

Stone Dairy Project

DESCRIPTION:

Sulphur Creek Bank Stabilization, located on Sulphur Creek at Highway 89, was constructed in August 2009. Bank stabilization techniques used included building boulder vanes to protect the lower portion of the banks, dissipating the energy into the center of the channel, sloping back the vertical banks, and expanding the floodplain. On Sulphur Creek about 500 feet of bank was laid back on a 1:1 slope. Seven boulder veins were installed, and the toe of the slope was planted with willows and other native vegetation. The floodplain on the opposite bank was taken down, and planted with willows perpendicular to the flow of water.

SPONSORS:

FEDERAL: Natural Resources Conservation Service, American Recovery and Restoration Act; STATE: California State Water Resources Control Board-Proposition 40 funds, Sierra Nevada Conservancy; PRIVATE: Landowners

PROJECT RESULTS:

In summary, the project met the goals and objectives of improving water quality and restoring functional habitats in the Middle Fork Feather River watershed. The project did not meet the goals of every parameter as outlined; however, it is expected that as the project matures over time, channel morphology and vegetation establishment will develop the expected outcomes creating better fish habitat, reducing water temperatures and sediment, and improving existing local water storage and supply. By rehabilitating the natural process of floodplain function (i.e. restoring the elevation of the shallow floodplain groundwater aquifer) and reducing bank erosion water in the floodplain aquifer will help reduce water temperatures and filter fine sediments. In addition as vegetation growth increases over time (increasing infiltration and shading), temperature, turbidity, and other water quality parameters (i.e. nutrients) will continue to improve. Decreasing fine substrates and increasing bank stability and pool habitats will also improve fish habitat. The quality and extent of riparian habitat will continue to improve as well, due to the restored channel floodplain elevation and reduced bank erosion thus allowing continued establishment of riparian vegetation.

PROJECT REPORTS (IF AVAILABLE):

Stone Dairy Final Report

<http://www.weebly.com/uploads/4/0/5/5/40554561/stonedairy.pdf>