

Mississippi Oyster Cultch Early Restoration Project

Phase I Early Restoration

PROJECT DESCRIPTION

The Mississippi Department of Environmental Quality (MDEQ) implemented the Mississippi Oyster Cultch Early Restoration Phase I Project to help restore natural resources of the Gulf following the 2010 *Deepwater Horizon* oil spill (Spill).

Valued at an estimated \$11 million, the Oyster Cultch Early Restoration project enhanced existing reefs within the footprint of harvestable areas in the western Mississippi Sound by providing a hard substrate on which oyster larvae could attach and grow. This early restoration project is anticipated to help restore natural resources injured by exposure to oil, dispersant, and/or response actions following the Spill.

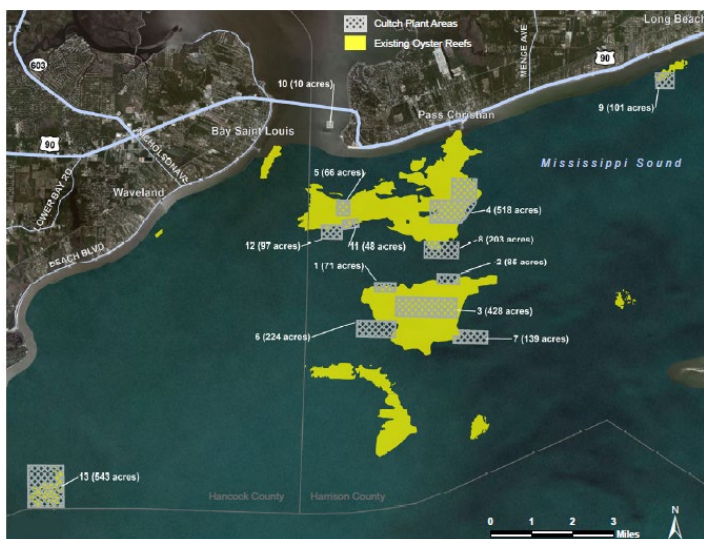


Figure 1: The map above depicts existing oyster reefs located in the western Mississippi Sound



Using a pump and nozzle system, crushed limestone was deployed from a spray barge to enhance existing Mississippi oyster reefs.

Of Mississippi's existing 12,000 acres of oyster reef, this project enhanced 1,430 acres by placing cultch material (oyster shell and limestone). During the fall of 2012 and spring of 2013 a total of 141,321 cubic yards of limestone gravel were placed during cultch deployment over approximately 324 acres on the Pass Christian Reef, 809 acres on the Pass Marianne Reef, and 100 acres on the St. Joe's Reef. In addition, 20,037 cubic yards of oyster shell were placed over approximately 100 acres on the Henderson Pass Reef and over approximately 100 acres on the Pass Christian Reef.

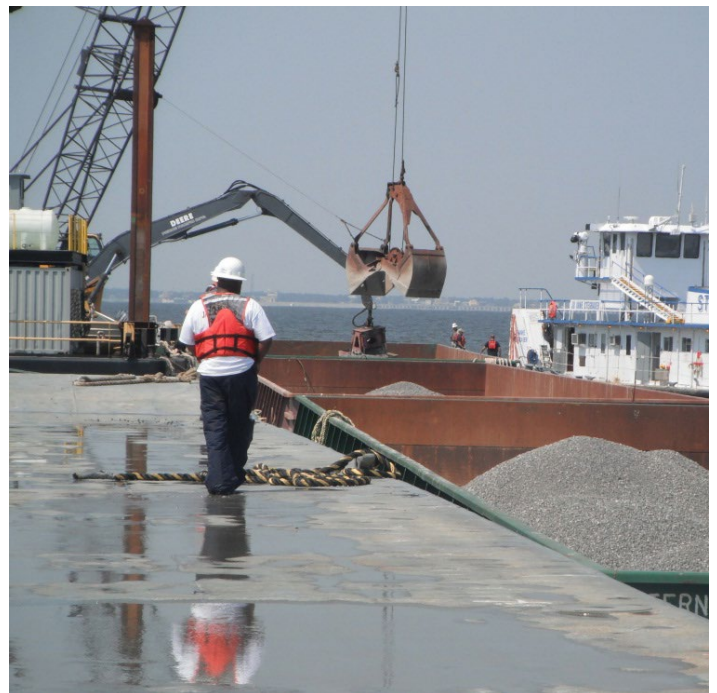
Performance monitoring began in 2014 and will continue through 2020 to determine the effectiveness of the project; data are available at <https://www.gulfspillrestoration.noaa.gov/>.



Initial sampling of the enhanced oyster reefs 120 days after deployment of the cultch indicated that oysters were growing on the limestone. Oysters collected range

Funding for this project is the result of an April 21, 2011 negotiated commitment from BP to provide \$1 billion for early restoration Gulf wide. When negotiated, the agreement was the largest of its kind. Of the \$1 billion, Mississippi was allocated \$100 million.

Detailed information about this project and other restoration efforts underway can be reviewed at www.restore.ms.



Crushed limestone is loaded onto barges and hauled to the oyster reef sites.