Habitat Assessment Procedure*, by Passarella and Associates, Incorporated, may serve as further guidance in ascertaining wetland foraging value to wood storks and compensating for impacts to wood stork foraging habitat.

## **Monitoring and Reporting Effects**

For the Service to monitor cumulative effects, it is important for the Corps to monitor the number of permits and provide information to the Service regarding the number of permits issued that were determined "may affect, not likely to adversely affect." It is requested that information on date, Corps identification number, project acreage, project wetland acreage, and latitude and longitude in decimal degrees be sent to the Service quarterly.

## **Literature Cited**

Kahl, M.P., Jr. 1964. Food ecology of the wood stork (*Mycteria americana*) in Florida. *Ecological Monographs* 34:97-117.

Ogden, J.C. 1991. Nesting by wood storks in natural, altered, and artificial wetlands in central and northern Florida. *Colonial Waterbirds* 14:39-45.

Rodgers, J.A. Jr., A.S. Wenner, and S.T. Schwikert. 1987. Population dynamics of wood storks in northern and central Florida, USA. *Colonial Waterbirds* 10:151-156.

Rodgers, J.A., Jr., S.T. Schwikert, and A. Shapiro-Wenner. 1996. Nesting habitat of wood storks in north and central Florida, USA. *Colonial Waterbirds* 19:1-21.

U.S. Fish and Wildlife Service. 1999. South Florida multi-species recovery plan. Fish and Wildlife Service; Atlanta, Georgia. Available from:  
<http://verobeach.fws.gov/Programs/Recovery/vbms5.html>.

**THE CORPS OF ENGINEERS, JACKSONVILLE DISTRICT, AND THE STATE OF  
FLORIDA EFFECT DETERMINATION KEY FOR THE MANATEE IN FLORIDA  
April 2013**

**Purpose and background of the key**

The purpose of this document is to provide guidance to improve the review of permit applications by U.S. Army Corps of Engineers' (Corps) Project Managers in the Regulatory Division regarding the potential effects of proposed projects on the endangered West Indian manatee (*Trichechus manatus*) in Florida, and by the Florida Department of Environmental Protection or its authorized designee or Water Management District, for evaluating projects under the State Programmatic General Permit (SPGP) or any other Programmatic General Permits that the Corps may issue for administration by the above agencies. Such guidance is contained in the following dichotomous key. The key applies to permit applications for in-water activities such as, but not limited to: (1) dredging [new or maintenance dredging of not more than 50,000 cubic yards], placement of fill material for shoreline stabilization, and construction/placement of other in-water structures as well as (2) construction of docks, marinas, boat ramps and associated trailer parking spaces, boat slips, dry storage or any other watercraft access structures or facilities.

At a certain step in the key, the user is referred to graphics depicting important manatee areas or areas with inadequate protection. The maps can be downloaded from the Corps' web page at <http://www.saj.usace.army.mil/Missions/Regulatory/SourceBook.aspx>. We intend to utilize the most recent depiction of these areas, so should these areas be modified by statute, rule, ordinance and/or other legal mandate or authorization, we will modify the graphical depictions accordingly. These areas may be shaded or otherwise differentiated for identification on the maps.

***Explanatory footnotes are provided in the key and must be closely followed whenever encountered.***

**Scope of the key**

This key should only be used in the review of permit applications for effect determinations on manatees and should not be used for other listed species or for other aquatic resources such as Essential Fish Habitat (EFH). Corps Project Managers should ensure that consideration of the project's effects on any other listed species and/or on EFH is performed independently. This key may be used to evaluate applications for all types of State of Florida (State Programmatic General Permits, noticed general permits, standard general permits, submerged lands leases, conceptual and individual permits) and Department of the Army (standard permits, letters of permission, nationwide permits, and regional general permits) permits and authorizations. The final effect determination will be based on the project location and description; the potential effects to manatees, manatee habitat, and/or manatee critical habitat; and any measures (such as project components, standard construction precautions, or special conditions included in the authorization) to avoid or minimize effects to manatees or manatee critical habitat. Projects that key to a "may affect" determination equate to "likely to adversely affect" situations, and those projects should not be processed under the SPGP or any other programmatic general permit. For

all “may affect” determinations, Corps Project Managers shall refer to the Manatee Programmatic Biological Opinion, dated March 21, 2011, for guidance on eliminating or minimizing potential adverse effects resulting from the proposed project. If unable to resolve the adverse effects, the Corps may refer the applicant to the U.S. Fish and Wildlife Service (Service) for further assistance in attempting to revise the proposed project to a “may affect, not likely to adversely affect” level. The Service will coordinate with the Florida Fish and Wildlife Conservation Commission (FWC) and the counties, as appropriate. Projects that provide new access for watercraft and key to “may affect, not likely to adversely affect” may or may not need to be reviewed individually by the Service.



**MANATEE KEY**  
**Florida<sup>1</sup>**  
**April 2013**

**The key is not designed to be used by the Corps' Regulatory Division for making their effect determinations for dredging projects greater than 50,000 cubic yards, the Corps' Planning Division in making their effect determinations for civil works projects or by the Corps' Regulatory Division for making their effect determinations for projects of the same relative scope as civil works projects. These types of activities must be evaluated by the Corps independently of the key.**

A. Project is not located in waters accessible to manatees and does not directly or indirectly affect manatees (see Glossary).....*No effect*

Project is located in waters accessible to manatees **or** directly or indirectly affects manatees ..... **B**

B. Project consists of one or more of the following activities, all of which are *May affect*:

1. blasting or other detonation activity for channel deepening and/or widening, geotechnical surveys or exploration, bridge removal, movies, military shows, special events, etc.;
2. installation of structures which could restrict or act as a barrier to manatees;
3. new or changes to existing warm or fresh water discharges from industrial sites, power plants, or natural springs or artesian wells (but only if the new or proposed change in discharge requires a Corps permit to accomplish the work);
4. installation of new culverts and/or maintenance or modification of existing culverts (where the culverts are 8 inches to 8 feet in diameter, ungrated and in waters accessible, or potentially accessible, to manatees)<sup>2</sup>;
5. mechanical dredging from a floating platform, barge or structure<sup>3</sup> that restricts manatee access to less than half the width of the waterway;
6. creation of new slips or change in use of existing slips, even those located in a county with a State-approved Manatee Protection Plan (MPP) in place and the number of slips is less than the MPP threshold, to accommodate docking for repeat use vessels, (e.g., water taxis, tour boats, gambling boats, etc; or slips or structures that are not civil works projects, but are frequently used to moor large vessels (>100') for shipping and/or freight purposes; does not include slips used for docking at boat sales or repair facilities or loading/unloading at dry stack storage facilities and boat ramps); [Note: For projects within Bay, Dixie, Escambia, Franklin, Gilchrist, Gulf, Hernando, Jefferson, Lafayette, Monroe (south of Craig Key), Nassau, Okaloosa, Okeechobee, Santa Rosa, Suwannee, Taylor, Wakulla or Walton County, the reviewer should proceed to Couplet C.]
7. any type of in-water activity in a Warm Water Aggregation Area (WWAA) or No Entry Area (see Glossary and accompanying Maps<sup>4</sup>); [Note: For residential docking facilities in a Warm Water Aggregation Area that is not a Federal manatee sanctuary or No Entry Area, the reviewer should proceed to couplet C.]
8. creation or expansion of canals, basins or other artificial shoreline and/or the connection of such features to navigable waters of the U.S.; [Note: For projects proposing a single residential dock, the reviewer should proceed to couplet C; otherwise, project is a *May Affect*.]

- 9. installation of temporary structures (docks, buoys, etc.) utilized for special events such as boat races, boat shows, military shows, etc., but only when consultation with the U.S. Coast Guard and FWS has not occurred; [Note: See programmatic consultation with the U.S. Coast Guard on manatees dated May 10, 2010.].

Project is other than the activities listed above..... C

- C. Project is located in an Important Manatee Area (IMA) (see Glossary and accompanying Maps<sup>4</sup>) ..... D

Project is not located in an Important Manatee Area (IMA) (see Glossary and accompanying Maps<sup>4</sup>) ..... G

- D. Project includes dredging of less than 50,000 cubic yards ..... E

Project does not include dredging ..... G

- E. Project is for dredging a residential dock facility or is a land-based dredging operation ..... N

Project not as above..... F

- F. Project proponent **does not elect** to follow all dredging protocols described on the maps for the respective IMA in which the project is proposed ..... *May affect*

Project proponent **elects** to follow all dredging protocols described on the maps for the respective IMA in which the project is proposed ..... G

- G. Project provides new<sup>5</sup> access for watercraft, e.g., docks or piers, marinas, boat ramps and associated trailer parking spaces, new dredging, boat lifts, pilings, floats, floating docks, floating vessel platforms, boat slips, dry storage, mooring buoys, or other watercraft access (residential boat lifts, pilings, floating docks, and floating vessel platforms installed in existing slips are not considered new access) or improvements allowing increased watercraft usage..... H

Project does not provide new<sup>5</sup> access for watercraft, e.g., bulkheads, seawalls, riprap, maintenance dredging, boardwalks and/or the maintenance (repair or rehabilitation) of currently serviceable watercraft access structures provided all of the following are met: (1) the number of slips is not increased; (2) the number of existing slips is not in question; and (3) the improvements do not allow increased watercraft usage..... N

- H. Project is located in the Braden River Area of Inadequate Protection (Manatee County) (see Glossary and accompanying AIP Map<sup>4</sup>) ..... *May affect*

Project is not located in the Braden River Area of Inadequate Protection (Manatee County) (see Glossary and accompanying AIP Map<sup>4</sup>)..... I

- I. Project is for a multi-slip facility (see Glossary) ..... J

Project is for a residential dock facility or is for dredging (see Glossary)..... N

- J. Project is located in a county that currently has a State-approved MPP in place (BREVARD, BROWARD, CITRUS, CLAY, COLLIER, DUVAL, INDIAN RIVER, LEE, MARTIN, MIAMI-DADE, PALM BEACH, ST. LUCIE, SARASOTA, VOLUSIA) or shares contiguous waters with a county having a State-approved MPP in place (LAKE, MARION, SEMINOLE)<sup>6</sup> ..... K

Project is located in a county not required to have a State-approved MPP ..... L

K. Project has been developed or modified to be consistent with the county’s State-approved MPP **and** has been verified by a FWC review (or FWS review if project is exempt from State permitting) **or** the number of slips is below the MPP threshold ..... N

Project has not been reviewed by the FWC or FWS **or** has been reviewed by the FWC or FWS **and** determined that the project is not consistent with the county’s State-approved MPP ..... *May affect*

L. Project is located in one of the following counties: CHARLOTTE, DESOTO<sup>7</sup>, FLAGLER, GLADES, HENDRY, HILLSBOROUGH, LEVY, MANATEE, MONROE<sup>7</sup>, PASCO<sup>7</sup>, PINELLAS ..... M

Project is located in one of the following counties: BAY, DIXIE, ESCAMBIA, FRANKLIN, GILCHRIST, GULF, HERNANDO, JEFFERSON, LAFAYETTE, MONROE (south of Craig Key), NASSAU, OKALOOSA, OKEECHOBEE, PUTNAM, SANTA ROSA, ST. JOHNS, SUWANNEE, TAYLOR, WAKULLA, WALTON ..... N

M. The number of slips does not exceed the residential dock density threshold (see Glossary) ..... N

The number of slips exceeds the residential dock density threshold (see Glossary) ..... *May affect*

N. Project impacts to submerged aquatic vegetation<sup>8</sup>, emergent vegetation or mangrove will have **beneficial, insignificant, discountable<sup>9</sup>** or no effects on the manatee<sup>10</sup> ..... O

Project impacts to submerged aquatic vegetation<sup>8</sup>, emergent vegetation or mangrove may adversely affect the manatee<sup>10</sup> ..... *May affect*

O. Project proponent **elects** to follow standard manatee conditions for in-water work<sup>11</sup> and requirements, as appropriate for the proposed activity, prescribed on the maps<sup>4</sup> ..... P

Project proponent **does not elect** to follow standard manatee conditions for in-water work<sup>11</sup> and appropriate requirements prescribed on the maps<sup>4</sup> ..... *May affect*

P. If project is for a new or expanding<sup>5</sup> multi-slip facility and is located in a county with a State-approved MPP in place **or** in Bay, Dixie, Escambia, Franklin, Gilchrist, Gulf, Hernando, Jefferson, Lafayette, Monroe (south of Craig Key), Nassau, Okaloosa, Okeechobee, Putnam, St. Johns, Santa Rosa, Suwannee, Taylor, Wakulla or Walton County, the determination of “*May affect, not likely to adversely affect*” is appropriate<sup>12</sup> and no further consultation with the Service is necessary.

If project is for a new or expanding<sup>5</sup> multi-slip facility and is located in Charlotte, Desoto, Flagler, Glades, Hendry, Hillsborough, Levy, Manatee, Monroe (north of Craig Key), Pasco, or Pinellas County, further consultation with the Service is necessary for “*May affect, not likely to adversely affect*” determinations.

If project is for repair or rehabilitation of a multi-slip facility and is located in an Important Manatee Area, further consultation with the Service is necessary for “*May affect, not likely to adversely affect*” determinations. If project is for repair or rehabilitation of a multi-slip facility and: (1) is **not** located in an Important Manatee Area; (2) the number of slips is not increased; (3) the number of existing slips is not in question; and (4) the improvements to the existing watercraft access structures do not allow increased watercraft usage, the determination of “*May affect, not likely to adversely affect*” is appropriate<sup>12</sup> and no further consultation with the Service is necessary.

If project is a residential dock facility, shoreline stabilization, or dredging, the determination of “*May affect, not likely to adversely affect*” is appropriate<sup>12</sup> and no further consultation with the Service is necessary. **Note:** For residential dock facilities located in a Warm Water Aggregation Area or in a No Entry area, seasonal restrictions may apply. See footnote 4 below for maps showing restrictions.

If project is other than repair or rehabilitation of a multi-slip facility, a new<sup>5</sup> multi-slip facility, residential dock facility, shoreline stabilization, or dredging, and does not provide new<sup>5</sup> access for watercraft or

improve an existing access to allow increased watercraft usage, the determination of “*May affect, not likely to adversely affect*” is appropriate<sup>12</sup> and no further consultation with the Service is necessary.

<sup>1</sup> On the St. Mary’s River, this key is only applicable to those areas that are within the geographical limits of the State of Florida.

<sup>2</sup> All culverts 8 inches to 8 feet in diameter must be grated to prevent manatee entrapment. To effectively prevent manatee access, grates must be permanently fixed, spaced a maximum of 8 inches apart (may be less for culverts smaller than 16 inches in diameter) and may be installed diagonally, horizontally or vertically. For new culverts, grates must be attached prior to installation of the culverts. Culverts less than 8 inches or greater than 8 feet in diameter are exempt from this requirement. If new culverts and/or the maintenance or modification of existing culverts are grated as described above, the determination of “*May affect, not likely to adversely affect*” is appropriate<sup>11</sup> and no further consultation with the Service is necessary.

<sup>3</sup> If the project proponent agrees to follow the standard manatee conditions for in-water work as well as any special conditions appropriate for the proposed activity, further consultation with the Service is necessary for “*May affect, not likely to adversely affect*” determinations. These special conditions may include, but are not limited to, the use of dedicated observers (see Glossary for definition of dedicated observers), dredging during specific months (warm weather months vs cold weather months), dredging during daylight hours only, adjusting the number of dredging days, does not preclude or discourage manatee egress/ingress with turbidity curtains or other barriers that span the width of the waterway, etc.

<sup>4</sup> Areas of Inadequate Protection (AIPs), Important Manatee Areas (IMAs), Warm Water Aggregation Areas (WWAAs) and No Entry Areas are identified on these maps and defined in the Glossary for the purposes of this key. These maps can be viewed on the [Corps’ web page](#). If projects are located in a No Entry Area, special permits may be required from FWC in order to access these areas (please refer to Chapter 68C-22 F.A.C. for boundaries; maps are also available at [FWC’s web page](#)).

<sup>5</sup> New access for watercraft is the addition or improvement of structures such as, but not limited to, docks or piers, marinas, boat ramps and associated trailer parking spaces, boat lifts, pilings, floats, floating docks, floating vessel platforms, (maintenance dredging, residential boat lifts, pilings, floating docks, and floating vessel platforms installed in existing slips are not considered new access), boat slips, dry storage, mooring buoys, new dredging, etc., that facilitates the addition of watercraft to, and/or increases watercraft usage in, waters accessible to manatees. The repair or rehabilitation of any type of currently serviceable watercraft access structure is not considered new access provided all of the following are met: (1) the number of slips is not increased; (2) the number of existing slips is not in question; and (3) the improvements to the existing watercraft access structures do not result in increased watercraft usage.

<sup>6</sup> Projects proposed within the St. Johns River portion of Lake, Marion, and Seminole counties and contiguous with Volusia County shall be evaluated using the Volusia County MPP.

<sup>7</sup> For projects proposed within the following areas: the Peace River in DeSoto County; all areas north of Craig Key in Monroe County, and the Anclote and Pithlachascotee Rivers in Pasco County, proceed to Couplet M. For all other locations in DeSoto, Monroe (south of Craig Key) and Pasco Counties, proceed to couplet N.

<sup>8</sup> Where the presence of the referenced vegetation is confirmed within the area affected by docks and other piling-supported minor structures and the reviewer has concluded that the impacts to SAV, marsh or mangroves would not adversely affect the manatee or its critical habitat, proceed to couplet O.

Where the presence of the referenced vegetation is confirmed within the area affected by docks and other piling-supported minor structures and the reviewer has concluded that the impacts to SAV, marsh or mangroves would adversely affect the manatee or its critical habitat, the applicant can elect to avoid/minimize impacts to that vegetation. In that instance, where impacts are unavoidable and the applicant elects to abide by or employ construction techniques that exceed the criteria in the following documents, the reviewer should conclude that the impacts to SAV, marsh or mangroves would not adversely affect the manatee or its critical habitat and proceed to couplet O.

- “Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat,” prepared jointly by the U.S. Army Corps of Engineers and the National Marine Fisheries Service (August 2001) [refer to the [Corps’ web page](#)], and
- “Key for Construction Conditions for Docks or Other Minor Structures Constructed in or over Johnson’s seagrass (*Halophila johnsonii*),” prepared jointly by the National Marine Fisheries Service and U.S. Army Corps of Engineers (October 2002), for those projects within the known range of Johnson’s seagrass occurrence (Sebastian Inlet to central Biscayne Bay in the lagoon systems on the east coast of Florida) [refer to the [Corps’ web page](#)],

Where the presence of the referenced vegetation is confirmed within the area affected by docks and other piling-supported minor structures and the reviewer has concluded that the impacts to SAV, marsh or mangroves would adversely affect the manatee or its critical habitat, and the applicant does not elect to follow the above Guidelines, the Corps will need to request formal consultation on the manatee with the Service as *May affect*.

For activities other than docks and other piling-supported minor structures proposed in SAV, marsh, or mangroves (*e.g.*, new dredging, placement of riprap, bulkheads, etc.), if the reviewer determines the impacts to the SAV, marsh or mangroves will not adversely affect the manatee or its critical habitat, proceed to couplet O, otherwise the Corps will need to request formal consultation on the manatee with the Service as *May affect*.

<sup>9</sup> See Glossary, under “is not likely to adversely affect.”

<sup>10</sup> Federal reviewers, when making your effects determination, consider effects to manatee designated critical habitat pursuant to section 7(a)(2) of the Endangered Species Act. State reviewers, when making your effects determination, consider effects to manatee habitat within the entire State of Florida, pursuant to Chapter 370.12(2)(b) Florida Statutes.

<sup>11</sup> See the [Corps' web page](#) for manatee construction conditions. At this time, manatee construction precautions c and f are not required in the following Florida counties: Bay, Escambia, Franklin, Gilchrist, Gulf, Jefferson, Lafayette, Okaloosa, Santa Rosa, Suwannee, and Walton.

<sup>12</sup> By letter dated April 25, 2013, the Corps received the Service’s concurrence with “*May affect, not likely to adversely affect*” determinations made pursuant to this key for the following activities: (1) selected non-watercraft access projects; (2) watercraft-access projects that are residential dock facilities, excluding those located in the Braden River AIP; (3) launching facilities solely for kayaks and canoes, and (4) new or expanding multi-slip facilities located in Bay, Dixie, Escambia, Franklin, Gilchrist, Gulf, Hernando, Jefferson, Lafayette, Monroe (south of Craig Key), Nassau, Okaloosa, Okeechobee, Santa Rosa, Suwannee, Taylor, Wakulla or Walton County.

Additionally, in the same letter dated April 25, 2013, the Corps received the Service’s concurrence for “*May affect, not likely to adversely affect*” determinations specifically made pursuant to Couplet G of the key for the repair or rehabilitation of currently serviceable multi-slip watercraft access structures provided all of the following are met: (1) the project is not located in an IMA, (2) the number of slips is not increased; (3) the number of existing slips is not in question; and (4) the improvements to the existing watercraft access structures do not allow increased watercraft usage. Upon receipt of such a programmatic concurrence, no further consultation with the Service for these projects is required.

## GLOSSARY

**Areas of inadequate protection (AIP)** – Areas within counties as shown on the maps where the Service has determined that measures intended to protect manatees from the reasonable certainty of watercraft-related take are inadequate. Inadequate protection may be the result of the absence of manatee or other watercraft speed zones, insufficiency of existing speed zones, deficient speed zone signage, or the absence or insufficiency of speed zone enforcement.

**Boat slip** – A space on land or in or over the water, other than on residential land, that is intended and/or actively used to hold a stationary watercraft or its trailer, and for which intention and/or use is confirmed by legal authorization or other documentary evidence. Examples of boat slips include, but are not limited to, docks or piers, marinas, boat ramps and associated trailer parking spaces, boat lifts, floats, floating docks, pilings, boat davits, dry storage, etc.

**Critical habitat** – For listed species, this consists of: (1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act (ESA), on which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the ESA, upon a determination by the Secretary that such areas are essential for the conservation of the species. Designated critical habitats are described in 50 CFR 17 and 50 CFR 226.

**Currently serviceable** – Currently, serviceable means usable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

**Direct effects** – The direct or immediate effects of the project on the species or its habitat.

**Dredging** – For the purposes of this key, the term dredging refers to all in-water work associated with dredging operations, including mobilization and demobilization activities that occur in water or require vessels.

**Emergent vegetation** – Rooted emergent vascular macrophytes such as, but not limited to, cordgrass (*Spartina alterniflora* and *S. patens*), needle rush (*Juncus roemerianus*), swamp sawgrass (*Cladium mariscoides*), saltwort (*Batis maritima*), saltgrass (*Distichlis spicata*), and glasswort (*Salicornia virginica*) found in coastal salt marsh-related habitats (tidal marsh, salt marsh, brackish marsh, coastal marsh, coastal wetlands, tidal wetlands).

**Formal consultation** – A process between the Services and a Federal agency or applicant that: (1) determines whether a proposed Federal action is likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat; (2) begins with a Federal agency's written request and submittal of a complete initiation package; and (3) concludes with the issuance of a biological opinion and incidental take statement by either of the Services. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed

action “is not likely to adversely affect” listed species or designated critical habitat). [50 CFR 402.02, 50 CFR 402.14]

**Important manatee areas (IMA)** – Areas within certain counties where increased densities of manatees occur due to the proximity of warm water discharges, freshwater discharges, natural springs and other habitat features that are attractive to manatees. These areas are heavily utilized for feeding, transiting, mating, calving, nursing or resting as indicated by aerial survey data, mortality data and telemetry data. Some of these areas may be federally-designated sanctuaries or state-designated “seasonal no entry” zones. Maps depicting important manatee areas and any accompanying text may contain a reference to these areas and their special requirements. Projects proposed within these areas must address their special requirements.

**Indirect effects** – Those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur. Examples of indirect effects include, but are not limited to, changes in water flow, water temperature, water quality (*e.g.*, salinity, pH, turbidity, nutrients, chemistry), prop dredging of seagrasses, and manatee watercraft injury and mortality. Indirect effects also include watercraft access developments in waters not currently accessible to manatees, but watercraft access can, is, or may be planned to waters accessible to manatees by the addition of a boat lift or the removal of a dike or plug.

**Informal consultation** – A process that includes all discussions and correspondence between the Services and a Federal agency or designated non-Federal representative, prior to formal consultation, to determine whether a proposed Federal action may affect listed species or critical habitat. This process allows the Federal agency to utilize the Services’ expertise to evaluate the agency’s assessment of potential effects or to suggest possible modifications to the proposed action which could avoid potentially adverse effects. If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Services concur, in writing, that a proposed action “is not likely to adversely affect” listed species or designated critical habitat). [50 CFR 402.02, 50 CFR 402.13]

**In-water activity** – Any type of activity used to construct/repair/replace any type of in-water structure or fill; the act of dredging.

**In-water structures – watercraft access structures** – Docks or piers, marinas, boat ramps, boat slips, boat lifts, floats, floating docks, pilings (depending on use), boat davits, etc.

**In-water structures – other than watercraft access structures** – Bulkheads, seawalls, riprap, groins, boardwalks, pilings (depending on use), etc.

**Is likely to adversely affect** – The appropriate finding in a biological assessment (or conclusion during informal consultation) if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions and the effect is not: discountable, insignificant, or beneficial (see definition of “is not likely to adversely affect”). An “is likely to adversely affect” determination requires the initiation of formal consultation under section 7 of the ESA.

**Is not likely to adversely affect** – The appropriate conclusion when effects on listed species are expected to be discountable, insignificant, or completely beneficial. **Discountable effects** are those extremely unlikely to occur. **Insignificant effects** relate to the size of the impact and should never reach the scale where take occurs. **Beneficial effects** are contemporaneous positive effects without any adverse effects to the species. Based on best judgment, a person would not (1) be able to meaningfully measure, detect, or evaluate insignificant effects or (2) expect discountable effects to occur.

**Manatee Protection Plan (MPP)** – A manatee protection plan (MPP) is a comprehensive planning document that addresses the long-term protection of the Florida manatee through law enforcement, education, boat facility siting, and habitat protection initiatives. Although MPPs are primarily developed by the counties, the plans are the product of extensive coordination and cooperation between the local governments, the FWC, the Service, and other interested parties.

**Manatee Protection Plan thresholds** – The smallest size of a multi-slip facility addressed under the purview of a Manatee Protection Plan (MPP). For most MPPs, this threshold is five slips or more. For Brevard, Clay, Citrus, and Volusia County MPPs, this threshold is three slips or more.

**Mangroves** – Rooted emergent trees along a shoreline that, for the purposes of this key, include red mangrove (*Rhizophora mangle*), black mangrove (*Avicennia germinans*) and white mangrove (*Laguncularia racemosa*).

**May affect** – The appropriate conclusion when a proposed action may pose any effects on listed species or designated critical habitat. When the Federal agency proposing the action determines that a “may affect” situation exists, then they must either request the Services to initiate formal consultation or seek written concurrence from the Services that the action “is not likely to adversely affect” listed species. For the purpose of this key, all “may affect” determinations equate to “likely to adversely affect” and Corps Project Managers should request the Service to initiate formal consultation on the manatee or designated critical habitat. **No effect** – the appropriate conclusion when the action agency determines its proposed action will not affect a listed species or designated critical habitat.

**Multi-slip facility** – Multi-slip facilities include commercial marinas, private multi-family docks, boat ramps and associated trailer parking spaces, dry storage facilities and any other similar structures or activities that provide access to the water for multiple (five slips or more, except in Brevard, Clay, Citrus, and Volusia counties where it is three slips or more) watercraft. In some instances, the Corps and the Service may elect to review multiple residential dock facilities as a multi-slip facility.

**New access for watercraft** – New dredging and the addition, expansion or improvement of structures such as, but not limited to, docks or piers, marinas, boat ramps and associated trailer parking spaces, boat lifts, pilings, floats, floating docks, floating vessel platforms, (residential boat lifts, pilings, floats, and floating vessel platforms installed in existing slips are not considered new access), boat slips, dry storage, mooring buoys, etc., that facilitates the addition of watercraft to, and/or increases watercraft usage in, waters accessible to manatees.



**Observers** – During dredging and other in-water operations within manatee accessible waters, the standard manatee construction conditions require all on-site project personnel to watch for manatees to ensure that those standard manatee construction conditions are met. Within important manatee areas (IMA) and under special circumstances, heightened observation is needed. **Dedicated Observers** are those having some prior experience in manatee observation, are dedicated only for this task, and must be someone other than the dredge and equipment operators/mechanics. **Approved Observers** are dedicated observers who also must be approved by the Service (if Federal permits are involved) and the FWC (if state permits are involved), prior to work commencement. Approved observers typically have significant and often project-specific observational experience. Documentation on prior experience must be submitted to these agencies for approval and must be submitted a minimum of 30 days prior to work commencement. When dedicated or approved observers are required, observers must be on site during all in-water activities, and be equipped with polarized sunglasses to aid in manatee observation. For prolonged in-water operations, multiple observers may be needed to perform observation in shifts to reduce fatigue (recommended shift length is no longer than six hours). Additional information concerning observer approval can be found at [FWC's web page](#).

**Residential boat lift** – A boat lift installed on a residential dock facility.

**Residential dock density ratio threshold** – The residential dock density ratio threshold is used in the evaluation of multi-slip projects in some counties without a State-approved Manatee Protection Plan and is consistent with 1 boat slip per 100 linear feet of shoreline (1:100) owned by the applicant.

**Residential dock facility** – A residential dock facility means a private residential dock which is used for private, recreational or leisure purposes for single-family or multi-family residences designed to moor no more than four vessels (except in Brevard, Clay, Citrus, and Volusia counties which allow only two vessels). This also includes normal appurtenances such as residential boat lifts, boat shelters with open sides, stairways, walkways, mooring pilings, dolphins, etc. In some instances, the Corps and the Service may elect to review multiple residential dock facilities as a multi-slip facility.

**Submerged aquatic vegetation (SAV)** – Rooted, submerged, aquatic plants such as, but not limited to, shoal grass (*Halodule wrightii*), paddle grass (*Halophila decipiens*), star grass (*Halophila engelmanni*), Johnson's seagrass (*Halophila johnsonii*), sago pondweed (*Potamogeton pectinatus*), clasping-leaved pondweed (*Potamogeton perfoliatus*), widgeon grass (*Ruppia maritima*), manatee grass (*Syringodium filiforme*), turtle grass (*Thalassia testudinum*), tapegrass (*Vallisneria americana*), and horned pondweed (*Zannichellia palustris*).

**Warm Water Aggregation Areas (WWAAs) and No Entry Areas** – Areas within certain counties where increased densities of manatees occur due to the proximity of artificial or natural warm water discharges or springs and are considered necessary for survival. Some of these areas may be federally-designated manatee sanctuaries or state-designated seasonal “no entry” manatee protection zones. Projects proposed within these areas may require consultation in order to offset expected adverse impacts. In addition, special permits may be required from the FWC in order to access these areas.

**Watercraft access structures** – Docks or piers, marinas, boat ramps and associated trailer parking spaces, boat slips, boat lifts, floats, floating docks, pilings, boat davits, dry storage, etc.

**Waters accessible to manatees** – Although most waters of the State of Florida are accessible to the manatee, there are some areas such as landlocked lakes that are not. There are also some weirs, salinity control structures and locks that may preclude manatees from accessing water bodies. If there is any question about accessibility, contact the Service or the FWC.



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
1339 20<sup>th</sup> Street  
Vero Beach, Florida 32960

May 13, 2019

Andrew D. Kelly, Jr., Colonel  
District Commander  
U.S. Army Corps of Engineers  
P.O. Box 4970  
Jacksonville, Florida 32232-0019

Dear Colonel Kelly:

The U.S. Fish and Wildlife Service (Service) and the U.S. Army Corps of Engineers (Corps) currently use a dichotomous key (Key) to assist in making effect determinations pursuant to the Endangered Species Act for in-water activities that may affect manatees. Recently, Corps and Service staff identified the need to make several revisions to the 2013 Key to address new issues and changed circumstances. Although a more complete revision is needed in the future, three issues need to be addressed as soon as possible: 1) requirements associated with clamshell dredge head operation; 2) locations and conditions related to impact hammer driven metal piles and/or sheet piles; and 3) incorporation of the current list of counties that have approved Manatee Protection Plans (MPPs).

For the purpose of continuing to use the Key on projects that involve clamshell dredging or impact driving of metal piles or sheet piles, the Service is issuing this letter as an addendum to the Key. The Service finds work that keys out as “not likely to adversely affect” the manatee or its critical habitat using the 2013 Key is still the appropriate determination provided there is adherence to the following additional conditions:

- 1) During clamshell dredging operations, the dredge operator shall gravity-release the clamshell bucket only at the water’s surface, and only after confirmation that there are no manatees within the safety distance identified in the standard construction conditions (or a 75-foot buffer if dredging is authorized at night);
- 2) Installation of metal pilings or metal sheet piles by impact hammer – if not within Important Manatee Areas, Warm Water Aggregation Areas, or Federal manatee sanctuaries or state-designated No Entry Areas - may occur under the following conditions: a) Use of at least one dedicated manatee observer, with all work being stopped if a manatee is observed within 1000 feet; b) no work shall occur outside of daylight hours (defined as one-half hour after sunrise to one-half hour before sunset); and, c) no more than 5 piles/day may be installed. If within any of the above-described areas, an informal or formal project-specific consultation with the Service is required.

In addition, the following change will allow projects in Charlotte County and Flagler County to be properly handled using the Key:

- 3) Charlotte County and Flagler County shall be added to the list of counties that have an approved Manatee Protection Plan (couplet J of the 2013 Key) and removed from the list of counties included in couplet L and the second category of couplet P of the 2013 Key.

With the above-described changes, the Service affirms that such work would not likely adversely affect the West Indian manatee and no further consultation is required provided all other conditions of the 2013 Key are met. The above changes, and possibly others, will ultimately be reflected in an updated version of the Key. We hope this letter provides the Corps with the ability to continue to work with the 2013 Key and in-water construction conditions until a revised and updated Key is approved.

Thank you for your continued support to facilitate recovery of the West Indian manatee and other species protected under the Endangered Species Act. If you have any questions, please contact Mr. Scott Calleson by e-mail at [charles\\_calleson@fws.gov](mailto:charles_calleson@fws.gov) or by phone at (904) 731-3326.

Sincerely,



Larry Williams  
State Supervisor

cc:

Service, Jacksonville, Florida (Jay Herrington)

Service, Vero Beach, Florida (Bob Progulske, Roxanna Hinzman)

## Appendix E – UMAM Data Sheets

**PART I – Qualitative Description  
(See Section 62-345.400, F.A.C.)**

Site/Project Name Selmon Expressway Bridge Improvement		Application Number		Assessment Area Name or Number Mangrove Fringe	
FLUCCs code 612		Further classification (optional) E2FO3		Impact or Mitigation Site? Shading	Assessment Area Size 0.05
Basin/Watershed Name/Number Tampa Bay/Anclote River Hillsborough River Watersheds	Affected Waterbody (Class) Class III		Special Classification (i.e.OFW, AP, other local/state/federal designation of importance) None		
Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands Mangroves along the shore of the Hillsborough River north of Garrison and Seddon Channels and Hillsborough Bay.					
Assessment area description Narrow mangrove fringe along a riprap shoreline adjacent to a seawall and recreation trail					
Significant nearby features Hillsborough Bay			Uniqueness (considering the relative rarity in relation to the regional landscape.) NA		
Functions Provides wildlife habitat, food chain support, water quality improvement, shoreline resiliency, foraging habitat for birds and other urban wildlife utilization (cover, refuge, nesting, etc.).			Mitigation for previous permit/other historic use NA		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found ) Urban wildlife, including birds, small mammals, and insects.			Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area) Potential utilization by loafing wading birds (T); mangrove roots provide fish habitat.		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.):					
Additional relevant factors:					
Assessment conducted by: HDR			Assessment date(s): 5/5/2020		

**PART II – Quantification of Assessment Area (impact or mitigation)**  
**(See Sections 62-345.500 and .600, F.A.C.)**

Site/Project Name Selmon Expressway Bridge Improvement	Application Number	Assessment Area Name or Number Mangrove Fringe
Impact or Mitigation Shading	Assessment conducted by: HDR	Assessment date: 5-May-20

<b>Scoring Guidance</b>
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

<b>Optimal (10)</b>	<b>Moderate(7)</b>	<b>Minimal (4)</b>	<b>Not Present (0)</b>
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500(6)(a) Location and Landscape Support	A narrow fringe of mangrove growing on riprap between the Hillsborough River and a seawall along an urban recreational trail. Mangroves create a buffer between river and the city. Density of mangroves decreases beneath the bridge.
w/o pres or current	with
3	2

.500(6)(b)Water Environment (n/a for uplands)	Mangroves provide water quality benefits and resiliency buffer against waves
w/o pres or current	with
6	5

.500(6)(c)Community structure	Mangrove quality good but density decreases moving north toward the Selmon Expressway Bridge
1. Vegetation and/or 2. Benthic Community	
w/o pres or current	with
6	3

Score = sum of above scores/30 (if uplands, divide by 20)	
current or w/o pres	with
0.50	0.33333

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres =
0.17 x 0.05 = 0.01

Delta = [with-current]
0.17

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG = delta/(t-factor x risk) =