March 2010 (rev)
Cost figures as of: March 2013

Little Lake Shoreline Protection/Dedicated Dredging Near Round Lake (BA-37)

Project Status

Approved Date: 2002 **Project Area:** 1,373 acres
Approved Funds: $21.9 M **Total Est. Cost:** $29.4 M
Net Benefit After 20 Years: 713 acres
Status: Completed
Project Type: Shoreline Protection and Marsh Creation
PPL #: 11

Location

The project is located in the central Barataria Basin in Lafourche Parish, Louisiana. The project area is generally bound by the East and West Forks of Bayou L'Ours and the southern shoreline of Little Lake from Plum Point westward to Breton Canal.

Problems

The Little Lake mapping unit is an area of high wetland loss caused by shoreline erosion, subsidence, and channel construction. The project is located in an area protecting approximately 3,000 acres of fragile interior marshes between the Little Lake shoreline and Bayou L'Ours Ridge. Project area wetlands currently experience two major problems: high shoreline erosion rates (20 to 40 feet per year) and subsidence that deteriorates interior marshes. The project area marsh is expected to convert to mostly open water over the next 20 years if these problems go unchecked. In addition, continued shoreline erosion and wetland loss may adversely affect large areas of adjacent marsh.

This 24-inch dredge pipe is actively rebuilding marsh by depositing sediment dredged from the lake. As the project progresses, the placed sediment will reach an elevation conducive for growing and sustaining marsh vegetation.

Restoration Strategy

The project's goals are to: 1) prevent erosion along roughly 4 miles of Little Lake shoreline; 2) create 488 acres of intertidal wetlands along the Little Lake shoreline; 3) nourish and maintain 532 acres of intermediate marsh; and 4) reduce land-loss rates by 50% over the 20-year life of the project.

Geotechnical, soil stability, and engineering evaluation will be required prior to selection of the specific structural and non-structural measures that could achieve the project's goals. However, for the purpose of evaluation, two major project features are envisioned. The first of these is 21,000 feet of shoreline protection in the open water constructed parallel to the existing shoreline at a crest elevation some 2 feet above the mean water level. The second project feature envisioned is marsh creation in the open water and broken marsh areas along the Little Lake shoreline. Borrow areas would be located in Little Lake, with preliminary data indicating that silty and clay-like sands may be located in the vicinity of Plum Point. Semi-confined disposal will likely be used, and any retaining features would be degraded or gapped as soon as the fill material has sufficiently consolidated.

Progress to Date

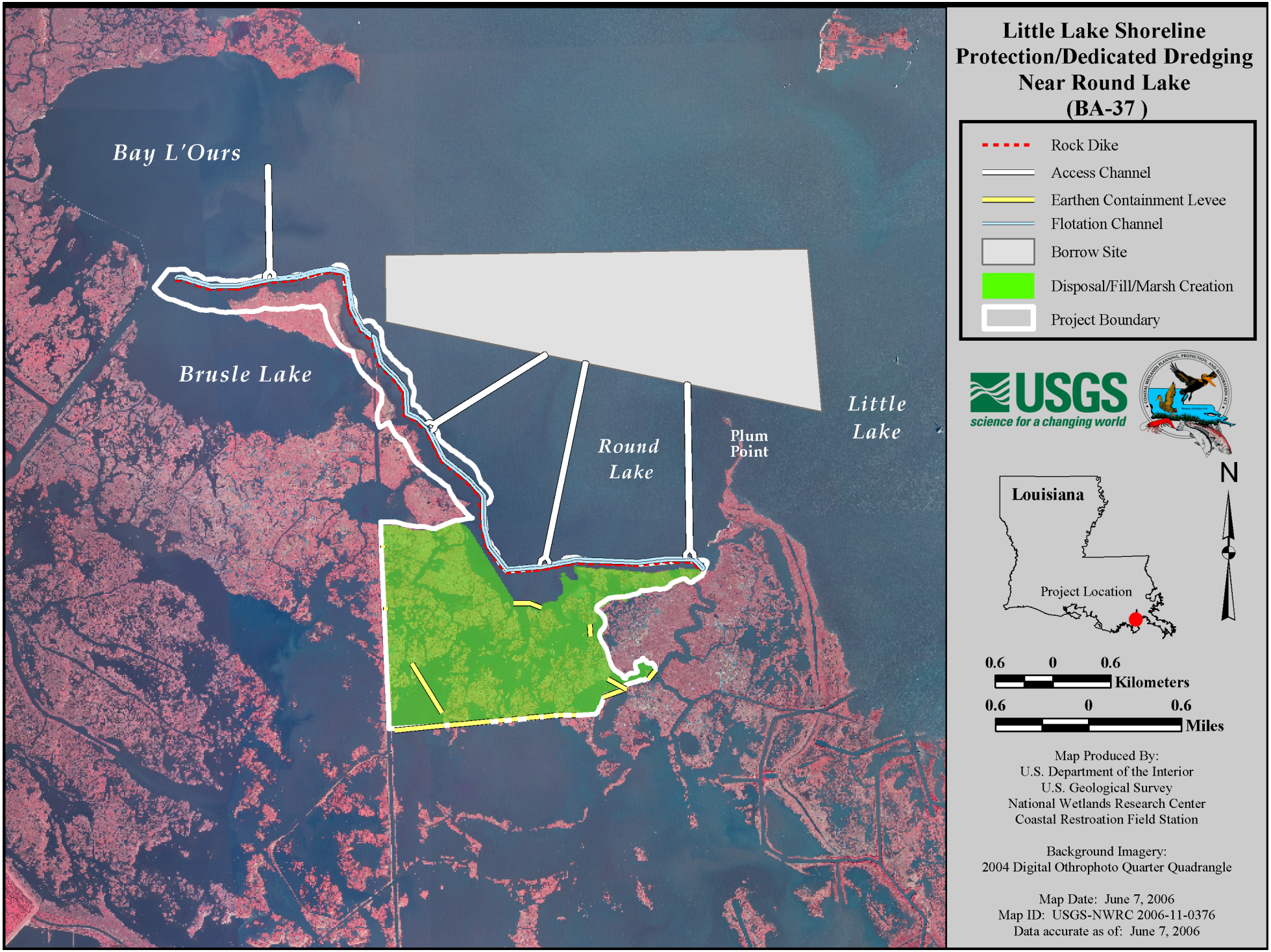
This project was selected for Phase I (engineering and design) funding at the January 2002 Breaux Act Task Force meeting and for Phase II (construction) funding in November 2003. Construction was completed in 2007.

The project is listed on Priority Project List 11.

For more project information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

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



Little Lake Shoreline Protection/Dedicated Dredging Near Round Lake (BA-37)

- Rock Dike
- Access Channel
- Earthen Containment Levee
- Flotation Channel
- Borrow Site
- Disposal/Fill/Marsh Creation
- Project Boundary

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

Background Imagery:
2004 Digital Othrophoto Quarter Quadrangle

Map Date: June 7, 2006
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