rev. September 2010
Cost figures as of: February 2023

Sabine Refuge Marsh Creation Cycle I (CS-28-1)

Project Status

Approved Date: 1999 **Project Area:** 10,551 acres *
Approved Funds: $3.61 M **Total Est. Cost:** $3.61 M
Net Benefit After 20 Years: 214 acres
Status: Completed February 2002
Project Type: Marsh Creation
PPL #: 8

Location

The Sabine Refuge Marsh Creation Project is located in the Sabine National Wildlife Refuge, west of LA Highway 27, in large, open water areas north and northwest of Brown's Lake in Cameron Parish, Louisiana.

Problems

The project is intended to strategically create marsh in large, open water areas to block wind-induced saltwater introduction and freshwater loss. In addition, it will increase nourishment in adjacent marshes while reducing open water fetch (distance a wave can travel) and the erosion of marsh fringe.

Restoration Strategy

Cycle I constructed 214 acres of marsh within the shallow, open water area within retention dikes. The perimeter of the created marsh was planted with smooth cordgrass. Dredged slurry obtained from the Army Corps of Engineers' dredging of the Calcasieu River Ship Channel was placed in the containment area.

Upon consolidation of the dredged material, the southern containment dike was degraded and breached to allow for water movement and restore the area to more natural conditions. Prior to the placement of dredged material, trenasses (small, man-made bayous) were constructed in the project area. These trenasses facilitate natural conditions and allow estuarine organisms to access the created marsh. This project is part of five cycles over a 10-year period with each cycle requiring individual construction approval.

* Acreage is the total for all 5 cycles.

Sabine Marsh Creation Cycle 1 on Sabine NWR looking westward. Note the constructed trenasses for fisheries and water movement can be seen.

Progress to Date

Priority Project List 8 funded $5.9 million to complete construction of a permanent pipeline and one cycle of marsh creation. Engineering analyses at the time indicated that the construction of a temporary pipeline would be more cost effective. Therefore, a temporary pipeline was utilized for Cycle I. However, further analysis determined that a permanent pipeline would be advantageous. In 2004, additional funds for engineering and design and construction were approved for Cycles II and III. Funds for Cycle II include the construction of a permanent dredged material pipeline.

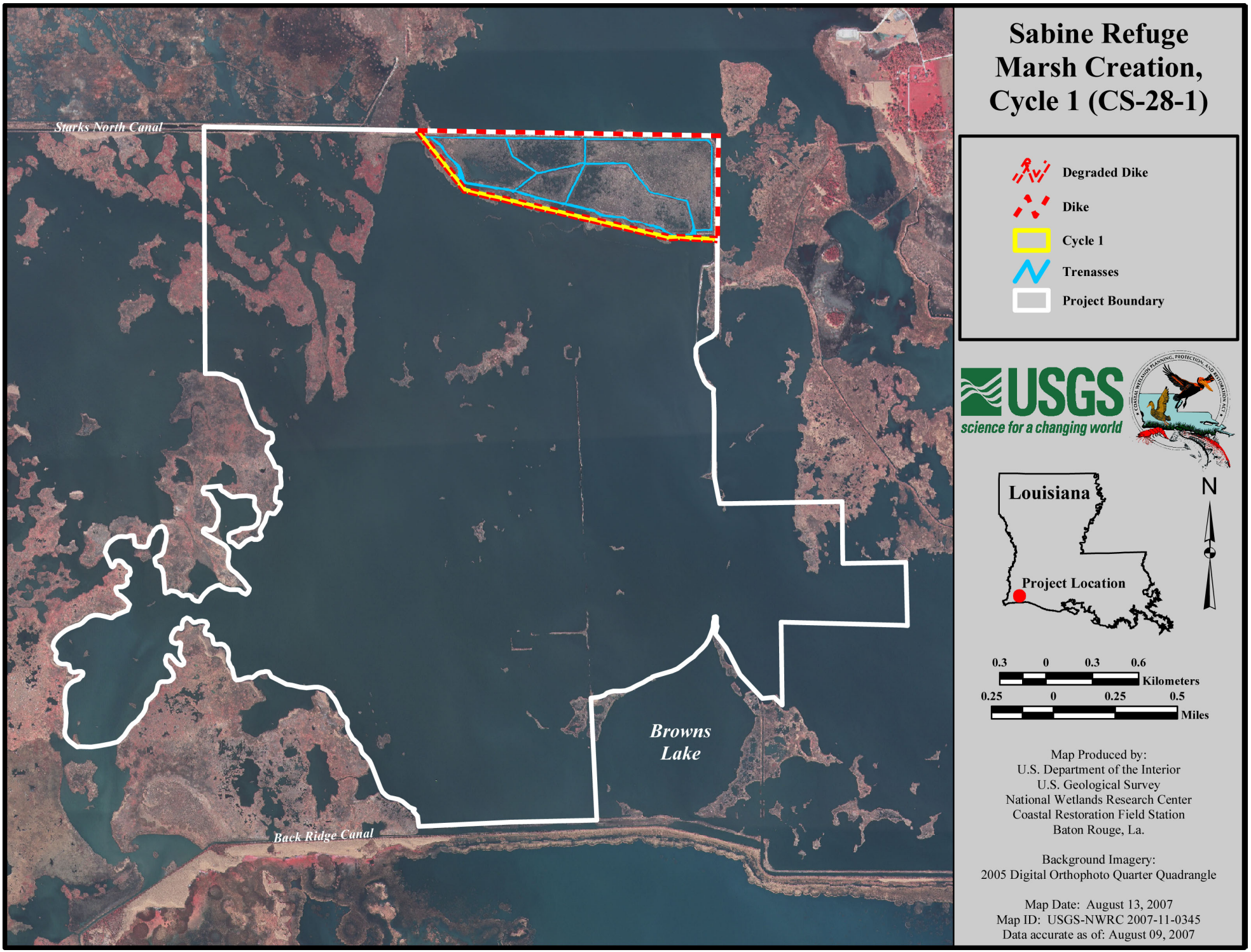
Construction of the Cycle I site was completed on February 26, 2002.

For more project information, please contact:

Federal Sponsors:
U.S. Army Corps of Engineers
New Orleans, LA
(504) 862-2309

U.S. Fish and Wildlife Service
Lafayette, LA
(337) 291-3100

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



Sabine Refuge Marsh Creation, Cycle 1 (CS-28-1)

- Degraded Dike
- Dike
- Cycle 1
- Trenasses
- Project Boundary

USGS science for a changing world

Louisiana

Project Location

N

0.3 0 0.3 0.6 Kilometers

0.25 0 0.25 0.5 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: August 13, 2007
Map ID: USGS-NWRC 2007-11-0345
Data accurate as of: August 09, 2007