Jordan River riparian improvements mark a final milestone in the Midvale Slag Superfund Site

ROD has riparian component

Fran Costanzi, RPM

Erna Waterman, RPM

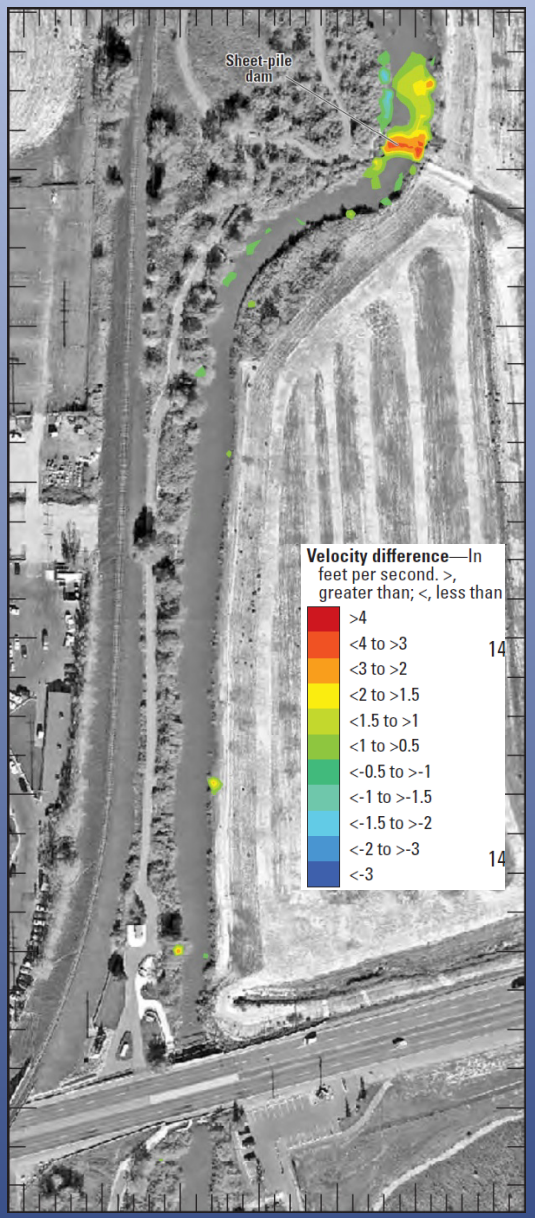
4 Phases – 1st phase sheet pile work and spur dikes to change river flow

Replace damaged sheet pile dam, a relic from historic operations without diverting water.

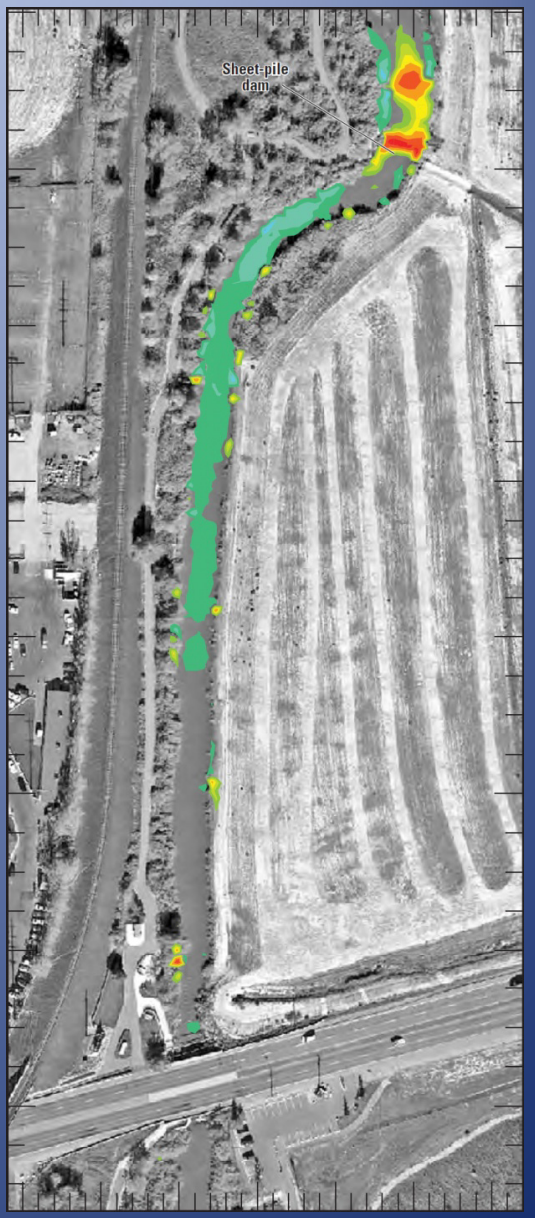
Construct boulder structure with boat chute and pull out area to accommodate kayakers.

Predicted water-surface elevation difference maps (500 ft^3/s)

Sheetpile minus as designed



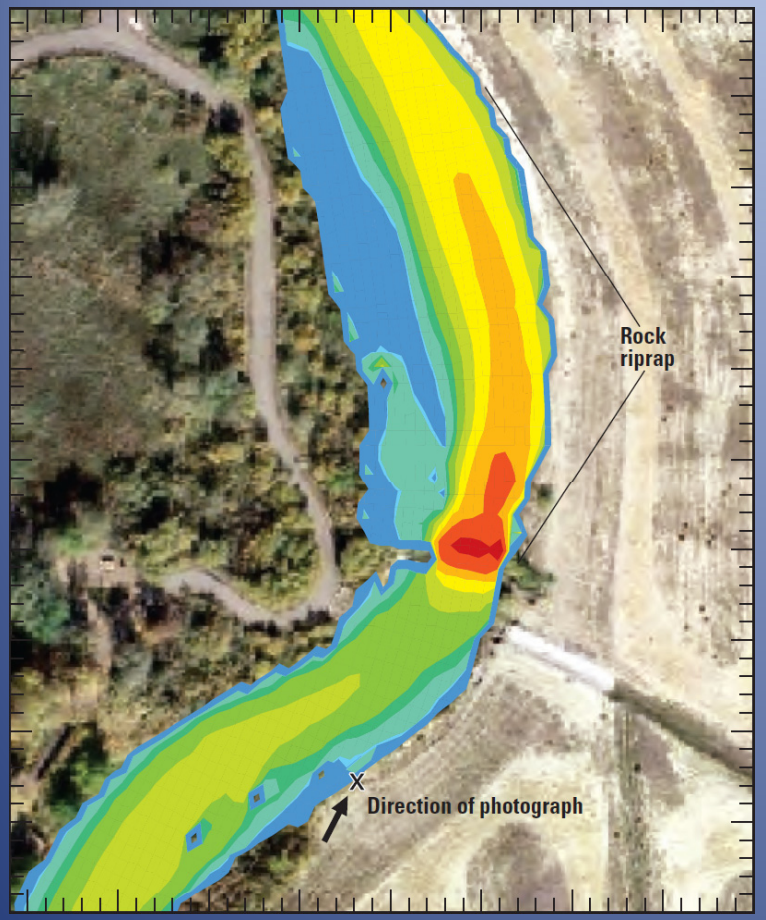
Sheetpile minus as designed plus 1.0 ft



Sheetpile minus as designed plus 2.0 ft

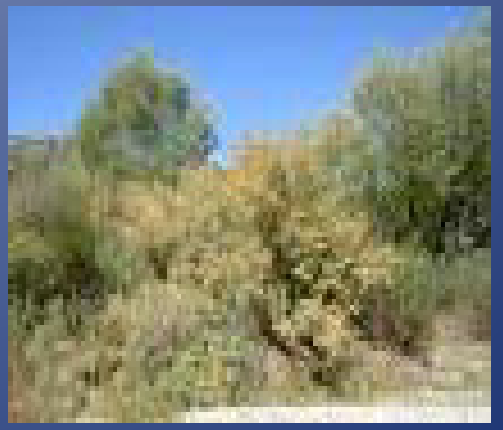
USGS
science for a changing world

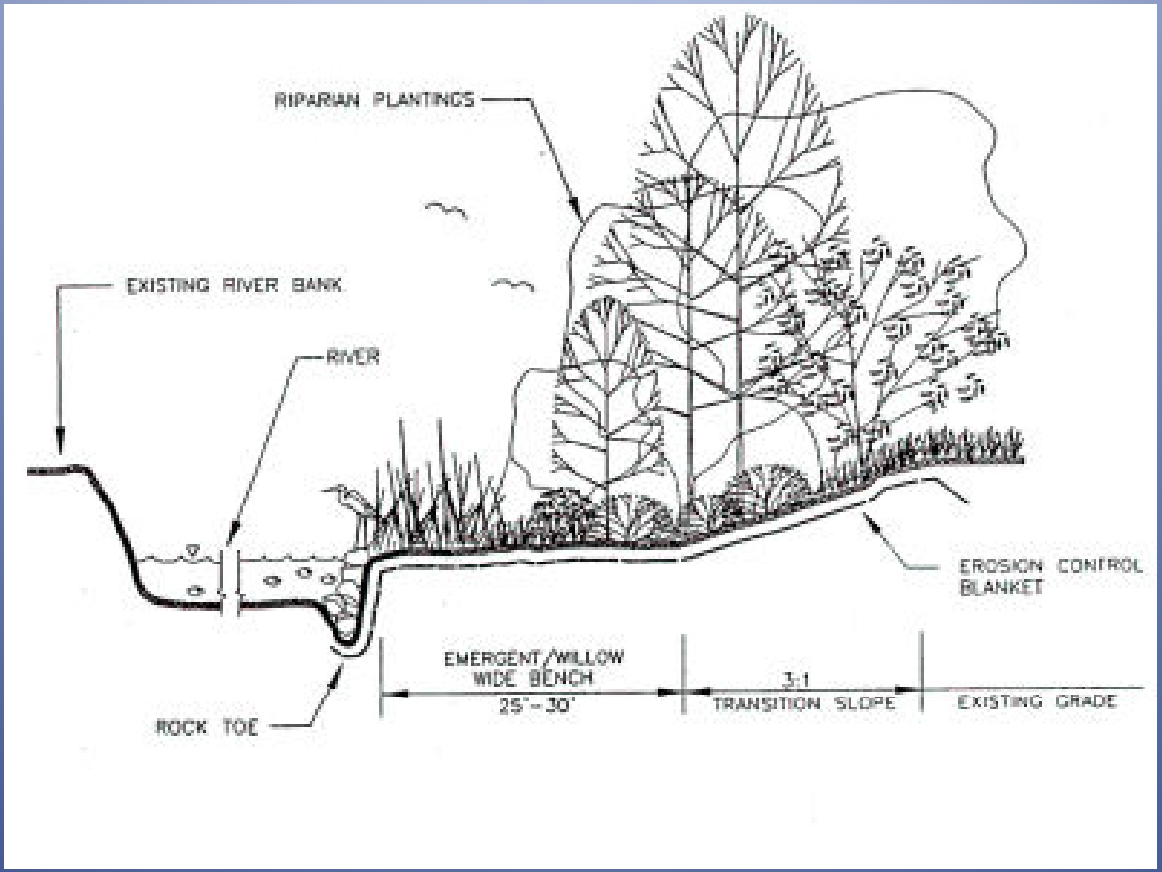
Example of rock riprap design based upon model predicted shear stress



USGS
science for a changing world

Problem – Monoculture of Russian Olive trees, Tamarisk and phragmites





Open up the river channel to slow the river down while adding diverse native plants to support banks.

Multi ownership of the river bank and challenge of arid Utah climate made low maintenance a factor in design plans. Rock on upper bench and willows at toe were part of the RD/RA. Non-point environmental education and invasive weed training conducted during RD/RA.