rev. November 2012
Cost figures as of: March 2013

West Pointe a la Hache Outfall Management (BA-04c)

Project Status

Approved Date: 1994 **Project Area:** 15,755 acres
Approved Funds: $4.26 M **Total Est. Cost:** $5.37 M
Net Benefit After 20 Years: 646 acres
Status: Engineering and Design
Project Type: Outfall Management (Siphon Improvements)
PPL #: 3

Location

This project is located along the west bank of the Mississippi River within the Barataria Basin in Plaquemines Parish, Louisiana.

Problems

Construction of the Mississippi River levee system halted the river's seasonal over-bank flooding, effectively terminating the principal mechanism that naturally counteracted subsidence within the Barataria Basin. The marshes within the project area were no longer nourished with sediment, nutrients, and fresh water. In addition, the dredging of major navigation canals has provided avenues for salt water from the Gulf of Mexico to intrude into the area.

Restoration Strategy

In 1991 the West Pointe a la Hache siphon (state project BA-04) was constructed to draw water from the Mississippi River into nearby marshes. The siphon has a maximum capacity of approximately 2,700 cubic feet per second through eight 72-inch diameter tubes. The objective of the siphon is to restore the marshes to a fresher state by reintroducing fresh water, sediment, and nutrients to the area.

The objective of the project is to reduce wetland loss by increasing the duration and dependability of operation of all siphon pipes each year, thereby increasing the net annual delivery of freshwater and sediment to the project area.

Proposed siphon improvements include: on-site and remote instrumentation to provide continuous monitoring and measurement of actual flow rates; remote instrumentation to provide instant notification when any pipes lose their prime, and thereby initiate immediate response to re-establish the vacuum; on-site vacuum pump, control equipment, and instrumentation to immediately re-establish flow when any pipes lose their prime; and an air release system to allow escape of accumulated gases to maintain the siphon vacuum.

West Pointe a la Hache siphon's levee crossing and intake on the west bank of the Mississippi River.

Progress to Date

During the original engineering and design phase of this project, hydrodynamic modeling showed that the siphon flow plays a major role in ameliorating project area salinities. As a result, a scope change was approved by the CWPPRA Task Force in 2008. The project is currently in the engineering and design phase. The 30% design meeting was conducted on October 3, 2012.

This project is on Priority Project List 3.

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
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West Pointe a la Hache Outfall Management (BA-04c)

Siphon

Project Boundary

USGS
science for a changing world

N

0.75 0 0.75 1.5 Kilometers

0.75 0 0.75 1.5 Miles

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

Background Imagery:
2008 Digital Orthophoto Quarter Quadrangle

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