October 2002
Cost figures as of: January 2017

Clear Marais Bank Protection (CS-22)

Project Status

Approved Date: 1992 **Project Area:** 4,637 acres
Approved Funds: $3.26 M **Total Est. Cost:** $3.26 M
Net Benefit After 20 Years: 1,067 acres
Status: Completed March 1997
Project Type: Shoreline Protection
PPL #: 2

Location

The project is located north of the Gulf Intracoastal Waterway (GIWW), approximately 10 miles northwest of Hackberry in Calcasieu Parish, Louisiana. It encompasses 4,637 acres of fresh marsh and open water.

Problems

Breaches in the GIWW have led to marsh loss in the Clear Marais area because of its increased exposure to saltwater intrusion, boat wakes, and tidal scour. As a result, erosion of the north bank of the GIWW threatens not only the water management levee to its north, but also the marshes protected by the levees.

Restoration Strategy

This project plan consisted of placing 6.7 miles of limestone riprap shoreline protection on the north bank of the GIWW to reduce erosion and fill the breaches. The project provides levee protection by placing stone riprap along the waterway and planting vegetation in the sheltered area between the riprap and the levee.

Pictured above is the GIWW at Clear Marais, with the rock riprap running along the right bank. To the immediate right of the riprap is the sheltered area that was the focus of the planting effort, with the management levee forming a boundary between it and the project area's marsh, which is visible on the far right.

Rock riprap provides shoreline protection from wave energy produced by shipping vessels on the GIWW.

Progress to Date

In March 1997, a 35,000-foot limestone breakwater was completed along the GIWW's norther n bank. It was designed to prevent the continued erosion of the management levee and the encroachment of the GIWW into the project area.

Shoreline gains have occurred at 24 of the 34 sampling sites established behind the breakwater, but shoreline losses have occurred at all of the project's unprotected reference sites. Overall, the project has produced an average land gain of 4.85 feet per year as opposed to the loss of 15.87 feet per year observed in the reference areas.

The construction phase of the project is complete. The monitoring plan has been completed and monitoring initiated. Operation and maintenance is scheduled for the future.

This project is on Priority Project List 2.

For more project information, please contact:

Federal Sponsor:
U.S. Army Corps of Engineers
New Orleans, LA
(504) 862-1597

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

Clear Marais Bank Protection (CS-22)

Shoreline Protection

Project Boundary

USGS science for a changing world

Louisiana

Project Location

N

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: August 20, 2002
Map ID: 2002-11-699
Data accurate as of: August 20, 2002