rev. May 2012

Cost figures as of: February 2017

South Lake Lery Shoreline and Marsh Restoration (BS-16)

Project Status

Approved Date: 2007 **Project Area:** 551 acres
Approved Funds: $32.2 M **Total Est. Cost:** $32.6 M
Net Benefit After 20 Years: 409 acres
Status: Construction
Project Type: Marsh Creation and Shoreline Restoration
PPL #: 17

Location

The project area is located in Region 2, within the Breton Sound Basin portion of Plaquemines Parish. The project is specifically located south of the Caernarvon Freshwater Diversion Structure and west of the town of Delacroix, southeast of New Orleans.

Problems

According to USGS-land loss analysis, much of the southern and western shorelines of Lake Lery and the surrounding wetlands were heavily damaged in 2005 by Hurricane Katrina. In the years following this storm, wind induced waves within the lake have begun to cause further damage to the lake's shorelines. Currently the shorelines have become so damaged that the interior emergent marshes that are still intact are being exposed to the damaging waves. This has caused an increased loss of emergent marsh habitat. Even with the benefits of the Caernarvon Diversion Structure, without some type of restoration in this area, these marshes may not be able to fully recover.

Restoration Strategy

This is a marsh creation and shoreline restoration project. The marsh creation aspect of the project would utilize a hydraulic dredge to extract material from Lake Lery water bottoms and pump that material into contained marsh creation cells which are located south of Lake Lery. This will initially create and/or nourish approximately 496 acres of marsh (356 Net Acres at Target Year 20). The shoreline restoration project component would have a barge-mounted dragline excavating material from the bottom of Lake Lery and placing that material along 35,831 ft. of the southern and western Lake Lery shorelines. This restored shoreline would have a 50 foot crown width and be built to a height considered high intertidal marsh.

Aerial photo taken looking south at the southern shoreline of Lake Lery with Grand Lake in the background

The lake side shoreline would have a 5:1 side slope which would be planted with smooth cordgrass and bullwhip. This would initially create 55 acres of marsh (50 Net Acres at Target Year 20) along the Lake Lery shoreline. Total created/restored marsh acreage for this project is 551 acres (406 Total Net Acres at Target Year 20).

Progress to Date

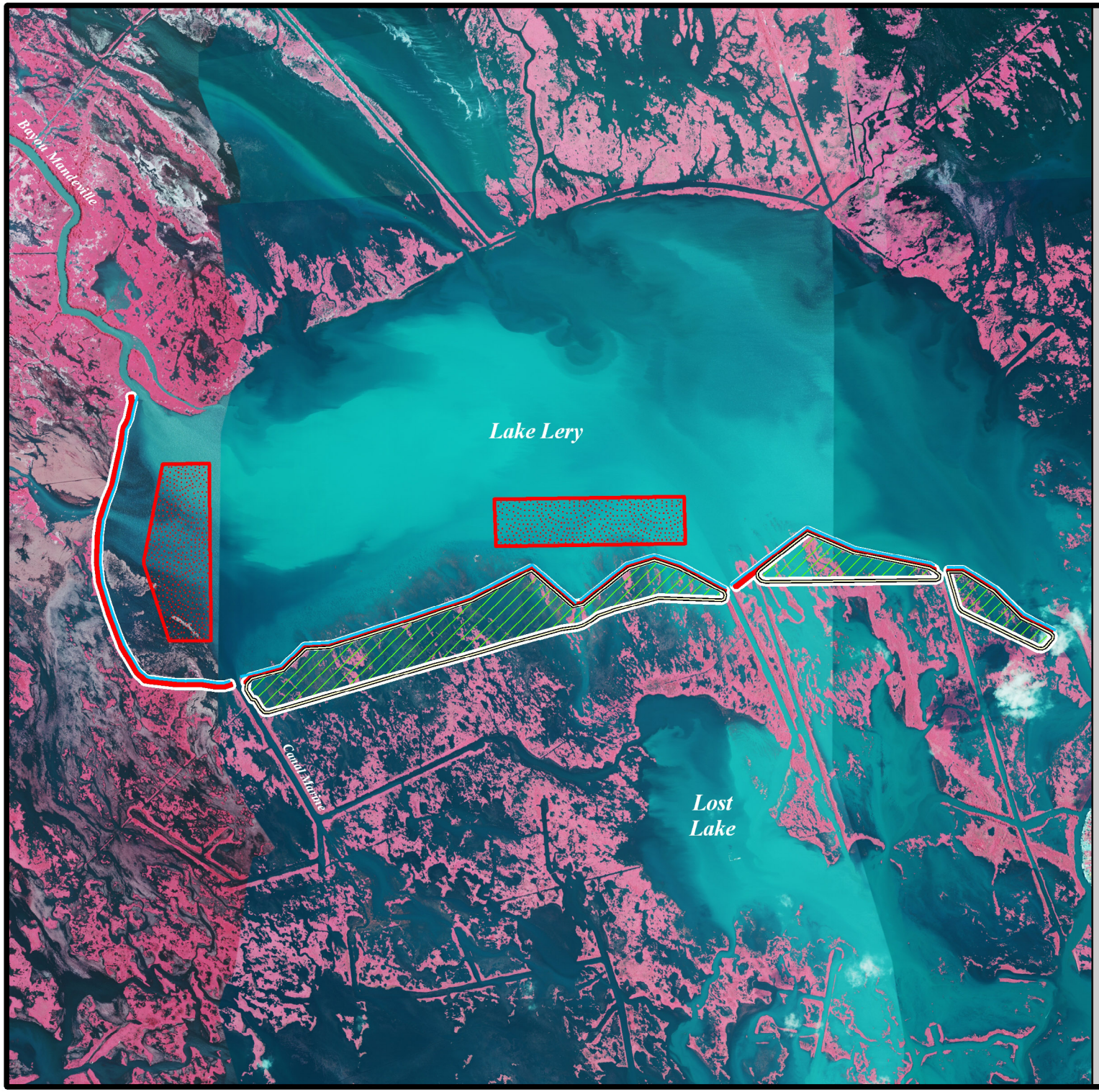
This project has received Phase II funding. Currently, there are just two outstanding items; 1) Landrights in which the State is actively pursuing landright agreements with the landowners; 2) 404 Permit in which the Corps has all documentation- awaiting approval. Construction will hopefully start in the spring of 2013.

This project is on Priority Project List 17.

For more information, please contact:

Federal Sponsor:
U.S. Fish and Wildlife Service
Lafayette, LA
(337) 291-3100

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



South Lake Lery Shoreline and Marsh Restoration (BS-16)

- Containment Dike *
- Borrow/Access Channel *
- Shoreline Berm *
- Borrow *
- Marsh Creation *
- Project Boundary

*denotes proposed features

USGS science for a changing world

0.3 0 0.3 0.6 Kilometers

0.3 0 0.3 0.6 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:
2010 National Agriculture Inventroy Program (NAIP) Photography

Map Date: December 14, 2011
Map ID: USGS-NWRC 2012-11-0005
Data accurate as of: December 14, 2011