October 2002
Cost figures as of: March 2013

Cameron Prairie National Wildlife Refuge Shoreline Protection (ME-09)

Project Status

Approved Date: 1991 **Project Area:** 640 acres
Approved Funds: $1.22 M **Total Est. Cost:** $1.22 M
Net Benefit After 20 Years: 247 acres
Status: Completed Aug. 1994
Project Type: Shoreline Protection
PPL #: 1

Location

This project is located in Cameron Parish, Louisiana, on the north shore of the Gulf Intracoastal Waterway (GIWW), approximately 7 miles southeast of Sweet Lake and to the east of Louisiana Highway 27 at its intersection with the GIWW. It encompasses 640 acres of fresh marsh and open water.

Problems

The management levee between the GIWW and the Cameron Prairie National Wildlife Refuge was in danger of breaching as a result of erosion from boat traffic in the GIWW. If breaching had occurred, wave energy from the GIWW and salt water would have entered the organic, freshwater wetlands.

Restoration Strategy

A 13,200-foot rock breakwater was constructed 50 feet from the northern bank of the GIWW to prevent waves caused by boat traffic from overtopping and eroding the remaining spoil bank.

The project's effectiveness is being evaluated by shoreline movement surveys and by comparing pre-construction and post-construction aerial photographs for changes in marsh loss rates.

The shoreline protection dike running along the northern shore of the GIWW.

Progress to Date

During 1993-97, while the project area had a 4.9% increase in water coverage due to management for waterfowl, the reference area remained unchanged.

The results of shoreline monitoring indicate that the project has protected 13,200 feet of shoreline, along with 247 acres of marsh north of the dike. This protection is expected to accrue throughout the life of the project for a net restoration of at least 23 acres. Monitoring has shown that the GIWW's northern shoreline advanced 9.8 feet per year in the project area while retreating at a rate of 3.0 feet per year in the reference area, indicating that low sediment availability does not prohibit wetland creation behind rock dikes on navigation channels.

To date, the project has exhibited success. It is expected that the project area will continue to accrete new wetland area between the spoil bank and the rock dike, further safeguarding the adjacent wetland area from encroachment by the GIWW. This project is on Priority Project List 1.

For more project information, please contact:

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

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

Cameron Prairie National Wildlife Refuge Shoreline Protection (ME-09)

Shoreline Protection

Project Boundary

USGS
science for a changing world

N

0.5 0 0.5 Miles

0.5 0 0.5 Kilometers

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

Background Imagery:
Thematic Mapper Satellite Imagery 2000

Map Date: June 6, 2002
Map ID: 2002-11-716
Data accurate as of: June 6, 2002