August 2009
Cost figures as of: March 2013

Alligator Bend Marsh Restoration and Shoreline Protection (PO-34)

Project Status

Approved Date: 2006 **Project Area:** 291 acres
Approved Funds: $1.66 M **Total Est. Cost:** $57.6 M
Net Benefit After 20 Years: 192 acres
Status: lLanning and Design
Project Type: Marsh Restoration and Shoreline Protection
PPL #: 16

Location

This project is located in Region 1, Pontchartrain Basin, Orleans Parish, along the East Orleans Landbridge on the northwest shoreline of Lake Borgne. The project area is located between the Chef Pass, the Gulf Intracoastal Waterway (GIWW), Unknown Pass, and Lake Borgne.

Problems

The landfall of hurricane Katrina in southeast Louisiana destroyed thousands of acres of marsh and other coastal habitats in the Lake Pontchartrain basin. Along the shorelines of Lake Borgne the storm created breaches between the lake and interior marshes and in some cases removed large expanses of wetlands. Loss of wetlands in the Alligator Bend area has created more than 1,000 acres of open water in a complex that formerly supported relatively stable brackish marshes. Post-storm aerial photographs show the most significant losses occurred along the flanks of Bayou Platte. The current landscape configuration has left a large area of open water between eroding shorelines on Lake Borgne and along the GIWW. Continued shoreline erosion and future storms could create a direct path of open water connecting the GIWW and Lake Borgne and threaten the integrity of this important landbridge.

Restoration Strategy

The current objective of this project is to protect the shoreline integrity of Lake Borgne and prevent hydrologic coupling between the lake and the open water behind the shoreline. A foreshore rock dike will be constructed along approximately 26,702 linear feet of the shoreline. In the shoreline areas not protected by the rock dike, approximately 21,674 feet of vegetation will be planted. The rows will be staggered to facilitate the establishment of a “vegetative-wall” to insure a continuous line of protection against erosion. At least two rows of terraces will be constructed parallel to the shoreline and they will also be planted with vegetation. Terraces and shoreline plantings will work synergistically to reduce erosion.

Progress to Date

Project is currently in the Planning and Design Phase. A 30% review meeting is anticipated for June 2010. Project is scheduled to request Phase II funding at the January 2011 Task Force meeting. Construction is anticipated to begin October 2011 with a completion date of September 2012.

This project is on Priority Project List 16.

Protecting the Alligator Bend shoreline will limit incursions of open water into interior marshes.

For more project information, please contact:

Federal Sponsor:
Natural Resources Conservation Service
Alexandria, LA
(318) 473-7756

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

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Rock Dike *

Vegetative Plantings *

Terracing *

*denotes proposed features

USGS
science for a changing world

N

0.5 0 0.5 1 Kilometers

0.5 0 0.5 1 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

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