



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE

December 02, 2014

Donna Anderson  
Wildlife Biologist  
Clear Lake Ecological Services Field Office  
17629 El Camino Real, Suite 211  
Houston, TX 77058-3501

Reference: NOAA Restoration Center Draft Damage Assessment and Restoration  
Plan/Environmental Assessment for the Tank Barge DBL 152 Oil Spill – ESA  
Section 7 Consultation

Dear Ms. Anderson,

The purpose of this letter is to ensure compliance with the consultation requirements of Section 7 of the Endangered Species Act (ESA, 16 U.S.C. 1531-1544). In fulfillment of those requirements, the National Oceanic and Atmospheric Administration (NOAA) Restoration Center (RC) is providing its assessment of potential impacts to listed threatened or endangered species and their habitats for the subject restoration plan and environmental assessment, and is requesting initiation of consultation.

Based on information and findings provided in the attached Draft Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA), the NOAA RC has determined that: (1) several federally listed threatened and endangered species managed by the US Fish & Wildlife Service (USFWS) may occur in the areas impacted by the DBL-152 oil spill or in areas where NOAA is considering implementation of the proposed restoration action; (2) some federally listed threatened and endangered species managed by the USFWS could benefit from the proposed restoration project; and (3) implementation of the preferred restoration action identified in the Draft DARP/EA will have no adverse impact on any species listed as threatened or endangered, or habitats critical to such species, under the ESA.

The proposed action consists of shoreline protection and salt marsh restoration on the northern shoreline of East Galveston Bay on the Texas Chenier Plain National Wildlife Refuge Complex (TCPNWRC) (the Project). Scouring by wind-driven waves at the TCPNWRC has resulted in erosive bluffs up to three feet in height and patchy remnants of intertidal wetlands. The USFWS, which manages the refuge, documents shoreline erosion rates within the refuge complex ranging from nine to over 50 feet per year, resulting in significant reductions in ecosystem services provided by the refuge as habitats are lost or converted. The Project will be designed to protect at least 4.23 miles of shoreline. The protective structure will consist of 8.97 acres of rip-rap habitat, and 11.55 acres of salt marsh habitat will be created behind the breakwater. The Project will also protect an anticipated 8.5 acres of existing salt marsh over its lifetime. A more detailed description of the Project is included in the attached DARP/EA.

The proposed breakwater will be constructed of crushed limestone or concrete rip-rap based on the stated preference of TCPNWRC staff for this technique. The design of the structures will incorporate gaps to allow for the ingress and egress of animals in the water column to the area between the breakwaters and the shoreline. The design will place the structures in depths no greater than -1 foot (NAVD 88), and will provide for relief from the bay bottom of at least 3 feet, allowing for a substantial structure that will be capable of withstanding storm events and continuing to provide shoreline protection over the 20-year breakwater design life given the



anticipated effects of sea level rise throughout the region. The shoreline protection efforts that have been implemented successfully at the site by Galveston Bay Foundation and TCPNWRC staff have typically employed less substantial, lower-relief structures (i.e., 18-24 inches in height). However, such structures are less likely to provide the level of protection required to compensate for the injury resulting from the DBL 152 oil spill.

*Spartina alterniflora* will be planted within the protected area landward of the breakwater. Plants will be nursery grown and will likely be multi-stemmed. Plant spacing will be determined during engineering and design of the project and may vary depending on the availability of various sizes of plants. Prior phases of project implementation have demonstrated that passive deposition of sediment that falls out of suspension in the water column on the landward side of the breakwater will serve over time to build up a shallow sloping shoreline in the project area. This will reduce erosion by dissipating wave energy, allowing waves to run up the shallow slope rather than falling directly on an exposed cut bank. Vegetation plantings will serve to accelerate this passive accretion by trapping and stabilizing sediments. The goal of the proposed restoration action is to protect and restore a sustainable coastal herbaceous wetland that compensates the public for lost services and resources due to the DBL 152 oil spill.

The areas targeted for marsh restoration under the proposed action have been subject to significant loss of intertidal marsh and coastal prairie habitats as a result of severe subsidence and erosion, which resulted in the conversion of those historic habitats to shallow open water. The proposed action would result in a benefit to federally listed threatened and endangered species and to the ecological function of Galveston Bay as a whole, which suffered the loss of over 30,000 acres of intertidal marsh over the last 60 years.

Finally, the proposed work would fulfill objectives of a number of regional and local publicly vetted habitat conservation and restoration-related priority-setting planning documents, including the Gulf of Mexico Alliance's "Governors' Action Plan for Healthy & Resilient Coasts", the Southeast Aquatic Resources Partnership's "Southeast Aquatic Habitat Plan, Galveston Bay Estuary Program's "Galveston Bay Plan" (the Comprehensive Coastal Management Plan for Galveston Bay, an estuary of national significance), and the Galveston Bay Foundation's "Habitat Conservation Blueprint."

Federally listed threatened and endangered species managed by the USFWS occurring in Chambers County and occasionally at or near the proposed restoration project site include the hawksbill, green, Kemp's ridley, leatherback, and loggerhead sea turtles (*Eretmochelys imbricata*, *Chelonia mydas*, *Lepidochelys kempii*, *Dermochelys coriacea*, and *Caretta caretta*, respectively), West Indian manatee (*Trichechus manatus*) and the piping plover (*Charadrius melodus*). It should be noted that the loggerhead sea turtle (*Caretta caretta*) was inadvertently omitted from Table 4 on page 37 of the attached Draft DARP-EA, and this omission will be corrected before finalizing the document. The project will improve the overall biological function of the site, and based on the information provided above regarding the project location, prior work completed in the vicinity, and the nature of the proposed work, the NOAA RC has determined that the proposed project will have no adverse effect on any federally listed threatened or endangered species or their habitats.

These determinations consider the infrequent occurrence of listed species at the proposed project site, the substantial net increase in ecosystem function and overall quality of habitat that will result from project implementation and will benefit listed species, the minor and temporary nature of any adverse effects that might occur during project construction, the minimization to the extent practicable of any potential adverse effects through design and proposed construction methods

(including the use of NMFS' "Sea Turtle and Smalltooth Sawfish Construction Conditions" and any other applicable best management practices), and the alleviation of any potential adverse effects by project benefits. Detailed engineering and design specifications will be prepared and submitted to the US Army Corps of Engineers for permitting implementation of the proposed action in waters of the United States, following the finalization of the attached DARP/EA and settlement of NOAA's claim to the U. S. Coast Guard's National Pollution Funds Center for the costs of conducting the natural resource damage assessment and the costs of implementing the selected restoration alternative.

Based on the information provided above and in the attached DARP/EA, the NOAA Restoration Center requests your concurrence with the determination of this Draft DARP/EA that the potential impacts of the proposed project on federally listed threatened and endangered species are adequately described in the document and that the preferred restoration action will have no adverse effect on federally listed threatened or endangered species or their habitats. If your office disagrees with this determination and recommends additional conservation measures, please inform me of this decision within 10 days of your receipt of this letter. Please do not hesitate to contact me if additional information or assistance is needed for your review.

Sincerely,



Kristopher Benson  
Marine Habitat Resource Specialist  
NOAA Restoration Center  
4700 Avenue U, Bldg. 307  
Galveston, TX 77551  
Phone: 409-766-3699  
Fax: 409-766-3575  
E-mail: kristopher.benson@noaa.gov