Mississippi River Sediment Delivery System - Bayou Dupont (BA-39)

Project Status

Approved Date: 2003  
Project Area: 471 acres

Approved Funds: $27.2 M  
Total Est. Cost: $27.7 M

Net Benefit After 20 Years: 326 acres

Status: Completed

Project Type: Marsh Creation

PPL #: 12

Location

The project is located adjacent to Bayou Dupont and southeast of Cheniere Traverse Bayou in the vicinity of Ironton in Plaquemines Parish and Lafitte in Jefferson Parish, Louisiana. The general area lies west of LA Hwy 23 and just north of the Myrtle Grove Marina within the Barataria Basin.

Problems

 Marshes in the project area have degraded to open water with only scattered clumps of low-lying vegetation remaining. Marsh degradation has resulted from a combination of lack of natural fresh water and sediment input, subsidence and the dredging of oil and gas canals.

Restoration Strategy

The proposed project included dredging sediment from the Mississippi River for marsh creation and pumping it via pipeline into an area of open water and broken marsh west of the Plaquemines Parish flood protection levee. The material was spread over the project area and contained primarily with existing land features. Newly-constructed low containment dikes were necessary only along a limited portion of the project area. Native intertidal marsh vegetation was planted post construction.

The proximity of the project to the Mississippi River presented a prime opportunity to employ a pipeline delivery system that utilized the sediment resources from the river to restore and create wetlands. Unlike most marsh creation projects that involve borrowing fill material from adjacent shallow water areas within the landscape, this project utilized renewable river sediment, thus minimizing disruption of the adjacent water and marsh platform.

The Bayou Dupont project represents the first example of pipeline transport of sediment from the river to build marsh as a CWPPRA project. Results from this project helped demonstrate the value and efficacy of greater use of pipeline-conveyed river sediments for coastal restoration.

For more information, please contact:

Federal Sponsor:  
U.S. Environmental Protection Agency  
Dallas, TX  
(214) 665-6722

Local Sponsor:  
Coastal Protection and Restoration Authority  
Baton Rouge, LA  
(225) 342-4736

www.LaCoast.gov