September 2010 (rev)
Cost figures as of: February 2013

Little Vermilion Bay Sediment Trapping (TV-12)

Project Status

Approved Date: 1996 **Project Area:** 964 acres
Approved Funds: $0.88 M **Total Est. Cost:** $0.88 M
Net Benefit After 20 Years: 441 acres
Status: Completed Aug. 1999
Project Type: Shoreline Protection and Sediment Trapping
PPL #: 5

Location

This project is located in the northwestern corner of Little Vermilion Bay at its intersection with the Gulf Intracoastal Waterway (GIWW) in Vermilion Parish, Louisiana. The project area encompasses 964 acres.

Problems

High winds and waves prevent GIWW sediments transported down the Freshwater and Schooner bayous from settling and forming the basis of vegetated marsh. This same wind and wave energy also increases shoreline erosion rates.

Restoration Strategy

This project involved the construction of a series of vegetated terraces to diminish waves in Little Vermilion Bay, helping to increase sediment deposition and reduce the rate of shoreline erosion. A pattern of channels was dredged 100-feet wide and 6-feet deep to beneficially distribute sediment from the GIWW through the Freshwater and Schooner bayous. Dredged sediments were used to construct 23 earthen terraces with a combined length of 23,300 feet. After settling, the average height of the terraces was 3.5 feet above mean sea level.

The bases of the terraces were planted with 20,450 containers of smooth cordgrass (*Spartina alterniflora*).

The design allows commercial and recreational fisherman to access the project area, and it stimulates fishery production by creating new habitat and increasing shoreline length.

In 1998 alone (prior to the project's completion) 40 acres of wetland habitat were created.

Aerial photo of constructed terraces in Little Vermilion Bay.

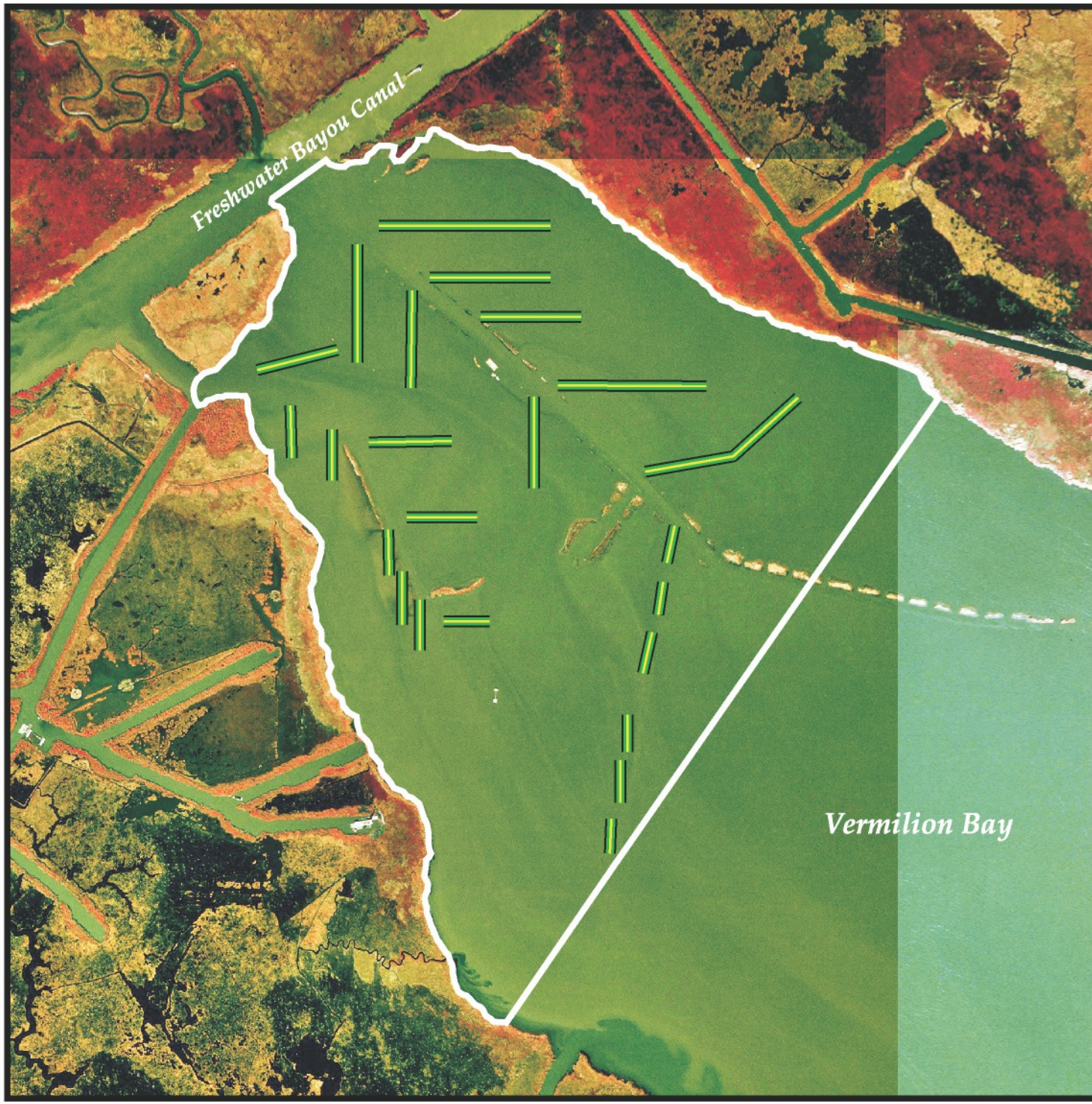
Progress to Date

Monitoring is underway and preliminary observations show that the terraces are growing in width, and bay depth between terraces is decreasing indicating marsh expansion in the project area. This project is on Priority Project List 5.

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 Vermilion Bay Sediment Trapping (TV-12)

Terrace

Project Boundary

USGS
science for a changing world

N

1000 0 1000 Feet

300 0 300 Meters

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: December 4, 2002
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