February 2010
Cost figures as of: March 2013

Bertrandville Siphon (BS-18)

Project Status

Approved Date: 2009 **Project Area:** 14,574 acres
Approved Funds: $2.12 M **Total Est. Cost:** $22.5 M
Net Benefit After 20 Years: 1,613 acres
Status: Engineering and Design
Project Type: Freshwater Diversion
PPL #: 18

Location

The project is located in Region 2, Breton Sound Basin, Plaquemines Parish, on the east bank of the Mississippi River, near the Woodlawn School about ½ mile south of the community of Bertrandville, Louisiana. The project area is an abandoned Mississippi River interdistributary basin, between the Mississippi River levee and River Aux Chenes.

Problems

The wetlands of this abandoned interdistributary basin were cut off from periodic overbank flooding of the Mississippi River when the river was leveed. This eliminated the input of sediments and nutrients which sustained these marshes. This elimination of hydrologic connectivity also has resulted in increased saltwater intrusion, which has caused the severe degradation of cypress-tupelo swamp forest and potentially a shift towards more saline marsh types. Finally, a number of spoil banks have altered flow patterns in this basin. Aerial photography clearly demonstrates the significant loss of marsh in this area.

Aerial view of the proposed siphon benefit area.

Restoration Strategy

This project will re-introduce Mississippi River water into existing shallow open water and intermediate marsh, restoring natural accretion processes and offsetting subsidence. This will result in the elimination of landloss and the creation of new wetland acreage. A siphon with a maximum capacity of 2,000 cubic feet per second and with appropriate outfall management features will be used to re-introduce water from the Mississippi River. In addition to the direct emergent wetland acreage benefits, the project will also:

- convert much of the existing intermediate marsh to fresh marsh
- increase submerged aquatic vegetation in interior marsh ponds and channels
- increase shallow water habitat
- improve habitat interspersion in the area by creating new marsh in open water areas, and by eliminating future wetland conversion to open water, as a result of diverting Mississippi River water, sediment, and nutrients.

Progress to Date

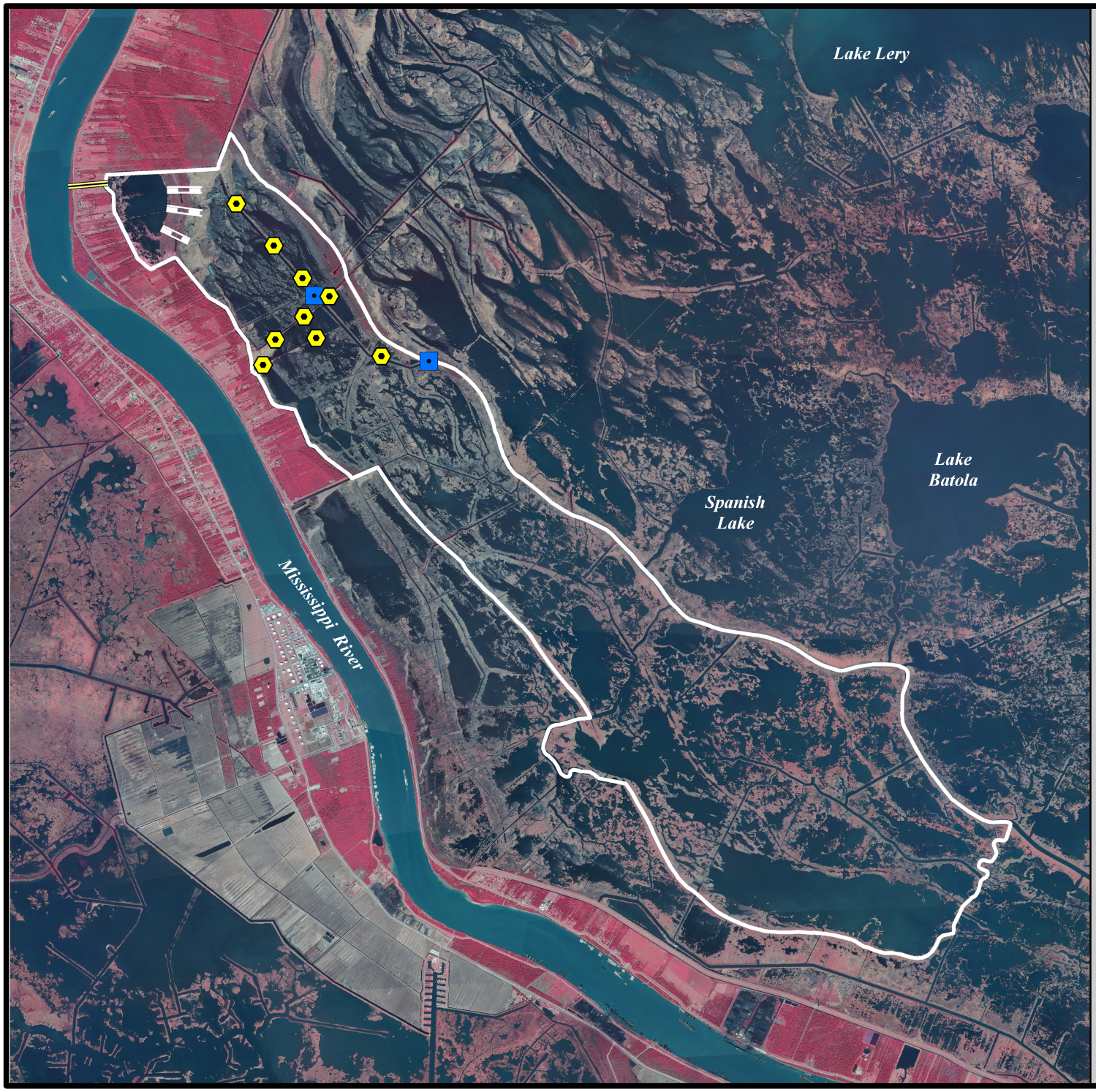
The project is in the process of moving into Phase I Engineering and Design.

This project is on Priority Project List 18.

For more project information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-7459

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



Bertrandville Siphon (BS-18)

- Plug *
- Spoil Gap *
- Siphon *
- Dredge Channel *
- Project Boundary

*denotes proposed features

USGS
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N

0.7 0 0.7 1.4 Kilometers

0.7 0 0.7 1.4 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: August 26, 2009
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