Bayou Dupont Sediment Delivery - Marsh Creation and Terracing #3 (BA-164)

Project Status
Approved Date: 2013  Project Area: 323 acres
Approved Funds: $17.7 M  Total Est. Cost: $18.1 M
Net Benefit After 20 Years: 118 acres
Status: Construction
Project Type: Marsh Creation
PPL #: 22

Location
CWPPRA Region 2, Barataria Basin, Jefferson and Plaquemines Parishes. The general project area is about 10 miles south of Belle Chasse, LA and is west of LA Hwy 23 and north of the Myrtle Grove Marina. The project is immediately adjacent to the completed CWPPRA Mississippi River Sediment Delivery System – Bayou Dupont (BA-39) project.

Problems
Wetlands in the Barataria Basin were historically nourished by the fresh water, sediment and nutrients delivered by the Mississippi River and its many distributary channels. These sediment and nutrient inputs ceased following the creation of levees along the lower river for flood control and navigation. In addition, the construction of numerous oil and gas canals along with subsurface oil and gas withdrawal has exacerbated wetland loss in the area. From 1932 to 1990, the Barataria Basin lost over 245,000 acres of marsh. From 1978 to 1990, the area experienced the highest rate of wetland loss in coastal Louisiana.

Restoration Strategy
The primary goal of this project is to create and nourish approximately 144 acres of emergent intermediate marsh using sediment from the Mississippi River, and constructing 9,679 linear feet of terraces. The proposed project includes dredging sediment from the Mississippi River for marsh creation by pumping the sediment via pipeline into an area of open water and broken marsh. The proximity of the project to the Mississippi River provides a prime opportunity to utilize this renewable river sediment resource. The strategy includes utilizing the access route and infrastructure previously put into place for the BA-39 project. This project will complement existing restoration projects in the area.

Progress to Date
The project was approved for engineering and design at the January 24, 2013 Task Force meeting. The E&D was completed in the fall of 2014 and sponsors requested phase 2 funding at the January 22, 2015 Task Force meeting, however, there was insufficient money available to fund the entire project. In order to take advantage of the existing mobilization of the Long Distance Sediment Pipeline (LDSP) Project, the sponsors proposed to reduce the scope of the project to fit within the available CWPPRA funding. The Task Force approved the reduced scope Phase 2 funding request at the May 14, 2015, Task Force meeting. The as-built project features include 144 acres of marsh creation and 9,679 linear feet of terracing.

In addition, CPRA increased the marsh creation feature of the project by utilizing contingency funding left over from BA-43, thereby increasing the total marsh creation in the area to an estimated 296 acres. Construction started in April 2016, and marsh creation was completed in November 2016. Terracing was completed in June 2017, and vegetative plantings for the terraces are scheduled for the spring of 2018.

This project is on Priority Project List 22.

For more information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-2712

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4733

Aerial view of the project site with the terraces visible in the foreground and the created marsh in the background