Little Last Chance Creek Project

Description:

Located in Sierra Valley, the Little Last Chance Creek project area is broken into three treatment reaches: the Guidici Ranch, the North Creek and the East Creek. The Guidici Ranch is located at the top of the alluvial fan in the most constricted part of the valley. Project design for the Guidici Ranch involved treating nine bank sections along a one-mile stretch of channel through reshaping of vertical banks, vegetating, and installing boulder vanes to direct the force of flows away from eroding terrace banks. On the North and East Creeks, a combination of concentrated flows, highway culverts, loss of sediment supply, and intensive agricultural use have contributed to the development of gully channels to an existing depth of three to nine feet. Restoration for these treatment reaches consisted of using riffle augmentation to allow high flows to spill out onto the floodplain. The project also included grazing management changes through the use of fencing. Construction began in October and was completed in December 2007.

Sponsors:

FEDERAL: Secure Rural Schools Title II funds, Natural Resources Conservation Service, U.S. Forest Service Plumas National Forest; STATE: California State Water Resources Control Board-Proposition 40 funds, California Department of Fish & Game; LOCAL: Plum

Project Results:

Post-project habitat parameters measurements were somewhat disappointing during follow-up in 2008. However, it should be noted that habitat typically requires three to five years to mature after projects of this type. Some of the increased bank instability is most likely due to the location of the post-project sample reach in a constructed segment of channel. Also, it was unfortunate that downstream water users requested bankfull flows in May 2008 before project revegetation had a chance to get established. The response of fish populations in 2008 was not conclusive. There was a total length through the project area of 2,144 feet of actively eroding bank. The project treated those banks so that they are now in a configuration that will allow vegetation to become established, leading to long term stability. It appears that there is not a clear difference in turbidity between pre- and post-project conditions on the sample dates.

Project Reports (if available):

Guidici Final Report
http://www.weebly.com/uploads/4/0/5/5/40554561/guidicifinal.pdf

Middle Fork Feather River Complex
http://www.weebly.com/uploads/4/0/5/5/40554561/mffr_complete_final_report.pdf