October 2002
Cost figures as of: March 2021

Lake Salvador Shore Protection Demonstration (BA-15)

Project Status

Approved Date: 1993 **Project Area:** N/A
Approved Funds: $2.80 M **Total Est. Cost:** $2.80 M
Net Benefit After 20 Years: N/A
Status: Completed June 1998
Project Type: Demonstration: Shoreline Protection
PPL #: 3

Location

The project is located on the southwest end of Lake Salvador near Des Allemands in St. Charles Parish, Louisiana. It encompasses approximately 1,200 acres.

Problems

The Lake Salvador area has experienced high rates of land loss caused by a documented shoreline erosion rate (1953-83) that averaged 13 feet per year. This chronic erosion has breached the lake shoreline in several locations, exposing fragile, highly organic marsh substrates to increased wave and tidal energy.

Restoration Strategy

Phase 1 of the project tested four types of shoreline protection structures along a section of the northern lakeshore to determine their effectiveness in reducing shoreline erosion.

To the south, Phase 2 constructed a 9,000 foot rock shoreline stabilization structure along a section of the western lakeshore to protect the shoreline and adjacent marsh from wave-induced erosion.

Progress to Date

Monitoring of the Phase 1 area indicated that none of the tested designs showed a reduction in shoreline erosion rates; however, the demonstration was helpful in determining the relative stability of the tested structures and therefore their possible use (or application) for shorelines that cannot be protected with rock.

The phase 2 structure (rock) has successfully reduced the shoreline erosion rate. Monitoring has indicated not only a halt in erosion, but a shoreline gain of 1.8 feet per year. This project is on Priority Project List 3.

Installation of an erosion control structure during Phase 1 of the Lake Salvador restoration project.

Phase 2 of the Lake Salvador restoration project. The rock structure shown was installed to help stabilize the shoreline, allow sediment trapping, and promote marsh development.

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

Lake Salvador Shore Protection Demonstration (BA-15)

- Shoreline Protection
- Marsh Creation Area
- Project Boundary

USGS science for a changing world

0.5 0 0.5 1 Miles

0.5 0 0.5 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:
1998 Digital Orthophoto Quarter Quadrangle

Map Date: June 10, 2002
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Data accurate as of: June 10, 2002