

CASE STUDY

BUFFALO CREEK

Beckham County, Oklahoma
Submar Project 18119

SUBMAR®



BEFORE



AFTER

EXISTING CONDITIONS

A 12-inch natural gas pipeline crosses Buffalo Creek in Beckham County, Oklahoma in a 16-foot wide right-of-way. The creek bed and banks are composed of clay and sand. A fallen tree in the creek pushed water to the right creating a scour area and eroding the right descending bank. Further, headcutting eroded the creek bed and exposed the pipeline sitting on the creek bed.

SOLUTION

Trees were removed from the creek. The site was dewatered using an earthen dam and pumps. Both banks and the streambed were graded, and a geotextile material was placed on top of the grade.

A Submar articulating concrete mat system (10 mats) was installed from high bank to high bank to armor the pipeline. All edges of the mat system were toed into anchor and flank trenches that were backfilled with existing material and rip rap. A subgrade rock grade control was installed downstream of the mat system to prevent headcutting. Additional riprap was placed on the banks to prevent future erosion and lateral migration. Final grading was performed, seed and straw were placed on the disturbed area.

THE Exposed Pipeline Remediation Experts

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