

MISSISSIPPI RIVER SEDIMENT DELIVERY SYSTEM – BAYOU DUPONT (BA-39) FINAL CONSTRUCTION FACT SHEET

Background:

The Mississippi River Sediment Delivery System – Bayou Dupont (BA-39) project is located in the Barataria Basin within Jefferson and Plaquemines parishes, about 3.7 miles northwest of Myrtle Grove. The Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) Task Force designated BA-39 as part of the 12th Priority Project List in 2003. The Environmental Protection Agency (EPA) is the lead federal sponsor for this project with funding approved through the Coastal Wetlands Planning, Protection, and Restoration Act of 1990 by the United States Congress and the Wetlands Conservation Trust Fund by the State of Louisiana. The Louisiana Department of Natural Resources (LDNR) is the local sponsor. The LDNR Coastal Engineering Division performed the engineering and design services.

The objective of the project is to create approximately 500 acres of sustainable marsh. This project constitutes using the renewable resource of Mississippi River sediment to create marsh in a rapidly eroding and subsiding section of the Barataria landbridge. Now converted to mostly open water, the poor condition of this marsh is likely due to a combination of subsidence, dredging of oil and gas canals, and lack of freshwater input. The project area is located near the Mississippi River and is a prime opportunity to utilize the relatively new initiative of creating marsh using Mississippi River sediment as opposed to hydraulically dredging material from within the Barataria Basin.

Timeline:

- Final plans and specifications were completed in 2007.
- The Task Force approved construction funding in January 2008.
- LDNR awarded a construction contract in the amount of \$20,719,145.50 and issued a Notice to Proceed to Great Lakes Dredge and Dock Company, LLC in February 2009.
- Great Lakes Dredge and Dock Company began construction in April 2009.
- Pumping of marsh material was completed in March 2010. Vegetative plantings were installed in April and May of 2010.
- Final Project Completion Cost \$24,012,739.46.

Project Facts and Features:

- 25,935 linear feet of earthen containment dikes were constructed to facilitate the creation of approximately 484 acres of intertidal marsh at a constructed elevation of +2.0' NAVD 88. An additional 84 acres of marsh were created through use of NOAA American Recovery and Reinvestment Act funds (\$3 million) and surplus CWPPRA construction funds (\$0.9 million).
- 2,578,240 cubic yards of sandy material were placed to construct three marsh creation areas.
- Mississippi River sediment was hydraulically dredged by the *Florida*, a 36", 16,000 HP cutter suction dredge, between Mississippi River Miles 63 and 65. The sediment was pumped approximately 5 miles.
- Two permanent 48" smooth steel casing pipes were installed underneath LA Highway 23 and New Orleans and Gulf Coast Railway to facilitate the temporary placement of a dredge slurry pipeline.
- Intertidal marsh vegetation was planted in the spring of 2010. Approximately 26,000 units were planted.
- This is the first CWPPRA project to mine sediment from the Mississippi River to create marsh.

No maintenance is anticipated, and EPA and DNR will continue to monitor the project over the 20-year project design life.

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