

Application Story

PROJECT RED EYE CROSSING, LOUISIANA
Product Geotube® Marine Structures Technology
Application Diversion Dikes

Location Red Eye Crossing, Baton Rouge, Louisiana
Installation 1994

The Challenge:

Heavy silt deposits and sediment build-up in the Mississippi River can disrupt shipping channels and deep water, oceangoing vessels. The Red Eye Crossing area of the River, a frequent trouble zone just south of Baton Rouge, suffered from deposit sediment problems. The Corps of Engineers often dredges the channel to insure it is deep enough. A plan of action was needed to reduce silt buildup in the shipping channel and also reduce dredging costs for this area.

The Solution:

Geotube® marine containment technology was selected for this diversion dike project. The purpose of the dikes at Red Eye Crossing was to narrow (contract) the channel to a width where the river flow would prevent sediment from dropping out of suspension and to reduce dredging in the area.

38,000 Geobag® units were mechanically filled with dredged river sand using the hopper method [photo 2]. These bags were placed at a depth up to 66 feet [photos 3-4]. Additionally, 550 Geocontainer® units were used in the construction of underwater dikes. These containers were filled with 500 cubic yards of dry sand [photos 5-6]. They were sewn closed by hand-held equipment. The units were then deployed through the bottom of a split-hull barge [photo 7]. A total of six structures were constructed for sedimentation control.

The Results:

The series of diversion dikes effectly narrowed the River, increasing velocity and dramatically reducing silt dropout and the need for constant channel dredging [photo 8]. This was a good example of successful engineered channel improvement.



Contact Information:

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