



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

Project Status

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

Cost: \$67.3 million
Status: Construction

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.

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 post-construction 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



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

Pelican Island Segment

- Sand Fence
- Discharge
- Beach
- Marsh Creation
- Project Boundary

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
1998 Digital Orthophoto Quarter Quadrangle

Map Date: September 20, 2005
Map ID: USGS-NWRC 2005-11-0336
Data accurate as of: September 20, 2005



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

Pass La Mer to Chaland Pass Segment

- Sand Fence
- Access Canal
- Discharge
- Beach
- Marsh Creation
- Project Boundary

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Background Imagery:
1998 Digital Orthophoto Quarter Quadrangle

Map Date: September 20, 2005
Map ID: USGS-NWRC 2005-11-0337
Data accurate as of: September 20, 2005