

## THE BRANSON SCHOOL BANK STABILIZATION PROJECT, 2005-2007

Client: The Branson School, Ross, CA

This project involved environmental compliance, design, and construction for bank stabilization at The Branson School in Marin County on Ross Creek. Ross Creek is a stream in the Corte Madera Creek watershed. The banks on a portion of the school's campus had severely eroded in recent years creating steep, undercut banks adjacent to large buildings. The eroded banks were threatening the foundations of the gymnasium and a classroom building. The eroding banks were also contributing to downstream sedimentation and habitat impairment for steelhead trout. PCI prepared a biotechnical bank stabilization design, prepared and submitted permit applications, conducted CEQA compliance, and negotiated with agencies.

The banks were stabilized by reconstructing a natural fabric and willow reinforced engineered fill at the gymnasium and building a near-vertical, soil-nailed, stained and sculpted shotcrete wall with planting pockets at the classroom building. Both techniques allowed for appropriate channel geometry widths and improved hydraulics for fish habitat. The 130 linear feet of shotcrete wall was shaped and colored to appear like adjacent bedrock outcroppings in the creek using a drilling and concrete subcontractor and was planted with native ferns and forbs by PCI. The streambed was supplemented with river run gravel and returned to a natural and improved condition. The construction was completed in 2007. Ongoing work includes a 3-year maintenance, monitoring and reporting program for an establishment period of the native vegetation.





