June 2004
Cost figures as of: December 2016

Mississippi River Sediment Trap (MR-12)

De-authorized

Project Status

Approved Date: 2002
Approved Funds: $0.35 M
Project Area: 1,920 acres
Total Est. Cost: $0.35 M
Net Benefit After 20 Years: 1,190 acres
Status: De-authorized
Project Type: Marsh Creation

Location

The sediment trap will be located in the Mississippi River between Venice and Head of Passes in Plaquemines Parish, Louisiana.

Problems

The wetlands in the Mississippi River delta are deteriorating from erosion, subsidence, and insufficient sediment input. More than 116,500 acres of marsh were lost in the area between 1932 and 1990.

Restoration Strategy

Since the 1930s, large areas of deltaic marshes have converted to open water throughout the Mississippi River delta. As a result, numerous shallow water sites located near the main river channel are available for marsh creation and restoration through dedicated dredging. The proximity of shallow bays to the Mississippi River deep draft navigation channel offers an excellent opportunity to coordinate annual channel maintenance operations with a large-scale restoration effort.

The U.S. Army Corps of Engineers dredges the Mississippi River navigation channel to a depth of 45 feet between the mouth of the river and Baton Rouge. Two studies have identified the potential for using material from an in-river sediment trap for use in delta marsh restoration.

A large pit is dug into the bottom of the river to create a sediment trap that captures material transported along the bottom of the river. The sediment deposited into the trap will then be mined with hydraulic dredges that will pump the material to beneficial use areas to create marsh. Hydrologic modeling suggests that a trap 4 miles long, 1,500 feet wide, and 65 feet deep would optimize the deposition of sediment.

Beneficial use sites for the project are on the east and west banks of the river in West Bay, the Delta National Wildlife Refuge, and Pass a Loutre Wildlife Management Area. Initial construction of the sediment trap will create an estimated 1,440 acres of new wetlands in the western project area and 440 acres in the eastern project area.

Large areas of marsh in the Mississippi River Delta have converted to shallow open water while much of what remains is deteriorated.

Progress to Date

The Louisiana Coastal Wetlands Conservation and Restoration Task Force directed the U.S. Army Corps of Engineers to conduct a complex investigation of the construction of a sediment trap in the Mississippi River between Venice and Head of Passes in 1999. The findings from this investigation led to the Task Force's approval of engineering and design for this project in August 2002.

The project is currently de-authorized.

This project is on Priority Project List 12.

For more project information, please contact:

US Army Corps of Engineers
New Orleans District

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Local Sponsor:
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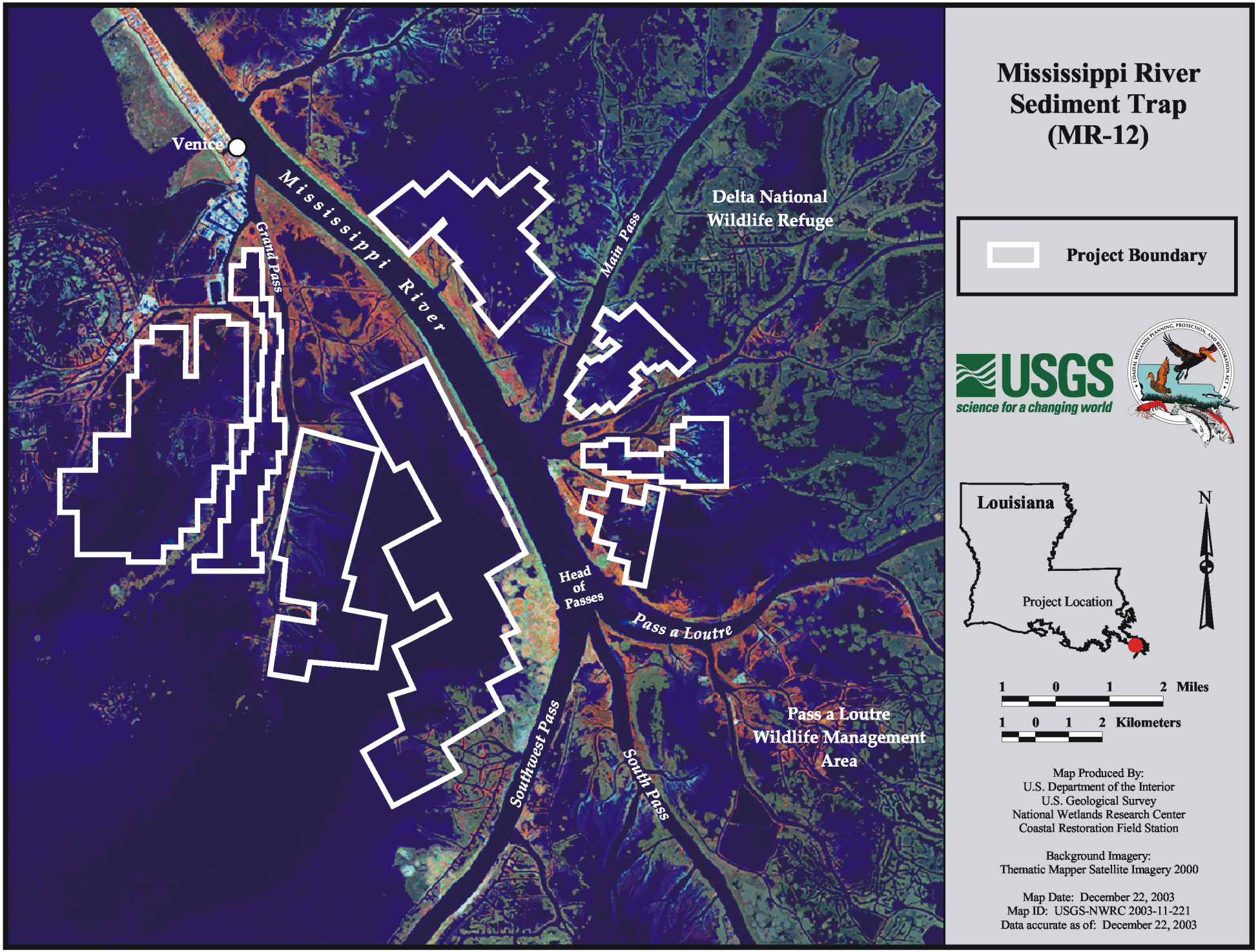

Mississippi River Sediment Trap (MR-12)

Project Boundary

USGS
science for a changing world

Louisiana

Project Location

N

1 0 1 2 Miles

1 0 1 2 Kilometers

Map Produced By:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Field Station

Background Imagery:
Thematic Mapper Satellite Imagery 2000

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