Lost Lake Marsh Creation and Hydrologic Restoration (TE-72)

Project Status
Approved Date: 2010  Project Area: 7,312 acres
Approved Funds: $31.5 M  Total Est. Cost: aaaTEC
Net Benefit After 20 Years: aaaNB
Status: Construction
Project Type: Marsh Creation
PPL #: 19

Location
The project is located in the Terrebonne Basin, Terrebonne Parish, near the vicinity of Lost Lake.

Problems
Significant marsh loss has occurred between Lake Pagie to the point that little structural framework remains between the lake and Bayou Decade. North and west of Lost Lake, interior marsh breakup has resulted in large, interior ponds where wind/wave energy continues to result in marsh loss.

Restoration Strategy
The original marsh creation feature consisted of approximately 465 acres around Lake Pagie, north of Bayou Decade, and along the northwestern Lost Lake shoreline. A favorable construction bid allowed an initial 245-acre marsh creation expansion with a portion of the remaining construction funds. Additional funding from the Louisiana Department of Natural Resources, Louisiana Oil Spill Coordinator’s Office, and an overestimation of dredged material quantities allowed for further project expansion. The marsh creation restored/protected some key features of structural framework (i.e., lake rim and bayou bank) within the area and connected to one of the marsh creation cells recently constructed under the North Lake Mechant Landbridge Restoration Project (TE-44). In total, over 1,100 acres of marsh were created/nourished. In addition, 30,000 linear feet (26 acres) of terraces were constructed to reduce fetch in an area of deteriorated marsh north of Bayou Decade.

Four fixed-crest weirs along Big Carencro Bayou and Rice Bayou were replaced with variable-crest structures. At certain times of the year, Big Carencro Bayou is an excellent source of fresh water and sediment from the Atchafalaya River/Four League Bay system. However, delivery of that water into the marshes west of Lost Lake has been limited by fixed-crest weirs. Structures with bays/gates were installed to increase freshwater and sediment delivery into those marshes. A similar structure was also installed along Little Carencro Bayou to increase freshwater and sediment delivery into the marshes north of Lost Lake.

TE-72 marsh creation cells along Bayou Decade. Recent vegetative growth can be seen on some of the newly-deposited dredged material in this December 2019 photo.

Progress to Date
This project was approved for Phase I on January 20, 2010. Phase II Construction was approved on January 24th, 2013. Construction was completed on November 30, 2018.

This project is on Priority Project List 19.

For more information, please contact:

Federal Sponsor:
U.S. Fish and Wildlife Service
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Local Sponsor:
Coastal Protection and Restoration Authority
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