rev. March 2008
Cost figures as of: February 2023

Highway 384 Hydrologic Restoration (CS-21)

Project Status

Approved Date: 1992 **Project Area:** 650 acres
Approved Funds: $1.84 M **Total Est. Cost:** $1.84 M
Net Benefit After 20 Years: 150 acres
Status: Completed January 2000
Project Type: Hydrologic Restoration
PPL #: 2

Location

This project is located in Cameron Parish, Louisiana. It surrounds the community of Grand Lake in the northeastern portion of Calcasieu Lake. It is bordered to the north and east by the Gulf Intracoastal Waterway (GIWW), and to the west by Calcasieu Lake. The project encompasses approximately 1,125 acres of intermediate-to-brackish marsh.

Problems

Marsh loss in this area has been caused by saltwater intrusion, rapid tidal fluctuations, tidal scour, and shoreline erosion.

Restoration Strategy

This project consists of the installation of a rock plug, two water control structures, and the rehabilitation of perimeter embankments. The structures are operated in a manner that restores the historical hydrology within the project area.

Progress to Date

Construction was completed January 7, 2000. Minor maintenance measures were installed at the water control structure in November 2000. The monitoring plan has been finalized and approved and post-construction monitoring initiated.

Structure operations begun on March 26, 2000 have greatly reduced tide-driven fluctuations in water level and moderated water salinity in the project area ponds. Maintenance on the rock plug located near the Calcasieu Lake shoreline has been completed. In addition, an aquatic plant retention fence is being installed on the intake side of the freshwater introduction structure near the GIWW.

This project is on Priority Project List 2.

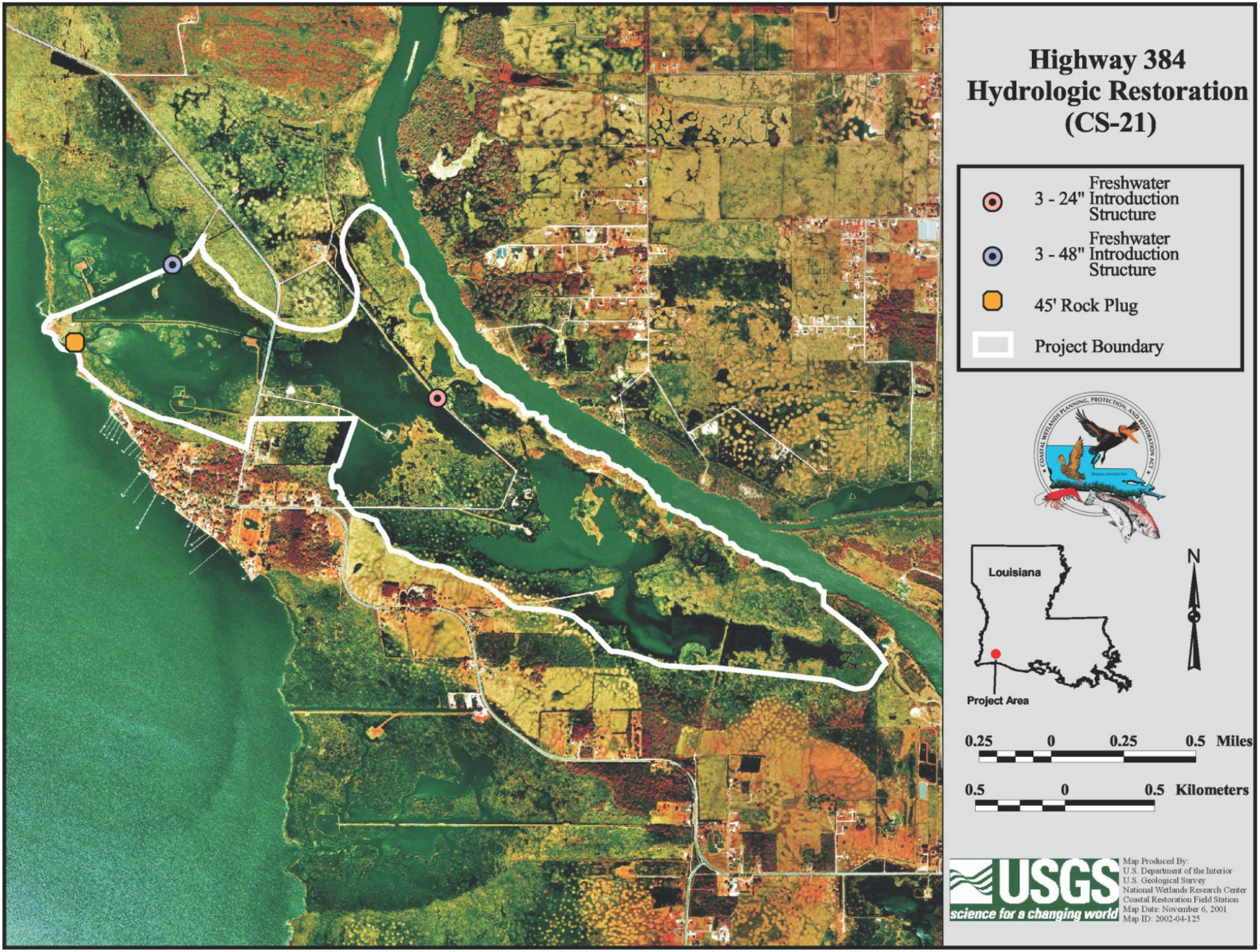
Flap gates on this structure are automatically operated and are opened when salinities allow according to a water management schedule.

This structure allows the insertion of stop-logs within the openings to regulate water passage. During certain times, such as storms or hurricanes, stop-logs are removed to prevent damage to the structure and adjoining embankments from high water levels.

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


Highway 384
Hydrologic Restoration
(CS-21)
3 - 24" Freshwater Introduction Structure
3 - 48" Freshwater Introduction Structure
45' Rock Plug
Project Boundary
Louisiana
Project Area
N
0.25 0 0.25 0.5 Miles
0.5 0 0.5 Kilometers
USGS
science for a changing world
Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Map Date: November 6, 2001
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