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

Oaks/Avery Canal Hydrologic Restoration, Increment 1 (TV-13a)

Project Status

Approved Date: 1997 **Project Area:** 3,348 acres
Approved Funds: $2.92 M **Total Est. Cost:** $2.92 M
Net Benefit After 20 Years: 160 acres
Status: Completed Oct. 2002
Project Type: Hydrologic Restoration
PPL #: 6

Location

This project is located in northeast Vermilion Bay in the vicinity of the Oaks and Avery canals and Tigre Lagoon, and in both Vermilion and Iberia Parishes, Louisiana.

Problems

Marsh loss is caused by increased tidal action and altered hydrology. The north shoreline of Vermilion Bay is eroding at a rate of 13 feet/year, and marine traffic is causing shoreline erosion along the Gulf Intracoastal Waterway (GIWW).

Restoration Strategy

This project will improve hydrology and reduce tidal fluctuation to minimize marsh loss and provide protection to critically eroding shoreline areas.

Project components include shoreline stabilization at the mouth of Oaks Canal; shoreline protection along the GIWW; a low sill rock weir at Cow Path Channel east of Oaks Canal; an armored plug in the breached opening along the Union Oil Canal; spoil bank maintenance on the western side of the Union Oil Canal; and vegetative plantings along the northern shoreline of Vermilion Bay from Oaks Canal eastward to Avery Canal.

The low sill rock weir east of the Oaks Canal and the armored plug at the Union Oil Canal will restore historic hydrologic conditions and reduce the surge effect of large marine traffic within interior marshes. The project will increase marsh, fish, and wildlife productivity by reducing shoreline erosion and improving altered hydrology.

By planting vegetation which is well suited to an intertidal environment, erosion along the shoreline of Vermilion Bay from Oaks Canal to Avery Canal will be reduced. The plantings will also result in creating diverse habitat for wading birds and other wildlife species.

Progress to Date

This project was approved by the Louisiana Coastal Wetlands Conservation and Restoration Task Force on April 24, 1997 and has both vegetative and structural components. The Natural Resources Conservation Service implemented the vegetative component and Louisiana Department of Natural Resources implemented the structural components. Approximately 34,000 smooth cordgrass plants were planted along 5.1 miles of the Vermilion Bay shoreline in the summer of 2000.

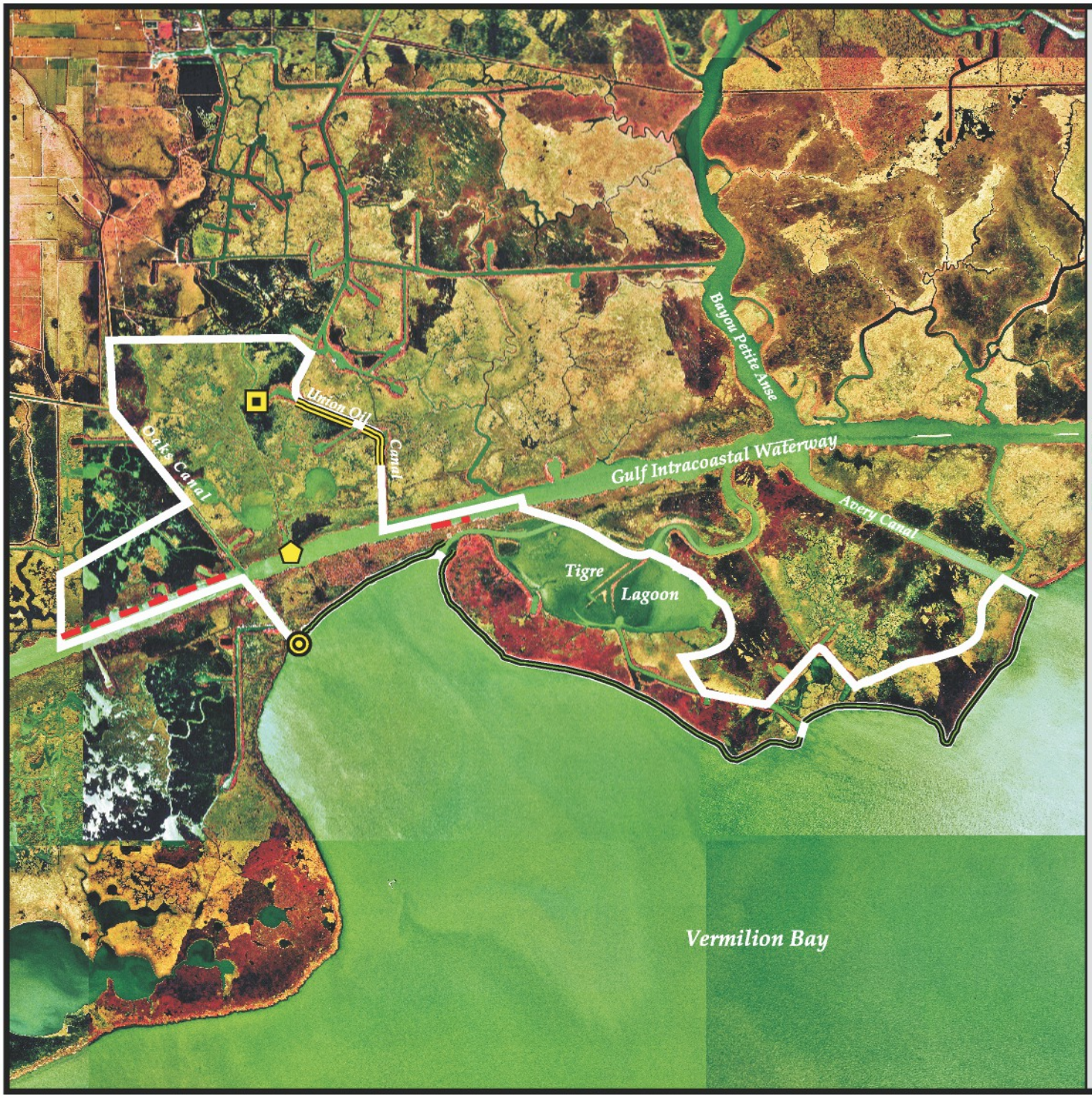
The monitoring plan was finalized in March 1999 and data collection has been ongoing since that time. Pre-construction aerial photography was collected in November 2000 and the first post-construction photography was collected in the fall of 2002. Monitoring elements to evaluate project effectiveness include submerged aquatic vegetation, emergent vegetation, shoreline movement, bathymetry, and water level.

This project is on Priority Project List 6.

For more project information, please contact:

Federal Sponsor:
Natural Resources Conservation Service
Alexandria, LA
(318) 473-7756

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



Oaks/Avery Canal Hydrologic Restoration, Increment 1 (TV-13a)

- Weir
- Plug
- Shoreline Stabilization
- Spoil Bank Maintenance
- Shoreline Protection
- Vegetative Plantings
- Project Boundary

USGS science for a changing world

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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: October 8, 2002
Map ID: USGS-NWRC 2003-11-003
Data accurate as of: October 8, 2002