

ATTACHMENT NO. 29

ENDANGERED SPECIES DESCRIPTION

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A list of federally listed threatened and endangered species with the potential to occur in the vicinity of the Lido Key project area is presented in Table 1. The project area includes beach, nearshore marine habitat, and borrow areas located in Big Sarasota Pass. Available information on species occurrence in the project area is provided below.

Table 1. Federally listed species with the potential to occur in the vicinity of the project area (USFWS, 2015; NMFS, 2015).

Common Name	Scientific Name	Federal Listing Status
SEA TURTLES		
Loggerhead	<i>Caretta caretta</i>	T ¹ /Critical Habitat ^{2,3}
Green	<i>Chelonia mydas</i>	E ⁴
Leatherback	<i>Dermochelys coriacea</i>	E
Hawksbill	<i>Eretmochelys imbricata</i>	E
Kemp's Ridley	<i>Lepidochelys kempii</i>	E
FISH		
Gulf sturgeon	<i>Acipenser oxyrinchus desotoi</i>	T
Smalltooth sawfish	<i>Pristis pectinata</i>	E
MARINE MAMMALS		
Florida manatee	<i>Trichechus manatus latirostris</i>	E
Right whale	<i>Eubalaena glacialis</i>	E
Sei whale	<i>Balaenoptera borealis</i>	E
Sperm whale	<i>Physeter macrocephalus catadon</i>	E
Finback whale	<i>Balaenoptera physalus</i>	E
Humpback whale	<i>Megaptera novaeangliae</i>	E
BIRDS		
Piping plover	<i>Charadrius melodus</i>	T/E ⁵
Rufa red knot	<i>Calidris canutus rufa</i>	T

¹Northwest Atlantic Ocean (NWA) distinct population segment (DPS). On September 22, 2011, NMFS and USFWS issued a final rule changing the listing of loggerhead sea turtles from a single threatened species to nine distinct population segments (DPSs) listed as either threatened or endangered (FR 76 58868). The NWA DPS was listed as threatened.

² The final USFWS critical habitat rule (79 FR 39755) was published on July 10, 2014 and went into effect on August 11, 2014. There is no critical habitat within the project area. However, there are two units are adjacent to the project area: the LOGG-T-FL-18 unit is located south of the project area along the shoreline of Siesta Key and the LOGG-T-FL-17 unit is located north of the project area along the shoreline of Longboat Key.

³The final NMFS critical habitat rule (79 FR 39855) was published on July 10, 2014 and went into effect on August 11, 2014. There is no critical habitat within the fill placement area. However, there are two units are adjacent to the project area: the LOGG-N-29 unit is located south of the project area off of Siesta Key and LOGG-N-30 is located north of the project area off of Longboat Key. One of the potential areas (Borrow Area B) is within the LOGG-N-29 unit.

⁴Green turtles are listed as threatened, except for breeding populations of green turtles in Florida and on the Pacific Coast of Mexico, which are listed as endangered.

⁵Piping plovers are listed as threatened, except for the Great Lakes population which is listed as endangered; Florida provides overwintering habitat for both threatened and endangered populations.

Sea Turtles

The green (*Chelonia mydas*), leatherback (*Dermochelys coriacea*), hawksbill (*Eretmochelys imbricata*) and Kemp's ridley (*Lepidochelys kempii*) are listed as endangered and the loggerhead (*Caretta caretta*) is listed as threatened under the 1973 Endangered Species Act. While all five species may be found in Florida waters, loggerhead and green turtles are the most commonly observed nesters on the Gulf coast, with leatherback and Kemp's ridley sea turtles nesting occasionally on Florida's Gulf beaches.

Loggerhead turtles account for the majority of nests on the Gulf coast of Florida. There were 4,185 loggerhead nests and 3,819 false crawls documented within Sarasota County in 2013 (FWRI, 2014a). Nesting sea turtles and emergent hatchlings are present annually on the beaches of Lido Key during the nesting season (May through October). Every season, Mote Marine Laboratory's (MML) Sea Turtle Conservation and Research Program (STCRP) conducts sea turtle monitoring along the 3.3 miles of Lido Key shoreline (R-30 to R-44). Details of STCRP monitoring protocol are provided in Attachment No. 30, and results of their monitoring are presented below.

Table 2. Loggerhead nesting and false crawls on Lido Key, 2005-2013 (MML STCRP, 2013).

Year	Nests	False Crawls
2005	27	25
2006	24	35
2007	33	38
2008	31	37
2009	17	39
2010	17	27
2011	50	37
2012	83	75
2013	68	82

Loggerheads are the dominant nesting species on Florida's Gulf beaches, though greens and leatherbacks and even Kemp's ridleys have also been documented nesting in small numbers on central Gulf beaches. According to Florida's Fish and Wildlife Research Institute (FWRI), there have been a total of 202 green turtle nests in Sarasota County between 2009 and 2013, with a low of only 11 nests laid in 2009 and a high of 91 nests in 2013. Leatherbacks are not common nesters in Sarasota County, but in 2001 a leatherback turtle deposited a clutch on Longboat Key, which marked the first documented nesting of this species on the central west coast of Florida. A second reporting of a leatherback turtle nesting was documented on Sanibel Island (Lee County) in 2009 (FWRI, 2014a). Kemp's ridley nests were documented once on Casey Key and once on Manasota Key (Charlotte County) during the 2010 nesting season (MML STCRP, 2011). Green, leatherback and Kemp's ridleys have not been documented as nesting on Lido Key in at least the past ten years (Mote STCRP, 2013).

Loggerhead Critical Habitat

On March 25, 2013, USFWS proposed critical habitat for the Northwest Atlantic Ocean (NWA) Distinct Population Segment (DPS) of the loggerhead sea turtle under the Endangered Species Act (ESA) (78 FR 17999). The final rule (79 FR 39755) was published on July 10, 2014 and went into effect on August 11, 2014. These designated critical habitat units include nesting beaches along approximately 685 miles of shoreline fronting the Atlantic Ocean from North Carolina to Florida and the Gulf of Mexico from Florida to Mississippi.

On July 18, 2013 NMFS proposed critical habitat for the loggerhead sea turtle NWA DPS within the Atlantic Ocean and the Gulf of Mexico. Specific areas proposed for designation include 36 occupied marine areas within the range of the NWA DPS. These areas contain one or a combination of nearshore reproductive habitat, winter area, breeding areas, and migratory corridors (78 FR 43005). The final rule (79 FR 39855) was published on July 10, 2014 and went into effect on August 11, 2014.

The sand placement area of the proposed project is not located within designated loggerhead critical habitat; however, terrestrial and nearshore reproductive critical habitat units are located to the north and south of Lido Key. The terrestrial LOGG-T-FL-17 unit includes the shoreline of Longboat Key and the LOGG-T-FL-18 unit includes the shorelines of Siesta and Casey Keys. The nearshore reproductive unit LOGG-N-29 spans from Big Sarasota Pass south to Captiva Pass and the LOGG-N-30 unit extends from New Pass north to Longboat Pass. Borrow Area B, one of the potential borrow areas (Attachment No. 34), is located in the LOGG-N-29 unit.

If a hopper dredge is used for the dredging operations, potential impacts to sea turtles could occur. To minimize the risk to sea turtles, standard sea turtle protection conditions will be implemented such as deflector dragheads, inflow screens, and/or monitoring of the operation. The project will adhere to all turtle safety precautions outlined in the NMFS Gulf of Mexico Regional Biological Opinion (GRBO) (November 19, 2003; Revision No 1, June 24, 2005; Revision No. 2, January 9, 2007), as well as implement the NMFS *Sea Turtle and Smalltooth Sawfish Construction Conditions* during project construction (NMFS, 2006).

Fish

Gulf Sturgeon

Historically, Gulf sturgeon (*Acipenser oxyrinchus desotoi*) occurred from the Mississippi River east to Tampa Bay. Sporadic occurrences were recorded as far west as the Rio Grande River in Texas and Mexico, and as far east and south as Florida Bay; however, their present range extends from Lake Pontchartrain and the Pearl River system in Louisiana and Mississippi respectively, east to the Suwannee River in Florida (USFWS and NMFS, 2009). In 2003, NMFS and USFWS jointly designated Gulf sturgeon critical habitat; 14 geographic areas from Florida and Louisiana were included encompassing spawning rivers and adjacent estuarine areas (68 FR 13370). The Florida designated critical habitat is restricted to the Florida Panhandle; there is no critical habitat located as far south as the Lido Key. Gulf sturgeon are not likely to occur in the vicinity of the project area.

Smalltooth Sawfish

Historically, the U.S. population of smalltooth sawfish (*Pristis pectinata*) was common throughout the Gulf of Mexico from Texas to Florida, and along the east coast from Florida to Cape Hatteras. The current range of this species has contracted to peninsular Florida, and smalltooth sawfish are relatively common only in the Everglades region at the southern tip of the state. Designated critical habitat for smalltooth sawfish is located in the Charlotte Harbor Estuary Unit and Ten Thousand Islands/Everglades Unit (74 FR 45353); both units are located far south of the project area. Smalltooth sawfish have the potential to occur, but are not likely to occur, in the vicinity of the project area.

Adherence to the NMFS *Sea Turtle and Smalltooth Sawfish Construction Conditions* during project construction will minimize potential impacts to smalltooth sawfish (NMFS, 2006).

Marine Mammals

Florida Manatee

The West Indian manatee (*Trichechus manatus*) is listed as a federally protected species under the Endangered Species Act of 1973 and the Marine Mammal Protection Act of 1972. The Florida Fish and Wildlife Conservation Commission's (FWC) conducts statewide synoptic surveys each winter in order to obtain a general count of manatees over a broad area. These surveys are conducted during the winter in order to count manatees in their warm-water wintering habitats. Results from the manatee synoptic surveys conducted from 2006 to 2014 are presented in Table 3.

Table 3. Manatee synoptic survey results from 2006-2014 (FWRI, 2014b).

Year	East Coast	West Coast	Total
2006	1639	1474	3113
2007	1414	1403	2817
2009	2148	1654	3802
2010	2780	2297	5077
2011	2432	2402	4834
2014	2315	2509	4824

*due to warmer than average weather, FWC did not conduct surveys in 2008, 2012 or 2013

In 2014 FWC documented 12 manatee mortalities in Sarasota County, attributed to perinatal, cold stress, watercraft, unrecovered and undetermined causes (FWRI, 2014b). As of February 13, 2015, there have been no manatee mortalities documented in Sarasota County; however, there have been 50 total manatee mortalities recorded in Florida (FWRI, 2014b).

There is no critical habitat designated for the Florida manatee within the project area. The closest critical habitat unit is located in Tampa Bay, which is more than 10 miles north of the project area. Adherence to the FWC *Standard Manatee Conditions for In-Water Work* will minimize potential impacts to manatees (FWC, 2011).

Cetaceans

In the Gulf of Mexico there are 28 species of cetaceans, which includes both baleen and toothed whales. Of the 28 species, there are 5 federally listed species have the potential to occur, but are not likely to occur in the vicinity of the project area: right whale (*Eubalaena glacialis*), sei whale (*Balaenoptera borealis*), sperm whale (*Physeter macrocephalus catadon*), finback whale (*Balaenoptera physalus*), and humpback whale (*Megaptera novaeangliae*). The proposed project area includes nearshore marine waters and Big Sarasota Pass – whales are unlikely to occur in these habitats.

Birds

Piping Plover

The Sarasota Audubon Society completed bird monitoring along the Lido Key shoreline in May and June 2009. During this survey no federally listed piping plovers (*Charadrius melodus*) or rufa red knots (*Calidris canutus rufa*) were observed (SAS, 2013). According to the Seabird Ecological Assessment Network (SEANET), a piping plover was observed on Lido Key on September 26, 2008; this bird was banded, and ultimately traced back to a nest in Michigan, making it one of the federally endangered Great Lakes population (SEANET, 2008). The most recent piping plover observation data from the e-Bird online database reported a sighting in 2012 in South Lido County Park (e-Bird, 2015a).

Piping plover critical habitat was designated for the Great Lakes breeding population in 2001 (66 FR 22938), and for the Northern Great Plains breeding population in 2002 (67 FR 57638). Critical habitat for wintering piping plovers, including individuals from the Great Lakes, Northern Great Plains, and Atlantic Coast breeding populations, was designated along the coasts of North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas in July 2001 (66 FR 36038). There is no piping plover critical habitat within the project area and the closest critical habitat unit (FL-21) is approximately 20 miles north of the project at Egmont Key in Tampa Bay. The project area does include areas identified to be Optimal Piping Plover Areas, as defined in the Programmatic Piping Plover Biological Opinion (P³BO; USFWS, 2013), due to the ability of coastal processes to function mostly unimpeded at South Lido Park. This area is primarily undeveloped, publicly owned, and located within one mile of an inlet.

Rufa Red Knot

The USFWS listed the *rufa* subspecies of red knot (*Calidris canutus rufa*) as threatened under the Endangered Species Act on December 11, 2014. Rufa red knots have been observed in greater numbers than piping plovers on Lido Key. According to e-Bird, from 2007 to 2014 there were 1,402 rufa red knot sightings; 308 of which were recorded in 2014 (e-Bird, 2015b).

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