rev. November 2017
Cost figures as of: February 2023

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

Project Status

Approved Date: 2007 **Project Area:** 551 acres
Approved Funds: $32.3 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 will have a hydraulic dredge extract material from the Lake Lery water bottom and pump that material into contained marsh creation cells located south and west of the southern and western Lake Lery shorelines. This will create and/or nourish approximately 642 acres of intertidal intermediate marsh. The shoreline restoration component of the project will have a barge-mounted dragline excavating material from the bottom of Lake Lery and placing that material along the southern and western shorelines. This restored shoreline will 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 will have a 4:1 sideslope which will be planted with smooth cordgrass and bullwhip. Marsh created along the shoreline will amount to 43 acres, for a project total of 688 acres of created/restored marsh.

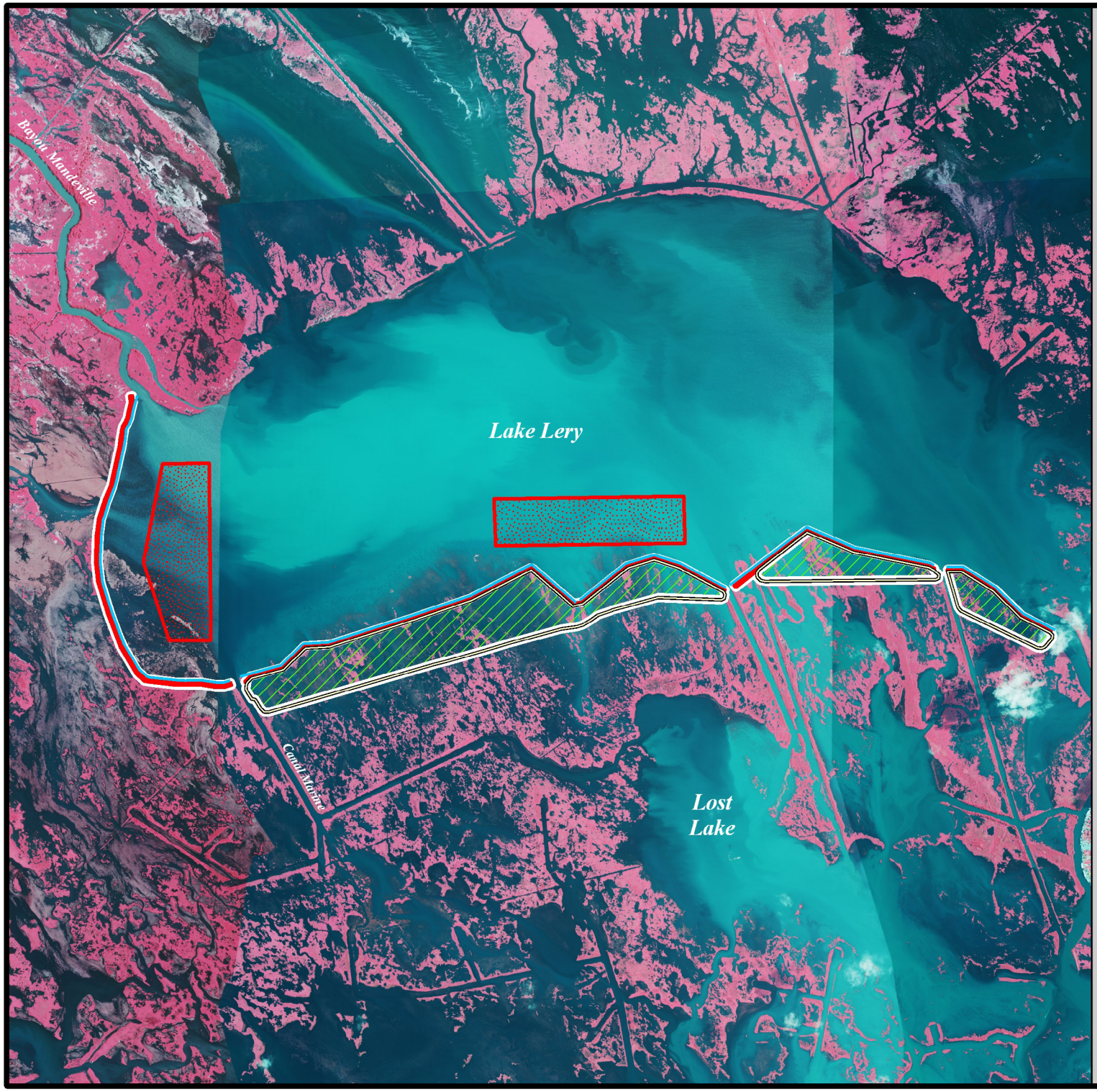
Progress to Date

This project received Phase II funding in January 2012. Construction began in the spring of 2015 and is expected to be complete in the summer of 2018. All marsh creation is complete. Earthwork and vegetative plantings associated with the lake rim embankments are complete. There are ongoing discussions regarding erosion concerns along lake rim embankments.

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

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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

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