

# Lake Salvador Shore Protection Demonstration (BA-15)

## **Project Status**

Approved Date:1993Cost:\$2.5 millionProject Area:N/AStatus:CompletedNet Benefit After 20 Years:N/AJune 1998

**Project Type:** Demonstration: Shoreline Protection

### 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: Louisiana Department of Natural Resources Baton Rouge, LA (225) 342-7308

