

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southeast Regional Office 263 13<sup>th</sup> Avenue South St. Petersburg, Florida 33701-5505 https://www.fisheries.noaa.gov/region/southeast

> F/SER31:MT SERO-2021-01685

Christy Fellas DWH Environmental Compliance Coordinator NOAA Restoration Center 263 13<sup>th</sup> Ave. South St. Petersburg, FL 33701

Dear Christy Fellas:

This letter responds to your request for consultation with us, the National Marine Fisheries Service (NMFS), pursuant to Section 7 of the Endangered Species Act (ESA) for the following action.

Project Name	Applicant	SERO Number	Project Type
Chester Island Shoreline	Texas General	SERO-2021-01685	Island Habitat
Protection and Habitat	Land Office		Restoration
Restoration			

# **Consultation History**

We received your letter requesting consultation on July 13, 2021, and initiated consultation that day. This project has been assigned a tracking number in our NMFS Environmental Consultation Organizer (ECO), SERO-2021-01685. Please refer to this number in any future inquiries regarding this project.

## **Project Location**

Location	Latitude/Longitude (North American Vertical Datum of 1988)	Water body
Chester Island, 3.5 miles east of Port O'Connor, TX	28.452077° -96.346414°	Matagorda Bay, Gulf of Mexico

# **Existing Site Conditions**

Chester Island (Figure 1) is a U.S. Army Corps of Engineers (USACE) dredged material placement site that is eroding at a faster rate than the current rate of placement. The primary causes of erosion are high currents near the Matagorda Ship Channel (MSC) jetties, vessel wakes from the MSC and Gulf Intracoastal Waterway (GIWW), high tides, relative sea level rise and strong wind-driven wave forces including impacts from winter storms and tropical cyclones. There are no known seagrasses or other marine vegetation in the project area. Shoreline protection in the form of an articulated concrete block mat geotextile tube extends from the



northeastern tip of the island, along the southeastern shore approximately 1,240 feet to the southwest. Uplands on the island consist of unvegetated beach and dune habitat along the edges of the island with scrub-shrub and grassy habitat in the interior portion of the island. The surrounding area is characterized by shallow bay bottom with soils consisting of clay, sand, and shell hash. Substrate at the proposed placement sites consists of unvegetated, unconsolidated bottom.



Figure 1. Overview of the proposed project area located in Matagorda Bay, Texas (Figure 2 in the Biological Evaluation Form for the Chester Island Shoreline Protection and Habitat Restoration Project)

#### **Project Description**

The proposed project would construct sediment control and shoreline protection structures, and add dredged sediment around Chester Island to create an additional 30 acres of land on the island. Erosion control structures such as groins and breakwaters (Figure 2; Figure 3) would be constructed around the island to protect it from erosive forces and to contain the added dredge material. Sediment added to the island would be dredged by USACE from the Matagorda Ship Channel and Gulf Intracoastal Waterway. Sediment placement plans (Figure 2; Figure 4) include the following elements:

- Northwest shore: 265,000 cubic yards would be added to a height of 8 feet above the water surface, extending from 140 feet inland from the current shore to 170 feet offshore;
- Southwest shore: 225,000 cubic yards would be added to a height of 2 feet above the water surface, extending from 100 feet inland from the current shore to 200 feet offshore;
- Northeast shore: 95,000 cubic yards would be added to a height of 8 feet above the water surface, extending 280 feet offshore; and
- Southeast shore: 65,000 cubic yards would be added to a height of 5 feet above the water surface, extending from 100 feet inland from the current shore to 200 feet offshore.



Figure 2. Overview of conceptual plan for placement of groins, breakwaters, and dredged sediment around Chester Island (Figure C-304 in Appendix B of the Project Conceptual Design Alternatives Analysis)



Figure 3. Schematic drawing of proposed typical groin profile and cross section (Figure C-502 in Appendix B of the Project Conceptual Design Alternatives Analysis)

Shoreline protection/groin structures would be constructed with the use of marine barges to transport rock material and construction equipment such as excavators to place the rock material into the structure configurations. These structures will require some excavation to establish a foundation toe below the existing grade. Excavation will be performed with the use of excavators, drag lines, and track hoes.



Figure 4. Schematic drawing of proposed typical beach nourishment design for the southwest (top), northwest, and southeast (bottom) shores of Chester Island (Figure C-500 in Appendix B of the Project Conceptual Design Alternatives Analysis)

## **Construction Conditions**

To minimize any potential effects to ESA-listed species, the construction contractors will implement the following conditions during all in-water construction activities:

- All project-related vessels will adhere to NMFS's Vessel Strike Avoidance Measures and Reporting for Mariners (https://media.fisheries.noaa.gov/dam-migration/vessel\_strike\_avoidance\_february\_2008.pdf).
- Construction contractors will implement the NMFS Protected Species Construction Conditions (https://media.fisheries.noaa.gov/2021-06/Protected Species Construction Conditions 1.pdf?null).
- Construction contractors will implement the NMFS Measures for Reducing the Entrapment Risk to Protected Species (https://media.fisheries.noaa.gov/dam-migration/entrapment\_bmps\_final.pdf).

# Effects Determination(s) 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 Atlantic [NA] distinct	Т	NLAA	NLAA		
population segment [DPS])					
Green (South Atlantic [SA] DPS)	Т	NLAA	NLAA		
Kemp's ridley	Е	NLAA	NLAA		
Loggerhead (Northwest Atlantic [NWA]	Т	NLAA	NLAA		
DPS)					
Hawksbill	Е	NLAA	NLAA		
Fish					
Giant manta ray	Т	NLAA	NLAA		

E = endangered; T = threatened; NLAA = may affect, not likely to adversely affect.

## **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

Giant manta and sea turtles may be injured if struck by construction related vessels, equipment, or materials (e.g. marine barges, excavators, etc.). The risk of this occurring is extremely unlikely because these species are highly mobile and are expected to avoid the noise and disturbance associated with construction vessels/activities. The implementation of NMFS's *Protected Species Construction Conditions* and *Vessel Strike Avoidance Measures and Reporting for Mariners* will further reduce any risk by requiring all construction vessels to maintain slow transit speeds (5 knots or less), and all workers shall keep watch for protected species. Operation of any mechanical equipment will cease immediately if a protected species is detected within a 150-ft radius of the equipment. Activities will not resume until the animal(s) have departed the project area of their own volition.

Construction-related noise and turbidity may deter giant mantas and sea turtles from utilizing the project area during construction activities. We believe any such effects from avoidance of the project area will be insignificant, given the availability of similar habitat nearby and the abundance of habitat outside of the project area. We expect any individuals that are excluded from the construction areas to continue their normal behavior in similar habitats outside of the affected zone.

Giant manta and sea turtles may be affected by the permanent loss of shallow water habitat that will be filled in by the proposed project. Approximately 30 acres of shallow, unvegetated, soft-sediment bottom will be completely filled in, and become inaccessible to these species (turtle nesting is not expected on the island as it is inside the bay, and no nesting has been previously documented on this island). We believe this loss of marginal habitat will be insignificant to these species given the relatively small area to be filled and the availability of more suitable habitat nearby. There are extensive shallow flats and discontinuous seagrass resources throughout the surrounding area that would provide more suitable foraging and shelter habitat outside of the project area.

#### Conclusion

Because all potential project effects to listed species were found to be discountable, insignificant, or beneficial, 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 new information reveals effects of the action not previously considered, or if the identified action is subsequently modified in a manner that causes an effect to the 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 identified action. NMFS's findings on the project's potential effects are based on the project description in this response. Any changes to the proposed action may negate the findings of this consultation and may require reinitiation of consultation with NMFS.

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 on this consultation, please contact Michael Tucker, Consultation Biologist, at (727) 209-5981 or by email at Michael.Tucker@noaa.gov.

Sincerely,

David Bernhart Assistant Regional Administrator for Protected Resources

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