



TERREBONNE BASIN BARRIER ISLAND & BEACH NOURISHMENT (TE-0143)

Background: This project, which is being funded through the National Fish and Wildlife Foundation (NFWF), includes the engineering, design, and construction of beach, dune, and marsh habitat within the Terrebonne Basin barrier shoreline system with restoration work on West Belle Headland, Timbalier Island, and Trinity-East Island. The project will create and/or nourish approximately 1,100 acres of marsh, dune and beach using approximately 9.2 million cubic yards of sediment. Sand will be dredged from an area commonly known as Ship Shoal through a lease agreement with the Bureau of Ocean Energy Management (BOEM).

The restoration areas are located in Lafourche and Terrebonne Parishes, Louisiana, and are part of the Terrebonne Basin. The Terrebonne Basin consists of four (4) contiguous water bodies, from west to east: Caillou Bay, Lake Pelto, Terrebonne Bay, and Timbalier Bay, which are separated from the open Gulf of Mexico by a series of barrier islands. Trinity-East and Timbalier Islands are located in the western central area of the Terrebonne Basin. West Belle Headland is located on the far eastern side of the Terrebonne Basin.

Purpose: The purpose of the Project is to reinforce the barrier shoreline and prevent breaching by restoring geomorphic and ecological form and function.

Restoration of the Terrebonne Basin barrier shoreline will provide a buffer to reduce the full force and effects of wave action, saltwater intrusion, storm surge and tidal currents on associated estuaries and wetlands. The project will also provide a marsh platform to capture overwash sediments during episodic events and serve as a roll-over platform as the islands migrate. Restoration of the barrier shoreline will provide protection and sustain significant and unique foraging and nesting areas for threatened, endangered and protected migratory species as well as protect critical infrastructure including Port Fourchon and Highway 1.

Cost:

- Total Project Cost (including E&D, construction, and 5 years of monitoring): \$167 M

Goals:

- **WEST BELLE HEADLAND.** The design for the West Belle Headland includes extending and renourishing the West Belle Pass Barrier Headland Restoration (TE-0052) project. A sand spit extending from the original TE-0052 fill limits will be used as a platform to construct the recommended design which will follow the natural shoreline geometry for alignment.

- The restoration template includes construction of beach, dune, and marsh components. These features on the West Belle Headland will result in the creation and restoration of approximately 500 acres.
- TIMBALIER ISLAND. The Timbalier Island restoration template extends along the eastern portion of the island and includes the construction of beach and marsh components for a total of approximately 400 acres.
- TRINITY-EAST ISLAND. The Trinity-East Island restoration template includes a 1,000-ft wide beach on the west end of the island which will be fronted by existing dune habitat. Breach prone areas in the central portion of the island where historic canals were dug will also be filled. This portion of the project will restore approximately 200 acres of beach habitat.

Project Schedule:

- Construction Contract Awarded to Weeks Marine, Inc.: August 14, 2019
- NTP for Construction: October 3, 2019
- Mobilization began mid-February 2020.
- Dredge and fill activities at W. Belle Headland scheduled to begin: mid-May 2020
- Dredge and fill activities at Trinity-East Island scheduled to begin: mid-June 2020
- Dredge and fill activities at Timbalier Island scheduled to begin: Spring 2021
- Duration of dredging: 2 years

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