Weaverville Water Conservation and Rainwater Catchment Demonstration Projects and Education

WEAVERVILLE SANITARY DISTRICT (WSD) & NORTHWEST CALIFORNIA RESOURCE CONSERVATION & DEVELOPMENT COUNCIL (NCRCD)













STATEMENT OF THE PROBLEM

Weaverville experiences water reliability and capacity issues during summer droughts. During extended drought periods streams can be completely dried up by water diversions, forcing residents to purchase bottled water for consumption and resulting in periodic fish kills.

PROJECT GOALS

- 1. Support and improve local and regional water supply reliability
- 2. Improve instream conditions for salmonid species
- Demonstrate water collection and conservation methods and conduct public outreach

THE SOLUTION

This project contains three elements that, when implemented, will meet Coho Recovery Plan recommendation RW-II-B-01: "Develop incentives for water right holders to dedicate instream flows for the protection of coho salmon (Water Code § 1707)."

PROJECT IMPLEMENTATION AND ACCOMPLISHMENTS

- 1. Modification of a historic agricultural ditch that diverted 1cfs to irrigate a series of small pastures, yards, and orchards. Project implementation keeps about 485,000 gallons per day instream.
- 2. Rainwater catchment demonstration and water conservation workshops to capture more than 160,000 gallons of stormwater, leaving approximately 41,000 gallons instream during the low flow period.
- 3. Installation of two 12,500 gallon potable water tanks for the Weaverville Community Services District to replace a leaking 24,000 gallon redwood tank, saving at least 73,000 gallons annually

COMPLETION DATE

Ongoing

PROJECT BUDGET

TOTAL	\$ 164,451
Leveraged funds:	\$ 24,588
IRWM funds:	\$ 135,023

BENEFITS

Economic

NORTH COAST RESOURCE PARTNERSHIP

Estimated benefit of \$205 per year in increased instream flows¹ (The estimate above was developed using a value of 833,419 gallons of water that remain instream due to project implementation)

Water Supply

- Savings of 188,419 gallons of treated potable water through conservation measures, reducing water treatment costs
- Water supply reliability
- Reduced costs of water purchases

Watershed Rehabilitation

- · Improved fish and wildlife habitat
 - » Increased instream flow of 834,180 gpd
 - » Reduced late summer mortality for Fish in Weaver Creek
 - Attainment and maintenance of water quality standards for lower water temperatures and improved biological conditions

Cultural benefits

- Sustain the area's agricultural heritage through provision of alternative water supplies and implementation of conservation measures
- Concerted public outreach to educate residents on drought adaptation measures

Jobs and Local Economic Benefit

- The project uses local labor and supplies when possible, thus contributing to State goals for environmental justice and social equity
- Increased fire-fighting capacity of 1000 gallons

NEXT STEPS & RECOMMENDATIONS

WSD and 5C will continue to collaborate with landowners and other organizations to improve water supply reliability and instream habitat in the Weaver Creek watershed.

CONTACT

Jim Cloud Weaverville Sanitary District, Weaverville, CA 96093 530.623.4102 Mark Lancaster 5 Counties Salmonid Conservation Program Weaverville, CA 96093 530.623.3967

CITATIONS

1. Brown, T.C. 2007. "The Marginal Economic Value of Streamflow from National Forests: Evidence from Western Water Markets." In: M. Furniss, C. Clifton, and K. Ronnenberg, eds. Advancing the Fundamental Sciences: Proceedings of the Forest Service National Earth Sciences Conference, San Diego, CA, 18-22 October 2004. Gen. Tech. Rep. PNW-GTR-689. Portland, OR: U.S. Forest Service, Pacific Northwest Research Station. p. 458-466