October 2002
Cost figures as of: January 2017

Fritchie Marsh Restoration (PO-06)

Project Status

Approved Date: 1992
Project Area: 5,924 acres
Approved Funds: $2.20 M
Total Est. Cost: $2.20 M
Net Benefit After 20 Years: 1,040 acres
Status: Completed February 2001
Project Type: Hydrologic Restoration
PPL #: 2

Location

The project is located approximately 3 miles southeast of Slidell, Louisiana, near the north shore of Lake Pontchartrain and its principal tidal exchange channel, The Rigolets in St. Tammany Parish. It is bounded by U.S. Highway 90 to the south and east, Louisiana Highway 433 to the west, and upland marsh to the north.

Problems

Since 1956, 34% of the marsh in the project area has converted to shallow water. Much of the loss is likely a result of the disruption of the natural hydrology by the construction of perimeter highways. The surrounding highways impound the area and impede the transport of water and nutrients. In addition, salt water also intrudes from the lake.

Restoration Strategy

The project area would be restored to a more natural hydrologic regime by enlarging the Salt Bayou culvert under Highway 90. This would increase flow of fresh water, nutrients, and sediment from the West Pearl River and alleviate stagnant conditions in the northern portion of the marsh.

Approximately one mile of Salt Bayou was dredged to improve its capacity to carry the projected increase of flow from the West Pearl River.

In addition, upland runoff from the city of Slidell was diverted through a weir on the W14 Canal into the marsh. The runoff will increase the overall productivity of the marsh by adding nutrients and fresh water to the marsh. It will also reduce nutrient loading into Lake Pontchartrain.

Steel sheet-pile will ensure that erosion will not enlarge this cross-sectional area of the channel. Actions such as these will restore a more natural hydrologic regime to the area.

Progress to Date

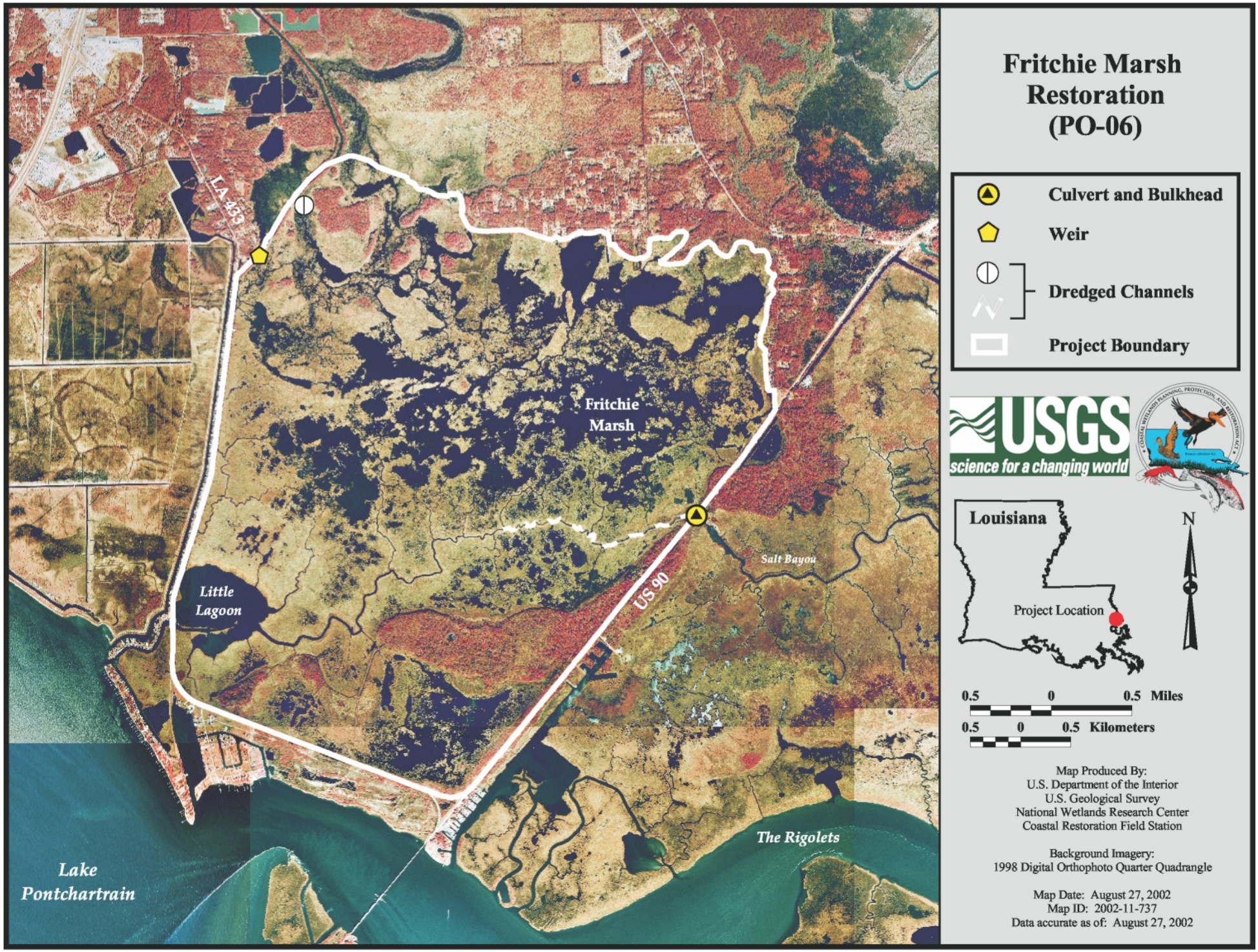
The Fritchie Marsh Project was completed on February 28, 2001. The O&M Plan was executed on January 29, 2003. The 2004 OM&M Report concluded that the constructed features of the Fritchie Marsh Restoration Project appear to be having the desired effect on the hydrology of the Fritchie Marsh. Salinity is significantly lower and water levels are significantly higher since project construction has been completed, suggesting increased flow of freshwater into the project area.

This project is on Priority Project List 2.

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


Fritchie Marsh Restoration (PO-06)
Culvert and Bulkhead
Weir
Dredged Channels
Project Boundary
USGS
science for a changing world
Louisiana
Project Location
N
0.5 0 0.5 Miles
0.5 0 0.5 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: August 27, 2002
Map ID: 2002-11-737
Data accurate as of: August 27, 2002
Fritchie Marsh
LA 433
Little Lagoon
US 90
Salt Bayou
The Rigolets
Lake Pontchartrain