South Shore of the Pen Shoreline Protection and Marsh Creation (BA-41)

Project Status
Approved Date: 2005    Project Area: 141 acres
Approved Funds: $19.8 M    Total Est. Cost: $21.6 M
Net Benefit After 20 Years: 106 acres
Status: Completed
Project Type: Shoreline Protection and Marsh Creation
PPL #: 14

Location
The project area is located in Jefferson Parish, Louisiana, in the vicinity of Bayou Dupont and the Barataria Bay Waterway.

Problems
The triangular landmass bounded by the southern shoreline of The Pen (an abandoned land reclamation effort), the Barataria Bay Waterway (Dupre Cut), and the Creole Gas Pipeline Canal is deteriorating because of shoreline erosion (ranging from 5 to 30 feet per year) and interior marsh loss. Loss of this protective landmass would provide a more direct connection between the marine/tidal processes of the lower and the freshwater-dominated upper Barataria Basin.

Restoration Strategy
The goals of this project are to stop shoreline erosion and to create and nourish marsh located between The Pen and Barataria Bay Waterway.

For shoreline protection, approximately 11,750 feet of foreshore rock dike will be constructed along the south shore of The Pen and Bayou Dupont. Two existing bayous will remain open, and a site-specific opening to The Pen will be incorporated at the eastern marsh creation site. Dedicated dredging will be used to create approximately 175 acres of marsh and nourish an additional 132 acres of marsh within the triangular area bounded by the south shore of The Pen, the Barataria Bay Waterway (Dupre Cut), and the Creole Gas Pipeline Canal. Containment dikes constructed for marsh creation and nourishment will be degraded upon completion of construction.

It is estimated that the project will prevent the loss of 56 acres of marsh caused by shoreline erosion, as well as create 175 acres of marsh, and nourish 132 acres of intermediate marsh. Over the 20-year project life, it is estimated that the project will produce 211 net acres.

Progress to Date
The foreshore rock dike and southern portion of the marsh creation area has been completed. The northern portion of the marsh creation area is being pursued by the Corps of Engineers as part of its Barataria Landbridge Storm Risk Reduction Project.

This project is on Priority Project List (PPL) 14.