

CASE STUDY

MAMMOTH WASH

Imperial County, California
Submar Project 14018

SUBMAR®



BEFORE



AFTER

EXISTING CONDITIONS

20-inch products pipeline runs parallel to a railroad track in Imperial County, California. Both the pipeline and the railroad are crossed by the 250-foot wide Mammoth Wash. Flash floods caused lateral migration and eroded 3 to 6 feet of the right-descending bank. This erosion exposed the pipeline for 15 feet at the toe of the bank. The soil in this area is composed of silty sand and gravel, while the terrain is sparsely vegetated with buckwheat, witch grass, dune primrose, and verbena.

SOLUTION

The exposed pipeline was covered with additional compacted soil that was graded to a gentle slope. A Submar articulating concrete mat system was installed 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. Additionally, a Longitudinal Peaked Stone Toe Protection (LPSTP) system was installed to prevent future toe and bank erosion. Final grading was performed to restore the disturbed area to pre-existing contours.

THE Exposed Pipeline Remediation Experts

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