Louisiana Coastal Wetlands Conservation and Restoration Task Force

June 2006 (rev.)



Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass (BA-38)

Project Status

Approved Date:2002Project Area:1,117 acresNet Benefit After 20 Years:534 acresProject Type:Barrier Island Restoration

Location

The project is located along two sections of the Plaquemines/Barataria Shoreline. The Chaland Headland segment is about 3.1 miles long, and is located between Pass La Mer and Chaland Pass. Pelican Island is located immediately east of the Empire Waterway; restoration of this segment will maintain the integrity of about 2.4 miles of shoreline. Both segments are in south Plaquemines Parish, Louisiana.

Cost: \$67.3 million

Status: Construction

Problems

Wetlands, dune, and swale habitats within the project area have undergone substantial loss due to subsidence, sea-level rise, oil and gas activities (e.g., pipeline construction), and marine and wind induced shoreline erosion (i.e., gulfside and bayside). Marine processes acting on the abandoned deltaic headlands rework and redistribute previously deposited sediment. The shoreline has breached in several locations, resulting in the formation of new tidal inlets.



This barrier shoreline has suffered significant erosion due to subsidence, oil and gas activities, and shoreline erosion. Construction has begun on this 1,100 acre island restoration project that will reestablish a beach and dune shoreline as well as the marshes that once thrived in this area.

Restoration Strategy

The project's primary goals are 1) to prevent breaching of the barrier shoreline by increasing its width and average height and 2) to protect and create dune, swale, and intertidal marsh habitats.

Restoration of Chaland Headland will result in the restoration and creation of about 180 acres of dune, beach and berm, and the restoration and creation of about 246 acres of intertidal saline marsh. About 2.5 million cubic yards of sand and silt will be mined from an offshore borrow area in the Gulf of Mexico to construct the dune and marsh features. Additional features include installation of sand fencing concurrent with dune construction, dune and marsh vegetative plantings, and post construction gapping of retention dikes and creation of tidal features.

The Pelican Island project will restore about 134 acres of dune, beach and berm as well as approximately 264 acres of intertidal saline marsh. Two offshore borrow areas will be used to mine about 2.4 million cubic yards of sand and silt. Other project features include installation of sand fencing concurrent with dune construction, both dune and marsh vegetative plantings, and postconstruction gapping of retention dikes.

Progress to Date

This project was selected for Phase I (engineering and design) funding at the January 2002 Breaux Act Task Force meeting and for Phase II (construction) funding in January 2004. The Chaland Headland project is currently in construction, which is anticipated to be complete in fall 2006. Pelican Island construction is pending resolution of various land rights issues.

This project is on Priority Project List 11.

For more project information, please contact:



Federal Sponsor: National Marine Fisheries Service Baton Rouge, LA (225) 389-0508



Local Sponsor: Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308

