November 2013
Cost figures as of: February 2023

Sabine Refuge Marsh Creation, Cycles IV & V (CS-28-4&5)

Project Status

Approved Date: 2011 **Project Area:** 10,551 acres
Approved Funds: $6.29 M **Total Est. Cost**: $6.60 M
Net Benefit After 20 Years: 331 acres
Status: Completed
Project Type: Marsh Management
PPL #: 8

Location

This project is located in the Sabine National Wildlife Refuge, west of LA Highway 27, in large, open water areas west of Brown's Lake in Cameron Parish, Louisiana.

Problems

The project area is experiencing marsh degradation due to saltwater intrusion, subsidence, and wind-driven erosion. Salt water migrates into the region from the Calcasieu River Ship Channel through existing canals and bayous. Wind-driven waves cause further loss of the remaining marsh fringe. This has resulted in the conversion of vegetated intermediate marsh to large shallow open water areas.

Restoration Strategy

Cycles 4 & 5 consist of the creation of 230 and 232 acres (respectively) of brackish marsh platform using material dredged from the Calcasieu River Ship Channel. Approximately 1 million cubic yards of material will be placed within each of the two Sabine Refuge Cycle 4 & 5 marsh creation areas. The dredged material will be contained by earthen dikes. Low level earthen overflow weirs will be constructed to assist in the de-watering of the marsh creation disposal area and to create fringe marsh with the overflow. The dredged slurry will be placed between elevations 2.0 and 2.7 feet North American Vertical Datum 88.

Progress to Date

The Sabine Refuge Marsh Creation Project, originally sponsored by the U.S. Army Corps of Engineers, was approved in 1999 as part of the Project Priority List 8 and later broken into 5 cycles. In 2001, the 214 acre Cycle 1 was constructed and in 2007 the 232 acre Cycle III was constructed. Cycle II consisted of the construction of a permanent pipeline to promote the beneficial use of material removed from the Calcasieu River Ship Channel during maintenance dredging events. This permanent pipeline was constructed in 2010. In 2012 the Corps transferred lead Federal sponsorship to FWS, which in turn signed a Cost Share Agreement with CPRA.

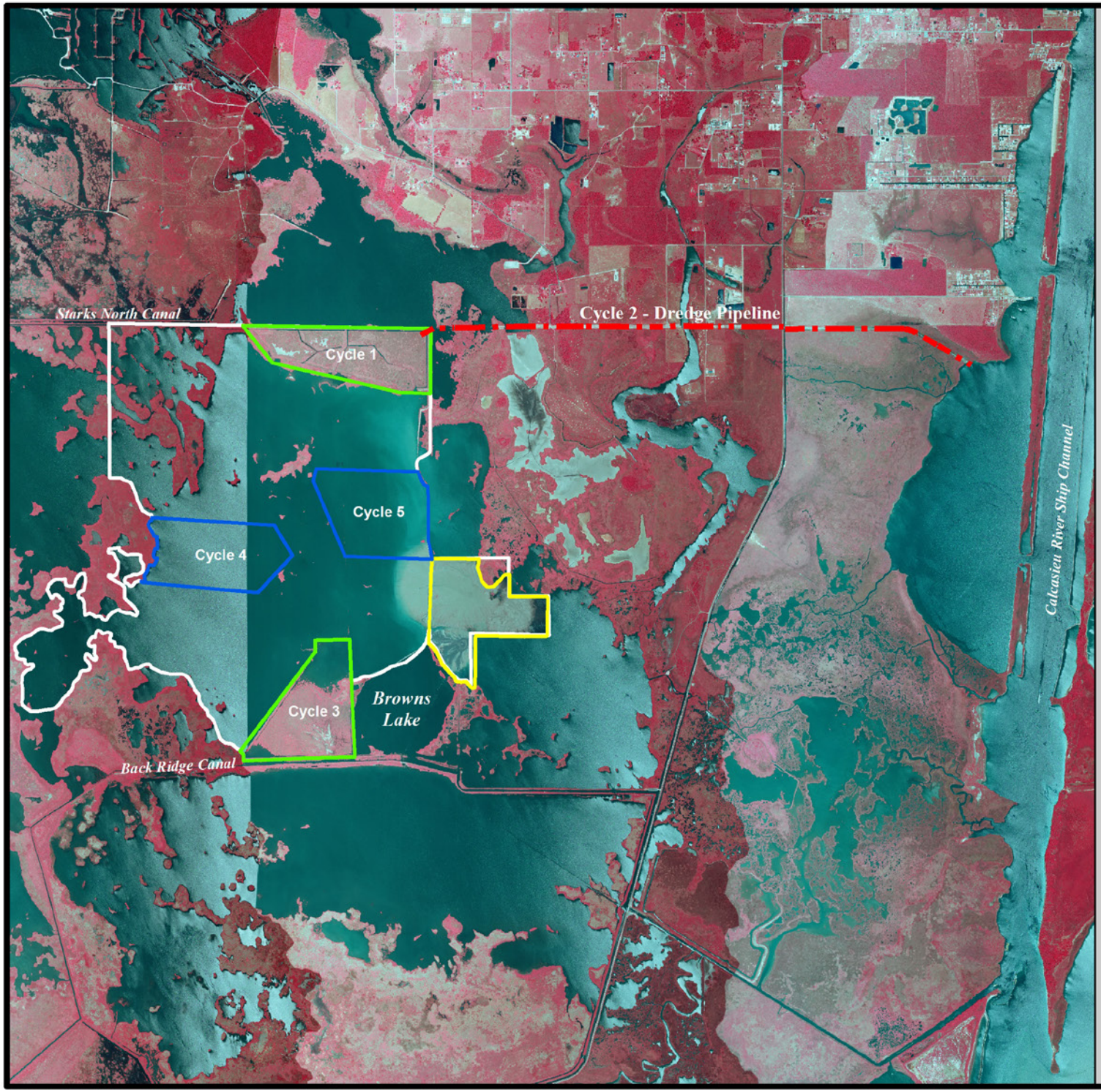
View of the State funded Cycle 2 Marsh Creation site on Sabine National Wildlife Refuge constructed in 2010.

View of the "overflow" area just outside of the Cycle 2 Marsh Creation Cell in which material was allowed to overflow the lower dike. Material was quickly colonized by Smooth cordgrass.

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



Sabine Refuge Marsh Creation, Cycles 4 & 5 (CS-28-4&5)

- Cycle 2 - Dredge Pipeline
- Project Boundary
- Completed Cycle
- Proposed Cycle
- State Project

USGS
science for a changing world

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0.5 0 0.5 1 Kilometers

0.5 0 0.5 1 Miles

Map Produced by:
U.S. Department of the Interior
U.S. Geological Survey
National Wetlands Research Center
Coastal Restoration Assessment Branch
Baton Rouge, La

Background Imagery:
2010 NAIP Photography

Map Date: June 19, 2013
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