Sabine Refuge Marsh Creation Increment 1 (CS-28)

Project Status

Approved Date: 1999
Cost: $5.92 million
Project Area: 5,776 acres
Status: Construction
Net Benefit After 20 Years: 993 acres
Project Type: Marsh Creation

Location

This 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

This project will construct earthen partitions within the shallow, open water areas to serve as material retention dikes. These dikes will be planted with smooth cordgrass to cover the dike surfaces. Dredged slurry obtained from the Army Corps of Engineers' dredging of the Calcasieu Ship Channel will be placed in the containment area. The Increment 1 containment dikes are completed and deposition of dredged material is scheduled to begin in December 2001. The first increment will create 125 acres of marsh. Construction of the Increment 2 retention dike and the accompanying deposition of material will begin in 2003.

Upon consolidation of the dredged material, the containment dikes will be breached to construct trenasses (small, man-made bayous) that will facilitate natural conditions and allow estuarine organisms access to the created marsh. This project will extend into five increments over a 10-year period with each increment requiring individual construction approval.

It is proposed that a creation event will occur every two years for a 10-year cycle, resulting in a total of five marsh creation events. An alternate pipeline route is being evaluated. The new route would allow annual creation events to occur due to improved access to the Calcasieu River.

A trackhoe constructs one of the 25-ft wide by 20-ft deep trenasses in shallow, open water prior to disposal of the dredge material. Trenasses are small, man-made bayous constructed in order to make the marsh creation area a functioning wetland.

Progress to Date

Priority Project List 8 funded $5.9 million to complete construction of a permanent pipeline and one increment of marsh creation. Because the cost efficiency of a permanent pipeline is only achieved with 10 pumping events or more, current engineering analyses indicate that the construction of a temporary pipeline will be more cost effective.

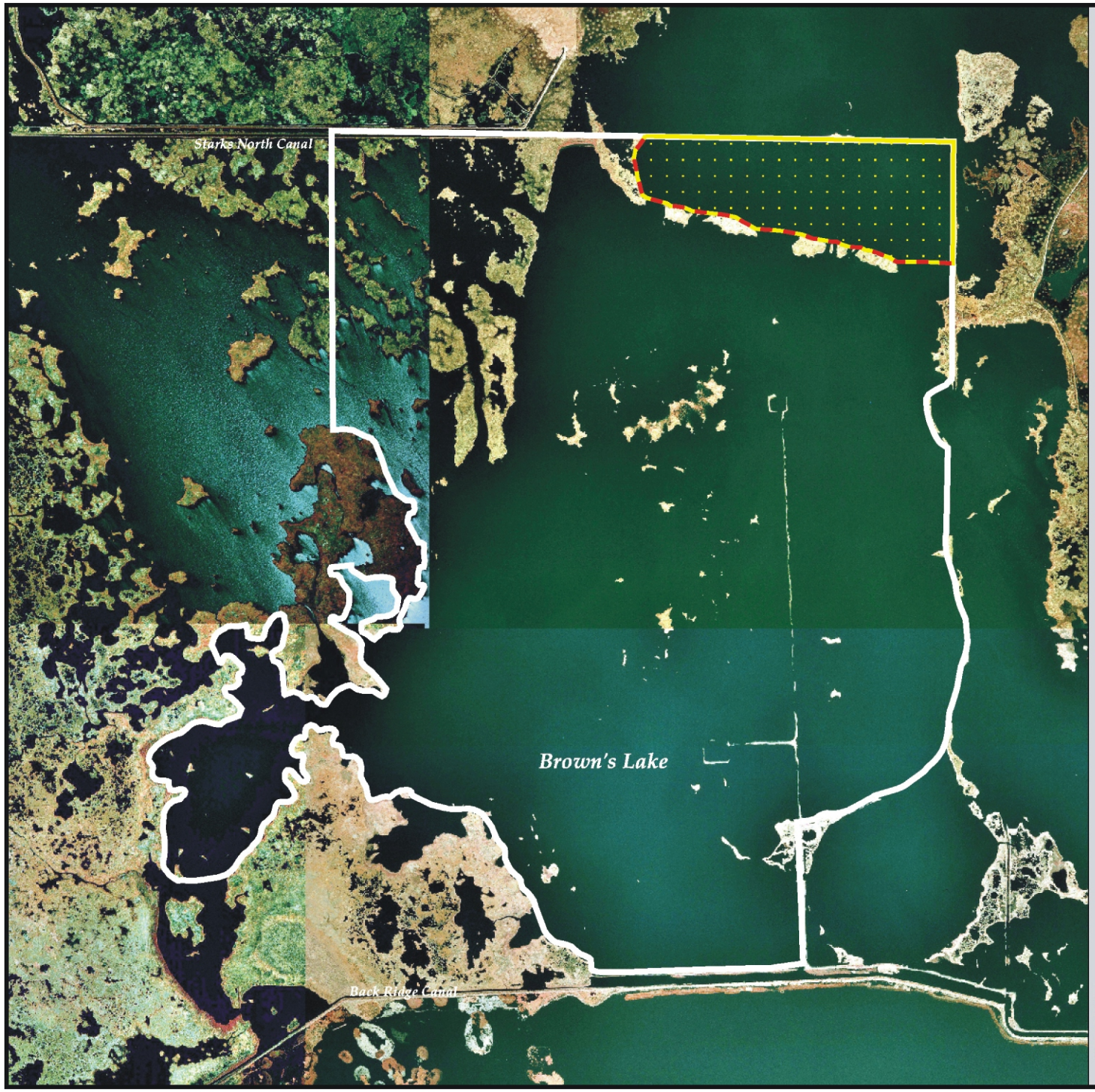
The Corps of Engineers will request funding for the remaining phases of the project upon completion of the engineering and design of Calcasieu Ship Channel dredge cycle 1 (2001). The monitoring plan was finalized in July 2001, and monitoring has been initiated.

For more project information, please contact:

Federal Sponsors:
U.S. Army Corps of Engineers
New Orleans, LA
(504) 862-2502

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

Local Sponsor:
Louisiana Department of Natural Resources
Baton Rouge, LA
(225) 342-7308



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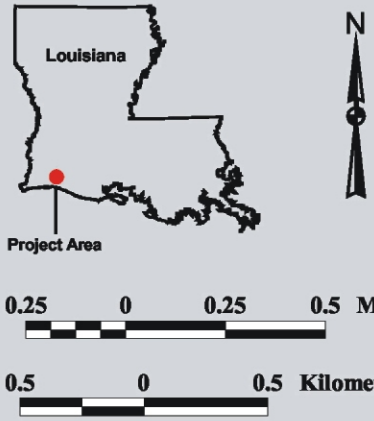
Dike

Increment 1

Project Boundary



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