

CASE STUDY

# BIG SWAMP CREEK

Covington County, Mississippi  
Submar Project 17572

**SUBMAR®**



**BEFORE**



**AFTER**

## EXISTING CONDITIONS

A 150-foot wide pipeline right-of-way contained four natural gas pipelines with diameters of 42 inches, 30 inches, and two 36 inches. The two 36-inch pipelines crossed Big Swamp Creek in Covington County, Mississippi. The two 36-inch pipelines had a preexisting grout mat system that had failed due to heavy rain, and the grout mats were dangling from them with a 12-foot plunge pool in between. The soil and banks were composed of clay, sand, and gravel, and they were heavily vegetated with grass and trees.

## SOLUTION

The project area was dewatered and graded to yield gentle slopes less susceptible to erosion. A geotextile material was placed atop the grade, followed by the Submar articulating concrete mat system which extends across the channel from bank to bank.

The upstream, downstream, and flank edges of the mat system were toed into anchor trenches that were backfilled with existing material and rip rap. Downstream of the mat system, a riprap subgrade was installed to prevent headcutting from progressing upstream.

Riprap was placed on the banks to prevent further lateral migration upstream and downstream of the mat system. Upon completion of final grading, seed and straw were placed on the disturbed areas of the site to aid in a rapid return to preconstruction vegetative conditions.

**THE Exposed Pipeline Remediation Experts**

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