October 2002
Cost figures as of: February 2023

Big Island Mining (AT-03)

Project Status

Approved Date: 1992 **Project Area:** 3,400 acres
Approved Funds: $6.89 M **Total Est. Cost:** $6.89 M
Net Benefit After 20 Years: 1,560 acres
Status: Completed October 1998
Project Type: Dredged Material/Marsh Creation and Hydrologic Restoration
PPL #: 2

Location

The project is located west of the lower Atchafalaya River navigation channel in the Atchafalaya River Delta, northwest of Big Island and approximately 19 miles southwest of Morgan City, Louisiana, in St. Mary Parish.

Problems

In the newly emergent Atchafalaya Delta, navigation channel development and maintenance created the large spoil island known as Big Island along the upper west bank of the Atchafalaya River Delta channel. Big Island's elevation of more than 20 feet above mean sea level is not conducive to the formation of marsh habitat and consequently has adversely affected delta growth.

Restoration Strategy

The project was an opportunity to increase marsh habitat in the northwestern portion of the Atchafalaya Delta. In 1998, over 3.4 million cubic yards of sediment north of Big Island were dredged to create several distributary channels that reestablished water and sediment flows into shallow water areas in the delta. The sediment was strategically placed to mimic natural delta lobe formation at an elevation suitable for marsh growth. Over 922 acres of new habitat were directly created by construction, and the reestablished water and sediment flows are expected to add an additional 2,000 acres over the life of the project.

A hydraulic dredge pumps sediment to create new wetland habitat in the project area south of Morgan City.

Progress to Date

Construction was completed in 1998. Monitoring indicates the channels are maintaining adequate depth and still delivering sediments into the delta. Visual inspection indicates that these sediments are settling in the constructed disposal areas. It also suggests that a forthcoming vegetative survey will show a significant increase in emergent marsh habitat. This project is on Priority Project List 2.

For more project information, please contact:

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

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

Big Island Mining (AT-03)

- Dredge Channel
- Containment Dike
- Marsh Creation Area
- Project Boundary

0.5 0 0.5 Miles

0.5 0 0.5 1 Kilometers

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: June 10, 2002
Map ID: 2002-11-440
Data accurate as of: June 10, 2002