



Freshwater Bayou Marsh Creation (ME-31)

Project Status

Approved Date: 2010 **Project Area:** 428 acres
Approved Funds: \$2.42 M **Total Est. Cost:** \$25.5 M
Net Benefit After 20 Years: 283 acres
Status: Engineering and Design
Project Type: Marsh Creation
PPL #: 19

Location

Region 4, Mermentau Basin, Vermilion Parish, Louisiana, in an area west of Freshwater Bayou and north of the Freshwater Bayou Locks

Problems

Dredging of the Freshwater Bayou Canal contributed to 2,610 acres of marsh lost in the area between 1956 and 1974. Saltwater intrusion caused vegetation die off resulting in a net loss of organic soils. Further, these historically low energy freshwater marshes have shifted to tidally influenced, intermediate open water as a result of the construction of the navigation canal and the erosion of its spoil banks. Hurricane Rita (2005) was responsible for the loss of approximately 1,500 acres of marsh due to storm surge. The North American Wetlands Conservation Act (NAWCA) funded Freshwater Bayou Canal Shoreline Stabilization project and the Freshwater Bayou Wetlands Protection (ME-04) project have been implemented to restore the shoreline. Dedicated dredging is necessary to restore the marsh platform. USGS calculated a historical rate of change for the extended boundary for the period 1984 to 2019. The loss rate during that period was -0.53%/year.

Restoration Strategy

Project features include creating and/or nourishing approximately 428 acres of marsh (291 acres of marsh creation and 137 acres of nourishment) in two marsh creation areas using dedicated dredged material from the Gulf of Mexico. The dredged material would be fully contained, and containment dikes will be degraded as necessary to reestablish hydrologic connectivity with adjacent wetlands. In case the area does not re-vegetate on its own, the maintenance cost estimate will include funds to plant 25% of the created marsh at Year 3. The project will restore the marsh platform and work synergistically with the NAWCA funded Freshwater Bayou Shoreline Stabilization project and the Freshwater Bayou Wetlands Protection (ME-04) project.



Large open water areas that were historically intermediate marsh are the focus for restoration.

Progress to Date

This project is on Priority Project List 19. The project was approved for Engineering and Design in January of 2010. The 95% Design has been complete.

For more 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) 342-4733

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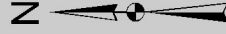
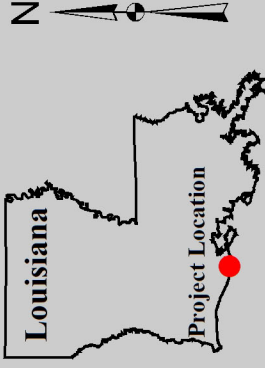


Marsh Creation *



Project Boundary

*denotes proposed features



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

Wetland and Aquatic Research Center

Coastal Restoration Assessment Branch

Baton Rouge, La.

Background Imagery:

2019 NAIP Photography

Map Date: August 18, 2020

Map ID: USGS-NWRC 2020-11-0036

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