rev. May 2010
Cost figures as of: January 2017

Bayou Lamoque Freshwater Diversion (BS-13)

Transferred

Project Status

Approved Date: 2006 **Project Area:** 9,435 acres
Approved Funds: $0.00 M **Total Est. Cost:** $0.00 M
Net Benefit After 20 Years: 620 acres
Status: Transferred
Project Type: Freshwater Diversion
PPL #: 15

Location

The project area is located in the Breton Sound Basin along the east bank of the Mississippi River across from Sixtymile Point approximately 3.4 miles north of Empire in Plaquemines Parish, Louisiana.

Problems

This system experiences land loss associated with subsidence, shoreline erosion from wave action, oil and gas activities, and disconnection from the river. Two large freshwater diversion structures are located here. One was built in 1955 and is capable of diverting 4,000 cubic feet per second (cfs) of river water. The other was built in 1978 and is capable of diverting 8,000 cfs. These structures were operated periodically by the Louisiana Department of Wildlife and Fisheries until 1994. Neither structure is officially used any longer because of repair and operation issues and the lack of an interagency management plan. The structures are being operated unofficially to some extent, but it is not known in what capacity or for how long. Wetland loss rates are low, probably because of beneficial effects of the occasional opening of the Bayou Lamoque structures, influence from the mouth of the Mississippi River, and possibly, the stabilizing effect of being on the flanks of the Mississippi River natural levee.

Freshwater diversion structures on Bayou Lamoque, which are in need of repair, will allow water from the Mississippi River to flow through the area's wetlands again when its gates and their mechanical operating systems are removed.

Restoration Strategy

This project is designed to achieve several goals within 20 years by continuously diverting up to 13,000 cfs (average 2,500 cfs) of water from the Mississippi River water into Bayou Lamoque. By strategically gapping spoil banks along Bayou Lamoque, the distribution of diverted water in the benefitted area will be highly improved. Project goals include creating approximately 620 acres of new marsh, increasing the percent cover of aquatic vegetation in interior marsh ponds and channels, increasing the area of shallow open-water habitat, and decreasing the average salinity level in the project area.

To achieve the project's goals, design plans call for making the Bayou Lamoque freshwater diversion structures more efficient by removing the gates and their mechanical operating systems to allow free-flowing diversion at the maximum capacity of both structures. Plans also call for constructing gaps in the natural levee ridges or spoil banks on Bayou Lamoque at strategic locations to facilitate distribution of diverted water and to promote the accretion of new wetlands through the deposition of diverted river sediments. This project will benefit intermediate marsh, brackish marsh, and open-water habitats.

Progress to Date

The Louisiana Coastal Wetlands Conservation and Restoration Task Force approved funding for engineering and design at their February 2006 meeting. This project has been transferred.

This project is on Priority Project List 15.

For more project information, please contact:

Federal Sponsors:
U.S. Army Corps of Engineers
New Orleans, LA
(504) 862-1597

U.S. Environmental Protection Agency
Dallas, TX
(214) 665-7255

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

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Gate Removal

Spoil Bank Gapping

Project Boundary

*denotes proposed features

USGS science for a changing world

0.7 0 0.7 1.4 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

Background Imagery:
2004 Digital Orthophoto Quarter Quadrangle

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