



PRUNUSKE CHATHAM, INC.

DEHLINGER WINERY STREAM STABILIZATION PROJECT, 2005-2007

Client: Dehlinger Winery

Contact: Dan Dehlinger, 707-823-3428

This project involved environmental compliance, design, and construction for stream stabilization at Dehlinger Winery in the Laguna de Santa Rosa watershed. A small stream flowing through highly erodible soils had severely incised in recent years creating steep, undercut banks leading to multiple bank failures and slumps that would ultimately threaten the stability of a reservoir and create severe sedimentation in the Laguna downstream. PCI prepared a natural channel design and revegetation plan, prepared and submitted permit applications, conducted CEQA compliance, and negotiated with agencies.



The streambed and reservoir were stabilized by reconstructing the natural bed elevation of the stream on 10 feet of engineered fill allowing for appropriate channel geometry widths and flood-prone meadow creation. The 800 linear feet of streambed was built using boulder step pools, roughened riffles, and boulder cascades for grade controls. Streambanks and created floodplain areas were stabilized using coir

blankets along with an aggressive transplanting and revegetation effort. Isolated slips and headcuts were stabilized using various bioengineering techniques including brush layering, willow wattles, straw wattles, live staking and fabric reinforced earth fills with brush layers. PCI completed the channel construction and revegetation in 2006.

