March 2010 (rev)
Cost figures as of: December 2016

North Lake Mechant Landbridge Restoration (TE-44)

Project Status

Approved Date: 2001 **Project Area:** 7,571 acres
Approved Funds: $35.1 M **Total Est. Cost:** $36.7 M
Net Benefit After 20 Years: 604 acres
Status: Completed
Project Type: Dredged Material/Marsh Creation and Vegetative Planting
PPL #: 10

Location

The project is located in the Terrebonne Basin, in Terrebonne Parish, Louisiana.

Problems

The project would protect and restore a critical landbridge barrier between the easily erodible fresh marshes north of Bayou De Cade and the higher saline environment of Lake Mechant. At the present shoreline erosion rate, the north Lake Mechant shore will soon fail to act as a barrier, allowing the hydrologic connection between Lake Mechant and the fresher marshes to the north.

In addition, erosion and deterioration along the banks of Raccourci Bayou are threatening to enlarge and straighten this winding tidal pass into a major conduit for water exchange. These changes will accelerate the loss of the remaining interior marshes, extend lake-like conditions, and increase salinities north to Bayou De Cade.

Should shoreline breaching and enlargement of tidal channels allow high tidal energy conditions to intrude into the project area, the organic interior marshes would likely experience increased loss rates.

Northern shoreline of Lake Mechant showing the saltmeadow cordgrass (Spartina patens) dominated marsh eroding behind a large stand of smooth cordgrass (Spartina alterniflora) left standing at the water's edge.

Restoration Strategy

Dredged material from northern Lake Mechant will be used to create marsh. Smooth cordgrass (Spartina alterniflora) will also be planted along the shorelines of Lake Mechant, Goose Bay, and Lake Pagie. The project will also repair breeches formed by erosion and oilfield access canals which threaten the integrity of the landbridge.

Progress to Date

The Louisiana Department of Natural Resources has completed project engineering and design. The Louisiana Coastal Wetlands Conservation and Restoration Task Force granted construction approval of construction unit one on August 7, 2002, which included shoreline vegetation plantings and were installed in summer 2003. Approval of construction unit two was granted on October 2004, which includes dedicated dredging for marsh creation and several other bank stabilization measures. Problems surrounding the recently established public oyster seed grounds and several private oyster leases in Lake Mechant were resolved and construction of that unit was completed in late 2009. This project is on Priority Project List 10.

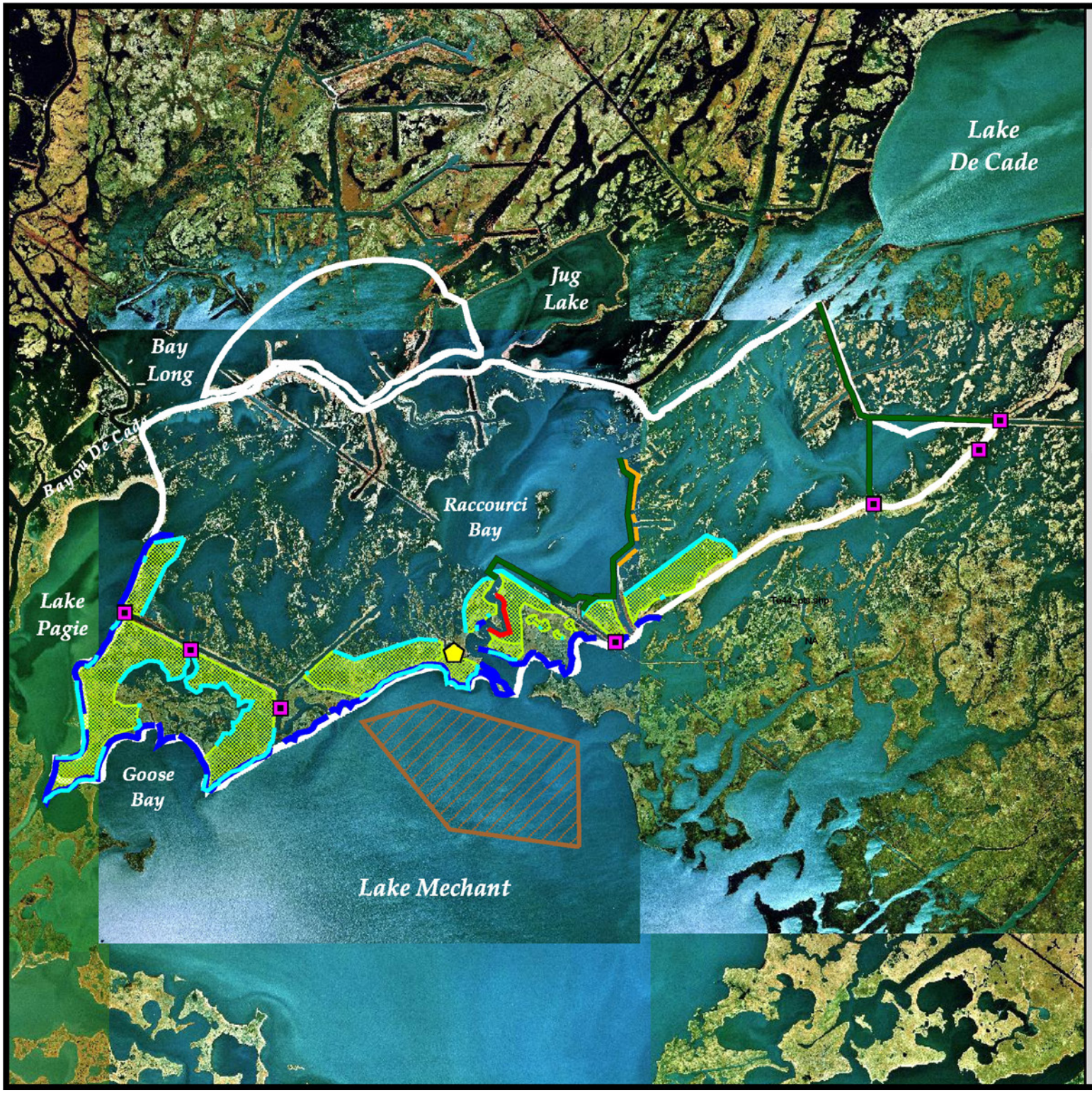
Aerial photo of the shoreline of Lake Mechant showing the narrow lake rim and deteriorating marsh to the north. Dredged material will be pumped into this broken marsh to create new marsh to maintain this land bridge.

For more 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

North Lake Mechant Landbridge Restoration (TE-44)



- Plug*
- Replace Existing Weir
- Concrete Mat Over Earthen Material *
- Containment *
- Flotation For Rock Barges *
- Spoil Disposal *
- Vegetation Plantings *
- Borrow Site *
- Marsh Creation Area*
- Project Boundary

* denotes proposed feature

USGS
science for a changing world

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: January 7, 2005
Map ID: USGS-NWRC 2005-11-0060
Data accurate as of: January 7, 2005