Black Bayou Hydrologic Restoration (CS-27)

Project Status

Approved Date: 1997
Project Area: 25,529 acres
Net Benefit After 20 Years: 3,594 acres
Project Type: Hydrologic Restoration
Cost: $6.4 million
Status: Completed Dec. 2001

Location

This project, sponsored by the National Marine Fisheries Service and the Louisiana Department of Natural Resources, is a 25,529 acre wetland located in Cameron and Calcasieu Parishes, Louisiana. Bordered by the Gulf Intracoastal Waterway (GIWW), Sabine Lake, Black Bayou, and Gum Cove Ridge, the project area consists of tidally-influenced intermediate and brackish marshes.

Problems

The purposes of the Black Bayou Hydrologic Restoration project are to (1) restore coastal marsh habitat, and (2) slow the conversion of wetlands to shallow, open water in the project area. The project limits the amount of saltwater intrusion into the surrounding marsh and canals from the GIWW and reduces erosion caused by wave action from nearby boats and tides.

Restoration Strategy

A 22,600-foot rock dike was placed on the southern spoil bank of the GIWW. A barge bay weir (70-foot bottom width) was constructed in Black Bayou Cutoff Canal. Weirs with boat bays (10-foot bottom widths) were constructed in Burton Canal and Block's Creek. A collapsed weir was plugged and replaced by a fixed crest steel sheet-pile weir with a state-of-the-art, self-regulating tidegate. Spoil material from weir installation and the dredging of access routes was deposited in nearby open water areas to the height of marsh elevations. The $3 million construction contract included installation of 55,000 marsh plants over the next two planting seasons.

Progress to Date

Construction is completed. Installation of vegetative plantings will begin in April 2002. The monitoring plan was finalized in March 2000, and monitoring has begun.

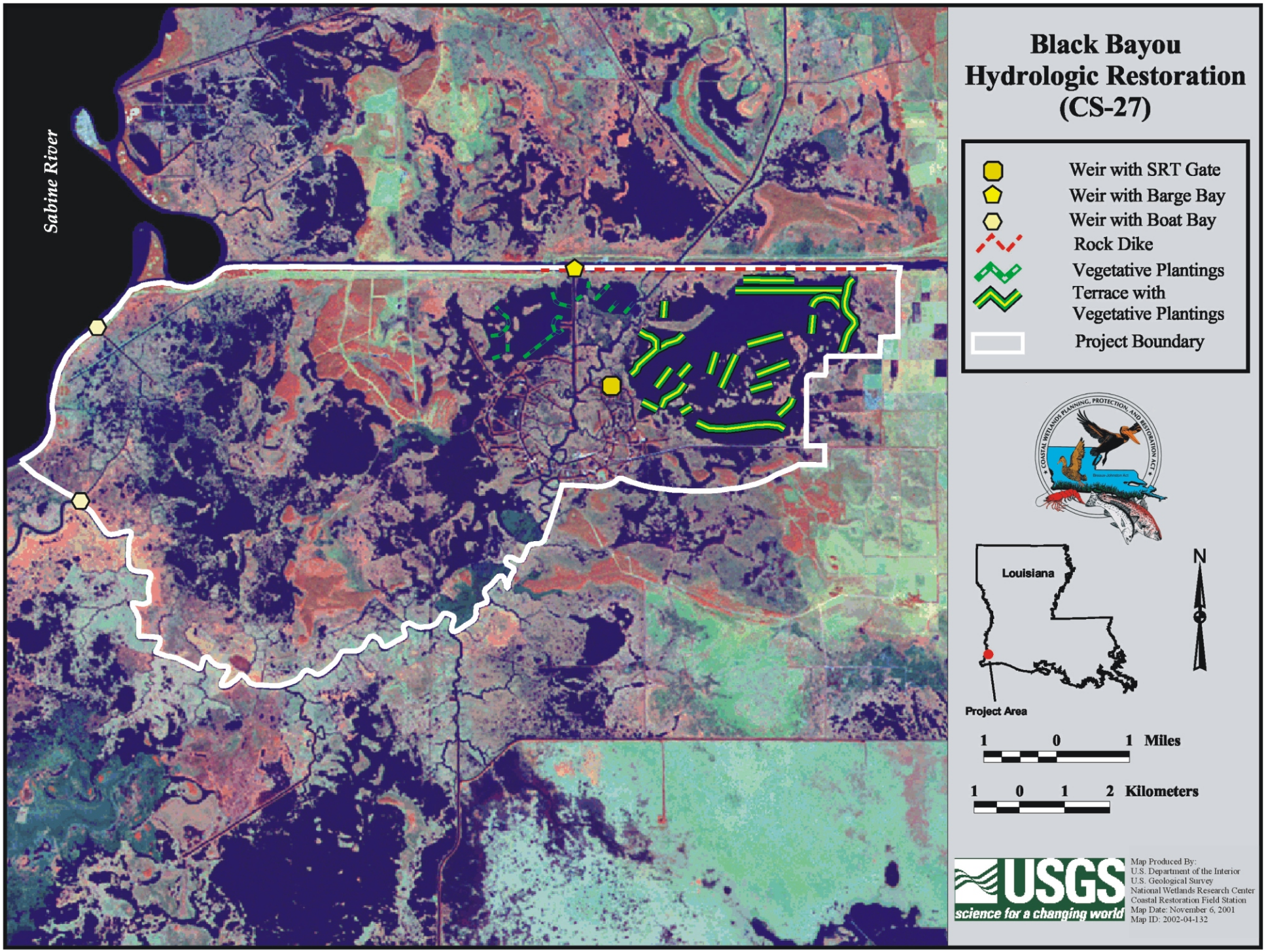
This picture was taken during installation of the self-regulating tidegate (SRT). Fish slots on either side of the SRT will allow movement of marine life between the areas when the gate is closed.

Above is the rock dike under construction. A large open water area is in the background.

For more project information, please contact:

Federal Sponsor:
National Marine Fisheries Service
Baton Rouge, LA
(225) 389-0508

Local Sponsor:
Louisiana Department of Natural Resources
Baton Rouge, LA
(225) 342-7308


Black Bayou
Hydrologic Restoration
(CS-27)
Sabine River
Weir with SRT Gate
Weir with Barge Bay
Weir with Boat Bay
Rock Dike
Vegetative Plantings
Terrace with
Vegetative Plantings
Project Boundary
Louisiana
Project Area
N
1 0 1 Miles
1 0 1 2 Kilometers
USGS
science for a changing world
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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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