June2004
Cost figures as of: March 2013

Mississippi River Reintroduction Into Northwestern Barataria Basin (BA-34)

Project Status

Approved Date: 2001 **Project Area:** 5,134 acres
Approved Funds: $2.36 M **Total Est. Cost:** $14.7 M
Net Benefit After 20 Years: 941 acres
Status: Engineering and Design
Project Type: Freshwater Diversion
PPL #: 10

Location

The project is located northwest of Lac des Allemands with the prospective siphon location identified at Pikes Peak or Dredge Boat Canal in St. James Parish, Louisiana.

Problems

The Lac des Allemands River Basin Initiative identified the following specific problems within the Lac des Allemands Watershed: drainage impairments; water quality impairments; loss of marsh; and decline of cypress forest. Many years of study by Louisiana State University researchers in these swamps have demonstrated that, because of impoundment, subsidence, and inadequate accretion of sediments and organic matter, some areas are already highly stressed and converting to open water, floating aquatic plants, and fresh marsh. Also, the Coast 2050 report suggests that other areas of the swamps throughout the basin will likely convert to open water or floating marsh by the year 2050. These problems are caused by the loss of river water along with the associated sediment and nutrients necessary for swamp health. The loss of river water can be attributed to the leveeing of the Mississippi River. Impoundment caused by roads, drainage canals, and spoil banks is also a major cause of degradation of these swamps.

An impounded cypress and tupelo swamp in the upper Barataria Basin in summer during extreme drought is shown here. The open, park-like nature of the landscape is due to the long-term effects of impoundment along with the recent drought. The impoundment has had a negative effect on the growth of young trees and the drought has led to the luxuriant growth of herbaceous plants in what is normally a deepwater impounded swamp.

Restoration Strategy

The proposed restoration strategy includes installing two small siphons (averaging 400 cubic feet per second) to divert water from the Mississippi River; gapping spoil banks on Bayou Chevreuil; gapping spoil banks along the borrow canal beside Louisiana Highway 20; installing culverts under Louisiana Highway 20; improving drainage in impounded swamps; and planting cypress and tupelo seedlings in highly degraded swamp areas. This diversion from the Mississippi River will bring fresh water, fine-grained sediments, and nutrients into the upper des Allemands swamps. It will help maintain swamp elevation, improve swamp water quality, and increase productivity and regrowth of young trees as older trees die. The spoil bank gaps, culverts, and other hydrologic improvements for the impounded swamps will help ensure the proper distribution of river water, sediments, and nutrients into the swamps, and reverse the impoundment effects that are such serious impediments to swamp health. Planting cypress and tupelo seedlings will help reestablish the swamp forest in highly stressed areas. Over time, project benefits should include reduced swamp submergence, increased swamp productivity, and improved water quality. This strategy will, in turn, provide wildlife, fishery, and storm buffering benefits.

Progress to Date

The Louisiana Coastal Wetlands Conservation and Restoration Task Force approved Phase 1 funding at their January 10, 2001 meeting.

A cooperative agreement between the U.S. Environmental Protection Agency and Louisiana Department of Natural Resources has been negotiated. Engineering and design tasks have begun.

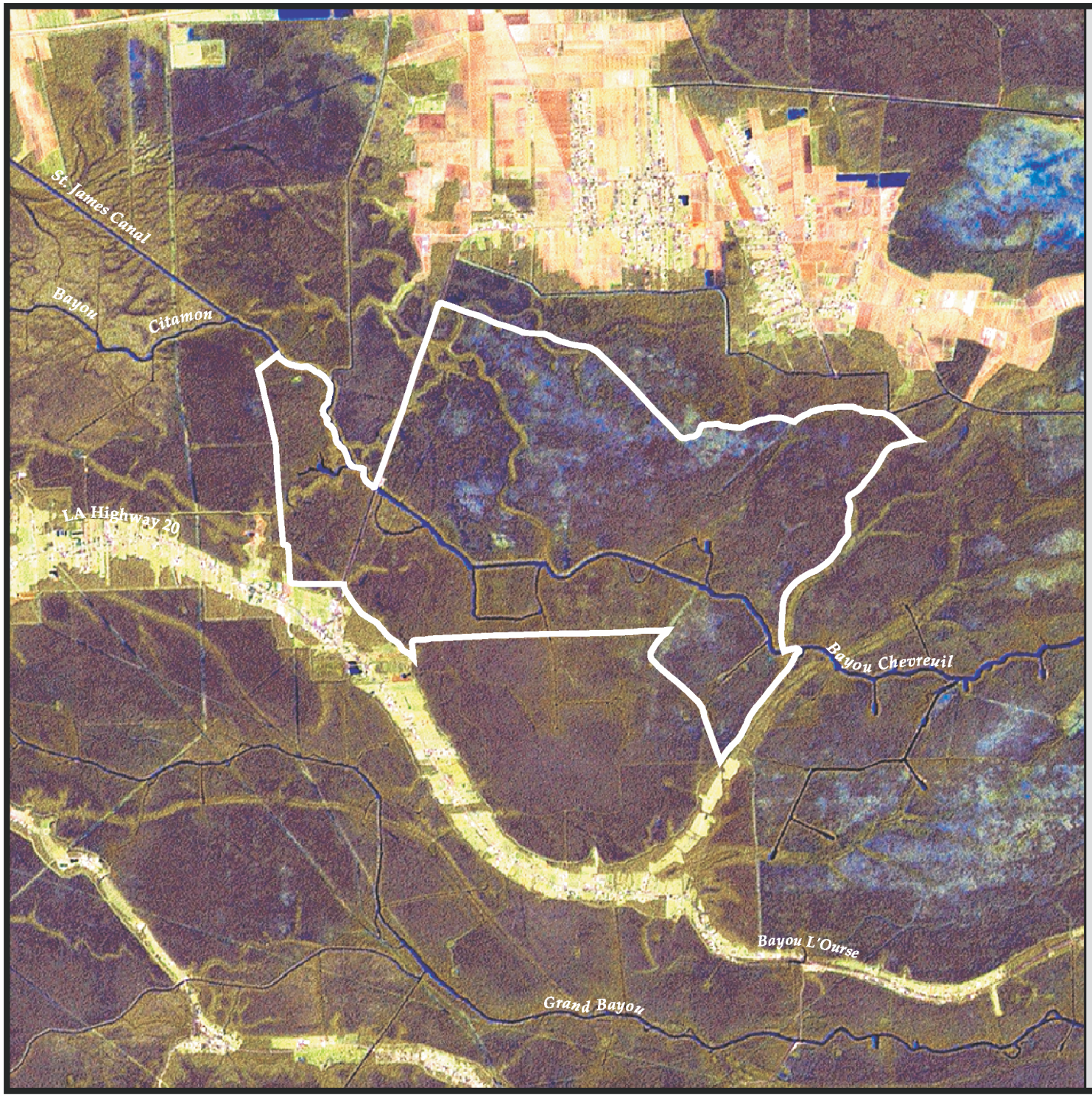
This project is on Priority Project List 10.

* The project will enhance an area of swamp (5,134 acres) that would be substantially degraded without the project.

For more project information, please contact:

Federal Sponsor:
U.S. Environmental Protection Agency
Dallas, TX
(214) 665-6722

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



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Project Boundary

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1 0 1 Miles

1 0 1 Kilometers

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
LDEQ Landsat Enhanced Thematic Mapper
Pan Sharpened Mosaic Image

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