

## Willow Creek Watershed Restoration Planning and Implementation 2004-2011

Stewards of the Coast and Redwoods and California State Parks

The majority of Willow Creek watershed is within the Sonoma Coast State Park. The creek, a tributary to the Russian River's estuary in Sonoma County, has been identified as a high priority for the California Department of Fish and Wildlife's (CDFW) coho broodstock program. PCI has participated in an ongoing, multi-pronged approach to ecological restoration in the watershed since the mid 1990s.

PCI's role in the watershed restoration program includes (most recent to earliest):

- Designer and prime contractor for removal of a series of culverts and replacement with a new 43-foot span HS20 vehicle bridge to open over 7 miles of upstream coho spawning and rearing habitat.
- Preparation of biological and hydrologic CEQA evaluations and an Initial Study/Mitigated Negative Dec. Permits were obtained from the Army Corps of Engineers, Regional Water Quality Control Board, CDFW, U.S. Fish & Wildlife Service, NOAA Fisheries, Sonoma County, and the Coastal Commission.



- Coordination with County roads department to upgrade 4 miles of road with rolling dips, culvert replacements, landslide repairs, and revegetation with native species, thus reducing sediment delivery to the stream by approximately 15,000 cubic yards.
- Evaluation of the opportunities and constraints associated with restoring a sustainable, fish migration channel through the aggraded lower Willow Creek valley. PCI documented results in the Sustainable Channel Development report with recommendations that have guided later implementation projects.
- Development of the Willow Creek Watershed Management Plan through a comprehensive and iterative process involving analyses of existing conditions, geomorphic assessments, and stakeholder outreach. Specific, prioritized recommendations for ecosystem restoration were developed, along with strategies for implementation.
- Guidance to watershed planning process (2001-2005) through participation in bimonthly Technical Advisory Committee (TAC) meetings and multiple public meetings. The TAC was comprised of staff from NOAA Fisheries Service, CDFW, Sonoma County Department of Transportation and Public Works, North Coast Regional Water Quality Control Board, Mendocino Redwoods Company, Trout Unlimited, and LandPaths.