



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
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F/SER31:MT

MEMORANDUM FOR: F/HC3 - Leslie Craig

FROM: for F/SE - Roy E. Crabtree, Ph.D.

DEC 12 2017

SUBJECT: Endangered Species Act Informal Consultation for the McFaddin Beach and Dune Restoration Project, Proposed for Funding under the Deepwater Horizon Oil Spill Natural Resource Damage Assessment in the Texas Trustee Implementation Group Restoration Plan #1 and Environmental Assessment

Table with 4 columns: Project Name, Applicants, SER Number, Project Type. Row 1: McFaddin Beach and Dune Restoration Project, National Marine Fisheries Service (NMFS) Restoration Center (RC) and Texas Parks and Wildlife Department (TPWD), SER-2017-18815, Beach Renourishment & Offshore Dredging.

This memorandum responds to the NMFS RC's July 28, 2017, memorandum requesting concurrence from NMFS Protected Resources Division (PRD) under Section 7 of the Endangered Species Act (ESA) with NMFS RC's project-effects determination for the McFaddin Beach and Dune Restoration Project on the McFaddin National Wildlife Refuge in Chambers and Jefferson Counties, Texas. You determined that the proposed project may affect, but is not likely to adversely affect, green, hawksbill, Kemp's ridley, leatherback, and loggerhead sea turtles.

Consultation History

We received your memorandum requesting consultation on July 28, 2017. On August 7, 2017, we requested (via email) additional information necessary to complete the consultation. We received your response to that request, including all necessary information on August 11, 2017, and initiated consultation on that day. NMFS PRD's determinations regarding the effects of the proposed action are based on the description of the action in this informal consultation. Any changes to the proposed action may negate the findings of the present consultation and may require reinitiation of consultation with NMFS PRD.

Project Location

Table with 3 columns: Project Element, Latitude/Longitude (North American Datum 1983), Water body. Rows include Beach Restoration Area West End, Beach Restoration Area East End, and Sediment Source Area Northeast Corner, Northwest Corner, Southeast Corner, Southwest Corner, all located in the Gulf of Mexico.



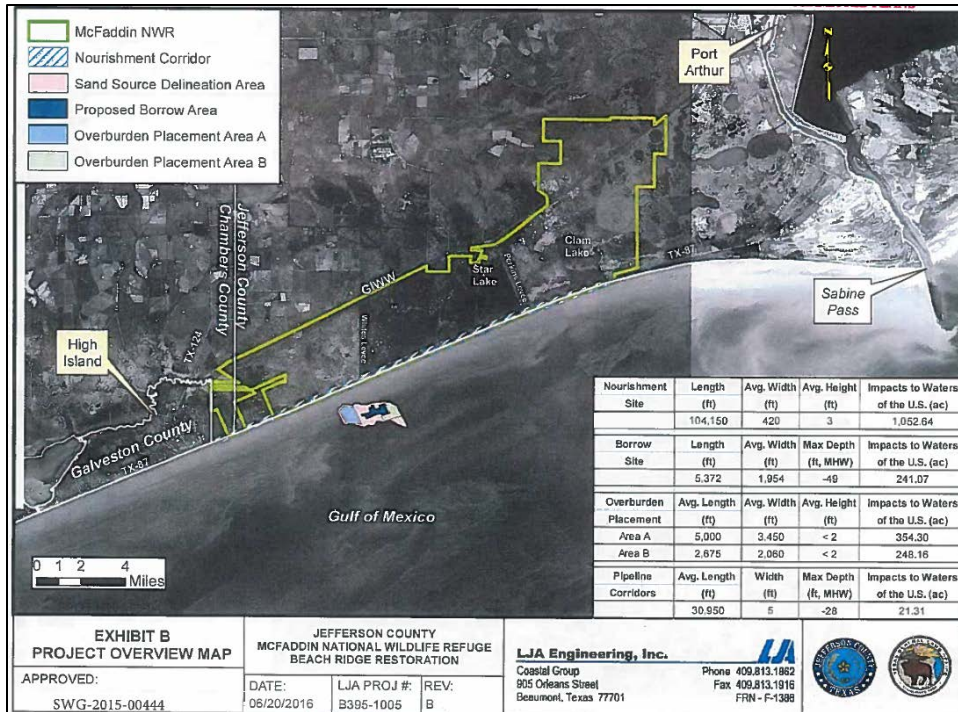


Figure 1. Overview of project area showing location of proposed beach and dune restoration area (Nourishment Corridor) and offshore sediment borrow and placement area (Sand Source Delineation Area) (Figure 1 in TPWD’s Biological Evaluation Form for the McFaddin Beach and Dune Restoration Project).

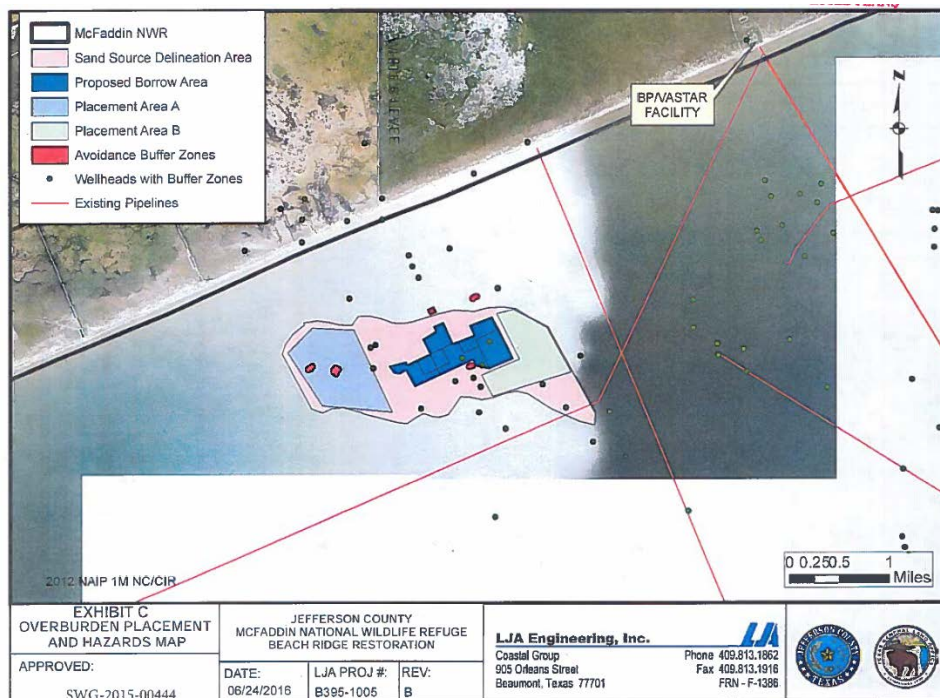


Figure 2. Detailed view of proposed offshore sediment borrow and placement area showing overall boundaries (Sand Source Delineation Area), proposed borrow area, and proposed placement areas where overburden materials would be deposited (Figure 2 in TPWD’s Biological Evaluation Form for the McFaddin Beach and Dune Restoration Project).

Project Description

The applicant proposes to re-build the dune line and beach face along an 18-mile section of the McFadden National Wildlife Refuge (MNWR) on the Gulf of Mexico in southeast Texas (Figure 1). The project is intended to re-create historic dune heights and beach widths necessary to reduce shoreline retreat and protect sensitive inland marshes.

The proposed activities include dredging approximately 4.1 million cubic yards of sand from a 241-acre borrow site located approximately 1.5 miles offshore of the beach restoration area. Sediment collection would be accomplished by using a hydraulic cutter-head dredge and transferring the sediment to the shore via a submerged pipeline. The borrow area is located in water depths of 18-27 feet. The proposed dredging and overburden placement areas do not contain seagrass beds or hard substrates that would support corals or hard structure habitats. In general, the vast majority of bottom substrate consists of soft, muddy sediments overlaying sand deposits.

To collect the sediment, a rotating cutterhead attached to a suction pipe would be lowered from a barge to the seafloor. Material entering the pipe would pass through the dredge pump(s) and be transported via pipeline to the shoreline. While removing material, the dredge (and rigid suction pipe) would swing side to side by applying tension on mooring wires affixed to anchors. As material is depleted, the dredge would progress forward using a combination of spuds, mooring wires, and tender tugs. The overburden material (surface sediments that are unsuitable for beach nourishment) will be side-cast and deposited in an area adjacent to the targeted borrow site (Figure 2). Final designed slopes around the borrow area will not exceed 5:1 (5 feet of horizontal slope to 1 foot of vertical depth) along the dredged boundaries to ensure integrity of the surrounding seabed. As the borrow site is located considerably outside the depth limits of significant motion of bottom sediments, the time rate for the dredged area to refill is expected to be slow and deposited materials are expected to consist of fairly fine sediments.

Pipeline construction would entail the use of a pipeline barge to bring sections of 30-inch diameter pipe to the construction area where another barge with a crane would be used to connect the pipe sections and lower them down to the bottom. The pipeline would be constructed between the borrow area and the shore where it would be connected to a second pipeline running perpendicular to the shoreline. Depending upon the distance between the dredge and the shoreline restoration area(s), booster pumps may be required along the pipeline.

Once onshore, the dredged material would be pumped along the shoreline to the deposit areas where heavy equipment (bulldozers and front-end loaders) would be used to create temporary earthen containment dikes to channelize the flow exiting the dredge pipe. As the slurry flows out onto the beach, sediment will settle out within the project template and sea water will return to the ocean. As sediment builds up in front of the pipe, heavy equipment will grade the sediment to meet the project specifications. This is a continuous process (24 hours per day, 7 days per week) interrupted only by the need to shut down due to dredge maintenance, repositioning, fueling, adding/removing shoreline pipe, severe weather or other emergency.

As the nourishment area progresses down the beach the contractor would add additional pipe length onto the shoreline pipeline using a front-end loader with a claw on it to move the pipe sections and connect them together until they have the length needed.

There has been no recent documentation of sea turtles nesting in the action area and the area does not currently contain suitable nesting habitat for sea turtles due to the lack of sand.

Conservation Measures Specific to Sea Turtles

The following conservation measures will be incorporated into operations for protection of threatened and endangered sea turtles:

- The applicant shall instruct all personnel associated with the project of the potential presence of sea turtles and the need to avoid collisions with these species.
- The applicant shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles, which are protected under the Endangered Species Act of 1973, and that all construction personnel are responsible for observing water-related activities for the presence of these species.
- All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times 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.
- If a sea turtle is seen within 100 ft of the active 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 within 100 ft of a sea turtle. Activities may not resume until the protected species has departed the project area of its own volition.
- Qualified environmental monitors will conduct daily surveys of the project area including a 100-ft buffer zone around construction activities and report any endangered species sightings or issues during construction.
- If a sea turtle or nest is located in or adjacent to work areas, the monitor will call 1-866-TURTLE-5 and notify the USFWS Clear Lake Ecological Services Field Office (281-286-8282). Work activities will not resume within 100 ft of the nest site or turtle until authorization from the monitor is received to do so.

Effects Determinations for Species the Action Agency or NMFS Believes May Be Affected by the Proposed Action

Species	ESA Listing Status	Action Agency Effect Determination	NMFS Effect Determination
Sea Turtles			
Green (North and South Atlantic distinct population segments [DPS])	T	NLAA	NLAA
Kemp's ridley	E	NLAA	NLAA
Loggerhead (Northwest Atlantic Ocean DPS)	T	NLAA	NLAA
Leatherback	E	NLAA	NE
Hawksbill	E	NLAA	NE
E = endangered; T = threatened; NLAA = may affect, not likely to adversely affect; NE = no effect			

We believe the project will have no effect on hawksbill and leatherback sea turtles, due to the species' very specific life history strategies, which are not supported in the action area. Leatherback

sea turtles have a pelagic, deepwater life history, where they forage primarily on jellyfish. Hawksbill sea turtles typically inhabit inshore reef and hard bottom areas where they forage primarily on encrusting sponges. These habitat types do not occur in or near the project site.

Critical Habitat

The project is not located in designated critical habitat, and there are no potential routes of effect to any designated critical habitat.

Analysis of Potential Routes of Effects to Species

NMFS PRD has identified the following potential effects to sea turtles from implementing the proposed project and concluded that these species are not likely to be adversely affected.

Sea turtles may be injured if struck by construction related vessels or equipment (e.g. dredge cutter head, pipeline, etc.). The risk of this adverse effect occurring is discountable because vessels and dredging equipment will be moving very slowly and these species are highly mobile and are expected to avoid the noise and disturbance associated with construction activities. NMFS has previously determined in regional biological opinions that the risk of injury during non-hopper-type dredging activities, such as cutterhead dredging, is discountable, and sea turtles are not likely to be adversely affected.¹ The applicant's implementation of the above-listed conservation measures will further reduce the risk by requiring the operation of any mechanical equipment to cease immediately if a sea turtle is seen within a 100-ft radius of the equipment. Activities will not resume until the protected species has departed the project area of its own volition.

Sea turtles may be temporarily unable to use the borrow site for forage or refuge habitat due to the effects of dredging activities (noise, increased turbidity, etc.). However, the area provides relatively low quality habitat (soft muddy substrate devoid of vegetation or hard bottom/structures) and dredging activities would occur in a relatively small area compared to the vast areas of similar habitat surrounding the project site. Any displaced sea turtles are expected to continue normal foraging behavior in the surrounding areas and any potential effects to sea turtles from temporary avoidance of the construction area would be insignificant.

Conclusion

Because all potential project effects to listed species were found to be beneficial, discountable or insignificant, we conclude that the proposed action is not likely to adversely affect listed species under NMFS's purview. This concludes your consultation responsibilities under the ESA for species under NMFS's purview. Consultation must be reinitiated if a take occurs or if new information reveals effects of the action not previously considered, or if the proposed action is subsequently modified in a manner that causes an effect to listed species or critical habitat in a manner or to an extent not previously considered, or if a new species is listed or critical habitat designated that may be affected by the proposed action.

We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions

¹ NMFS. 2015. Biological Opinion on the Impacts Associated with the U.S. Army Corps of Engineers Jacksonville District's Authorization of Minor In-water Activities throughout Florida. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southeast Regional Office, Protected Resources Division, Saint Petersburg, Florida.

about this consultation, please contact Mike Tucker, Consultation Biologist, at (727) 209-5981, or by email at michael.tucker@noaa.gov.

File: 1514-22C.