rev. September 2010
Cost figures as of: February 2017

East Sabine Lake Hydrologic Restoration (CS-32)

Project Status

Approved Date: 2001
Project Area: 6,589 acres
Approved Funds: $4.94 M
Total Est. Cost: $6.04 M
Net Benefit After 20 Years: 225 acres
Status: Completed October 2010
Project Type: Hydrologic Restoration, Terraces
PPL #: 10

Location

The project is located in the western portion of the Sabine National Wildlife Refuge from Pool 3 to the eastern shoreline of Sabine Lake in Cameron Parish, Louisiana.

Problems

The lower salinity marshes are converting to shallow, open water due to elevated salinity events and subsidence. Navigation channels provide a direct route for salt water to infiltrate the marsh, disrupt the natural water circulation, and allow rapid runoff of fresh water. The larger Sabine-Neches Waterway and the Gulf Intracoastal Waterway (GIWW) have allowed saltwater intrusion into the project area's fresh and intermediate marshes. Elevated tidal fluctuations in these channels have led to increased water flow, which has increased the conversion of marsh to open water. Area marsh loss is also caused by wave action along Sabine Lake and interior marsh shorelines and other natural causes (i.e., subsidence).

Restoration Strategy

The project features include: a rock weir in Pines Ridge Bayou; three culverts with flap gates at Bridge Bayou; a 3,000 foot-long rock rip-rap breakwater along the Sabine Lake shoreline at Willow Bayou; a weir/plug at the opening at Starks South Canal Section 16 levee; and 232,000 linear feet of vegetated earthen terraces in the vicinity of Greens Lake.

Portion of the 232,000 linear feet of vegetated earthen terraces constructed near Greens Lake on Sabine National Wildlife Refuge.

Progress to Date

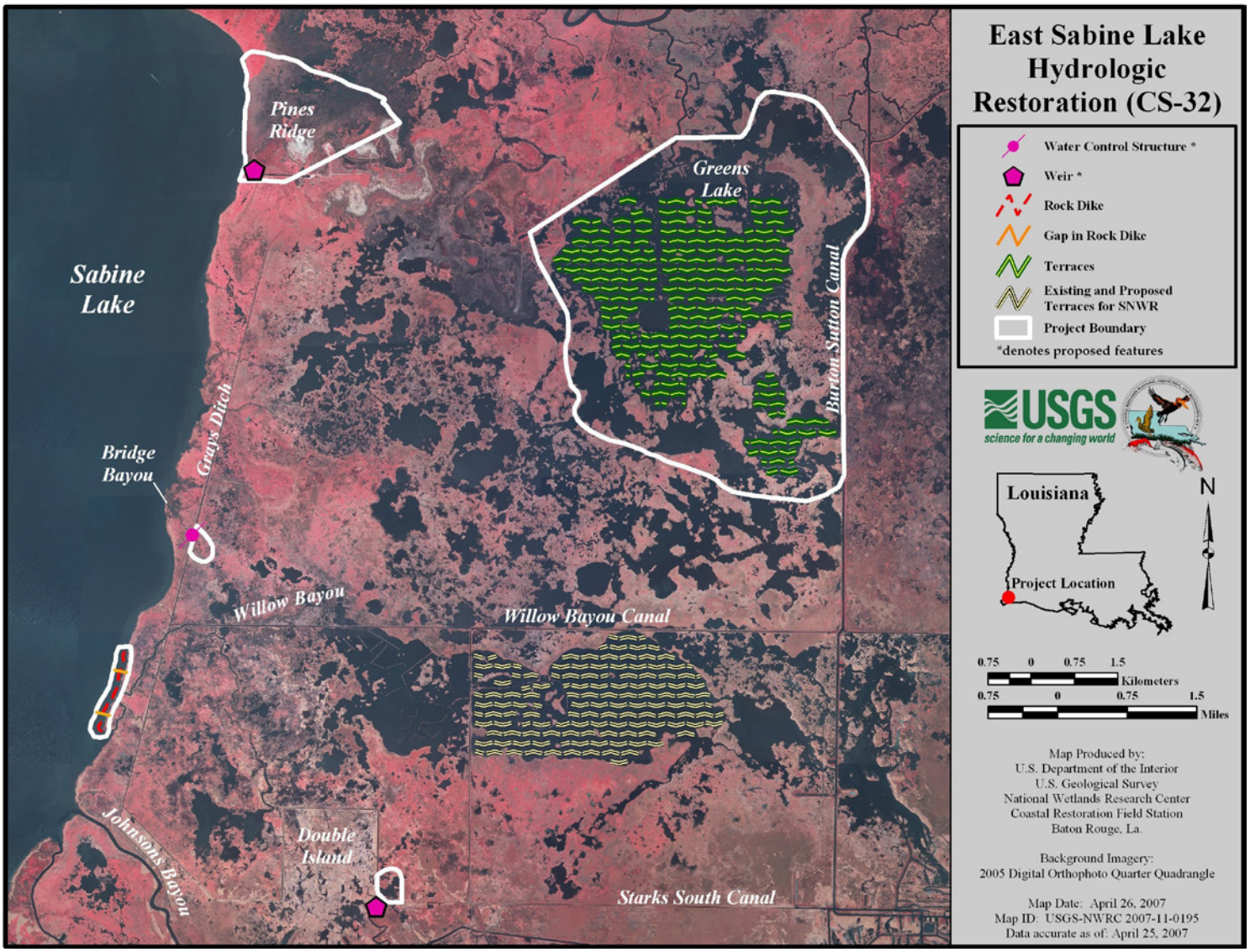
Construction was completed in October 2010.

This project is on Priority Project List 10.

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


East Sabine Lake Hydrologic Restoration (CS-32)
Water Control Structure *
Weir *
Rock Dike
Gap in Rock Dike
Terraces
Existing and Proposed Terraces for SNWR
Project Boundary
*denotes proposed features
Pines Ridge
Greens Lake
Sabine Lake
Burton Sutton Canal
Bridge Bayou
Grays Ditch
Willow Bayou
Willow Bayou Canal
Double Island
Johnsons Bayou
Starks South Canal
USGS
science for a changing world
Louisiana
Project Location
N
0.75 0 0.75 1.5
Kilometers
0.75 0 0.75 1.5
Miles
Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station
Baton Rouge, La.
Background Imagery:
2005 Digital Orthophoto Quarter Quadrangle
Map Date: April 26, 2007
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Data accurate as of: April 25, 2007