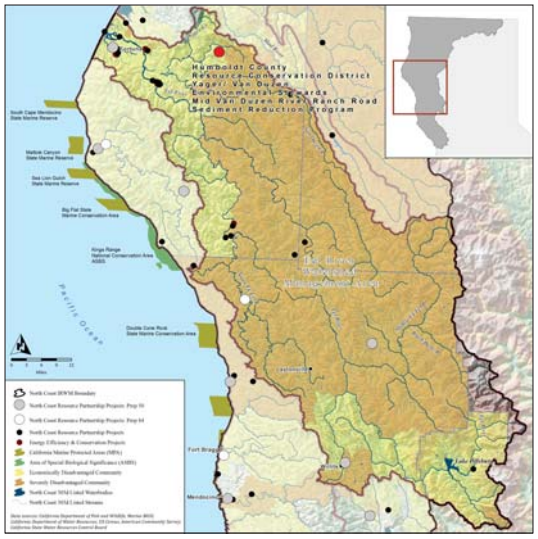
Mid Van Duzen River Ranch Road Sediment Reduction Program

HUMBOLDT COUNTY RESOURCE CONSERVATION DISTRICT
YAGER/VAN DUZEN ENVIRONMENTAL STEWARDS (YES)



STATEMENT OF THE PROBLEM

In December of 1999, the Environmental Protection Agency (EPA) completed the "*Van Duzen River and Yager Creek TMDL for Sediment* "(EPA 1999). The Total Maximum Daily Load (TMDL) stratified the basin into three distinct sub-basins, the lower basin, the middle basin (Mid Domain), and upper basin. EPA identified the Mid Domain encompassing approximately 202 square miles as contributing the largest amount of sediment to the Van Duzen River at 3,319 tons/mi2/yr .

One of the Water Quality concerns identified by EPA in the TMDL was expressed as "the challenge for resource managers is to reduce the risk of management-associated sediment delivery, particularly in the event of large storms, through implementing a prevention and restoration strategy, which will result in protection of these critical habitat values" (EPA 1999).

Project Goals

1. Improve salmonid habitat and increase spawning and rearing habitat
2. Improve water quality with respect to sediment delivery in the Mid-Van Duzen River through implementation of sediment source treatments on road reaches and stream crossings

THE SOLUTION

Members of the Yager/Van Duzen Environmental Stewards (YES) initiated an ownership-wide assessment aimed at identifying controllable sources of road-related sediment. YES members include approximately 80,000 acres of non-industrial, private ranch lands in the Mid Domain of the Van Duzen River watershed. Approximately 420 miles of road were inventoried and a total of 1,020 sites were recommended for erosion control and/or erosion prevention treatment.

This project implemented erosion control treatments which reduced sediment delivery. The project also built community trust and allowed for voluntary improvement of natural resources providing public benefit and prosperity for Humboldt County.

PROJECT IMPLEMENTATION AND ACCOMPLISHMENTS

The implementation of the project encompassed two work seasons starting July 2009 and ending October 2010. To prepare for implementation the database presented in the "Watershed Assessment and Erosion Prevention and Erosion Prevention Planning Project for the Middle Van Duzen River" (PWA 2003) was verified and adjusted to identify priority sites for sediment source treatments. Sites specific plans were developed. Priority was based on: erosion potential, distance from Class I streams, volume of potential sediment reduction, comparison of implementation cost vs. sediment volume, dependence of the landowner on the road, and accessibility for implementation. Sediment source treatments were based on site-specific conditions and standard practices as verified through field visits.

COMPLETION DATE

June 2011

PROJECT BUDGET

IRWM funds:	*$278,381*
Leveraged funds:	*$ 58,436*
Total cost:	**$336,817**

BENEFITS

Economic

- Sediment reduction provided an estimated benefit of $20,592
- reduction in lower domain flood events

Water Quality

- 3,432 tons of sediment prevented from entering the watercourse over the next 20 years
- Improvements to beneficial uses including MIGR, RARE, WET, WQE, FLD, SPWN, and REC2

Habitat and Ecosystem Function

- Improved salmonid spawning and rearing habitat

Cultural

- Hosting local workshops and a "Partners Day" event sharing with landowners and partners from across the nation the benefits of collaborative locally led conservation can have in rural communities

Jobs and Local Economy

- The project cost $336,817, which was spent using local labor and supplies when possible, contributing to State goals for environmental justice and social equity
- 10 jobs were created. During a time when there was no market for logs, local contractors were able to stay employed working on restoration projects
- "Restoration jobs tend to double their value in economic output as those investments ripple through the economy" (Moseley & Pincus)

NEXT STEPS & RECOMMENDATIONS

This project documented the effectiveness that landowners can have when working collaboratively with partners. YES leveraged this success into other valuable grant opportunities and collaborative partnering opportunities. With funding support from US Fish and Wildlife Service – Partners Program and the Headwaters Fund, YES developed outreach materials to share this model of success as well as a database documenting all of the work completed by the YES members.

CONTACT

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NORTH COAST RESOURCE PARTNERSHIP