February 2025

Cost figures as of: July 2025



# Wood Lake - East Lake Lery Restoration (BS-48)

# **Project Status**

**Project Area:** 609 acres **Approved Date: 2025 Approved Funds: Total Est. Cost:** 

Net Benefit After 20 Years: 306 acres Status: Engineering and Design **Project Type:** Marsh Creation

**PPL#: 34** 

#### Location

This project is located in Region 2, Breton Sound Basin, St. Bernard Parish, between the eastern shoreline of Lake Lery and Bayou Terre aux Boeufs (BTaB).

#### **Problems**

Hurricane Katrina (2005) significantly impacted the eastern Lake Lery shoreline, removed a large swath of marsh between Lake Lery and BTaB, and degraded a large area of marsh to the north of the project area. Subsequent hurricanes (Gustave in 2008, Isaac in 2012, and Ida in 2021) continued thinning marsh within and to the north of the project area exposing these vulnerable marshes to more disruptive energy via increased tidal prism and generated waves. Presently, only remnants of the historical Lake Lery shoreline and interior marsh remain and the hydrologic connectivity between the area to the north and BTaB has broadened in the Wood Lake Area. Without restoration, the lake will likely continue to grow and erode the thin buffer of marsh along the BTaB ridge threatening the Delacroix/Wood Lake communities and Hwy 300. Based on a land change analysis conducted by the USGS, which included both interior marsh loss and lake shoreline erosion, the land change rate in the area is estimated to be -1.47% per year (1984 to 2024). Total subsidence derived from the 2023 Master Plan in the area is estimated to be 9.60 mm/y.

# Restoration Strategy

The project represents a combination of two PPL34 candidate projects, Wood Lake Marsh Creation and Terraces and Eastern Lake Lery Shoreline Restoration. The project combination will result in an expanded data collection (i.e., surveys and geotechnical) effort and alternatives analysis to address restoration needs in the project area (Figure 1). The goal is to develop and evaluate an array of alternatives that best meet the area's needs.

The decision to combine the projects in an expanded Phase I Engineering & Design effort will allow CWPPRA's Planning and Evaluation Subcommittee to collect additional data from both areas and determine the optimal project location and features. www.LaCoast.gov

#### Wood Lake Marsh Creation and Terraces

Approximately 331 acres of marsh will be created and approximately 90 acres of marsh will be nourished by utilizing sediment hydraulically dredged from Lake Lery. The project also proposes to construction 13,160 linear feet (LF) of terraces within a 188-acre terrace field. Marsh creation from the BTaB ridge west to the existing marsh along Lake Lery would reduce the hydrologic exchange between the degrading areas to the north and BTaB, while the marsh creation and terraces would reinforce the BTaB ridge against wave fetch erosion.

#### East Lake Lery Shoreline Restoration

Sediments from Lake Lery will be hydraulically dredged and pumped via pipeline to create/nourish approximately 295 acres of marsh along the eastern Lake Lery shoreline. Approximately 7,094 LF of lake rim will be restored by constructing a lakeshore berm with a 25-ft crown width and a top elevation of +3.5 ft NAVD88. Re-establishment of the east Lake Lery shoreline would prevent the wave fetch between Lake Lery and the BTaB ridge and reduce hydrologic exchange between Lake Lery and degrading areas to the north of the project area.

#### Progress to Date

This project was approved for Phase I Engineering and Design in January 2025.

The Project is on Priority Project List (PPL) 34.

For more information, please contact:



### Federal Sponsor:

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



RESOURCES CONSERVATION

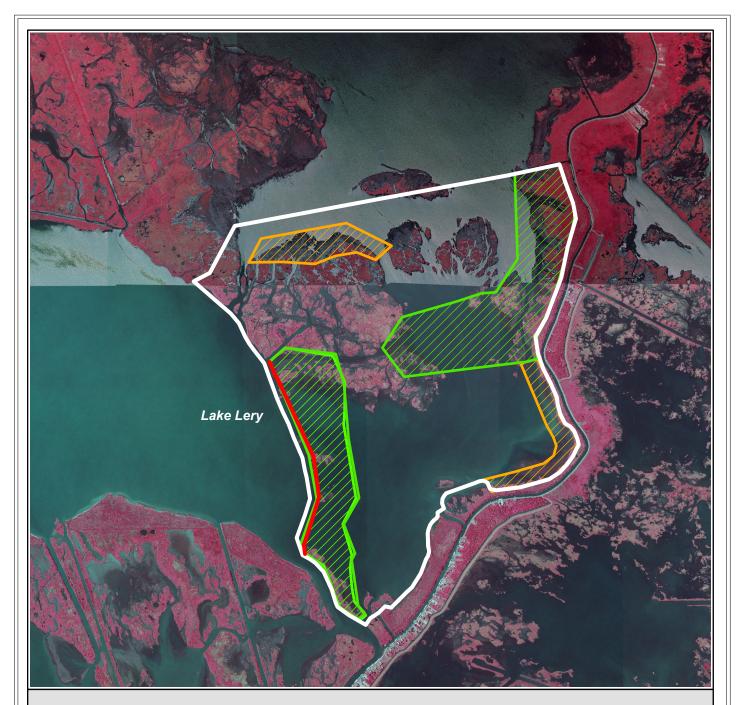
Federal Sponsor:

Natural Resources Conservation Services Alexandria, LA (318) 473-7756



# Local Sponsor:

Coastal Protection and Restoration Authority Baton Rouge, LA (225) 342-4733

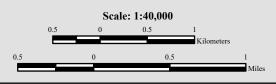


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Note: All features are proposed.







Map Produced By: U.S. Department of the Interior U.S. Geological Survey Wetland and Aquatic Research Center Lafayette, La.

> Image Source: 2023 NAIP CIR

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