October 2002
Cost figures as of: March 2013

West Belle Pass Headland Restoration (TE-23)

Project Status

Approved Date: 1992 **Project Area:** 2,459 acres
Approved Funds: $6.75 M **Total Est. Cost:** $6.75 M
Net Benefit After 20 Years: 474 acres
Status: Completed July 1998
Project Type: Dredged Material and Shoreline Protection
PPL #: 2

Location

The project is located just west of Port Fourchon, Louisiana, in Lafourche Parish. It covers 2,459 acres of saline marsh. The project is bounded by Belle Pass to the east, the Gulf of Mexico shore to the south, and Timbalier Bay to the west.

Problems

The encroachment of Timbalier Bay into the marshes west of Belle Pass, and ultimately its connection with Bayou Lafourche, threatens the physical integrity of the entire Fourchon headland. Timbalier Bay is encroaching into the marshes on the west side of Bayou Lafourche, and wave action is eroding its banks.

Breaches in the Bayou Lafourche and Belle Pass banks were causing tidal scour in the interior marshes. The project reduced the encroachment of Timbalier Bay into the interior marshes by using dedicated dredged materials to create wetlands. Dams and controls were constructed on channel cross sections.

Restoration Strategy

Approximately 1.5 million cubic yards of material were dredged from Bayou Lafourche and used to build 184 acres of marsh on the west side of Belle Pass. Another 240,000 cubic yards of material were placed on the shore for beach nourishment.

A water control structure was placed in the Evans Canal, and plugs were placed in other canals. Almost 17,000 feet of riprap were placed on the west side of Belle Pass and Bayou Lafourche to protect the shoreline from persistent wave-induced erosion.

In the photo above, the Gulf of Mexico is in the foreground, and Belle Pass is the wide channel that can be seen curving off to the right near the top of the image. The riprap dike that was constructed runs along its western bank. The brown, white, and green areas just above the gulf's shoreline and to the left of Belle Pass is where the deposited dredge material has promoted newly emergent marsh.

Progress to Date

Oyster leases in the project area were purchased by the Greater Lafourche Port Commission to expedite implementation of the project. Louisiana Land and Exploration Company project lands were deeded to the state of Louisiana and approved by the state legislature on August 14, 1997.

Construction was completed in July 1998. Monitoring is underway by the Louisiana Department of Natural Resources and operation and maintenance are scheduled for the future. This project is on Priority Project List 2.

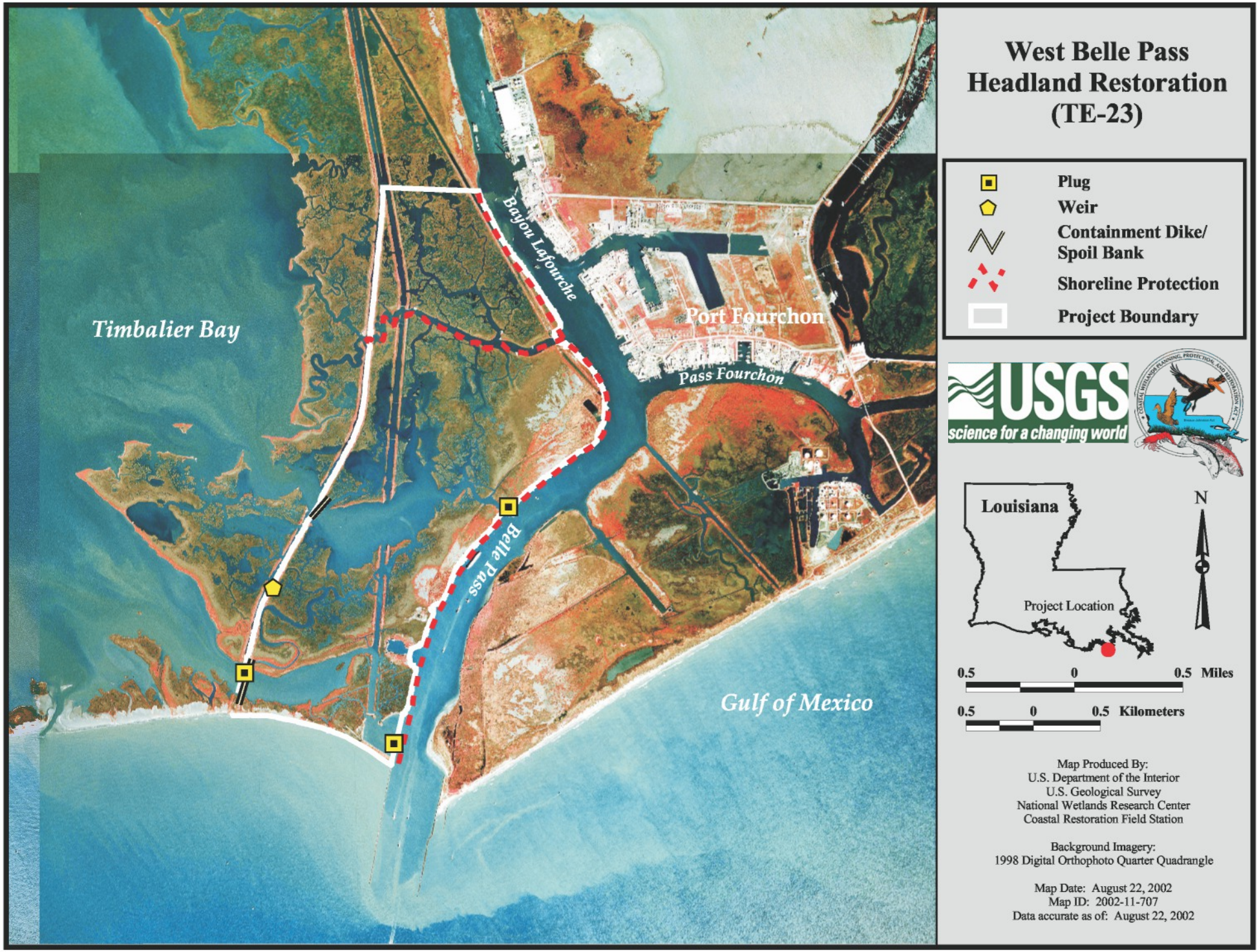
For more project information, please contact:

US Army Corps of Engineers
New Orleans District

Federal Sponsor:
U.S. Army Corps of Engineers
New Orleans, LA
(504) 862-1597

CPRA

Local Sponsor:
Coastal Protection and Restoration Authority
Baton Rouge, LA
(225) 342-4736



West Belle Pass Headland Restoration (TE-23)

- Plug
- Weir
- Containment Dike/ Spoil Bank
- Shoreline Protection
- Project Boundary

USGS science for a changing world

Louisiana

Project Location

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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 22, 2002
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