Highway 384 Hydrologic Restoration (CS-21)

Project Status
Approved Date: 1992  Project Area: 650 acres
Approved Funds: $1.83 M  Total Est. Cost: $1.83 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
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Local Sponsor: Coastal Protection and Restoration Authority
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