March 2010 (rev)
Cost figures as of: February 2023

Dedicated Dredging on the Barataria Basin Landbridge (BA-36)

Project Status

Approved Date: 2002 **CWPPRA Cost:** $16.2 M
Project Area: 1,245 acres **CIAP and State Cost:** 19.9M

Net Benefit After 20 Years (CWPPRA): 605 acres
Net Benefit After 20 Years (CIAP and State): 422 acres
Project Type: Marsh Creation **Status:** Complete
PPL #: 11

Location

The project is located in the Barataria Basin within Jefferson Parish, 7 miles southwest of Lafitte. It is located at the southern end of Bayous Perot and Rigolettes on both sides of the Harvey Cut. The approved CWPPRA project footprint of 1,246 acres was expanded to a total of 2,789 acres as a result of additional project funds and excess material.

Problems

The upper portion of the Barataria Basin is largely a freshwater-dominated system of natural levee ridges, swamps, and fresh marsh. Marine and tidal processes (along with barrier islands, saline and brackish marshes, tidal channels, large bays, and lakes) dominate the lower portion of the basin. Historically, a small, meandering Bayou Perot and the longer and narrower Bayou Dupont, Bayou Barataria, and Bayou Villars channels provided limited hydrologic connection between the upper and lower basin. However, those hydrologic connections are much greater today because of the Barataria Bay Waterway, Bayou Segnette Waterway, and the Harvey Cut. In addition, substantial erosion and interior marsh loss between the enlarged Perot and Rigolettes bayous have also contributed to the problem.

The project area has been experiencing annual land loss rates of roughly 2.5% in recent years, mostly due to interior marsh deterioration and wind and wave induced erosion.

The previously approved Barataria Basin Landbridge Shoreline Protection Project (BBLSPP) will protect the project area from the high wave energy of the Perot and Rigolettes bayous, but the interior wetlands will continue to deteriorate from subsidence, sea-level rise, and excessive tidal exchange. The Davis Pond Freshwater Diversion Project will freshen this area, possibly converting it from brackish to intermediate marsh. However, Davis Pond will not add land-building sediments to this area, and marsh deterioration will continue even under the freshened conditions.

Restoration Strategy

This project has filled open water areas to create new marsh, and nourished existing marsh by using hydraulic dredged material. Containment dikes were constructed from in-situ material around the original CWPPRA project footprint. Placement outside of the CWPPRA footprint was done with limited confinement using existing spoilbanks and marsh. Containment dikes were used only in strategic locations such as small bayous and openings in the marsh. The source of material was two borrow sites in Bayou Rigolettes and one borrow site in Bayou Perot.

Progress to Date

Three sources of construction funding have been combined for this project. The State of Louisiana's Coastal Impact Assistance Program (CIAP) contributed $17.5 million, the CWPPRA program contributed $15.0 million, and $2.4 million of the State of Louisiana's Surplus Funds were utilized. The project was selected for Phase I (engineering and design) funding at the January 2002 Breaux Act Task Force meeting as part of Priority Project List 11. Design was completed in 2004. The CWPPRA Task Force approved construction funding in February 2007, and construction commenced in October 2008. The project was completed in late March 2010.

This project is on Priority Project List 11.

This photo illustrates the deteriorated condition of marshes in the project area.

For more project information, please contact:

Federal Sponsor:
U.S. Fish and Wildlife Service
Lafayette, LA
(337) 291-3100

Local Sponsor:
Coastal Protection and Restoration Authority
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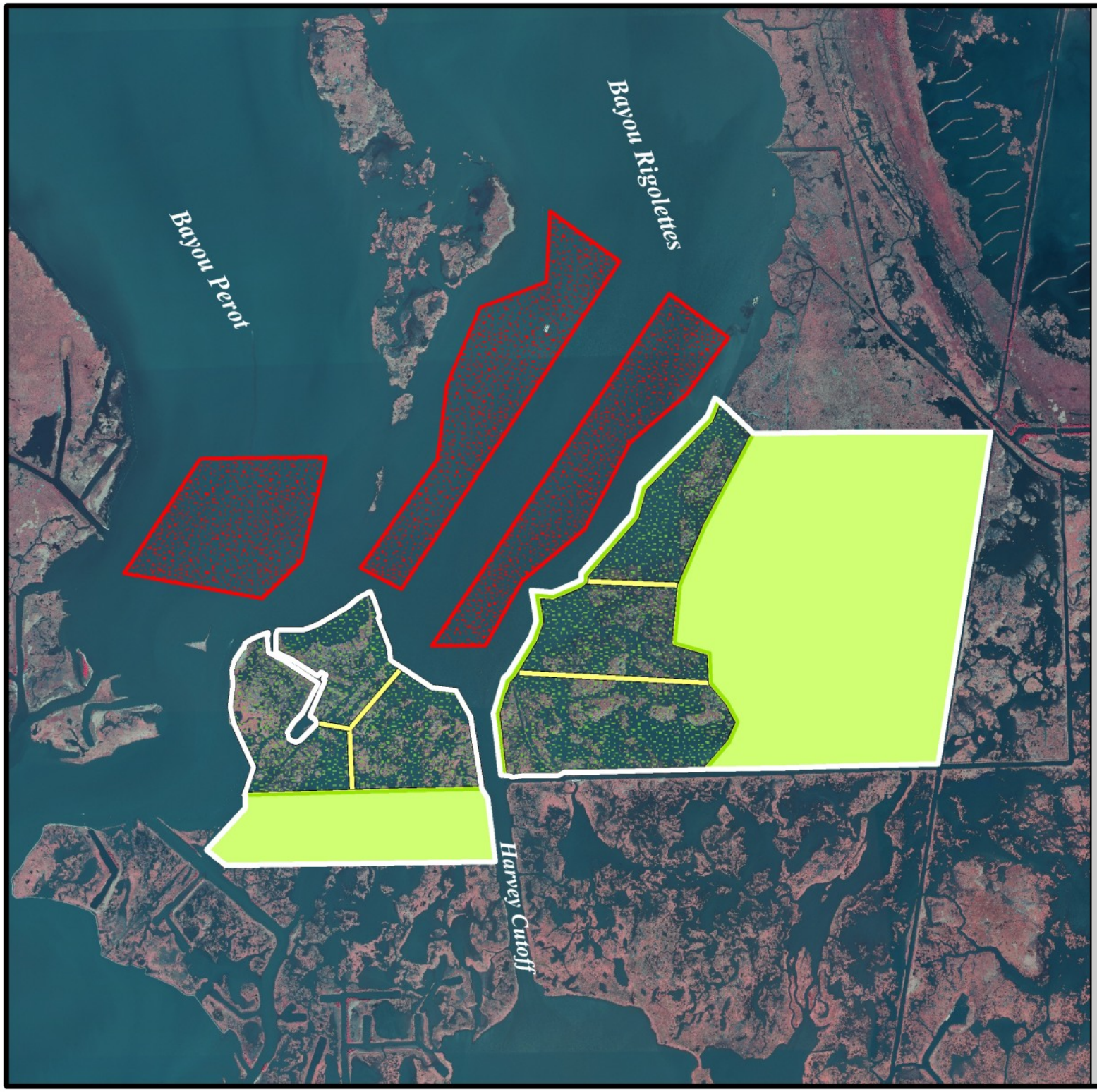

Dedicated Dredging on the Barataria Basin Landbridge (BA-36)

- Containment Dike *
- Marsh Creation *
- Marsh Nourishment *
- Borrow Site *
- Project Boundary

*denotes proposed features

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0.25 0 0.25 0.5 Kilometers

0.25 0 0.25 0.5 Miles

Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La.

Background Imagery:
2008 Digital Orthophoto Quarter Quadrangle

Map Date: March 15, 2010
Map ID: USGS-NWRC 2010-11-0024
Data accurate as of: March 15, 2010