

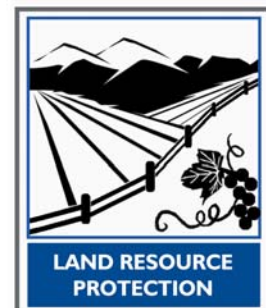
# California Department of Conservation 2004-07 Watershed Coordinator Grant Program



*Western Shasta RCD's Lower Clear Creek Watershed  
Floodway Rehabilitation Project receives the Governor's  
2006 Environmental and Economic Leadership Award*

Annual Report #2  
December 2006

California Bay-Delta Authority  
Interagency Agreement #4600002373



## Summary of Grant Program

The Watershed Coordinator Grant Program (WCGP) was established by the Legislature in the Budget Act of 2000 to fund watershed coordinator positions throughout the state. The purpose of the program was to improve impaired watersheds throughout California by providing support for watershed improvement efforts at a local level. Under this \$2 million pilot program, the Department of Conservation (DOC) awarded grants to Resource Conservation Districts to hire coordinators to work on 30 impaired watersheds across the state.

This highly successful two-year pilot program demonstrated that watershed coordinators are very effective and extremely valuable. By facilitating collaboration among diverse stakeholders across the watershed, coordinators were able to build coalitions for watershed work with hundreds of partners including government agencies, non-profit organizations, businesses, landowners, and individuals. In addition to building consensus, the coordinators contributed significantly to the success of many other state programs including the CALFED Watershed Program, CDFGA noxious weed programs, CDFFP fire safe programs, and DFG salmon enhancement programs. Using a coordinated, local approach to watershed planning and management resulted in highly successful and sustainable watershed improvements.

Recognizing the value of the program and its contribution to meeting CALFED Watershed Program goals, the CALFED Bay-Delta Program provided \$1 million in 2003, and \$9 million in 2004 to continue the program within the CALFED Solution Area through June 30, 2007. The grants were expanded to include non-profit organizations and local governments.

Currently, the WCGP provides funding for 48 grants and 60 watershed coordinator positions throughout the Bay-Delta System. An infrastructure of highly experienced and established coordinators are currently implementing watershed improvement projects and helping to meet CALFED Program objectives.



*Watershed Coordinator, DFG staff, and volunteers collecting samples for World Water Monitoring Day on Bear Creek, Shasta County.*

The WCGP is among the few state grant programs that require grantees to provide performance measures and a work plan, which outlines goals, objectives, and specific tasks to be undertaken to complete the work plan. Grantees are also required to provide quarterly and annual accounting of how these measures are being met. The grantee reports are reviewed by DOC staff and compiled

into comprehensive reports, which cover all of the grants. Under the program, recipients of these highly competitive grants have worked to bring together environmental groups, agricultural landowners, and local governments to cooperate on projects that benefit water quality, stream restoration, fire safety, and other local watershed issues.

This report covers the period from the start of the current grant program in spring 2004 through March 31, 2006. Information received from the grantees has been reviewed by the DOC staff and is presented in this annual report. Also included in this report is a table, which summarizes the total amount of additional watershed project funding requested and obtained through the efforts of the coordinators since the start of the current grant program.

As the Additional Funding Table shows, the coordinators have secured almost **\$33 million** in additional watershed funding since the start of the grants in spring 2004. This additional funding is the result of grant writing and fund-raising activities conducted by the coordinators. Coordinators wrote proposals requesting a total of over \$127 million for additional watershed work. **The \$33 million obtained by the coordinators represents a 26% funding success rate.** Most of this funding is designated for watershed projects and does not provide funding for coordinator positions to conduct these projects.

The grantee reports are summarized as individual fact sheets and are listed alphabetically by grantee name. For each grant, the watershed background, benefits to the watershed, benefits to the CALFED Program, and performance measures are listed. Please refer to the individual fact sheets for details.

In addition to their main coordination activities, we are pleased to report that since the beginning of the grant in spring of 2004, the watershed coordinators have worked in 38 counties and collaborated with 35 cities and multiple partners to complete 181 on-the-ground projects thus far. These projects have included:

- ◆ Water-quality monitoring projects, involving partner agencies and citizen volunteers.
- ◆ Restoration projects including bank stabilizations, fish ladder installations, and barrier removals.
- ◆ Creating and completing watershed assessments or planning documents.
- ◆ Conducting workshop and training sessions for landowners and residents on a range of conservation issues including water monitoring, non-native invasive species removal, and the agricultural waiver program.



*Willow planting on the Eight Mile Valley Meadow Restoration Project, Lake County.*

- ◆ Helping to establish new watershed stakeholder groups.
- ◆ Conducting on-going outreach events at public venues such as schools, fairs, and community events, focusing on educating the public about local watershed issues.
- ◆ Organizing watershed clean-up events, resulting in the removal of tons of trash from local watersheds and involving dozens of community volunteers.
- ◆ Conducting watershed tours for local stakeholders, legislative staff, school groups, and partner agencies.
- ◆ Publishing numerous watershed reports, brochures, flyers, newsletters, and press releases.

Watershed coordinators have built extensive networks of partnerships among community stakeholders and have facilitated collaborative decision-making between diverse private and public entities. They have developed an understanding of issues relevant to their local watersheds and have become an important resource to their communities. Coordinators build coalitions for watershed improvements, obtain funds for those improvements, carry out projects, and educate residents on how to best manage and care for their watersheds.

As part of the management of the grant program, the DOC staff maintains regular contact with the watershed coordinators and conducts field visits to monitor progress on work plans and program objectives. Throughout the state, coordinators have confirmed that the program fulfills a great need. Coordinators are able to reduce duplicative efforts, leverage resources, build collaborative partnerships, and encourage local stakeholder participation. Since the program's inception, local citizen involvement has grown immensely. Coordinators



*Community watershed clean-up event along the San Joaquin River.*

have been successful in energizing their communities and getting more people involved, as evidenced by the most recent quarter where several new watershed groups were established and numerous clean-up events were conducted. Residents have developed a sense of ownership and look to their coordinators for guidance. Watershed coordinators have provided that leadership.

Several of the coordinators have been involved in the program for over three years. It has taken time to integrate themselves into the community, develop relationships, and establish a reputation for being reliable and getting things done. Over a period of years, the coordinators have developed an understanding of the watershed and how to best address local issues. After many years of

persistent effort, momentum has grown and progress has accelerated dramatically. Coordinators are now expanding their efforts into sub-watersheds and adjacent watersheds. For example, a group of coordinators worked together to form CABY, a regional effort to address issues related to the Cosumnes, American, Bear and Yuba Rivers. Long-term coordinators provide stability and enable groups to work together to track and address complex problems over a period of time.

Moreover, many of coordinators have been involved in multiple long-term projects that take years to coordinate and implement. The coordinator for the Upper Cache Creek Watershed spent years working with the Scott's Creek Watershed Council, BLM, the County, Forest Service, NRCS, and local students to implement a gully restoration project, which consists of 16 acres. The site had been a significant contributor of nutrient laden sediment to Clear Lake. The coordinator was involved in researching and selecting the project design, negotiating the contract, working with the contractors on site, conducting education outreach, and monitoring the project's long term viability. This is only one of many projects that the coordinator is involved with at any given time. The project was the culmination of many years of effort and could not have been completed without the coordinator's involvement during the entire project.

The WCGP is the only grant program that funds watershed coordinator positions. The watershed coordinators have been extremely successful in securing additional watershed funding; however, the majority of this funding is designated for specific watershed projects, not positions. Without support from the WCGP, most organizations will not be able to sustain or maintain their coordinators. Not only would it impact the organization's ability to function, but also it would severely reduce the number of future projects in the watershed and the amount of funding coming into the area. Coordinators have been very effective in getting diverse stakeholders to cooperate and work together. In many cases, it has taken years to establish this network. The loss of the coordinator would be highly detrimental and could result in a breakdown of cooperation among watershed groups, government entities, and stakeholders. Coordinators have often stated that they have finally established momentum within the watershed and that this progress would end if they were not present. The WCGP fulfills a need for which there is no other funding. Both field visits and progress reports indicate that the program is effective in delivering results. Coordinators who have worked in their watershed for the past 3-5 years are the most successful. These coordinators are highly experienced, well established in their community, understand local dynamics, and have built trust and strong relationships with multiple stakeholders



*Lower Stoney Creek Watershed Tour,  
Glenn County.*

and partners. Losing well-established coordinators would be devastating and would erase much of the gain made over the past six years.

In fact, many coordinators have reported that their skills are in such high demand and their efforts so successful that there is a great need for a second coordinator to work on management plans and projects within the watershed. This clearly illustrates the program's effectiveness and success. Demand for coordinators is great and many impaired watersheds would greatly benefit from having one or more designated coordinators.

Watershed coordinators are crucial for the success of watershed improvements. Prior to the WCGP, relatively few of the state's watersheds had watershed coordinator positions identified and funded. For those few, results had been impressive, and those that were subsequently funded by the WCGP have been extremely successful. As the program has progressed, it has become increasingly apparent that watershed coordinators are vital for facilitating collaboration, building consensus, increasing stakeholder awareness, obtaining project funding, and initiating watershed improvement projects. Coordinators are building the watershed management infrastructure necessary for healthy watersheds statewide.

The WCGP is a critical component of an overall strategy for watershed management in California, and should not be viewed independently. A statewide study of watershed partnerships conducted by the Resources Agency and the State Water Resources Control Board found that a key gap in watershed management was in building the local capacity to develop and implement projects. The WCGP provides the resources for a watershed coordinator so that the community can collaborate and cooperate to successfully plan and implement projects. Without a permanently funded and dedicated watershed coordinator, the community would lose and the watershed would suffer. It is important to provide support for this program to insure that essential watershed improvements are continued statewide.

**Table 1: Additional Funding Requested/Awarded to Date**

<b>Grantee Name</b>	<b>Cumulative Requested</b>	<b>Cumulative Awarded</b>
Alpine County	\$1,624,442.68	\$170,183.00
Arroyo Seco Foundation	\$3,582,181.00	\$0.00
Battle Creek Watershed Conservancy	\$700,870.00	\$655,470.00
Butte County RCD	\$3,306,564.00	\$187,367.00
Central Modoc RCD	\$1,695,261.00	\$333,558.00
Central Sierra RC&D	\$2,885,587.00	\$242,200.00
Chowchilla-Red Top RCD	\$486,480.00	\$33,850.00
Coastal San Luis RCD	\$2,829,662.00	\$1,171,543.00
Colusa County RCD	\$515,134.00	\$185,114.00
Contra Costa Public Works Department	\$975,487.00	\$399,705.00
Contra Costa RCD	\$251,961.00	\$152,566.00
Dear Creek Watershed Conservancy	\$999,320.00	\$839,320.00
Earth Resource Foundation	\$128,400.00	\$106,400.00
East Merced RCD	\$4,228,109.00	\$2,400,300.00
El Dorado Irrigation District	\$2,457,500.00	\$527,500.00
Fall River RCD	\$311,582.00	\$311,582.00
Friends of Deer Creek	\$6,648,791.00	\$37,335.00
Georgetown Divide RCD	\$865,493.00	\$880,193.00
Glenn County RCD	\$2,400,000.00	\$0.00
Los Angeles & San Gabriel Rivers Watershed Council	\$282,157.00	\$136,747.00
Mariposa County RCD	\$514,500.00	\$2,776,382.00
Mojave Desert / Mountain RC&D	\$2,528,480.92	\$6,121.49
Mountains Recreation and Conservancy Authority	\$28,192,860.00	\$335,667.00
Napa County RCD	\$4,987,204.00	\$1,687,926.00
Nevada County RCD	\$1,856,322.00	\$10,350.00
Placer County RCD	\$1,118,875.00	\$1,174,575.00
RCD of the Santa Monica Mountains	\$2,896,029.00	\$613,412.00
Sacramento Area Flood Control Agency	\$1,537,523.00	\$157,523.00
San Francisquito Creek JPA	\$5,749,840.00	\$3,907,056.00
San Joaquin County RCD	\$3,125,004.00	\$1,379,500.00
San Joaquin River Parkway and Conservation Trust	\$1,280,668.00	\$450,400.00
Santa Barbara County Water Agency	\$361,000.00	\$80,000.00
Sierra Valley RCD	\$850,680.00	\$850,680.00
Sloughhouse RCD	\$229,247.00	\$53,550.00
Solano RCD	\$4,787,211.00	\$619,425.00
Sonoma Ecology Center	\$5,640,619.00	\$591,793.00
Stockton East Water District	\$1,096,194.00	\$0.00
Tehama County RCD	\$1,223,162.00	\$128,342.00
Upper Putah Creek Stewardship	\$559,032.00	\$39,300.00
Upper Sacramento River Exchange	\$1,426,462.00	\$308,885.00
Urban Watershed Project	\$50,000.00	\$0.00

**Table 1: Additional Funding Requested/Awarded to Date  
Continued**

<b>Grantee Name</b>	<b>Cumulative Requested</b>	<b>Cumulative Awarded</b>
Western Shasta RCD (Sac-Upper Clear)	\$4,601,061.00	\$0.00
Western Shasta RCD (Upper Cow-Battle)	\$8,028,099.97	\$5,697,104.00
Westside RCD	\$575,000.00	\$58,500.00
Yolo County RCD (Lower Cache)	\$1,613,481.00	\$727,219.00
Yolo County RCD (Lower Sacramento)	\$2,857,958.94	\$1,054,535.94
Yuba County RCD	\$1,414,143.00	\$910,452.00
<b>Totals</b>	<b>\$127,035,256.51</b>	<b>\$32,743,406.43</b>





# Alpine County

Upper Mokelumne / Upper Stanislaus /  
South Fork American / Upper Carson /  
West Walker Watersheds



**Amount Funded:** \$138,473

**Additional Funding Obtained to Date:** \$172,583

## Background

These watersheds are located in Alpine County, the least populated county in the state, and provide water to regions throughout California. Today, 96% of the land is publicly owned, heavily forested, and highly utilized by outdoor recreationists. Resource management is challenged by excessive fuel loads and erosion that have resulted from over 150 years of extensive mining, grazing, timber harvesting, and road building. Mining operations were common at one time and more than 300 abandoned mines are located throughout Alpine County. Timber operations, rural development, and grazing practices have contributed to sedimentation and erosion. With an increase in the population and consequential recreational impacts, animal habitats and water quality continue to be threatened. It is imperative that this pristine environment is restored and protected for future generations.

## Benefits to the Watershed

- ◆ Developed the Alpine Watershed Group's Erosion Control BMP Program. The program assists local contractors in identifying, properly installing, and maintaining BMPs in Alpine County. The program was developed in partnership with Alpine County Public Works and Planning Departments and local contractors. The program will include a manual and workshops specific to Alpine County.
- ◆ Coordinated the Annual Alpine Fishing Meeting to address in-stream habitat and fisheries issues and identify potential restoration efforts.
- ◆ Secured \$200,000 for a collaborative restoration effort for the Lower Hope Valley. The project is being conducted in partnership with the California Department of Fish and Game and the Alpine Watershed Group.



*Trail maintenance work as part of Alpine Creek Days.*

- ◆ Developed a monitoring plan for the restoration efforts on Markleeville Creek at a United States Forest Service Guard Station.
- ◆ Organized a public meeting to garner community support for the Markleeville Creek project. The coordinator has also solicited support from stakeholder groups. The eighteen groups have dedicated a total of 150 hours to the project.
- ◆ Coordinated an erosion control effort at the east end of Indian Creek Reservoir with partners (BLM, Local Fish and Game Commission, and Alpine Watershed Group). The coordinator developed a project proposal and identified potential funding sources to implement BMPs to address phosphorous TMDL on the reservoir.
- ◆ Attained 501(c)(3) status for the Alpine Watershed Group. The nonprofit status will give them access to additional funding opportunities for their volunteer citizen water quality monitoring, Alpine Creek Days, restoration activities, and erosion control BMPs.
- ◆ Helped the Markleeville Water Company complete an application for Tahoe Sierra IRWM funding. The proposal would provide \$1.2 million of Proposition 50 funding for IRWM projects.
- ◆ Helped identify potential nonpoint and point sources of pollution identified in headwaters of the Mokelumne River as part of the Upper Mokelumne River Watershed Assessment and Planning Project.
- ◆ Obtained equipment and supplies to collect macroinvertebrate samples within streams throughout the county. The information gathered will provide a better understanding of the impacts of various land uses and water management techniques.
- ◆ Trained volunteers as citizen water quality monitors during a Kirkwood Creek Day event. The event included developing a water quality snapshot and conducting a creek clean up.
- ◆ Organized a two-day workshop to train volunteers about bioassessment.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator supported the Watershed Program’s goals of fostering collaboration between stakeholders and agencies and the goal to build capacity for local stakeholders to address watershed issues. This year the coordinator continued to serve on the Upper Mokelumne River Watershed Assessment and Planning Project Advisory Committee. The coordinator represented the interests of Alpine County stakeholders and helped identify potential sources of point and nonpoint pollution. Additionally, the coordinator worked with Alpine County to develop a groundwater management plan and assisted in the dissemination of the information gathered through the study.

The coordinator also trained citizen water quality monitors in bioassessment and basic water quality monitoring. The first full year of citizen volunteer monitoring was completed this year. The coordinator analyzed and distributed the data. Finally, the coordinator worked to reduce duplication of efforts and ensure issues are addressed on a regional basis by meeting and working with many different groups including the Alpine Resource Advisory Council, the Central Sierra RC&D, the Upper Mokelumne River Watershed Council, the Carson River Coalition, the Upper Mokelumne River Watershed Assessment Project Advisory Committee, the Sierra Tahoe, IRWMP Group, and the American River Regional Coordination Team.

**Water Use Efficiency** – The coordinator completed several activities that supported the goals of the Water Use Efficiency program. This year the coordinator began coordinating an effort to update Markleeville Water Company conveyance system in order to decrease the loss of water through pipeline failures and the installation of meters.

**Ecosystem Restoration** – In support of the Ecosystem Restoration Program goals, the coordinator wrote and submitted three project proposals to seek support from state and federal agencies in conducting large-scale restoration projects that will increase instream and riparian habitat throughout Alpine County. The coordinator also acted as the project manager of the Markleeville Stream Restoration project. The project involves coordinating 18 agencies and organizations to restore ¼ mile of floodplain and stream channel. The restoration will improve habitat and water quality.

**Drinking Water Quality** – The coordinator worked to support the goals of the Drinking Water Quality program. Specifically, the coordinator provided support for the development of a groundwater management plan for Alpine County and coordinated a streambank restoration project in partnership with the USFS to improve water quality in Hot Springs creek, the drinking water source for the Markleeville Water Company.

### **Performance Measures**

**Goal 1:** Preserve and enhance the natural system functions of Alpine County’s watersheds for future generations.

**Objective #1:** Assess the Watershed Systems within the Upper Carson, Upper Mokelumne, Upper American, and Upper Stanislaus Watersheds to determine the health of their natural system functions

**Performance Measurement:** A completed set of watershed assessment reports for the Upper Carson, Upper Mokelumne, Upper American and Upper Stanislaus watersheds in Alpine County that identify reaches and specific areas of the watershed that require enhancement or preservation actions.

#### **Progress:**

- Facilitated the consolidation of Alpine Watershed Group GIS information with Alpine County GIS information to produce an expanded GIS network within Alpine County.
- Trained watershed citizen monitors to use GPS for photo-monitoring and data collection.
- Worked with partners to determine what types of macroinvertebrates exist in Alpine County watersheds.
- Held a 2-day training that trained 15 citizen volunteers to conduct bioassessment samples.

**Objective #2:** Accomplish Stream Restoration in the Watersheds.

**Performance Measurement:** Restore 2.5 miles of stream reaches with bio-engineering techniques in Alpine County; begin a multi-million dollar reconstruction restoration on 1 mile of stream reach in the County which reduces sedimentation by 50% below restored sites.

**Progress:**

- Coordinated a ¼ mile revegetation project in Hope Valley.
- Completed monitoring for the Hope Valley restoration site.
- Submitted and received a \$128,987 USRP grant to plan a ½ mile restoration project.
- Coordinated a ¼ mile restoration project on Markleeville Creek and a 1/8-mile restoration project on East Fork Carson River.

**Objective #3:** Monitor progress of watershed restoration and protection.

**Performance Measurement:** Pre and post monitoring data exists for each restoration project, on-going monitoring data occurs for 5 sites on each Alpine County watershed; and ongoing data collection is reported and analyzed to identify reaches for future work or protection.

**Progress:**

- Recruited and trained volunteers for monitoring in Markleeville. The volunteers monitored 9 sites in the Carson Watershed.
- The volunteer monitors conducted water quality monitoring in Kirkwood.
- Trained ten individuals in Kirkwood for water quality monitoring.
- Completed an annual monitoring report.

**Goal 2:** Inspire participation, collaboration, and education to implement projects that benefit and steward the county's watersheds.

**Objective 2.1:** Ensure continued diverse, stakeholder participation to represent the variety of stakeholders in all five headwater watersheds in Alpine County.

**Performance Measurement:** Ensure 75% of the following types of stakeholders are represented at the majority of group monthly meetings: ranchers, conservation groups, landowners, federal agencies, tribes, state agencies, local agencies, water districts, recreation interests, business owners, wildlife advocates, teachers, and unaffiliated residents and that there is participation from stakeholders from the Carson, American, Mokelumne, and Stanislaus watersheds.

**Progress:**

- Published and distributed a monthly newsletter to educate and keep stakeholders information about watershed issues.
- Recruited new members to serve on the watershed group.

**Objective 2.2:** Develop Community Watershed Awareness and Commitment to watershed protection.

**Performance Measurement:** Involve 10% of the community of Alpine County in watershed forums, creek days, and other watershed activities.

**Progress:**

- Worked with Woodford High school students to create and distribute a GIS watershed map that shows priority restoration sites.
- Held watershed workdays in Markeleeville, Bear Valley Creek, Hope Valley, Markleville Creek, and Kirkwood Day Creek. A total of 160 volunteers attended the work days.
- Held a watershed workday with the Washoe Tribe. 20 volunteers participated.
- Constructed a trifold display about the watershed and the activities of the watershed group. The display was used at a variety of public events.

**Watershed Goal 3:** Build the Alpine Watershed Group Capacity to accomplish goals one and two.

**Objective 3.1:** Coordinate with other Watershed Groups in shared major watersheds to share information, resources, and to avoid duplication of effort.

**Performance Measurement:** Avoid duplicating any projects by another watershed group in the shared watershed and have at least one collaborative project with each watershed group that exists in a shared watershed.

**Progress:**

Met with watershed coordinators in all shared major watersheds to share information and determine potential areas for collaboration.

**Objective 3.2:** Facilitate and coordinate a meetings and committees to achieve tasks in the Strategic Plan, attract and retain members.

**Performance Measurement:** 90% retention rate of stakeholder participation in monthly meetings annually and 98% completion of Workplan tasks on deadline

**Progress:**

Conducted monthly stakeholder meetings and presented monthly progress reports to group.

# Arroyo Seco Foundation

## Los Angeles Watershed



**Amount Funded:** \$214,360

**Additional Funding Obtained to Date:** \$391,000\* (funding received 6/16/06)

### Background

The Arroyo Seco watershed is located within the larger Los Angeles Watershed. It connects the San Gabriel Mountains with downtown Los Angeles. Over the years, water consumption has increased dramatically, creating tremendous stress on the watershed. In addition, creeks and rivers throughout the watershed are contaminated because of algae, fecal coliform, trash, and commercial activities. This has resulted in the upper portion of the watershed being designated a Superfund site and caused the closure of nine of Pasadena's wells. As the population increases, so will the need to address these critical issues.

### Benefits to the Watershed

- ◆ Held the initial organization meeting for the Arroyo Seco Stream Team, a group of volunteers who will conduct water quality monitoring, education, restoration, and clean-up activities in the watershed. Fifteen participants signed up for work projects.
- ◆ Prepared and printed the first bill insert for the Valley Water Company (VWC) water conservation partnership, which was delivered to 3,600 customers. The insert focused on native plant and California friendly landscaping tips for residents. Also prepared the insert and news release for the next billing cycle, which will focus on VWC's rebate program regarding ET based irrigation controllers.
- ◆ Promoted and presented local water conservation and water quality information at the Water Wise Garden Anniversary Celebration at the Lummis Home in Northeast Los Angeles, which was attended by over 200 residents.
- ◆ Presented information on Arroyo planning efforts water quality and water conservation to the Hermon Neighborhood Association, the Pasadena Garden Club, and the national Conservation Committee of the Garden Clubs of America. More than 125 people attended the events.



*The Watershed Coordinator participated in an anniversary celebration of a public water-wise garden along the Arroyo Seco.*

- ◆ Discussed water quality with Friends of the Hermon Dog Park, an advocacy group for a dog park located on the banks of the Arroyo Seco. Outlined Best Management Practices (BMPs) for dog owners and gave suggestions for park design to reduce potential negative impacts on water quality in the Arroyo Seco stream.

**Benefits to CALFED Program**

**Watershed Management** – Continued to work with partners on activities throughout the watershed. Spearheaded the Council of Arroyo Seco Agencies (CASA) workshop to coordinate water quality issues in the Arroyo Seco. Representatives from the City of La Canada Flintridge, Angeles National Forest, LA County, City of Pasadena, City of South Pasadena, City of LA, and the RWQCB discussed issues relating to stormwater. Continued outreach efforts to

educate local residents about the environment. Conducted four events that focused on water conservation methods. Also included information in VWC’s inserts that directed people to the “Be Water Wise” webpage for more specific information.



*Watershed Coordinator presents the Verde Award to Congressman Adam Schiff at the Council of Arroyo Seco Organizations’ meeting.*

**Water Use Efficiency** – Promoted native plant sales for Theodore Payne Foundation and California native Plant Society – San Gabriel Mountains Chapter. Informed residents about native plant garden design workshops hosted by Pasadena Water and Power, Theodore Payne Foundation and California Plant Society. Used website and Arroyo news service to inform community about the water conserving landscapes. Promoted Pasadena Water and Power’s community meeting to discuss their Urban Water Management Plan. Provided comments on plan to increase the use of recycled water and water conservation programs.

**Ecosystem Restoration** – Held meetings and promoted the Los Angeles County Department of Public Works and Army Corps of Engineers restoration feasibility study of the Arroyo Seco.

**Performance Measure Progress**

**Goal:** Better Manage, Optimize and Conserve Water Resources and Improve Water Quality.

**Objective # 1: Conservation and Improved Water Management**

Performance Measure: Amount of increased groundwater storage, irrigation savings

**Progress:**

- Promoted watershed awareness to 150 attendees Lower Arroyo Trails Day Celebration



- WC presented watershed and source water information to the Sierra Club's Political Action Committee.
- Providing information on native plants of the Arroyo to the Pasadena Urban Forestry Advisory group to shape public policy and program development.
- Moved forward in setting up institutional agreements amongst grant partners in the Brookside BMP grant.
- Encouraged and strengthened efforts in conservation and water management by acknowledging individuals' and organizations' stewardship with Arroyo Verde Awards.

## **Objective # 2: Improve Water Quality**

**Performance Measure:** Reduction in contaminants in Arroyo Seco Stream; wells put back into service.

### **Progress:**

- Arroyo Seco Stream Team participated in three water quality monitoring events. ASST collected data on relevant water quality parameters at eleven sites.
- The Arroyo Seco Foundation moved forward in implementing the 1.9 million dollar grant to install water quality BMPs in a subwatershed and parking lot in Pasadena. This project will have a positive effect on water quality in the whole stream.
- WC assisted community in creating a raingarden in a pocket park, which will deter storm run-off from the Arroyo Seco.

## **Objective # 3: Stakeholder Outreach and Education**

**Performance Measure:** Number of organizations and volunteers involved in watershed improvement activities; number of volunteer activities with quantitative improvements; Amount of funding for priority projects.

### **Progress:**

- Six unique volunteer opportunities were promoted through the Arroyo Seco Foundation's website and news service.
- Twenty local organizations participated in the quarterly CASO meeting to discuss relevant projects and programs, including a presentation of the proposed Arroyo Center for Art and the Environment.
- The joint-decision of the Los Angeles Commission of Public Works and the Los Angeles City Councilman to construct an alternative route for the tax-assessed sewer line as a means to protect the community-created garden BMP, resulted in incurring an additional \$15,000 cost. That amount was absorbed by the two entities, as a benefit to the community.

# Battle Creek Watershed Conservancy Upper Cow-Battle Watershed



**Amount Funded:** \$87,918

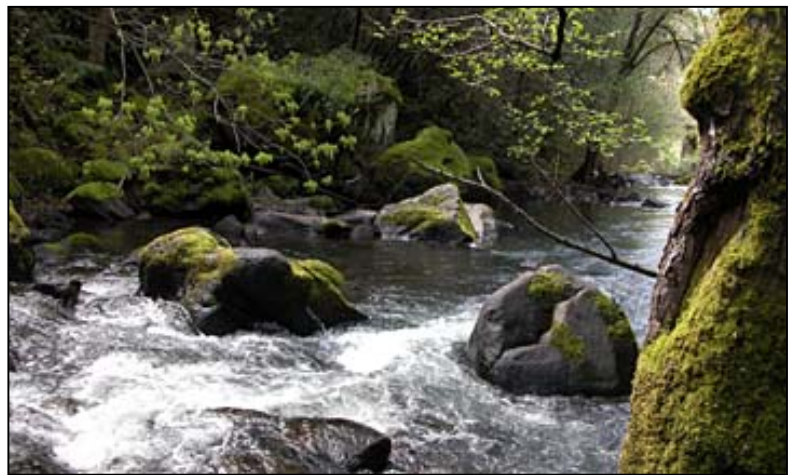
**Additional Funding Obtained to Date:** \$655,470

## Background

Throughout the watershed, streams provide habitat for a variety of fish including steelhead and Chinook salmon. These species and others are facing tremendous pressures from increased sedimentation and a reduction in habitat. In the event of a fire, excessive fuel loads would not only destroy wildlife habitats but would also affect livestock grazing, farming operations, and local homeowners. The diversity of the watershed requires a coordinated, collaborative effort to ensure that issues are addressed on a comprehensive basis.

## Benefits to the Watershed

- ◆ Kept local stakeholders informed of progress on the Battle Creek Steelhead and Salmon Restoration Project, as well as BCWC grant projects. The coordinator also provided local stakeholders with the opportunity to communicate concerns and issues regarding Battle Creek watershed.
- ◆ Worked with the Tehama/Shasta Watershed Coordinators Group to plan for a Watershed Awareness Day event on May 6, 2006. The event involved federal and state agencies as well as local watershed groups. The event provides the public with an opportunity to see what watershed groups are contributing to local watersheds, as well as to the greater Sacramento River watershed.
- ◆ Served as liaison between the local conservancy and fire safe council and the county fire safe council. This allows the coordinator to provide conservancy and fire safe council members with information about fire safe projects.
- ◆ Continued managing the Defensible Fuel Zone project. The project establishes a defensible space in which firefighters can make an effective stand against an approaching wildfire, protecting private property, wildlife and fish habitat from the threat of catastrophic fire.
- ◆ Worked with the UC Cooperative Extension to organize and facilitate a Forest Stewardship Workshop.



*North Fork Battle Creek in winter*

- ◆ Coordinated the design and implementation of a Stream Condition and Water Quality Monitoring Program. The coordinator worked with a subcontractor, Terraqua, to complete a stream plan outline and form a technical advisory committee.
- ◆ Managed funds for a road-decommissioning project in the Upper Battle Creek Watershed portion of Lassen Nation Park. The project will remove significant sediment sources in the upper watershed.
- ◆ Continually updated the BCWC website with educational and informational postings related to Battle Creek watershed activities, as well as activities of other watershed groups and the Battle Creek Steelhead and Salmon Restoration Project. The website provides stakeholders with an up to date resource for watershed information.
- ◆ Helped coordinate a “Manton Chipper Days” event with Sierra Pacific Industries, Western Shasta RCD and Shasta Fire Safe Council. The event allowed residents use a chipper to dispose of cut vegetation at the Manton Volunteer Fire Station. The event helped the community reduce potential fuel for fires in the area.
- ◆ Wrote a grant proposal for continued maintenance of a shaded fuel break/Defensible Fuel Profile Zone in the watershed and was awarded funds from the Tehama Resource Advisory Committee.
- ◆ Produced and distributed an issue of BCWC News to almost 350 people and posted it on website. The newsletter provided stakeholders with valuable watershed information.
- ◆ Held Battle Creek Watershed Conservancy Annual Meeting to allow stakeholders the opportunity to provide input about watershed issues.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator supported several of the CALFED Watershed Program goals. Specifically, the coordinator:

- Worked with the Battle Creek Watershed Working Group outreach subcommittee to design an informational brochure that will be part of a series of brochures that will provide information about the Battle Creek Restoration Project.
- Helped to build stakeholder knowledge of the watershed by keeping the BCWC website up to date with links to current information about the Battle Creek Restoration Project.
- Worked with members of Greater Battle Creek Watershed Working Group to establish and prioritize issues regarding the Battle Creek Restoration Project.
- Organized and facilitated a community Fire Safe Council. The primary goal of the council is to reduce the risk of a catastrophic fire, which would damage or destroy Battle Creek Salmon and Steelhead Restoration Project efforts.
- Helped to organize a community “Chipper Days” event, which served both as an educational opportunity and an opportunity for community members to dispose of cut brush, a potential fire hazard.
- Served as a liaison between community members, PG&E, and federal and state agencies. For example, the coordinator worked with landowners to allow the Bureau of Reclamation to have access to private property for watershed improvement efforts.

**Ecosystem Restoration** – The coordinator worked on a Fire Safe Plan through both the Tehama County Fire Safe Council and the Battle Creek/Manton Fire Safe Council. One of the main goals of the fire plan and fuel breaks is to provide protection to Battle Creek habitat where salmon restoration is planned.

### **Performance Measure Progress**

**Goal:** To improve watershed conditions and water quality in the Battle Creek watershed to support fisheries restoration.

**Objective # 1:** To manage and coordinate implementation of multiple grant sources that will undertake treatments of sediment sources in upper Battle Creek; develop a long-term monitoring program of stream conditions; maintain a Defensible Fuel Profile Zone in the watershed; and provide technical scientific support for Battle Creek Conservancy Board members and constituents.

**Performance Measure:** Production of videos, websites, and publications that disseminate technical information, reports and plans describing sediment reduction and water monitoring programs; reports on Defensible Fuel Profile Zone; records of meetings held to provide technical support to BCWC board and constituents.

#### **Progress:**

- Posted a report detailing the ongoing maintenance of Defensible Fuel Profile Zone on the BCWC website.
- The road decommissioning project is underway in the upper watershed portion of Lassen National Forest; site selections in process.
- A long-term Stream Condition and Water Quality Monitoring Program has been implemented; a Stream Plan Outline has been completed; and a Technical Advisory Committee has been formed.
- The Battle Creek-Manton Fire Safe Council has been formed. The purpose of the council is to identify and implement Defensible Fuel Zones as well as fire safe practices.
- BCWC website updated on a regular basis.
- Held a community meeting to provide information on fire recovery and resource agency resources.
- Produced and distributed a fact sheet on the Battle Creek Restoration Project.

**Objective #2:** To implement the Battle Creek Watershed Strategy.

**Performance Measure:** Meetings attended and notes posted to website; newsletters completed and distributed on schedule; website upgraded; information flyers produced and distributed.

#### **Progress:**

- Created and distributed an informational flyer on the Forest Stewardship Workshop.

- Posted notes and agendas of BCWC Board meetings on BCWC website on a regular basis.
- Posted notes and agendas of the Greater Battle Creek watershed Working Group meetings on BCWC website on a regular basis.
- Posted the notes and agendas of Battle Creek/ Manton Fire Safe Council meetings on BCWC website on a regular basis.
- Posted the notes and agendas of Tehama County Fire Safe Council meetings on BCWC website on a regular basis.
- Posted the notes and agendas of Watershed Coordinators Group meetings on BCWC website after each meeting.
- Posted notes from the Forest Stewardship Workshop on BCWC website.
- Upgraded and updated the BCWC website on a weekly basis.
- Produced and distributed a flyer that lists state and federal resource agencies, services and resources they have available, and contact information.
- Produced and distributed the BCWC newsletter. The newsletter provided stakeholders with educational information about the watershed.
- Produced and distributed a flyer to publicize the BCWC Annual Meeting.
- Produced and distributed an informational fact sheet about the watershed. The flyer was distributed at the BCWC annual meeting.

**Butte County RCD**  
Mill-Big Chico / Upper Butte  
Lower Butte Watersheds



**Amount Funded:** \$218,338

**Additional Funding Obtained to Date:** \$187,367

**Background**

The upper portions of the watersheds are primarily forested lands highly susceptible to fires. Throughout the region, communities are growing rapidly exerting tremendous pressure on the environment. Both water quality and wildlife habitat is being severely degraded. There is tremendous concern about the Butte Basin Aquifer, which may not be recharging as rapidly as in the past. Water quality, invasive weeds, range management, and excessive fuel loads are only some of the issues that need to be addressed. Recognizing that significant challenges face the community, several organizations came together to form a partnership to address these critical issues.

**Benefits to the Watershed**

◆ The BCCWA coordinator partnered with Streaminders, a local chapter of the Izaak Walton League, to develop a project to address stream incision and streambank failure along 600 meters of Big Chico Creek. This reach of Big Chico Creek is identified as the creek's most degraded section, with a loss of connection to the floodplain and near vertical banks in many areas. The coordinator conducted outreach to residents, coordinated with County staff, and worked with Streaminders to develop the restoration concept and the grant proposal. The project will increase the stream's access to its floodplain, expand the wetland, restore native riparian and grassland species, establish an area of native plants for Mechoopda tribe cultural use, and provide interpretive panels for public education.

◆ Continued developing the Big Chico Creek Watershed Alliance Watershed Management Strategy. The strategy includes goals, objectives and actions for water quality, fisheries, wildlife, stream channel and riparian habitat, non-native species, groundwater, fire management and environmental education. The coordinator conducted research for the strategy, wrote the document, and is conducting outreach.



*Oak Woodlands Management  
Workshop*

- ◆ Coordinated the Big Chico Creek citizen's water quality monitoring program on Big Chico Creek and began developing a new monitoring program for Little Chico Creek. Volunteer monitors are being recruited for this new effort.
- ◆ Collaborated with the UC Davis Ag Extension program to complete an Oak woodlands plan that was submitted to the Butte County Board of Supervisors for adoption.
- ◆ Worked with the Watershed Partnership, a cooperative partnership between five local watershed organizations, to organize events and strategize ways to develop funding resources for identified needs in the watersheds.
- ◆ Held a sustainable funding workshop to learn how to develop funding sources
- ◆ Began developing a series of workshops related to watershed health. Workshops will include Oak Woodlands Management for the large landowner and Equine Management Practices to promote water quality.
- ◆ Helped develop a Butte County RCD 2005 Stakeholder Survey Results report. This report provides a summary of Butte County landowner characteristics, interests, and needs related to natural resource issues and agricultural production, practices, and experiences. The report will be used to help increase awareness of local resource priorities.
- ◆ Began working with local watershed groups to produce a 2007 watershed calendar. The calendar is being designed to encourage and support the ongoing stewardship of creeks in Butte County. Each month will include a discussion of a different creek topic along with recommended actions to help residents protect and care for the county's diverse urban and rural creeks.
- ◆ Reestablished lines of communication between the Butte Creek Watershed Conservancy board of directors and partners. The coordinators efforts have lead to greater participation in the Conservancy board meetings and renewed annual memberships.
- ◆ Conducted two watershed tours for community members and partners. Tours included stops at a dump site, areas with potential flooding problems, and areas with road erosion problems.
- ◆ Conducted a public meeting to discuss gravel migration in Butte Creek. This issue is of great concern to the Conservancy and watershed community members.
- ◆ Met with Big Chico Creek landowners to discuss creek incising and threats to homes adjacent to the creek. The watershed alliance is developing a project that will use biotechnical streambank stabilization to protect the homes. The project will also restore the streams access to its floodplain.
- ◆ Coordinated a native vegetation flagging project as part of an invasive species removal project. Lower Chico Creek Watershed Group members flagged native vegetation in the stream channel so the Department of Water Resources crews could easily identify natives and concentrate on removing non-native species. Approximately 2 miles of stream channel was treated to remove *Arundo donax* and improve flood capacity.
- ◆ Conducted water quality training for 17 volunteers as part of the ongoing citizen-monitoring program.

## **Benefits to CALFED Program**

**Watershed Management:** In support of the CALFED Watershed program goals, the coordinator worked with partners to develop a draft Watershed Management Strategy. The strategy proposes 16 joint actions between the BCCWA and the BCRC. Additional work completed that supported the goals of the Watershed program includes:

- A Draft Oak Woodlands Protection Plan was completed. The plan will provide a plan to help Butte County landowners protect oak woodlands, which will have benefits in addition to Oak Woodlands protection, including recharge area protection and protection of the winter range of the Tehama Deer Herd, the largest migratory deer herd in California.
- Conducted educational tours of the watershed.
- Provided stakeholders with a chance to discuss their watershed concerns and learn about the watershed.
- Worked with partners to plan a Watershed Calendar, which will be distributed to watershed stakeholders throughout the county. The calendar will provide information about local creeks and watersheds, as well provide tips for property owners and residents to care for the creeks.
- Continued meetings of the Cherokee Watershed Alliance with representatives from stakeholders throughout the watershed.

**Ecosystem Restoration:** The coordinator completed several tasks that will support the goals of the ecosystem restoration program. Specifically the coordinator:

Submitted a grant proposal to obtain funding for floodplain, riparian, wetland and grassland restoration at two sites in the Big Chico Creek watershed. The projects funded through this proposal would restore five habitat types identified in the Natural Community Conservation Plan Habitats of the Multi Species Conservation Strategy, including Valley Riverine Aquatic, Seasonal Wetland, Valley Foothill Riparian, Grassland and Anadromous Fish Species habitat. This grant would benefit all four runs of Chinook salmon (spring, fall, late fall and winter), steelhead, valley elderberry longhorn beetle and Swainson's Hawk.

**Drinking Water Quality:** The coordinator worked with partners to implement a citizen water quality-monitoring program on Big Chico Creek. Numerous residents have participated and have provided information that will be used to plan future projects.

**Storage:** The BCCWA Watershed Management Strategy includes actions to manage the recharge areas of a large regional aquifer (the Lower Tuscan) and to increase the scientific knowledge and public participation in the management of that aquifer.

## **Performance Measure Progress**

**Watershed Goal 1:** To create a dynamic and integrated working relationship among all Butte County Watersheds and the newly created Butte County RCD.



**Objective #1:** To develop trust and mutual benefits between watershed groups and Butte County RCD, Memoranda of Understanding will be developed addressing goals, policies and procedures for program integration.

**Performance Measurement:** 4 MOU's between Big Chico Creek Watershed Alliance, Little Chico Creek Watershed Group, Butte Creek Watershed Conservancy and Cherokee Watershed Alliance and the Butte County RCD will be developed and signed.

**Progress:** MOUs have been developed and signed between BCCWA and Butte County RCD, and the LCCWG and Butte County RCD. Another MOU was adopted between the Cherokee Watershed Alliance and the BCRCD. This performance measure is 75% complete.

**Objective #2:** To share common understanding of watershed groups' history, decision-making process, progress to date, and future plans to facilitate on-the-ground conservation projects for voluntary landowners of Butte County.

**Performance Measurement:** Identify joint priorities and develop corresponding projects for implementation, one or more per calendar year.

**Progress:**

- BCCWA and LCCWG participated in the RCD strategic planning sessions and have identified three joint projects.
- The BCCWA draft Watershed Management Strategy proposes 16 actions with the BCRCD as lead or partner agency.
- The Cherokee Watershed Alliance completed a watershed group presentation on the Lower Tuscan Formation and conducted a tour of the watershed.
- The BCRCD held one annual meeting and conducted a survey of 230 landowners to receive input into local priorities.
- The BCRCD completed a 2005 Stakeholder Survey document and a 2005-2006 Annual Report.

**Watershed Goal 2:** To assist, educate and offer voluntary solutions to the agricultural landowners of Butte County regarding evolving requirements of Agricultural Discharge Waiver programs through partnerships collaboration and regional assistance.

**Objective 1:** Integrating the site-specific monitoring data of the tributary watershed programs and the agricultural discharge waiver program.

**Performance Measurement:** Increased efficiency and coordination of watershed meetings attended by growers.

**Progress:** The Watershed Coordinator contacted stakeholders to inform them about opportunities to increase irrigation efficiency.

**Objective #2:** To assist, coordinate and facilitate a Farm Water Quality Short Course. The curriculum to be developed by a collaboration of experts, including local commodity representatives, UC Cooperative Extension, NRCS, CSU Chico, Dept. of Agriculture and regional partners.

**Performance Measurement:** Annual increase of 25% of the acreage covered by a Farm Water Quality Plan from the previous year.

**Progress:** The coordinator assisted Hennigan Farms with a workshop where attendees learned about cover crops and filter strips. More than 25 people attended.

**Watershed Goal 3:** To maintain a self-sustaining Butte County RCD and partnership of watershed groups and to provide long term support for the watershed Coordinator positions so as to best serve the conservation needs of the lands of Butte County in an integrated forum.

**Objective #1:** To provide information and opportunities to interested parties of Butte County in order to make contact with representatives from private foundations and government agencies and develop personal relationships.

**Performance Measurement:** Butte County RCD in partnership with local watershed groups will host a “Meet the Grantmakers” workshop.

**Progress:** This workshop has been revised to focus on funding mechanisms that are alternatives to the boom and bust cycle of competitive grants. The workshop was scheduled for April 29, 2006.

**Objective #2:** To develop the knowledge and skills among Butte County RCD watershed coordinators to acquire resources sufficient to develop and expand watershed enhancement, outreach and education efforts.

**Performance Measurement:** At the end of three years Butte County RCD in collaboration with Watershed groups will have developed funding resources to sustain the proposed watershed coordinator positions and respond to priority projects within each watershed.

**Progress:** The grant-writing workshop has been completed. The Watershed Partnership meets monthly, with members providing funding updates.

## Central Modoc RCD Upper Pit Watershed



**Amount Funded:** \$196,330

**Additional Funding Obtained to Date:** \$50,000

### **Background**

The Pit River Watershed is a significant tributary to the Sacramento River. The main stem Pit River has been identified by the EPA as impaired due to nutrient loading, low dissolved oxygen, and high temperatures. Sediment is also a concern. A watershed-wide assessment is under way to collect data to support initiation of a comprehensive watershed plan.

### **Benefits to the Watershed**

- ◆ Submitted seven grant proposals for stream restoration, wetland enhancement, and environmental education projects.
- ◆ Facilitated the establishment of over 23 water quality monitoring sites. Twelve (12) are directly related to agricultural uses and were established in coordination with landowners. Results from the monitoring efforts indicate an overall improvement in the Pit River water quality.
- ◆ Worked with the Pit River Watershed Alliance to produce a data gap analysis report.
- ◆ Analyzed data collected from ongoing monitoring efforts. The data indicated an overall improvement of Pit River water quality. The coordinator shared the data with the Pit River Watershed Alliance Coordinator.
- ◆ Finalized 3 project plans for Clark, Dry Creek Basin, and XL Ranches.
- ◆ Worked with Ducks Unlimited to propose a new project on Fitzhugh Creek.
- ◆ Adjusted design work on two previously designed restoration projects to better withstand flooding.
- ◆ Collaborated with RCD directors and staff to design recycling projects, biodiesel feasibility studies, aspen improvement projects, and good steward beef symposiums.
- ◆ Worked with the Modoc County Ag Commissioner, XL Ranch Tribal Staff, and BLM Botanist to develop a noxious weed control partnership.
- ◆ Worked with landowners to develop four new restoration projects and submitted grant proposals to fund the projects through the USFWS Partners for Wildlife Program, the Proposition 40 Consolidated Grants Program, and the NRCS Grazing Lands Conservation Initiative.
- ◆ Performed sensitive plant surveys at two project sites to ensure CEQA compliance, and trained labor crews to identify and avoid excess turbidity during in stream operations in order to comply with state water quality standards.
- ◆ Submitted CEQA Notice of Exemptions for three restoration projects.

- ◆ Wrote four newsletter articles for the Modoc Watershed Monitor about current and future restoration projects, agricultural discharge issues, and riparian fencing funding opportunities. The newsletter is distributed to watershed stakeholders.
- ◆ Contacted landowners to encourage them to participate in the countywide weed control program.
- ◆ Hosted two tours of proposed project sites for USFWS, Ducks Unlimited, and NRCS staff.
- ◆ Secured donations of culverts and cattle guards from the USFS for use in upcoming restoration projects.
- ◆ Helped a landowner develop an agreement with the NRCS to add \$77,000 in funding to the Dobe Swale Riparian Restoration Project.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator completed several activities to increase the capacity of the local community to address watershed issues, improve coordination between agencies, local watershed groups, and other stakeholders, and educate the local community about the watershed. In support of CALFED Watershed Program goals the coordinator:

- Worked with landowners to identify restoration projects, submit grant proposals, and complete permit applications for currently funded restoration projects.
- Coordinated two field trips to four proposed restoration sites with landowners and resource specialists from USFWS, Ducks Unlimited, and NRCS to develop concepts and implementation strategies.
- Developed partnerships and sought funding for a local native plants nursery to serve restoration activities on USFS, BLM, CDF, and private lands.
- Developed partnerships and sought funding for a local biodiesel fueling station to ultimately reduce toxins in the air and water from diesel exhaust and spills.
- Assisted with developing an environmental educational curriculum, with an emphasis on watershed health, for grades K-12 to be taught through the River Center and the Modoc County Office of Education.
- Encouraged landowner participation in the county-wide weed control project and assisted with grant writing to fund this project through the Grazing Lands Conservation Initiative.

**Ecosystem Restoration** – The coordinator completed the following tasks that supported the goals of the Ecosystem Restoration Program:

- Facilitated the development of 23 new water quality monitoring sites.
- Composed two project narratives as a supplement to permit applications for restoration activities scheduled for 2006.
- Worked with landowners and agencies to develop new restoration project concepts and submitted grant proposals to obtain funding for the projects.
- Coordinated Technical Advisory Committee meetings to obtain additional technical expertise for upcoming restoration activities.

**Storage** – In support of Storage program goals, the coordinator submitted grant and permit applications to promote upcoming wetlands enhancement projects, which will slow run-off and naturally store water longer throughout the growing season.

**Science** – The coordinator supported Science program goals by completing the following tasks:

- Submitted grant applications to fund projects that will determine the effectiveness of agricultural water quality impairment best management practices.
- Collaborated with the UC Cooperative Extension and landowners to develop a program that assesses local hydrology and identifies the best locations to test management measures.

### **Performance Measure Progress**

**Watershed Goal 1:** Continue contribution to watershed-wide assessment & planning.

**Objective 1:** Ensure success of Pit River Watershed Alliance Assessment Project.

**Performance Measure:** Documentation of district input to assessment drafts, participation in 9 team meetings, data-gap analysis.

#### **Progress:**

- The coordinator has attended more than 12 team meetings to date.
- The Upper Pit River Watershed Assessment was published October 2004. CMRCD Watershed Coordinators provided maps, photos, and other data for the Assessment, as well as editing services.

**Objective 2:** Support initiation of PRWA Watershed Management Planning Efforts.

**Performance Measure:** Documentation of participation in watershed plan process initiation; document planning comments.

#### **Progress:**

The coordinator has submitted grant proposals to find funding for developing a Watershed Strategy based on the findings of the Watershed Assessment. In March 06, PRWA submitted a full proposal to DWR for funding to develop a Watershed Strategy in the Upper Pit River.

**Watershed Goal 2:** Document Watershed Trends through Continued Implementation of CMRCD & PRWA Monitoring Plans.

**Objective 1:** Provide opportunities for landowner led monitoring of watershed conditions on private land.

**Performance Measure:** Initiate Farm and Ranch Watershed Monitoring at 12 sites.

**Progress:**

Thirteen (13) monitoring stations were established on private or tribal land with oversight provided by the landowners. Another 10 sites were located on public lands. Each month during the growing season these sites were sampled for pH, turbidity, temperature, specific conductance, dissolved oxygen, nutrients, etc. The results of the monitoring program from 2001-2005 are available through the PRWA.

This performance measure is complete.

**Objective 2:** Continue implementation of PRWA Water Quality Monitoring plan.

**Performance Measure:** Monitoring data collected under approved PRWA QAPP for 11 sites.

**Progress:**

- All 23 sites monitored by CMRCD staff within the District's boundaries were sampled each month during the growing season; the collected data was shared with PRWA staff.
- Data was checked thoroughly for errors before publishing in the Final Report.
- Sampling events were coordinated with landowners, PRWA, Pit RCD and Fall River RCD staff.

**Watershed Goal 3:** Improve Watershed Health through Restoration Projects.

**Objective 1:** Continue work with landowners to develop new watershed restoration projects.

**Performance Measure:** Approved project design alternatives for 9 new projects.

**Progress:**

- Six new restoration project designs were approved in 2005. In 2006, one new funded project design has been approved and another is pending approval.
- Four new restoration project concepts have been developed.
- The coordinator is currently developing environmental education programs for youth and adults. These programs will be directly related to current restoration projects and will include field trips to project sites.

**Objective 2:** Pursue programmatic Permitting and CEQA compliance for landowner implemented watershed restoration projects.

**Performance Measure:** Documentation of steps taken to coordinate programmatic permitting.

**Progress:**

Completed paperwork to obtain permits for three restoration projects and helped landowners complete permit applications.

**Objective 3:** Analyze effectiveness of past projects through continued observation of site conditions.

**Performance Measure:** Update reports on Bushey, Flourney, Osborne, Parker Creek, Sears Flat, Thoms Creek, Gleason Creek, Heard/Valena Pit River, and Turner Creek Projects.

**Progress:**

- Many of these projects were damaged by flooding in May 2005. The Office of Emergency Services (OES) agreed to cost-share with CMRCD on repairs for 5 projects. CMRCD is waiting for the OES to provide funding for the repairs.
- Bushey, Flourney, Sears Flat, and the Likely projects survived the May flood with minimal damage. These projects are often used as examples of successful restoration work.

**Watershed Goal 4:** Ensure coordination of local programs with watershed-wide, regional, and statewide stakeholders.

**Objective 1:** Continue management of UPRWEPP TAC to apply local expertise for local watershed problems.

**Performance Measure:** Minutes of 7 TAC meetings, 7 TAC newsletters, Maintenance of TAC section of CMRCD website.

**Progress:**

- Three TAC meetings have been held.
- The TAC section of the CMRCD website was regularly updated with accurate information.
- Three TAC newsletters have been produced and distributed. The newsletters follow TAC meetings to provide more information on important topics discussed.

**Objective 2:** Participate in regional and statewide forums to communicate local concerns to downstream stakeholders, and to bring downstream perspective to local watershed management efforts.

**Performance Measure:** Documentation of communication with coordination staff of PRWA, neighboring RCDs and watershed groups, and regional watershed management groups.

**Progress:**

- Conducted a demonstration of the CMRCD water-jet stinger for planting willows stems on a project managed by the Pit RCD just downstream from CMRCD's area.
- Attended the Regional Partnership Fair sponsored by the USFS to advocate for the establishment of a native seedbank program in the Upper Pit River.
- Attended multiple NECWA meetings to ensure landowner participation in the Irrigated Lands Program, and to tell state agencies about local landowner's efforts to comply with regulations.

**Watershed Goal 5:** Ensure that all stakeholders are aware of and informed about watershed concepts and issues.

**Objective 1:** Communicate watershed stewardship issues to diverse stakeholders through participation in or sponsorship of outreach events.

**Performance Measure:** Documentation of outreach participation and sponsorship in 13 outreach events.

**Progress:**

- Hosted the “Day in the District” which included a barbeque, field trip to restoration site, and a lesson on water quality monitoring. Over 50 people attended the event.
- Staffed a booth at the Migratory Bird Festival and County Fair to highlight the restoration efforts of the CMRCD and water quality monitoring program of the PRWA. The coordinator presented a “hands-on” display of macro invertebrates for all ages.
- Assisted with many other outreach/educational events such as the CMRCD sponsored “Good Steward Beef” Symposium, Citizens Monitoring Events, field trips with local students, meetings with teachers, Rotary Club, North Cal-Neva RC&D meetings, meetings with USFS, BLM, and multiple Conservation Organization resource specialists.
- Established summer internships for high school and college students to help implement watershed restoration projects.

**Watershed Goal 6:** Ensure continuation of CMRCD/UPRWEPP vision and goals.

**Objective 1:** Pursue funding through development of grant funds and in-kind sources.

**Performance Measure:** Documentation of 6 grant proposals submitted, documentation of collaboration on watershed wide proposals; documentation of in-kind sources solicited.

**Progress:**

- 10 grant proposals have been submitted to the following agencies/programs to fund CMRCD restoration projects: Office of Emergency Services, California Rivers Parkway Program (Prop 40), National Fish & Wildlife Foundation (NFWF) Bring Back the Natives Program, Consolidated Grant Program (Prop 40), US Fish & Wildlife Service, NFWF 5 Star Restoration Program, and the Modoc Resource Advisory Committee (Title 3), NRCS Wetlands Reserve Program.
- The CMRCD is collaborating with other local agencies to obtain funding through the NRCS Grazing Lands Conservation Initiative to support a county wide weed control program.
- Documentation landowner and local agency contributions to restoration projects is on file with the CMRCD & State Water Board. Recently the USFS offered used culverts and cattle guards to the CMRCD and BLM offered certified training to CMRCD staff to use weed control chemicals and equipment. Landowners have donated native plant materials, straw mulch, fencing materials, use of equipment and labor to complete restoration projects.

**Objective 2:** Initiate implementation of any new grant contracts during the life of this contract.



**Performance Measure:** Documentation of grant contract drafts and completed contracts as they become available; Documentation of project plans ready for handoff to project coordination staff, as they become available.

**Progress:**

- Two grant contract drafts were signed in 2005 by CMRCD staff with the Office of Emergency Services and the Wildlife Conservation Board.
- Another grant contract between Ducks Unlimited and CMRCD is currently being developed. Funding from the North American Wetlands Conservation Act was awarded to Ducks Unlimited to be used, in part, on three CMRCD projects.
- Contracts for three restoration projects between three landowners, NRCS and USFW&S programs are currently in the works.
- Pending approval of permit applications for two restoration projects, work may begin when weather and stream flow conditions allow.

# Central Sierra RC&D Upper Mokelumne Watershed



**Amount Funded:** \$311,591

**Additional Funding Obtained to Date:** \$242,200

## **Background**

The watershed's condition varies from pristine riparian habitats in some locations to other areas that have been significantly impacted by deforestation. Also, past practices such as gold mining have adversely affected the quality of water and continue to pose problems for wildlife and people. Residential communities are growing rapidly, exerting pressure on the environment. Recreational users, commercial entities, and agricultural operations add to the impact on the watershed. The diversity of interests requires a coordinated approach to ensure that resources remain available for future generations.

## **Benefits to the Watershed**

- ◆ Assisted with the formation of the Amador/Calaveras Oak Conservation Group. The group is supported by the watershed coordinator and Central Sierra Resource Conservation and Development office. Participation with the group has resulted in increased overall support for watershed improvement efforts and the watershed council's efforts.
- ◆ Completed a Voluntary Oak Woodlands Management Plan for Calaveras County. The plan was forwarded to the Calaveras County Hardwoods Advisory Group for further revision.
- ◆ Worked with Amador County to educate local county public works staff and contractors about implementing erosion and sediment control projects and management techniques. The training included the introduction of Low Impact Development (LID) techniques.
- ◆ Continued to provide support for the local citizen-based voluntary water quality monitoring program within the Upper Mokelumne and Upper Calaveras River watersheds. The coordinator has recruited new citizen monitors and reported monitoring results to the state.
- ◆ Collaborated with partners to write and submit 7 grant proposals requesting approximately \$1.5 million. Writing the proposals included working with local community groups, private landowners, NGOs, and the El Dorado National Forest hydrology staff. This collaboration



*Field training portion of streamwalk training as part of citizen volunteer water quality monitoring program on South Fork Mokelumne.*

helped increase the visibility of the watershed council among the watershed's local resource management agencies.

- ◆ Secured a private donation of approximately \$1,200 to fund a water temperature monitoring study throughout the watershed. The data collected will be used in conjunction with existing water quality monitoring efforts to enhance understanding of low-flow hourly water temperatures and potential ecological impacts.
- ◆ Initiated a local youth education and school outreach program through the formation of the Stewardship Through Education group.
- ◆ Held two oak woodlands educational workshops focusing on oak woodland ecology and the recent state oak conservation law (Public Resource Code section 21083.4), and a workshop on local water agencies and their respective water management projects.
- ◆ Participated in the development of an Integrated Regional Water Management Planning (IRWMP) grant. The coordinator proposed four projects that would take place within the Upper Mokelumne River and Upper Calaveras River watersheds. Participation in this effort has helped build support and capacity for the watershed council's efforts.
- ◆ Provided two Streamwalk and bioassessment training sessions for volunteer water monitoring teams in Mokelumne and Dry Creek Watersheds. The training included evaluation of stream and riparian habitat features.
- ◆ Worked with local water agencies to identify water quality issues, data development needs, and complete water resource planning.
- ◆ Completed a water quality information assessment and data gap needs throughout the Upper Mokelumne River watershed to prepare for the Upper Mokelumne River Watershed Authority drinking water quality assessment and planning program.
- ◆ Worked with CALTRANS to complete an erosion and slope stabilization project at the Highway 26 bridge on the middle fork of the Mokelumne River.
- ◆ Held the first annual Upper Mokelumne River Watershed Awareness Festival.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator completed several tasks that supported the Watershed Programs goals of increasing collaboration between agencies, local watershed groups, and other stakeholders; increasing the capacity of the community to address watershed issues; and sustaining local watershed activities. Activities completed include:

- Conducted a regional public outreach event focused on local and state oak woodland protection efforts. This event helped improve public awareness of the Upper Mokelumne River Watershed Council and watershed issues.
- Submitted two grant proposals totaling \$1,731,592 to support watershed improvement efforts.
- Helped develop a local oak conservation group, the Amador/Calaveras Oak Conservation group, for watershed stakeholders. The group is focused on education, support, and advocacy for local oak woodlands conservation and mitigation.
- Supported water quality monitoring and planning projects to build collaboration among local water management agencies.

- Provided technical assistance and oversight to the Calaveras County Planning Department and local community planning groups regarding the update of open space, watershed planning, wildlife corridors, and water resources components of the County General Plan.
- Worked with CALTRANS and local governments to improve collaboration on erosion and sediment control projects.
- Participated in preparing a regional IRWMP grant proposal to assist in watershed management goals and objectives to identify and prioritize future regional water management planning efforts within the watershed.
- Conducted a watershed tour for BLM Forest Fuels Program staff from the Washington DC office to support the local efforts of the fire safe councils.
- Completed a local public education and outreach program titled “Water Management in the Upper Mokelumne River Watershed – Players and Partners”. The outreach program helped increase the knowledge base of local water agency facilities, operations, and activities.

**Ecosystem Restoration** – In support of the CALFED Ecosystem Restoration program goals the coordinator:

- Worked with El Dorado National Forest staff to identify watershed restoration sites and develop plans within the Upper Mokelumne watershed. The coordinator prepared and submitted a grant proposal to obtain funding for identified activities.
- Worked with partners as part of a current CALFED funded Upper Mokelumne River Watershed Assessment and Watershed Planning grant to identify areas or projects for potential restoration.

**Drinking Water Quality** – The coordinator supported the goals of the Drinking Water Quality program by completing the following activities:

- Recruited and trained volunteer monitors to enhance the capacity of the local watershed Volunteer Water Quality Monitoring Program. Monitoring efforts were expanded to include adjacent watersheds.
- Worked to identify grant opportunities for water quality monitoring within the watershed.
- Worked collaboratively with the PG&E ERC FERC 137 project to identify water monitoring and biological resource needs and monitoring/reporting program implementation.
- Worked with local and state agencies and stakeholders on watershed planning activities designed to protect or restore water quality in the watershed. Planned activities include contractor training for water quality control, adding open space elements to County General Plan updates, and including watershed planning in community plans.
- Collaborated with partners to develop a local Low Impact Development (LID) workshop for local agencies and community planning groups.

**Science** – The coordinator supported the goals of the Science program by:  
Developing tentative agreements with the PG&E FERC Project 137 Ecological Resource Committee to initiate research that will improve knowledge of water quality and ecological

resources within the watershed. Research efforts will focus on water temperature conditions and ecological considerations.

### **Performance Measures**

**Watershed Goal 1:** Improve Water Quality in the Upper Mokelumne River Watershed.

**Objective 1:** Reduce non-point pollution entering surface waters within the watershed

**Performance Measure:** Identify non-point source contaminants; obtain partnerships; implement plan to reduce contaminants by 60%; and implement adaptive management protocol.

#### **Progress:**

- The coordinator investigated historic and current water quality monitoring data.
- Identified additional baseline monitoring needs for non-point source contaminants.
- Worked with regulatory agencies, stakeholders, partners, and water agencies to develop and fund new non-point source pollution water quality monitoring programs and equipment to provide an adaptive management component.
- Recruited and trained community volunteers for water quality monitoring and specialized training such as Proper Functioning and Condition (PFC) relating to watershed assessments. A Rapid Bioassessment Program was initiated last September and Streamwalk Training provided last October.
- Helped to identify non-point pollution sources.
- Evaluated water quality data to determine which (if any) water body segments are candidates for the USEPA 303(d) list.
- Worked with agencies and local nonprofit groups to identify, develop, and submit grants to fund the implementation of BMPs.
- Provided support to agriculture interests implementing water quality monitoring requirements of the SRWQCB Ag Waiver Program.

**Objective 2:** Reduce point source pollution entering surface waters within the watershed.

**Performance Measurement:** Identify point source contaminants; obtain partnerships; implement plan to reduce contaminants by 60%; and implement adaptive management protocol.

#### **Progress:**

- Investigated historic and current water quality data for permitted point source pollutants in the watershed.
- Identified additional baseline monitoring needs for point source contaminants.
- Worked with regulatory agencies, stakeholders, partners, or water agencies to fund water quality monitoring programs and equipment.
- Developed new partnerships, support, and cooperation to help fund, implement, and monitor water quality management plans.

**Objective 3:** Evaluate riparian habitat quality to enhance water quality in the watershed.

**Performance Measurement:** Identify nonpoint source contaminants (1.3.7); obtain partnerships (1.3.9); implement plan to reduce contaminants by 30% (1.3.11); and implement adaptive management protocol (1.3.5, 1.3.14)

**Progress:**

- Worked with Upper Mokelumne River Watershed Authority and Grant Contractor to develop protocols for watershed assessments and surveys.
- Work with stakeholders, landowners, local agencies, and nonprofits to identify, develop, and submit grants to fund the implementation of BMPs.

**Objective 4:** Reduce groundwater pollution impacts to human health within the watershed.

**Performance Measures:** Identify sources of well water contaminants (1.4.6); obtain partnerships (1.4.9); implement plan to reduce contaminants by 25% (1.4.10); and implement adaptive management protocol (1.4.4, 1.4.12).

**Progress:**

- Evaluated the extent and capacity of groundwater basins within the watershed. Geology of fractured rock throughout most of the Upper watershed areas results in lack of significant groundwater resources in all but lower portion of watershed.
- Participated in collaborative conjunctive water use planning efforts allows for evaluation and prevention of groundwater quality and quantity threats to the watershed.

**Watershed Goal 2:** Improve Public Awareness and Support for Watershed Management and Conservation in the Upper Mokelumne River Watershed.

**Objective 1:** Increase community education and outreach and participation for watershed activities.

**Performance Measure:** Ensure broad-based support for and membership in the Upper Mokelumne River Watershed Council and diversify stakeholder by securing participations from at least 75% of the dominant stakeholder groups. These include local businesses, recreational entities, tribes, utilities, ranchers, independent loggers, building contractors, federal agencies, water agencies, conservation groups, and others.

**Progress:**

- Worked with watershed participants to provide public outreach and encourage participation in watershed management activities.
- Developed new partnerships and support to help fund, implement, and maintain the Upper Mokelumne River Watershed Coordinator position. The coordinator identified new potential tasks and collaboration opportunities within the watershed for diverse watershed planning.

**Watershed Goal 3:** Improve cooperation and collaboration among watershed groups and related conservation activities within the Upper Mokelumne River Watershed.

**Objective 1:** Improve coordination, collaboration, and assistance among federal, state, and local governmental agencies, resource conservation and utilities districts, watershed councils, nonprofit groups, and other interest groups, insuring efficient use of CALFED grant funds and preventing duplication of activities.

**Performance Measurement:** Improve coordination, collaboration, information sharing, and support in the Upper Mokelumne River Watershed hydrologic unit area by documentation of increased watershed activities and partnerships over the life of the grant.

**Progress:**

- Prepared and submitted a grant proposal to initiate a facilitated Upper Mokelumne River Watershed participation workshop.
- Sponsored a watershed assistance and grant writing workshop to improve success of watershed grant proposals within and adjacent to the Upper Mokelumne River watershed.

**Watershed Goal 4:** Provide long-term funding for the position of watershed coordinator.

**Objective 1:** Develop an implementation plan and strategy that will address the long-term funding opportunities for a watershed coordinator position in the Upper Mokelumne River Watershed.

**Performance Measurement:** Develop a long-term funding program to secure the position of Watershed Coordinator for 5-10 additional years beyond the lifetime of the 2004 Watershed Coordinator Grant.

**Progress:**

Developed new partnerships, support, and cooperation to help fund and implement additional water quality, assessment, and restoration activities.

**Watershed Goal 5:** Increase economic development, watershed planning, and awareness of cultural resources in the Upper Mokelumne River Watershed.

**Objective 1:** Increase community training, technical education, and public education and outreach for watershed activities.

**Performance Measurement:** Increase participation by local skilled and trained citizens for specialized watershed assessment, restoration, and monitoring activities in the Upper Mokelumne River Watershed as evidenced the establishment of five monitoring teams.

**Progress:**

Recruited and trained new volunteer water quality monitors in the Upper Mokelumne, Upper Calaveras, and Dry Creek (Amador County) watersheds.

# Chowchilla-Red Top RCD

Upper Chowchilla-Upper Fresno / Middle  
San Joaquin-Lower Chowchilla Watersheds



**Amount Funded:** \$176,430

**Additional Funding Obtained to Date:** \$33,850

## Background

Abundant wildlife, diverse topography, and cascading rivers epitomize these watersheds. Increased population densities, past practices, and an infusion of noxious weeds jeopardize their long-term health. Like many forested areas, fuel loads are growing at an alarming rate and rivers are being inundated by sedimentation. It is imperative that a coordinated, collaborative approach be taken to address these issues. The watershed coordinator will ensure that stakeholders from both watersheds work together to address the natural resource concerns of the local community.

## Benefits to the Watershed

- ◆ Prepared and submitted a grant proposal to the Madera County Resource Advisory Committee (RAC) for \$3,000.00 to pay for the printing of the Sierra Smarts brochure.
- ◆ Submitted a \$600,000 concept proposal to the SWRCB to fund a survey and mapping project of Ash Slough, Berenda Creek, Berenda Slough, and Cottonwood Creek.
- ◆ Created watershed educational programs. The coordinator:
- ◆ Conducted an after school program for an elementary and intermediate school. Students learned about water conservation and water quality.
- ◆ Spoke to the Sierra/Oakhurst Kiwanis Club about the fractured rock system in the foothills, private wells and well testing, and how to spot noxious weeds. Forty people attended this presentation.
- ◆ Presented to the East Merced Resource Conservation Stakeholders group about watershed friendly *Arundo donax* removal.
- ◆ Meet with local property owners to discuss issues in the watershed and recruit members for the stakeholders committee. The coordinator also helped landowners identify *Arundo donax* and areas in need of treatment.



*Participants in the Natural Resources Youth Workshop learn about water quality sampling.*



- ◆ Worked with partners to create and distribute informational watershed brochures to 22,330 residents in the foothills.
- ◆ Worked with the Clean Water Team to create a brochure to distribute to kids' events. The brochure, titled "Gee Whiz Water Quiz: How Much Do You Know About Your Water?", helps increase watershed awareness in children.
- ◆ Collaborated with the Millerton/Finegold Watershed coordinator to discuss addressing watershed issues on a regional basis.
- ◆ Helped the North Fork Community Development Council write a grant proposal for restoration projects on Pitcher Creek and North Fork Mill River.
- ◆ Wrote numerous educational articles about invasive weeds that were published by local newspapers.
- ◆ Held two small water conferences to provide local residents with information about the Madera Irrigation District's Water Enhancement Plan/Water Bank. Almost 50 people attended the meetings. The meetings were followed up with newspaper articles to inform and educate the public.
- ◆ Organized and participated in the first annual Oakhurst River Parkway Creek Stewardship Day. Thirty-five participants helped remove noxious weeds and collected information during the event.
- ◆ Presented water conservation and noxious weed information to the Oakhurst Lions Club, the North Fork Lions Club, the Madera County Flood Control and Water Conservation Advisory Committee, and a variety of other groups.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator completed many activities that supported the goals of the watershed management program. Activities included:

- Obtained funding for a Sierra Smarts brochure. The brochure is an educational piece that describes the "fractured rock" water system in the Sierra Foothills and how to live in this type of system through water conservation and proper well drilling
- Collaborated with the Department of Water Resources, the Regional Water Quality Board, Sierra Foothill Conservancy, and Central Sierra Watershed Committee to create the Sierra Smarts brochure.
- Conducted an educational after school program about water conservation for the North Fork School Elementary/Intermediate school.
- Provided a presentation on private wells and well testing for the Sierra/Oakhurst Kiwanis Club.
- Worked with the Clean Water Team to create the "How do you measure up?" quiz brochure for adults to test their water and water conservation knowledge and community involvement.
- Partnered with NRCS to present Natural Resources Youth Workshop at Scout Island in Fresno. The program involved speakers/experts in the various watershed sciences. Speakers educated the students on soils, water, invertebrates and more. A total of 65 people participated in this event.

**Ecosystem Restoration** – In support of the Ecosystem Restoration Program the coordinator collaborated with the Madera County Planning Department to implement a weed control program. The program will focus on “Log Cabin” kits and the noxious weeds that are frequently found within the kits. When the county approves the building plans for a log cabin a notification will go out to the County Agricultural Commissioner. The commissioner’s office will then schedule an inspection of the building and the building site one year later to look for any noxious weeds brought in during construction.

**Performance Measures**

**Watershed Goal:** Support and promote the integration among watershed efforts with the coordination of stakeholders working together through community involvement, providing public education regarding watershed issues.

**Objective 1:** Establish the Chowchilla And Fresno River Watershed Council to facilitate & improve coordination of stakeholders; provide collaboration and assistance among government agencies, local watershed groups and organizations.



*Community/Town Hall meeting held in Oakhurst*

**Performance Measurement:** Stakeholder Cooperation Agreements are signed by at least 75% on the Watershed Council; Develop watershed council work plans.

**Progress:**

Five Memorandums of Understanding have been signed that demonstrate the willingness of groups to work together. The MOUs are between the Chowchilla Red Top RCD and Coarsegold RCD, East Merced RCD, Eastern Madera County Fire Safe Council, Central Sierra Watershed Committee, and the Sierra/San Joaquin Weed Management Alliance.

**Watershed Goal:** Support and promote grants and program applications that achieve our goal for sustainable watershed health and the continuance of Watershed Council/Coordinator.

**Objective #2:** Implement a strategy that will ensure long-term sustainability of local watershed activities supporting ecosystem restoration; water quality; water use efficiency and watershed management while integrating the Watershed Program and other CALFED program elements.

**Performance Measurement:** Identify and apply for grants to improve watershed elements as defined in work plan and for continuation of Watershed Council/Coordinator.

**Progress:**

The coordinator helped four separate organizations write \$2.6 billion in grant proposals for projects in the watershed. Additionally, the coordinator wrote and submitted five grant proposals for watershed improvement projects. The RCD received \$40,000 as a result of these proposals.

**Watershed Goal:** Provide expertise, advice, educational information and present opportunities to landowners, government agencies and the general public.

**Objective # 3:** To support education and stakeholder outreach. Improve water management by working with local communities at a watershed level. Emphasize local participation & government cooperation at all levels.

**Performance Measurement:** Newspaper articles; Presentations to Local Boards, Organizations, Water Districts, and Community Events; Host Demonstration Workshops; Coordination of Volunteers Efforts for Education opportunities.

**Progress:**

- Submitted four articles to the six area newspapers on noxious weeds and other water issues.
- Gave two presentations to Local Boards including the Flood Control and Water Conservation Advisory Board and the East Merced Resource Conservation District Board.
- Gave six presentations about the watershed to community organizations including the Oakhurst Lions Club, North Fork Lions Club, Chowchilla Rotary Club, Oakhurst Women's Green Thumb Gardening Club, Sierra/Oakhurst Kiwanis Club, and North Fork Elementary School after school program.
- Gave one presentation to a water district about *Arundo donax* in Chowchilla.
- Provided four presentations at community events including the Rivergold Elementary School Earth Day event, the Oakhurst River Parkway Creek Stewardship Day, the Natural Resources Youth Workshop, and Sharing Knowledge: Tribal and RCD meeting.
- Organized and hosted four community workshops including: Foothill Visioning Workshop, Valley Stakeholders Workshop, Madera Irrigation Water Enhancement Project, and the Oakhurst Basin Water Study.
- Coordinated three volunteer events for educational purposes this year including: the Oakhurst River Parkway Creek Stewardship Day, the Natural Resources Youth Workshop, and the Senior Scholarship/Award Program.

## Coastal San Luis RCD Central Coast Watershed



**Amount Funded:** \$165,977

**Additional Funding Obtained to Date:** \$1,171,543

### **Background**

There are three active and significant areas within the Central Coast Watershed: Morro Bay, Arroyo Grande Creek and San Luis Obispo Creek. These water bodies suffer to a greater or lesser extent from pathogens, siltation, metals, nutrients, and turbidity. A combination of agricultural practices, resource extraction, land disposal, and urban runoff contribute to these conditions.

### **Benefits to the Watershed**

- ◆ Worked with landowners to develop 29 conservation plans. The plans include 63 BMPs.
- ◆ Fifty-four BMPs have been installed during the second year of the grant. These on-the-ground projects help reduce sedimentation, runoff-borne pollutants, and increased percolation.
- ◆ Coordinated the completion and distribution of the “Arroyo Grande Creek Erosion, Sedimentation and Flooding Alternatives Study.” This study included analysis of hydrology and hydraulics of Arroyo Grande Creek watershed, identified specific projects both within the AG Creek flood control channel and throughout the watershed. The projects would increase flood protection, decrease erosion and sedimentation, and enhance the floodplain.
- ◆ Assisted partners in developing new stream protection policies and ordinances for the City of Arroyo Grande.
- ◆ Secured additional funding and expanded the envirothon program for conservation education.
- ◆ Worked with partners to begin developing a Permit Coordination Program in partnership with Upper Sanlinas Las Tablas RCD, Cachuma RCD, San Luis Obispo County, Santa Barbara County, NRCS, CDFG, NMFS, NOAA, SCC, RWQCB, and Army Corps of Engineers. The Permit Coordination Program is being developed by Sustainable Conservation to develop a set of BMPs that can be submitted and approved by all regulatory agencies under a streamlined process. This process will reduce the amount of time and cost of obtaining permits from multiple regulatory agencies for conservation projects that restore and enhance watersheds.
- ◆ Began to seek funding for the development of a Morro Creek Watershed Management Plan.
- ◆ Submitted a grant proposal to the SWRCB to fund \$1.5 million in Arroyo Grande Creek and Meadow Creek watershed projects. Projects included sediment control, water quality monitoring, and land acquisition for stream and floodplain restoration. The concept proposal was selected to move onto the full application phase.

- ◆ Participated in a working group for the City of Arroyo Grande that is which assisting the City in developing new stream protection policies and ordinances, setting storm runoff standards, and incorporating low impact development standards.

### **Benefits to CALFED Program**

**Watershed Management** – In support of the Watershed Program goal of improving coordination, collaboration, and assistance among government agencies, other organizations and local watershed groups; the coordinator:

- Held several meetings and watershed tours to assist with development of an RCD Permit Coordination Program with the CSLRCD, Upper Salinas Las Tablas RCD, and Cachuma RCD. Program participants include representatives from the three RCDs, NRCS, San Luis Obispo and Santa Barbara County Planning and Agricultural Commissioners Offices, CDFG, NMFS, NOAA, SCC, RWQCB, and ACOE. Sustainable Conservation is developing the Permit Coordination Program with grant funding from the SCC and the RWQCB. The goal of the program is to develop a set of BMPs that can be pre-approved by all regulatory agencies under a streamlined process. The process will greatly reduce the amount of time and cost of obtaining permits for conservation projects that restore and enhance watersheds.
- Held a meeting to revive the Pikeminnow Task Force. The meeting was attended by representatives from CCC, Hydro-Terra and the CSLRCD. The group supported the RCD's grant proposal to NOAA for the eradication of non-native fish species in Chorro Reservoir. This is the first phase of a multi-step plan to eradicate pike minnow from the watershed.
- Collaborated with the SLO County Counsel, CDGG, SLO County Code Enforcement, CCRWQCB, NRCS and the property owner of a WRP easement to develop and implement a restoration plan for the easement on Warden Creek.
- Conducted a tour of the CSLRCD sediment capture project for MBNEP and CCRWQCB members and staff. The tour highlighted the long-term and continuing success of sediment capture projects.
- Organized and participated in a Red-Legged Frog Biological Monitoring Workshop. A total of 25 participants attended the workshop. The participants are now qualified to monitor Red-Legged Frogs at conservation project sites. Trained monitors will allow conservation projects to be implemented more quickly and at reduced cost in watersheds throughout the state.
- Organized two public events to review the draft final Arroyo Grande Erosion, Sedimentation and Flood Alternatives Study. A town hall meeting was held in Arroyo Grande to discuss the study, and was attended by 58 community members. The meeting was broadcast on the local public access television channel. A Technical Advisory Team meeting provided feedback for integration into the final study. The Technical Advisory Team meeting was attended by representatives of the SWRCB, the NRCS, the USFWS, NOAA/NMFS, the County of San Luis Obispo, the City of Arroyo Grande, the Oceano Community Services District, the Flood Control Zone 1/1A Advisory Committee, Central Coast Salmon Enhancement, California State Dept. Parks & Rec., the California Coastal Conservancy, the South San Luis Sanitation District, and CDFG. The results of the Alternatives Study will provide the basis for implementation of watershed-wide erosion and sediment control measures, as well as for the long-term management of the AG Creek flood control channel.

- Hosted two tours of Arroyo Grande Creek flood control channel for representatives of the Regional Water Quality Control Board and the U.S. Fish and Wildlife Service, the City of Arroyo Grande, Central Coast Salmon Enhancement, Flood Control District Zone 1/1A Advisory Committee, and the NRCS.
- Collaborated with the Department of Water Resources to set up a Flood Fight Training course in the South County. The course will focus on construction of flood control structures using sandbags.

The coordinator supports the Watershed Program goal of developing watershed monitoring and assessment protocols by participating in workshops and that addressed water quality monitoring and quality assurance programs in the Morro Bay Watershed. The goal of these meetings and workshops was to improve coordination of monitoring efforts, improve water quality data, and data analysis. The information will allow watershed stakeholders and agencies to more accurately assess the effectiveness of BMPs at reducing pollutant loads and meeting TMDL goals for central coast watersheds.

The coordinator also supported the Watershed Programs educational goals by:

- Meeting with the MBNEP education coordinator to develop a plan and identify funding for the production of a video/TV-spot to promote conservation, environmental stewardship, and awareness in Los Osos and the Morro Bay Watershed.
- Presenting at the Farm Water Quality workshop and field tour for 45 orchard growers. There were over 50 participants at the workshop/field tour including landowners, RCD staff, NRCS staff, CCRWQCB staff, Cachuma RCD staff, and UC Cooperative extension staff. Landowners learned how to conduct water quality monitoring programs on their properties, interpret test results, and evaluate BMP effectiveness in improving water quality.
- Giving a presentation at the Farm Water Quality Short Course for row crops. Landowners were given information on financial and technical resources available to assist in implementation of water quality and erosion control BMPs. The meeting was attended by 30 local growers.

**Water Use Efficiency Program** – The coordinator supported the goals of the Water Use Efficiency Program by completing the following activities:

- Helped secure additional funding for the Mobile Irrigation Lab. The success of the Farm Water Quality Program workshops increased the demand for water audits of irrigation systems. Increased funding for the Mobile Lab will provide landowners with objective irrigation system management tools.
- Helped landowners develop a total of 51 conservation plans, which included 98 BMPs. Forty-eight BMPs were installed in the Morro Bay Watershed. The estimated sediment reduction by the installed BMPs = 986 tons tons/year. Seven BMPs' were installed in the Arroyo Grande Watershed. These installed BMPs increased water use efficiency by reducing sedimentation, non-point source pollution, and improving the overall quality of water in the watersheds.

**Drinking Water Quality** – In support of the Drinking Water Quality program goal of providing good quality water for all beneficial uses, the coordinator:

- Helped implement three off-creek water systems and riparian fencing projects in the Chorro Valley watershed. The projects will reduce nutrient and bacterial inputs to the watershed. Additionally, the coordinator helped implement a large ranch road improvement project in the Los Osos Valley watershed. This project will reduce erosion in the upper watershed of Los Osos Creek and improve steelhead spawning habitat.
- The draft final Arroyo Grande Creek Watershed Erosion, Sedimentation and Flood Alternatives Study was completed and reviewed by the public, as well as state and local agencies. The study supports the Drinking Water Quality program goals by addressing the need to protect the Arroyo Grande wastewater treatment plant from flooding, which would cause ground water and surface water contamination.

### **Performance Measures**

**Watershed Goal:** Improve water quality, water use efficiency, ecosystem quality, and soil conservation through out the watershed.

**Objective #1:** Provide assistance for implementation of conservation practices that improve water use efficiency, water quality, and ecosystem quality throughout the district.

**Performance Measure:** Number of conservation plans developed. Number of Best Management Practices (BMP) installed. Estimate of nutrient input reductions and sediment reduction produced by installed BMP. Estimate nutrient input reductions using watershed nutrient TMDLs. Estimate sediment reduction using the Revised Universal Soil Loss Equation (RUSLE) version 1.05.

### **Progress:**

With the coordinators assistance:

- Fifty-one (51) conservation plans have been developed including 98 BMPs.
- The coordinator has helped to install 78 BMPs since the start of the grant.
- The estimated sediment reduction produced by installed BMPs since the start of the grant is 2,688 tons/year.
- Thirty-nine (39) projects have been photo-documented.

**Objective #2:** Educate landowners and other watershed stakeholders about the financial and technical services available to improve water quality, water quantity, and soil conditions.

Performance Measure: Number of stakeholders that participate in workshops and tailgate meetings. Number of water audits completed.

- Three workshops have been held. Over 22 stakeholders attended these workshops.
- Twenty-four (24) water audits have been completed since the beginning of the grant.

**Objective #3:** Facilitate and improve coordination, collaboration, and assistance among government agencies, other organizations, and local watershed residents.

**Performance Measure:** Number of press releases, newspaper articles, magazine articles, tour agendas, attendance lists, and presentation outlines of the coordinator and the RCD.

- Eighteen (18) newspaper press releases have been printed since the start of the grant.
- Twenty-one (21) watershed tours have been conducted.
- The coordinator has attended 109 meetings since the start of the grant to collaborate and share information with a variety of watershed stakeholders.
- The coordinator has helped stakeholders and watershed groups submit 21 grant proposals for watershed improvement projects.



*Channel through forest before maintenance work.*



*Channel after maintenance work.*



**Colusa County RCD**  
Upper Cache Watershed  
(Sub Watershed Bear Creek)



**Amount Funded:** \$127,317

**Additional Funding Obtained to Date:** \$185,114

**Background**

The 24-mile Bear Creek drainage is a rare aquatic ecosystem that supports four native fishes, western pond turtles, and yellow-legged frogs. It is an important corridor for neotropical migratory birds, and biological inventories have documented 33 other special status plants and animals. The California Unified Watershed Assessment has identified several areas of concern for Bear Creek: non-functioning riparian communities, habitat degradation from non-native species, and impaired water quality.

**Benefits to the Watershed**

- ◆ Worked with partners to organize a major cleanup in the Sulpher Creek Valley at Wilbur Hot Springs. The clean-up included removal of rocks and refuse including abandoned equipment, car parts, old mining equipment, wood, barbed wire, and more. Over 30 volunteers participated in the clean-up. With the refuse and rocks out of the way, a planned yellow star thistle mowing program can move forward.
- ◆ Collected plant material, supervised propagation and planting crews, and installed over 1000 native plants along two miles of Bear Creek on BLM’s Cache Creek Natural Area where extensive tamarisk removal was completed. This revegetation work will help prevent the return of tamarisk and enhance wildlife habitat.
- ◆ Supervised planting efforts at Wilbur Hot Springs. Over 500 plants were planted as part of a native plant recovery program.
- ◆ Worked with BLM staff to prepare and submit a grant proposal to DWR for a Bear Creek Watershed Assessment grant. The proposed assessment would include 65,000 acres in the upper Sulpher Creek watershed that are a major source of mercury and sediment in Bear and Lower Cache Creek.



*Bear Creek sediment discharge*

- ◆ Produced a technical guide for vegetation management in the Sulphur Creek valley. The guide was produced as part of stewardship activities that took place during a 3-day music festival at Wilbur Hot Springs.
- ◆ Worked with partners to design and implement a demonstration erosion control project to reduce sediment in Sulphur Creek and enhance native prairie vegetation.
- ◆ Evaluated the effects of saline water on yellow starthistle suppression and two untested native plants, mugwort and narrow-leaf goldenrod.
- ◆ Worked with the American Land Conservancy to address conservation easement management issues at Wilbur Hot Springs. Issues included unmanaged livestock grazing, soil erosion, mercury, in-stream (Sulphur Creek) headcuts, and invasive plants.
- ◆ Coordinated weed management efforts in the Bear Creek Botanical Management Area as part of an ongoing attempt to eradicate barbed goatgrass and yellow starthistle. The coordinator provided CALTRANS with a comprehensive plant list and project summary to help protect the management area during a new bridge and highway construction project.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator completed several activities that improved coordination between stakeholders and agencies, and built the capacity of local stakeholders to address watershed issues. This year the coordinator worked with partners to submit a proposal for a Bear Creek Watershed Assessment, served as a member of BLM’s grazing advisory committee to address management issues on over 10,000 acres of the Cache Creek Nature Area, organized numerous volunteer work events, and meet with key stakeholders to promote land stewardship. The coordinator also worked with stakeholders, including agencies and landowners, to develop an expanded noxious weed program at Wilbur Hot Springs and to evaluate livestock grazing for weed control on BLM land.

**Ecosystem Restoration** – The coordinator supported several Ecosystem Restoration Program goals. Specifically the coordinator collected plant materials, supervised plant propagation and planting crews, and installed over 1000 native plants along a two-mile stretch of Bear Creek in BLM’s Cache Creek Natural Area. The revegetation work was completed as a follow up to a tamarisk removal effort. The native plants will help prevent the return of the tamarisk. The coordinator also supervised the planting of 500 plants at Wilbur Hot Springs as part of a native plant recovery program.

**Science** – The coordinator supported the goals of the Science Program by initiating a saline irrigation experiment to evaluate the effects on native grasses and suppression of exotic weeds.

### **Performance Measures**

**Watershed Goal #1:** Restore native plant communities.

**Objective #1:** Reduce non-native invasive species (NIS).

**Performance Measure:** Develop and maintain 10 partnerships to address non-native invasive plants in the watershed.

**Progress:**

- Helped organize a cleanup at Wilbur Hot Springs to remove rocks and trash in preparation for yellow starthistle control using mowers. Approximately thirty volunteers attended the clean up.
- Received funding for to restore a state-designated Botanical Management Area on a Caltrans right-of-way along Hwy 20.
- Conducted follow-up control work on regrowth of tamarisk and small plants missed from previous herbicide applications.

**Objective #2:** Promote native plant revegetation program and grazing management as a complement to NIS removal and erosion control

**Performance Measure:** Plant 4,000 native plant starts on BLM and WHS property & 5) Serve as technical advisor to federal and private landowners for grazing mgt programs.

**Progress:**

- Collected plant materials for a 2nd round of propagation for BLM revegetation project. Supervised propagation and planting of 1000+ starts.
- Met with NRCS, UCD soil scientists, and a graduate student to monitor plantings. Began assessment of soil conditions along Bear Creek for revegetation work on BLM property.



*Volunteers at a Wilbur Hot Springs clean-up event.*

**Objective #3:** Determine value of using naturally occurring saline water for controlling exotic plants and enhancing natives.

**Progress:**

- Developed saline water test project with NRCS and Wilbur Hot Springs
- Gathered essential baseline data soils, water chemistry, and vegetation data necessary to measure the success of the saline water control project.
- Completed 2 years of irrigation treatments for this experiment. In the process of analyzing data. Wrote up partial results for a Wildlife Conservation Board report.
- Monitored soil moisture levels, salinity, and compared growth response
- Initiated a 2nd experiment on a new site to test the effectiveness of saline water in yellow starthistle suppression. 3 summer irrigations were completed.
- Most of the experiment site was destroyed with the torrential New Year’s flood. However, observations prior to the flood indicated seedling suppression of yellow starthistle and annual grasses.

**Watershed Goal #2:** Improve hydrologic function and water quality.

**Objective # 1:** Assemble and develop baseline information for water quality and major soil erosion sites in the watershed.

**Progress:**

- Met with agency personnel to discuss soil erosion sites in the watershed and develop a watershed-level assessment protocol.
- Worked with UC Davis and NRCS scientists to evaluate scouring and deposition patterns along Bear Creek. The NRCS engineer conducted a channel and floodplain cross section survey using GPS points for topographic mapping. Using this information, a GIS soil and aerial photo map was developed for the lower Bear Creek watershed.
- Prioritized erosion control project sites.

**Objective # 2:** Increase landowner cooperation and funding to address high-priority soil erosion sites.

**Progress:**

- Documented and developed demonstration sites that show effective remediation, including grazing management, erosion control structures, and revegetation.
- Worked with BLM staff to develop a grant proposal for a watershed assessment for the entire Bear Creek watershed. The proposal was submitted by BLM to the Department of Water Resources.

**Watershed Goal #3:** Promote local cooperation within the watershed and expand outreach.

**Objective # 1:** Maintain existing partnerships and develop new cooperative programs.

**Progress:**

- Obtained an estimated (\$4,750) of in-kind labor from the Konocti Conservation Crew for three days of work with a 15-member crew and their supervisor.
- Organized and participated in a cleanup event with 30 people, providing a total of 120 volunteer hours, in the Sulphur Creek valley.

**Objective #2:** Increase Outreach

**Progress:**

- Produced a sequence of photos to show Wilbur Hot Springs ownership an example of sediment discharge into Sulphur Creek during a storm event.
- Conducted a meeting with a fluvial geo-morphologist to discuss remediation protocol for headcut along a Sulphur Creek tributary.
- Attended a 2-week Watershed Stewardship Seminar sponsored by CALFED with Dennis Bowker.

# Contra Costa Public Works Department

## San Joaquin Delta Watershed



**Amount Funded:** \$215,959

**Additional Funding Obtained to Date:** \$399,705

### **Background**

This is one of the fastest urbanizing watersheds in California. Consequently, ever-increasing amounts of polluted run-off is entering the Delta – the water supply for over 20 million people. The watershed is also home to numerous unique special status terrestrial plant and animal species. Agriculture is an important element of the landscape, economy and cultural heritage. Recognizing the need for cooperation, Contra Costa County is implementing a new Stormwater Management Plan. However, much more needs to be done to address critical issues such as flooding, erosion, and diminishing habitat.

### **Benefits to the Watershed**

- ◆ Obtained \$313,766 in additional funding through the State Water Resources Control Board's Agricultural Water Quality Grant Program (AWQGP). The funding will be used to implement best management practices (BMPs) on selected agricultural fields to reduce the environmental impact of runoff from irrigated agriculture.
- ◆ Developed working relationships with five of the major row crop growers in east Contra Costa County. Two of the growers have applied for financial assistance through the NRCS Environmental Quality Incentives Program to implement BMPs. The projects will involve almost 400 acres.
- ◆ Six projects, on 375 acres, are being developed as part of the AWQGP grant.
- ◆ Convened 12 monthly meetings of the new grassroots community group, the Friends of Marsh Creek Watershed (FOMCW).
- ◆ Organized and coordinated 14 volunteer events in the Marsh Creek Watershed, which involved a total of 150 volunteer participants.
- ◆ Worked with Friends of Marsh Creek Watershed, East Bay Regional Park District, Cub Scouts, Boy Scouts, Girl Scouts, Save the Bay, Contra Costa RCD, and Contra Costa County



*Tailwater Pond with Wildlife Habitat*

to coordinate five monitoring events. Two events used Global Positioning System to monitor vegetation, species habitat, and water quality. Four events monitored water quality using benthic macroinvertebrates.

- ◆ Worked with partners to organize five events to remove invasive plants and plant native plants.
- ◆ Conducted presentations, staffed information tables, and contacted over 900 residents in the Marsh Creek Watershed to inform watershed stakeholders about watershed programs and events.
- ◆ Wrote and submitted approximately \$420,000 in grant proposals to obtain funding for restoration and protection of the Marsh Creek Watershed.
- ◆ Coordinated six meetings with the Contra Costa County Flood Control and Water Conservation District, City of Brentwood staff, and Pinn Brothers and Pulte Homes developers to incorporate riparian restoration projects into developments adjacent to Marsh Creek in the City of Brentwood.
- ◆ Coordinated a Marsh Creek Watershed clean up day. Over 5,000 tons of trash was removed from the creek channel. The clean up event involved over 260 community volunteers.
- ◆ Worked with the City of Brentwood, City of Oakley, the Central Valley Regional Water Quality Control Board, and the California Department of Fish and Game to monitor water quality after the Brentwood ethanol spill and the Marsh Creek fish kill.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator completed several tasks to support the Watershed Program goal of encouraging collaboration between agencies, stakeholders, watershed groups, and others. The coordinator worked with the community and local agency on a watershed level by:

- Notifying approximately 200 residents about an East County Symposium, and organizing FOMCW and Dutch Slough Wetland Restoration Project tables at East County Symposium.
- Facilitating monthly FOMCW meetings to protect and restore the Marsh Creek Watershed.
- Recruiting and organizing over 40 volunteers to monitor salmon, vegetation, species habitat and water quality.
- Helping community and local agencies to recruit and organize more than 260 volunteers to remove over 5,000 tons of trash from Marsh Creek.
- Helping organize watershed events such as two activity days to remove invasive vegetation in Creekside Park in Brentwood, and two water quality monitoring programs to sample benthic macroinvertebrates.



*Sand Creek Vegetation Removal Project*

**Ecosystem Restoration** – The coordinator supported Ecosystem Restoration Program goals by:

- Working to increase habitat for threatened species such as the California red-legged frog, rehabilitate the natural hydrology, stream channel and floodplain, and protect and restore functional riparian habitats. The coordinator held three meetings with Pulte Homes developers, the City of Brentwood and the Contra Costa County Flood Control and Water Conservation District to plan the restoration of hundreds of linear feet of riparian habitat along Marsh Creek in downtown Brentwood, one of the fastest growing cities in California.
- Organizing and implementing two invasive plant removal volunteer events, and one volunteer event to plant native plants adjacent to the Dutch Slough Wetlands Restoration Project with over 30 community members.
- Working with an agricultural producer to apply for funding to improve wildlife habitat by establishing a hedgerow of native vegetation, which will help reduce the impacts of non-native plant species.
- Organizing three watershed events to collect seeds and propagate plants that will be used to restore native riparian vegetation in the Marsh Creek Watershed.
- Applying for two grants to remove a fish barrier on Marsh Creek to allow migrating Chinook salmon and steelhead trout to access 7 miles of additional spawning habitat.

**Drinking Water Quality** – In support of Drinking Water Quality program goals the coordinator:

- Encouraged and helped agricultural producers to install BMPs such as drip irrigation and tailwater return systems. These BMPs will reduce the quantity and improve the quality of irrigation tailwater flowing to the Delta, a source of drinking water for 23 million people.
- Worked with local governments and community groups to monitor water quality by organizing two events to monitor benthic macroinvertebrates.

**Science** – In support of the Science Program, the coordinator:

Worked with Contra Costa County to integrate unbiased, relevant science into benthic macroinvertebrates monitoring data collection programs in the Marsh Creek Watershed.

### **Performance Measures**

**Watershed Goal 1:** Improve the quality of aquatic habitats in the lower watershed and Delta through an integrated program of urban stormwater management and volunteer participation in habitat restoration.

**Objective 1:** Engage local residents in the planning, implementation, and monitoring of ecosystem restoration, habitat enhancement, and water quality improvement projects.

**Performance Measure:** # of volunteers who participate in a ½ day watershed program; particularly macro invertebrate sampling; consistent quarterly sampling on Marsh, Kellogg, and Brushy Creek; number of plants propagated and planted.

**Progress:**

- Approximately 1,150 volunteers have participated in ½ day watershed programs:
- 350 volunteers participated in the Brentwood Marsh Creek Clean up event on 9/18/04.
- 20 volunteers participated in community salmon monitoring event on 11/21/04.
- 16 volunteers participated in community salmon monitoring event on 12/19/04.



*Volunteers at work during an invasive species removal day*

- 25 high school student volunteers participated in Freedom High School's First Annual Career Fair on 2/16/05.
- 12 volunteers participated in Gardening for Wildlife Workshop on 4/3/05 and 4/17/05.
- 20 volunteers participated in FOMCW Earth Day mowing and mulching project on 4/24/05
- 25 volunteers participated in Oakley Science Week MESA Fair on 4/29/05.
- 50 volunteers participated in Oakley Science Week Oakley Community Science Fair 4/30/05.
- 75 volunteers participated in Oakley Science Week Dutch Slough Day 5/1/05.
- 70 volunteers participated in Oakley Marsh Creek Clean up event on 5/21/05.
- 5 volunteers participated in invasive species suppression mulching project on 6/18/05.
- 8 volunteers participated in seed collection event with FOMCW and California Native Plant Society on 9/13/05.
- 300 volunteers participated in Brentwood Marsh Creek Clean up event on 9/17/05.
- 15 volunteers participated in GPS training and monitoring event on 10/23/05.
- 6 volunteers participated in GPS monitoring event on 11/5/05.
- 25 Cub Scout volunteers participated in community salmon monitoring outing on 11/16/05.
- 5 volunteers participated in community salmon monitoring outing on 11/13/05.
- 10 volunteers participated in community salmon monitoring outing on 11/28/05.
- 5 volunteers participated in invasive plant removal event on 3/18/06.
- 20 volunteers participated in invasive plant removal event on 3/19/06.
- 10 volunteers participated in native plant planting event on 3/26/06.
- 75 volunteers participated in East County Symposium on 3/30/06.
- Approximately 40 volunteers have participated in macro invertebrate sampling on Marsh Creek:
- 30 student volunteers from Freedom High School chemistry class monitored water quality including benthic macroinvertebrates on 3/5/05.



- 4 volunteers participated in Contra Costa County benthic macroinvertebrate training on 3/19/05.
- 3 volunteers participated in benthic macroinvertebrate sampling event on 4/1/05.
- 2 volunteers participated in benthic macroinvertebrate sampling event on 4/9/05.
- 3 volunteers participated in Contra Costa County training and refresher courses on benthic macroinvertebrate monitoring on 3/25/06 and 3/26/06.
- Approximately 180 plants were propagated and planted at the mouth of Marsh Creek adjacent to the Dutch Slough Wetland Restoration Project at a volunteer planting event on 3/26/06.

**Objective 2:** Incorporate stormwater reduction and water quality improvement BMPs into the plan, review, permitting, and construction of new development and into the retrofit of existing urban developments.

**Performance Measure:** # of BMPs incorporated into new permits and developments; # developments using innovative BMPs such as pervious pavements and grassy swales. Long-term measure: macro invertebrate diversity and pollution intolerance on the Index of Biological Integrity (IBI)

**Progress:**

- Organized over 15 meetings with Contra Costa County Flood Control and Water Conservation District, Pinn Brothers developers, Pulte Homes developers, City of Brentwood Department of Engineering, Department of Parks and Recreation and Planning Department, and East Bay Regional Park District to discuss incorporation of BMPs into new permits and developments along Marsh Creek.
- Incorporated 3 BMPs into new Pinn Brothers subdivision development along Marsh Creek including constructed wetlands, vegetated swales and vegetated buffer strips.
- 2 subdivision developments are considering using innovative BMPs along Marsh Creek:
  - 77.5-acre Marseilles development constructed by Pinn Brothers.
  - 37-acre Carmel Estates development constructed by Pulte Homes.
- Coordinated with Contra Costa County to measure macro invertebrate diversity and pollution intolerance in the Marsh Creek Watershed using data collected by volunteers and consultants on Marsh Creek and in other creeks in Contra Costa County. All County and volunteer monitoring efforts are done in coordination with bioassessment efforts conducted by the State of California's Surface Water Ambient Monitoring Program (SWAMP) This will result in a regional dataset to allow bioassessment data to be compared throughout the San Francisco Bay region.

**Watershed Goal #2:** Improve the quality of water flowing into the Delta through an integrated program of agricultural tailwater and run-off management, water conservation, and wildlife friendly agriculture.

**Objective 1:** Implement water conservation measures and other BMPs to reduce the quantity of polluted tailwater flowing from agricultural fields to the Delta.

**Performance Measure:** # of landowners who implement BMPs; # of acres with BMPs implemented. Long term: reduction in TDS; increase in macro invertebrate richness and improvement in index of biological integrity.

**Progress:**

- With assistance or encouragement from the coordinator, five landowners have pursued either the NRCS EQIP incentive program or the AWQGP incentive program, and have developed plans to implement BMPs that will reduce the quantity of polluted tailwater discharged from their fields.
- The total number of acres with planned BMPs is approximately 775.
- Currently planned BMPs, including installing a drip irrigation and a tailwater return system, will have a long-term reduction in TDS. The quantity of tailwater and associated sediment discharged from the agricultural fields will be reduced.



*Agricultural field identified for potential BMP implementation*

**Objective 2:** Improve the quality of tailwater and stormwater discharge flowing to the Delta from agricultural fields.

**Performance Measure:** # of landowners who implement BMPs; # of acres with BMPs implemented. Long term: reduction in TDS; increase in macro invertebrate richness and improvement in index of biological integrity.

**Progress:**

- Worked with the CCWD and the NRCS on the Veale-Byron Tract, Rock Slough drainage management project. NRCS surveyed Veale Tract for a potential land-leveling project, which will assist with the implementation of the pump relocation to direct agricultural tail water away from Rock Slough and the CCWD intake.
- Conducted the first Technical Advisory Committee meeting for the Agricultural Water Quality Grant Program grant to solicit advice on potential project sites and the evaluation and selection of BMPs in east Contra Costa County.
- Worked with district conservationist, CCWD, CCFCWCD, RD 800, and irrigation districts to identify type and priority location of on farm BMPs that would best contribute to their collective water quality objectives. Implementing drip irrigation systems and constructing

tailwater return systems have been identified as BMPs that would best contribute to the water quality objectives of RD 800 and CCWD.

- Identified and publicized the NRCS EQIP and the RCD's AWQGP grant as the two incentive programs that are the best source of funding for implementing BMPs.
- Identified six parcels to implement projects under the AWQGP. The proposed project activities include conversion from furrow-irrigated tomatoes to drip irrigated tomatoes and the construction of a tailwater return system for furrow irrigated sweet corn.

**Objective 3:** Implement BMPs that improve the wildlife value of irrigated agriculture and reduce stormwater runoff.

**Performance Measure:** # of landowners who implement BMPs; # of acres with BMPs implemented. Long term: reduction in TDS; increase in macro invertebrate richness and improvement in index of biological integrity.

**Progress:**

Worked with a landowner to apply for funding through the Contra Costa County Fish and Wildlife Committee to continue establishing a hedgerow with native plants to increase wildlife habitat at the edges of an orchard. Although the landowner was in the process of selling the property, the buyer expressed interest in the project. However, after submitting the application to the Wildlife Committee, the new landowner decided not to pursue the project.

## Contra Costa RCD Suisun Bay Watershed



**Amount Funded:** \$188,730

**Additional Funding Obtained to Date:** \$123,891

### Background

The Suisun Bay watershed includes rangeland, protected wetlands, state and regional parks, and urban areas. Invasive non-native plants are a widespread problem in the watershed, decreasing upland and riparian habitat value. Trash and illegal dumping impair creeks throughout the region, and several creeks also have serious erosion and sedimentation problems. Water quality is also a significant concern with the California Unified Watershed Assessment assigning the watershed a Category 1 priority.

### Benefits to the Watershed

- ◆ Coordinated numerous workdays in cooperation with several partners. Work days included six planting days at the Sky Ranch Restoration Project where 15 species of native plants were planted, 12 invasive weed removal events at Strentzel meadow where weeds were removed from 1000 feet of riparian channel and surrounding meadow area, three planting events at Strentzel meadow where seven species of native plants and seeds were planted, a weed removal day at the Dow Wetlands where the volunteer group Kids for the Bay removed invasive weeds and applied mulch around 1,000 square feet of upland area surrounding the pond, and a planting event at Dow wetlands where five species of native grasses and seed were planted.
- ◆ Helped partners develop grant proposals for watershed improvement projects. A \$400,000 proposal was submitted to CALFED and a \$2.1 million proposal was submitted to the State Water Board. The proposals include funding to continue the watershed coordinator position.
- ◆ Coordinated four planting days at local restoration sites with cooperators.
- ◆ Obtained \$24,000 in funding to support water quality monitoring efforts in the watershed.
- ◆ Submitted a grant proposal for \$63,795 to start a volunteer-based Watershed Nursery in the Kirker Creek watershed. The nursery will support local restoration efforts.
- ◆ Participated in two regional outreach events and presented awards to two volunteers recognized for their involvement in stewardship and restoration activities.



*Watershed volunteer Jamie Menasco receives award for her involvement in stewardship activities.*

- ◆ Selected a contractor to conduct a geomorphic survey of the AVCC project area and collaborated on \$2.5 million in grant proposals that includes funds to design and implement the restoration project.
- ◆ Produced and distributed *Cross Currents*, a regional newsletter for watershed stewards.
- ◆ Coordinated and participated in four creek clean up events. The clean up days resulted in over 180 volunteers improving  $\frac{3}{4}$  mile of creek channel, removing 9 yards of trash, and removing 5 yards of recyclables. The clean up events took place on Kirker and Alhambra Creeks.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator completed several activities that supported the CALFED Watershed Programs goals of: (1) Facilitating and improving collaboration among agencies, organizations, and local watershed groups. (2) Supporting education and outreach. (3) Integrating the Watershed Program with other CALFED program elements, and (4) Implement a strategy that will ensure support and long-term sustainability of local watershed activities.

1) To support collaboration, the coordinator maintained a list of projects in each watershed; submitted a funding request for \$63,795 to support community-based restoration efforts and collaborated with stakeholders groups to develop \$2.5 million in funding requests; conducted regular website updates to help watershed groups and organizations stay informed and connected; and attended meetings of regional conservation and watershed groups to encourage collaboration among watershed interests.

2) To support education and outreach the coordinator recruited schools to participate in four restoration and stewardship events; participated in meetings with schools to incorporate restoration activities into school curriculum; worked with community college students to conduct GIS mapping in Kirker Creek; held educational workshops for the community; and provided support for community led restoration efforts that will continue beyond the life of this grant.

3) The coordinator encouraged the integration of the Watershed Program with other CALFED program elements by carrying out actions that supported Ecosystem Restoration Program elements and informing cooperators about the goals of other CALFED program elements.

4) Finally, the coordinator began implementing a strategy that will ensure support and long-term sustainability of local watershed activities. The coordinator collaborated on funding requests for \$2.5 million that include continued funding for the watershed coordinator position after the end of this grant.

**Ecosystem Restoration** – The coordinator worked with partners to conduct native planting events at Strentzel Meadow, Dow Wetlands, and Sky Ranch. The coordinator also worked with partners to conduct a cleanup at Kirker Creek. In addition, the coordinator conducted several invasive species removal days at Strentzel Meadow and Dow Wetlands.

## **Performance Measure Progress**

**Goal:** Restore habitat and increase stewardship capacity through community-based watershed programs.

**Objective 1:** Facilitate community involvement in current and planned restoration and stewardship activities in the Kirker and Alhambra Creek sub-watersheds.

**Performance Measure:** Volunteers participate in an average of three restoration activities and two cleanups per year in each sub-watershed.

### **Progress:**

- Maintained an updated list of existing and planned watershed projects in the watershed.
- Worked with cooperators to coordinate five creek cleanups since the beginning of the grant period.
- Coordinated 31 invasive plant removal workdays.
- Coordinated 21 plant propagation and revegetation events.
- Submitted 10 funding proposals to obtain funding for watershed stewardship activities.
- Worked with a variety of school cooperators to incorporate restoration activities into regular school programs.



*Volunteers at work during a planting event at Sky Ranch*

**Objective 2:** Promote and facilitate participation, coordination, and collaboration among organizations, agencies, landowners, residents, and other stakeholders in the Kirker and Alhambra Creek subwatersheds.

**Performance Measure:** Promote and facilitate participation, coordination and collaboration among organizations, agencies, landowners, residents, and other stakeholders in the Kirker and Alhambra Creek sub-watersheds.

### **Progress:**

- Facilitated communication between watershed group members.
- Held 15 watershed outreach events.
- Kept stakeholders, agency representatives, watershed groups and others informed by updating the website on a regular basis.

**Objective 3:** Act as a resource and point of contact for community groups concerned with creek and watershed health within the HUC.

**Performance Measure:** Greater awareness of watershed projects and activities in HUC as documented by survey.

**Progress:**

- Produced and distributed three newsletters to educate and keep stakeholders informed about activities in the watershed.
- Attended regular monthly Contra Costa watershed group meetings to provide information and obtain information about activities taking place in the watershed.

**Objective 4:** Seek sources of funding that will ensure continued watershed coordinator support within the HUC.

**Performance Measure:** Grant proposal and partnering requests completed.

**Progress:**

- The coordinator collaborated with partners to submit two grant proposals.
- The coordinator developed new partnerships with UC Berkeley, Kids for the Bay, and the Alhambra Valley Creek Coalition since the beginning of the grant period.

# Deer Creek Watershed Conservancy

## Mill-Big Chico Watershed



**Amount Funded:** \$192,099

**Additional Funding Obtained to Date:** \$839,320

### **Background**

Deer Creek is a pristine watershed that possesses one of California's few remaining populations of wild Spring-run Chinook salmon. In the southern portion of the watershed, farmers grow a variety of crops. Both wildlife and agriculture need water to survive and thrive. Consequently, water management is absolutely critical and requires a comprehensive, collaborative approach. Changes in land use contribute to erosion and runoff. The watershed is characterized by a diversity of natural resources and competing stakeholder interests. As the population increases, so will the challenges.

### **Benefits to the Watershed**

- ◆ Provided coordination and communication among key stakeholders, private landowners, scientific and technical advisors, local, state, and federal resource managers, and other organizations associated with the Deer Creek Conservancy landscape restoration projects.
- ◆ Worked with partners to get the Flood Plan project back on track. The project is a significant benchmark for Deer Creek ecosystem restoration and is key to meeting CALFED objectives.
- ◆ Initiated and developed a non-point source monitoring program for the upper watershed. The monitoring program is providing important data to help watershed stakeholders understand the water quality status of the watershed.
- ◆ Managed the fiscal aspects for the two large grant projects. The coordinators contributions allow the projects to move forward with accountability and transparency.
- ◆ Provided a central point of contact for both upper and lower watershed stakeholders. The coordinator is key to helping the upper and lower watershed groups exchange information about projects and activities within the larger watershed.
- ◆ Provided educational presentations about the watershed to local schools.
- ◆ Assisted agency representatives in an administrative capacity to support their time and efforts in making valuable contributions to the above-mentioned watershed projects.



*High Flows in Deer Creek*



- ◆ Assisted in developing and expanding a watershed-fisheries based environmental education program in the school district.
- ◆ Completed and submitted permit applications to the ACOE, DFG, SWRCB for the Cone-Kimball fish ladder project. The project will support the maintenance and enhancement of the aquatic system within the Deer Creek Watershed.
- ◆ Coordinated and facilitated a public workshop for local stakeholders to discuss and present information on watershed issues. The workshop educated stakeholders on issues including water quality, fisheries, and Deer Creek Watershed Conservancy projects throughout the watershed. The workshop also included a discussion about the Agricultural Waiver Program and the Deer Creek Water Exchange Program.
- ◆ Worked with the DCC Board of Directors and other agency personnel to obtain additional data that will be integrated into the WMP/WMS.
- ◆ Recruited new members for the Technical Advisory Committee.
- ◆ Coordinated monthly board meetings, distributed board agendas and packets, and distributed meeting minutes.

### **Benefits to CALFED Program**

**Watershed Management** – In support of Watershed Management program goals the coordinator initiated a non-point source monitoring program in the upper watershed and established a multi-disciplinary TAC to guide the Conservancy’s erosion control project, ecosystem restoration projects, and flood control project in the lower watershed.

**Ecosystem Restoration** – Starting August 24, 2006 the conservancy will begin work to complete a CALFED Ecosystem Restoration program directed action. The Deer Creek Directed Action in the CALFED Record of Decision focuses on key ecosystem restoration activities in the lower reach of the watershed. One of the priority projects is integrating flood control with fisheries restoration.

**Science** – The Conservancy developed a contract with CALFED to conduct a presentation at the CALFED Science Conference in October 2006 regarding the restoration efforts being conducted on the lower reach of the stream. The data and the scientific approach meet the Science Program framework and standards.

### **Performance Measures**

**Watershed Goal:** Continue Deer Creek Watershed Conservancy’s role in the ongoing management of the Deer Creek Watershed, utilizing a cooperative, interdisciplinary, multi-species and ecosystem approach.

**Objective #1:** Updating the Deer Creek Watershed Management Plan and Strategy.

**Performance Measure:** Completion of an updated Watershed Management Strategy.

**Progress:** The coordinator completed the following tasks towards the completion of this performance measure:

- Convened a Technical Advisory Council (TAC), comprised of representatives from public agencies and private entities to provide technical input for the Conservancy's flood control and restoration projects.
- Worked with the Board of Directors and partners to obtain data to integrate into the WMP/WMS.
- Worked with partners to review existing watershed assessment and identify data gaps.
- Provided input into community planning efforts such as the Tehama County General Planning process.
- Researched potential funding opportunities and worked with the Board of Directors to develop a funding strategy.

**Watershed Goal:** Protect and/or enhance the long-term productivity of the Deer Creek aquatic system with special consideration of anadromous fish species.

**Objective 1:** Maintain and/or improve aquatic ecosystem health within the Deer Creek Watershed.

**Performance Measure:** Map of riparian habitat and completion of Phase 1 of floodplain feasibility study.

**Progress:** The coordinator completed the following tasks towards the completion of this performance measure:

- Conducted research on potential funding opportunities to identify and map exotic species affecting the watershed as well as water use efficiency projects.
- Cooperated with CALFED staff to help them complete their audit of the Lower Deer Creek Restoration and Flood Management Feasibility Study.

**Watershed Goal:** Improve water quality in the Deer Creek watershed.

**Objective 1:** Reduce nonpoint source pollution entering watershed.

**Performance Measure:** Identification of primary locations of nonpoint source contaminants in watershed and established plans to reduce impacts to water quality.

**Progress:** The coordinator completed the following tasks towards the completion of this performance measure:

- Worked with partners and the Conservancy Board of Directors to develop a funding strategy for nonpoint source pollution prevention projects.

**Watershed Goal 4:** Foster conservation, restoration and sound resource management in the Deer Creek Watershed, while respecting and protecting private property rights and public resources

**Objective 1:** Encourage good land stewardship practices through education, research and public outreach

**Performance Measure:** Completion and implementation of plans to address Safe Harbor, oak management, range, and fire.

**Progress:** The coordinator completed the following tasks towards the completion of this performance measure:

- Facilitated the implementation of the Conservancy's rangeland grant.
- Obtained information to begin developing an Oak Woodlands Habitat Strategy.
- WC worked with the Board of Directors to coordinate and facilitate the 2005 Annual Meeting/Public Workshop.

**Watershed Goal 5:** Beneficial interactions of agencies, organizations and individuals involved with the management of Deer Creek Watershed.

**Objective 1:** Improve the communication and cooperation among agencies and organizations that are directly involved with the management of the Deer Creek Watershed and surrounding area

**Performance Measure:** Increased participation in Deer Creek Watershed Conservancy by 25%.

**Progress:** The coordinator completed the following tasks towards reaching this performance measure:

- Recruited a Nature Conservancy staff member to serve on the Technical Advisory Committee.
- The WC coordinated monthly board meetings, distributed board agendas, and circulated meeting minutes.
- Worked with members of the TAC/WAC to make final revisions to the 2004 Annual Report and distributed it to stakeholders.
- Met with Mill Creek Conservancy to discuss opportunities for collaboration.

**Watershed Goal 6:** Acknowledge and actively retain the important role of natural resource parameter monitoring in the Deer Creek watershed.

**Objective 1:** Develop and coordinate a long term monitoring program that addresses key watershed conditions.

**Performance Measure:** Completion of monitoring plan.

**Progress:** The coordinator completed the following tasks towards reaching this performance measure:

- Created a TAC for Phase II and III of the Deer Creek Erosion Control Project. The TAC will work with DCWC and the USFS to develop a QAPP and coordinated monitoring plan.

- Met with USFS and SWRCB agency reps to plan Phase III of the erosion control project.
- Collaborated with DWR staff on Deer Creek monitoring efforts. Data will be collected to analyze the sediment load into the Sacramento River.

# Earth Resource Foundation

## Santa Ana Watershed



**Amount Funded:** \$178,135

**Additional Funding Obtained to Date:** \$106,400

### Background

The Santa Ana is the largest river in Southern California and has a significant impact on residents throughout the region. Agriculture, industrial, and residential demands for water is intense and will only grow. Due to population growth, water usage will surge by a more than 40% over the next 50 years. In the 1980's the federal government determined that the river posed the greatest risk for flooding west of the Mississippi and initiated several major projects, including the construction of the Seven Oaks Dam. The river is managed to maximize groundwater recharge. Runoff from urban areas, agricultural operations, and industrial facilities pose health hazards for residents. Many areas are extremely urbanized with little open space. Debris and other trash flow toward the ocean, polluting beaches. Some areas along the river have little natural habitat.

### Benefits to the Watershed

- ◆ Organized two *Got River?* workshops for community members, watershed agencies, and nonprofit organizations. The workshops were hosted in partnership with the City of Huntington Beach, the Wildlands Conservancy, City of Santa Ana, Trust for Public Land, Latino Health Access, and Metropolitan Water District. The Metropolitan Water District provided a \$3,000 grant for the second workshop.
- ◆ Helped reestablish the Santa Ana and Huntington Beach “Blue Ribbon Task Force”. The coordinator also worked to initiate the development of similar task forces in Newport Beach and Costa Mesa. The Blue Ribbon Task Forces are sponsored by the Wildlands Conservancy, which provides \$5,000 to each city to help develop a city led watershed plan or vision.
- ◆ Coordinated efforts with several Orange Coast River Park nonprofit organizations to strategize land acquisition priorities along the river.
- ◆ Facilitated and participated in workshops and conference calls to outline a \$234.5 million package for programmatic mitigation through the proposed extension of the Orange County Transportation Authority’s Measure M ½ cent sales tax.



*Students picking up debris and trash during the Human Broom Beach Cleanup event.*

- ◆ Helped organize a field trip to the Orange County Water District for its Water 101 course. The field trip featured a project at the Yorba Regional Park where Orange County is using a satellite “SMART” irrigation system to water the park. This demonstration project will help reduce water usage and urban runoff.
- ◆ Gave a presentation about alternatives for sediment transfer at the Prado Basin using new technology that has already been implemented in the San Gabriel River. Sixty people attended the presentation.
- ◆ Hosted an annual “Human Broom Beach Cleanup” that involved 398 volunteer high school students. The clean up included picking up trash at the beach and planting native plant gardens at three elementary schools in Santa Ana.
- ◆ Organized clean up events as part of the Inner Coastal Cleanup Day and Coastal Cleanup Day, which involved over 1800 volunteers who picked up over 2000 bags of trash.
- ◆ Held a “Working at the Watershed Level” program for 30 at risk girls through “Girls, Inc.”. The summer camp provided watershed education to the girls. As a result of the program, “Girls, Inc.” eliminated the use of polystyrene at their headquarters.
- ◆ Acted as a liaison between the regional water quality control board and the Natural Resources Conservation Service to plan site-level watershed improvements on four private properties in Santiago Canyon. A plan was developed for each of the properties to address severe water quality and erosion problems.
- ◆ Coordinated a meeting with the Natural Resources Conservation Service and Huntington Beach Wetlands Conservancy, which lead to the award of \$50,000 in funding for invasive plant removal.  
Created and maintained a new Santa Ana River Watershed website which provides users with information about the watershed and activities in the watershed. The site is located at <http://www.santaanariverwatershed.org>.
- ◆ Assisted with the development of a cover story published in the OC Metro magazine Santa Ana River Watershed efforts.

### **Benefits to CALFED Program**

**Watershed Management** – In support of the watershed program goals, the coordinator: partnered with OCWD to host a Water 101 class; partnered with UCSB for a study of water use in the watershed; hosted a meeting that focused on water transport and sediment; published several articles and held press conferences regarding accomplishments, challenges and upcoming events within the Santa Ana Watershed. Developed a bi-weekly electronic newsletter, which is distributed throughout the community and is available on the Santa Ana River Watershed and Earth Resource Foundation websites.

**Water Use Efficiency** – To support the goals of the Water Use Efficiency program the coordinator: hosted a Got River? Workshop that focused on water conservation; provided SARWA and members of the public with information about smart timer irrigation; and, held a field trip that highlighted a project at the Yorba Regional Park where a satellite “SMART” irrigation system is used.

**Ecosystem Restoration** – To help support the Ecosystem Restoration Program goals the coordinator organized numerous watershed cleanups that improved watershed conditions and promoted and organized numerous restoration projects.

### **Performance Measures**

**Goal:** Improve Watershed Management Plan.

**Objective 1:** Facilitate the development of a stakeholder-based watershed group for the major local watersheds. The watershed groups will serve as the forums for establishing watershed management goals and pursuing restoration efforts that are supported by the stakeholders.

**Performance Measure:** Establish and help support active, regularly meeting stakeholder-based watershed groups for each major local watershed including, at a minimum, Santiago Creek.

#### **Progress:**

- Established the Santa Ana River Watershed Alliance “SARWA.”
- Created and continually updated website [www.santaanariverwatershed.org](http://www.santaanariverwatershed.org).
- Held monthly meetings with an average of 25 stakeholders at each meeting.
- Sent e-newsletters regularly to over 265 stakeholders.
- Developed watershed management goals and created matrix that included existing restoration projects, funding possibilities, and volunteer opportunities.

This performance measure is complete but ongoing.

**Objective 2:** Create opportunities to experience the creek through nature walks, historical sites, planting parties, clean up days, adopt-a -trails, volunteer monitoring, bus tours for elected officials.

**Performance Measure:** Organize one event per month in the watershed.

#### **Progress:**

Created, developed, and promoted monthly meetings, cleanups, nature walks, planting parties, volunteer monitoring and bus tours for elected officials. This performance measure is complete but ongoing.

**Objective 3:** Building on past studies, develop a stakeholder-supported watershed assessment and restoration plan for the “pilot watershed” Santiago Creek. The plan will establish watershed goals (e.g., reliable water supply, improved water quality, restored ecological habitat, recovered steelhead trout population, etc.), assess watershed conditions and problems, and identify a prioritized set of restoration projects to address existing problems. Stakeholder input and participation through each phase of developing the plan will be facilitated through regular watershed groups meetings.

**Performance Measure:** Completion of a watershed assessment and restoration plan for the Santiago Creek watershed, and pursuit of funding to complete restoration projects identified in the plan.

**Progress:**

- Through initial meetings of the Santa Ana River Watershed Alliance, 60% of the work has been completed of identify stakeholders and assessing current conditions, etc.
- Coordinated regular meetings to discuss the assessment and restoration plan.

**Goal 2:** Ecosystem Restoration/Maintenance Objectives.

**Objective 1:** Implement measures to restore natural wetlands.

**Performance Measure:** Identify all potential restoration sites and restore 30% of natural wetlands.

**Progress:**

- Through email, phone and letters, stakeholders have been contacted to identify potential restoration sites.
- Developed database to record potential sites, specific stakeholders, restoration activities, and funding needed.
- Worked with the Wetlands Recovery Project to setup a task force. The task force is now in the process of finalizing the Santa Ana River Watershed wetlands inventory.

**Objective 2:** Implement measures to reduce discharge of nutrients, pesticides, herbicides, chlorine, fecal bacteria and trash.

**Performance Measure:** Identify current percentage of water pollution and reduce it by 40%.

**Progress:**

- Implemented measures to reduce trash by recruiting and educating citizen volunteers through river, street, school and beach cleanups.
- Provided information to Newport Harbor High School and Girls, Inc. that lead them to eliminate foamed polystyrene from their facilities, thereby reducing the amount of foamed polystyrene entering the Santa Ana River.
- Worked with the Citizens Watershed Monitors of Orange County to gather water quality data that identifies the types of pollution and problems areas in the watershed.
- Encouraged private property owners, schools, and businesses to plant native plants, which help reduce the amount of pesticide, herbicides, and nutrient discharge.

**Objective 3:** Promote physical preservation and restoration activities.

**Performance Measure:** Identify, prioritize, and seek funding for projects.



**Progress:**

Contacted landowners to identify potential restoration sites. The information was recorded in a database developed by the coordinator.

**Goal 3:** Water Use Efficiency - Reduce dependence on imported water.

**Objective 1:** Improve water use practices by commercial users.

**Performance Measure:** Reduce of irrigation water by 30%.

**Progress:**

- Collaborated with MWDOC to conduct training in satellite irrigation which improves irrigation efficiency.
- Worked with FHBP to disseminate information about water conservation.
- Held a River of Life Conference, which included local businesses and government agencies. Rebate programs, tiered water rates, and other water conservation technologies and strategies were promoted at the conference.
- Worked with the County's Water Efficiency Committee to target county parks.
- Helped selected "practice" sites for water conservation irrigation practices.
- Worked with the County of Orange in its efforts to use smart timers and ETS systems at Yorba Park.
- Worked with MWDOC to increase attendance at the AB 2171 Landscape Committee. The purpose of the committee is to improve water conservation and promote evapo-transpiration controllers.

**Objective 2:** Improve water use practices by residential users.

**Performance Measure:** Reduction of water use by 10%.

**Progress:**

- Distributed materials on rebates for toilets and the landscape certification program.
- Posted water conservation tips on the website.
- Provided educational presentations on the use of native plants in home/business gardens.
- Assisted in creating a native gardening class at Santa Ana Parks.
- Collaborated with UCSB Bren students and the Irvine Ranch Water District to gain support for developing a tiered rate system.
- Recruited volunteers and elementary schools to develop a native plant garden.

**Goal 4:** Educational/Cooperative Objectives.

**Objective 1:** Build local capacity for stakeholders in the Santa Ana Watershed. Increase awareness of the creek as a resource and community participation.

**Performance Measure:** Increase active memberships in the local stakeholder group by 50 members.

**Progress:**

- Over 250 stakeholders regularly receiving our monthly e-newsletter
- An average of 25 stakeholders attend monthly meetings
- Increased attendance at special meetings such as Got River? Workshops
- On average three new organizations are added per month for volunteer projects. These organizations include churches, youth groups, schools, and environmental organizations.

**Objective 2:** Raise awareness of water quality and its relation to natural resources through hands on education - water analysis, collection of microorganisms and participation in conservation/preservation activities.

**Performance Measure:** Involve five new high schools per year in the Earth Resource Foundation “Working at the Watershed Level” program.

**Progress:**

- Recruited and trained teachers about watersheds and urban refuse.
- Conducted presentations for over 3000 students on the Santa Ana River Watershed. Topics covered included water quality, water conservation, and plastic pollution.
- Five new schools per year are participating in the urban refuse project which consists of collection and analysis of trash “urban refuse” in the Santa Ana Watershed
- Over 1000 students participated in beach and watershed cleanups and restoration projects.
- Recruited students and other volunteers for the Citizens Watershed Monitors of Orange County Coastal Snapshot Day and World Water Monitoring Day.

**Objective 3:** Promote compatible development along the creek.

**Performance Measure:** Present proposal to all local land use authorities in the watershed.

**Progress:**

- Researched existing land use policies in the watershed.
- Conducted research and provided presentations to stakeholders about effective compatible development policies used in other watersheds.

**East Merced RCD**  
Middle San Joaquin-Lower Merc  
Lower Stanislaus Watershed



**Amount Funded:** \$286,957

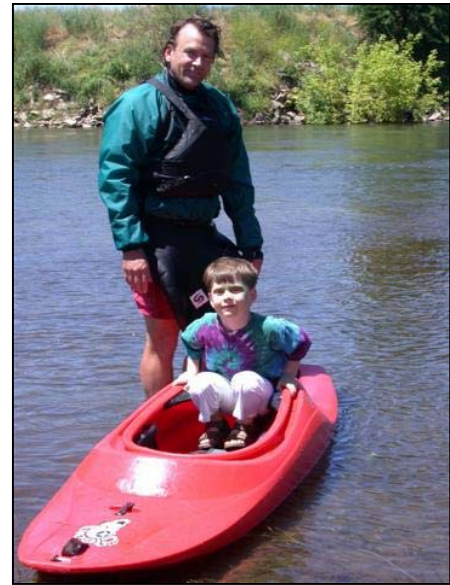
**Additional Funding Obtained to Date:** \$2,400,300

**Background**

The lower Merced River and its adjacent floodplains have been heavily altered through channel narrowing, diking, placement of revetments (rip rap), removal of riparian vegetation and gravel mining. The lower Merced is almost entirely privately owned and its predominant land use is agricultural. Issues of concern in the watershed include: urbanization, water quality, habitat degradation, invasive species, and pesticide, herbicide and fertilizer run-off.

**Benefits to the Watershed**

- ◆ Worked with the Upper Merced watershed coordinator to form the Merced River Alliance. The Alliance conducts environmental education, publishes a semi-annual newsletter, holds joint meetings with upper and lower watershed stakeholders, and is conducting a biological assessment of fish, birds, and macro-invertebrates.
- ◆ Held two landowner field days to demonstrate best management practices that help maintain good water quality.
- ◆ Provided landowner outreach and education as part of the East San Joaquin Water Quality Coalition agricultural waiver program.
- ◆ With coaching from the staff at the nonprofit group, Sustainable Conservation, the coordinator laid the groundwork for a permit coordination program. The coordinator has conducted research and outreach to initiate the coordination program. Known occurrences of listed species have been catalogued, conservation practices have been identified, and contact has been made with all regulatory agencies with jurisdiction in the area. The coordinator is currently working with partners to prepare reports to the agencies to streamline the actual permitting process.
- ◆ Secured additional funding for work in the Merced River watershed through proposition 13.
- ◆ Helped to raise awareness of issues within the watershed thorough publishing the Merced River Alliance newsletter. The newsletter is distributed to 250 stakeholders in the Upper Merced River watershed and 500 stakeholders in the Lower Merced River watershed.



*River Fair participants explore the watershed by kayak*

## **Benefits to CALFED Program**

**Watershed Management** – The coordinator’s activities resulted in an increase in coordination, collaboration, and assistance between government agencies, other organizations, and watershed groups. The Merced River Alliance, developed in partnership with the Upper Merced River Watershed Council, brings together stakeholders from the upper and lower Merced River watershed to address common issues on a watershed-wide basis. Activities of the Alliance include a biological survey of fish, birds, and macro-invertebrates along the course of the Merced River. To implement this survey partnerships have been formed between Stillwater Sciences, Merced Irrigation District, EMRCD, the Upper Merced River Watershed Council, and the Merced River Stakeholders. The RCD has also developed new partnerships with regulatory agencies to develop the permit coordination program.

The coordinator has also supported the CALFED Watershed Program goal of implementing a strategy to ensure support and long-term sustainability of local watershed activities. The coordinator has submitted three grant proposals that would fund a watershed activities including: a demonstration project of bio-revetment streambank stabilization techniques, a project to increase citizen involvement in watershed improvement activities, and a non-native invasive species removal demonstration project.

Finally, the coordinator has conducted several educational activities to help landowners understand and comply with environmental regulations. The watershed coordinator conducted workshops for landowners that provide them with information about how to implement best management practices that will improve water quality and meet the requirements of the Irrigated Lands Waiver Program. The coordinator also provides landowners with information at the Merced River Stakeholders meetings, works with partners to publish and distribute the Merced River Alliance newsletter, and provided environmental education at the Merced county fair.

**Ecosystem restoration** – The coordinator has helped support the Ecosystem Restoration program goals of recovering at-risk native species, improving and maintaining water and sediment quality, and streamlining the regulatory permit process. As a result of the coordinator’s work, occurrences of federal and state listed species have been mapped for the East Merced area for use with the permit coordination program. The coordinator has also conducted water quality and erosion control workshops and began developing a permit coordination program that will allow landowners to implement projects without having to apply for multiple permits.

## **Performance Measures**

**Goal 1:** Serve as an intermediary between landowners, agencies and interests in the watershed to move them toward a shared goal of watershed health.

**Objective 1:** Facilitate and provide support to MRS group to bring attention and energy to focus on lower Merced watershed health.

**Performance Measure:** Stakeholders received info and made contacts to benefit watershed and comply with regulations.

**Progress:**

- Conducted five Merced River Stakeholders meetings. Presenters at the meetings disseminated information and engaged stakeholders in discussions about Merced River projects.
- Held a Merced River Alliance kick-off dinner to celebrate the beginning of the Merced River Alliance. Over 90 stakeholders from all parts of the watershed attended. Presenters provided information about the biological assessment and activities in both the upper and lower reaches of the watershed.
- Disseminated information through the Merced River Alliance newsletter. The newsletter reaches 750 watershed stakeholders.
- Recruited new partners and stakeholders to be part of the Alliance.

**Objective 2:** Serve as a liaison for providing information and addressing concerns related to the Irrigated Lands Conditional Waiver program.

**Performance Measure:** Landowners will be aware and can adjust how their management practices affect water quality.

**Progress:**

- Held a landowner field day to teach landowners about the irrigated lands waiver, water quality testing, conservation practices for cleaner water, cover cropping, organic farming, and solar power on farms. Over 60 stakeholders attended the field day.
- Held a workshop for landowners to demonstrate best management practices for improved water quality. The workshop was held at the Merced County Fair. Topics covered included: Farmscaping for pest and resource management, the irrigated lands waiver program, do it yourself water quality testing, dealing with non-native invasive species, and watershed safe techniques for removal of *Arundo donax*.
- Conducted outreach at Ag Futures Alliance and Merced County Farm Bureau meetings on practices for improved water quality.
- Provided training to five landowners on water quality testing and other self-assessment practices. Water quality test kits were also provided to the landowners.
- Conducted research on best management practices that could be implemented by landowners to improve water quality and support the Irrigated Lands Conditional Waiver program.

**Goal 2:** Facilitate voluntary conservation work (including streambank stabilization) identified as a priority by MRS.

**Objective 1:** Evaluate geographical areas and types of work where environmental compliance may be preventing ecosystem restoration.

**Performance Measure:** Conservation work defined and # measures drafted and conservation work types affirmed.

**Progress:**

- Through consultation with USDA Natural Resources Conservation Service, Sustainable Conservation, landowners, and other stakeholders, the coordinator has identified conservation practices that would be useful in the area. Implementing these practices requires completing regulatory tasks that may be extremely difficult for individual landowners to accomplish. The practices will become part of the EMRCD permit-streamlining program.
- Catalogued species listed as threatened or endangered under the Endangered Species that may require protection when implementing practices approved under the permit coordination program.

This performance measure has been completed.

**Objective 2:** Engage in constructive dialog with the regulatory community regarding methods by which the experience of environmental compliance will be easier for landowners, while upholding all environmental laws and mandates.

**Performance Measure:** Minimum of two meetings and field visits hosted.

- Held meetings with Army Corps of Engineers, National Marine Fisheries Service, California Department of Fish and Game, US Fish and Wildlife Service, Regional Water Quality Control Board, Department of Water Resources, and the Board of Reclamation to discuss landowner environmental compliance.
- The coordinator and partners have chosen permit coordination as the approach to help landowners overcome the burden of individual permitting. The program will be conducted by the watershed coordinator with assistance from USDA NRCS and Sustainable Conservation.

This performance measure has been completed.

**Objective 3:** Attend training and coaching in land conservation work and permitting from Sustainable Conservation.

**Performance Measure:** Watershed Coordinator will have understanding of permitting process and establish a network of RCDs for support and encouragement.

**Progress:**

- Held regular teleconferences with Sustainable Conservation staff members who coached the coordinator about the permitting process.
- Attended Yolo/Lake County RCD's permit coordination meeting and field tour for regulatory agencies to learn more about the permitting process and establish a support network.
- Attended a California Watershed Forum meeting to network with others engaged in permit coordination.

**Objective 4:** Obtain funding to hire a permit coordination specialist to implement a coordinated permitting system.

**Performance Measure:** Appropriate funding program identified, grant application submitted and funding received.

**Progress:** The coordinator obtained funding to develop a permit coordination system. This performance measure is complete.

**Goal 3:** Secure funding for projects on lower Merced to enable enhancement and protection of water and/or habitat quality.

**Objective 1:** Grant writing to fund on-the-ground lower Merced projects.

**Performance Measure:** List of potential projects and available funders, two grant applications submitted, and funding received.

**Progress:**

- Funding was secured for the Merced River Alliance through a Proposition 13 grant.
- A concept proposal was submitted to DWR for the Citizen Involvement in Watershed of East Merced project. The concept proposal was accepted and a full proposal was submitted. The proposal is pending.
- Submitted a proposal to the CALFED Ecosystem Restoration Program for a Streambank Stabilization Demonstration project. The proposal is pending.

**Goal 4:** Build local capacity at the watershed coordinator level in order to meet EMRCD & MRS goals.

**Objective:** Watershed coordinator participation in regional and state watershed and conservation organizations and outreach to local, state, and federal agencies and officials.

**Performance Measure:** # of conferences attended, attend minimum of three meetings per month, six education days, and one annual local official briefing.

**Progress:**

This year the coordinator attended one local official briefing, six education days, and 36 meetings. The coordinator has also conducted outreach over the phone and email to various agencies and the local media.

**Goal 5:** Complete administrative grant tasks in a timely and accurate manner.

**Objective:** Administer grant, make reports to EMRCD, and write reports for DOC.

**Performance Measure:** Work completed on time, correctly (coordination with EMRCD grant administrator); approx. 30 oral and written board updates; up to 12 quarterly reports, up to three annual reports, final report.

**Progress:**

- Regular EMRCD staff meetings with grant administrator for budget review and program planning.
- Reports made to EMRCD at monthly board meetings.
- Prepared and submitted first annual report in April 2005.
- Prepared and submitted six quarterly reports.



# El Dorado Irrigation District

## South Fork American Watershed



**Amount Funded:** \$214,157

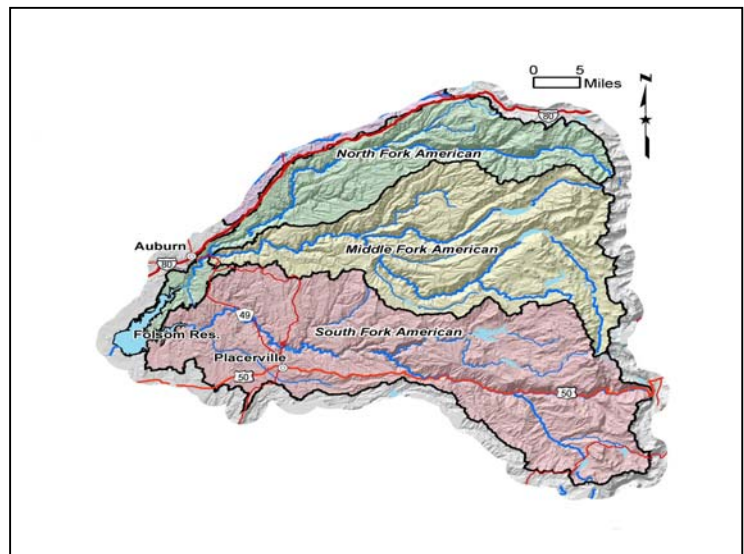
**Additional Funding Obtained to Date:** \$527,500

### Background

The watershed is located within the fastest growing region of the Sierra Nevada. Water quality is affected by many factors including timber and mining operations, agricultural runoff, industrial facilities, and recreational use. Natural events such as flooding, soil erosion, and fires exacerbate the problems. It is estimated that more than 13,000 septic systems are located within the watershed. Failing systems could pose problems for local residents, vacationers, and down stream water users. It is imperative that a comprehensive approach be used to prevent potential disasters.

### Benefits to the Watershed

◆ Brought together over 80 organizations represented by over 100 individuals to begin creating an Integrated Regional Water Management Plan (IRWMP). The process has already educated stakeholders in the region about the benefits of resource management integration. The process will identify priority actions for water quality, supply, and environment in the Cosumnes, American, Bear, and Yuba river watersheds. This will provide cohesive action within the watersheds, further facilitating protection, improvements, and preservation.



*American River Watershed water management map*

- ◆ Provided a presentation on El Dorado Irrigation District's hydroelectric project at the American River Watershed Conference. The presentation provided attendees with valuable information and helped foster improved communication between upper and lower American River watershed interests. Conference attendees had positive feedback for the presentation.
- ◆ Purchased a watershed model that includes representations of forest, wetland, farms, urban areas, factories, streams, and roads, and sits in a clear base, representing the ground water table. The model will be used to explain what a watershed is, what NPS pollution is, and how it can be controlled.

- ◆ Helped create a Drought Analysis Plan for the South Fork American River watershed. The plan will be instrumental in minimizing water pollution during a drought.
- ◆ Facilitated a collaborative process on the South Fork American River watershed to address the effects of recreation on water quality.
- ◆ Encouraged the Sacramento River Watershed Program to complete the Cosumnes-American-Bear-Yuba portion of their proposed GIS project.
- ◆ Completed two websites for the region to aid in the education of the community and the ability to communicate regionally with greater ease. The coordinator obtained \$15,000 to complete the American River Watershed Portal ([www.americanriverwatershed.net](http://www.americanriverwatershed.net)). The CABY IRWMP website ([www.cabyregion.org](http://www.cabyregion.org)) was completed. The website provides information on upcoming meetings, minutes from past meetings, and documents detailing decision making processes and how the decisions will affect the CABY region.
- ◆ Obtained \$5,000 from the Bureau of Reclamation to create a recognition program for homebuilders and developers. The program is designed to encourage the use of water saving fixtures in model homes, xeriscaping, and ET controllers to minimize irrigation at model home sites.
- ◆ Created a Regional Watershed Coordination Team (RWCT) for coordinating efforts between regional watershed interests. The group was suspended while the coordinator was on maternity leave but has been restarted by the new coordinator.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator completed several activities in support of CALFED Watershed Program goals. Specifically, the coordinator:

- Initiated the CABY IRWMP to ensure regional watershed planning for the future of the upper Cosumnes, American, Bear, and Yuba River watersheds. The plan will improve regional watershed management and will result in multiple benefits. The process includes coordination between over 80 water agencies, water districts, watershed groups, and non-profit agencies.
- Finalized the American River Watershed Portal to provide stakeholders with easy access to data and information about activities and projects within the watershed. The site increases coordination and facilitates the development of monitoring and assessment protocols and supports education and outreach.
- Established the Regional Watershed Coordination Team. The RWCT will facilitate funding and improve coordination, collaboration, and assistance among government agencies, other organizations, and local watershed groups.

**Water Use Efficiency** – In support of Water Use Efficiency program goals the coordinator:

- Developed the “El Dorado Friendly” program to encourage home builders to install water efficient hardware and landscaping in model homes to demonstrate the environmental and lifestyle benefits of being water smart. The coordinator also developed an “El Dorado Friendly” handout for homebuyers.

- Included in the CABY IRWMP a strategy to maximize the current water use through recycling and optimization of water conservation.
- Participated in the Placerville Home and Garden Show to demonstrate the importance of water conservation and watershed health.

**Ecosystem Restoration** – To support the goals of the Ecosystem Restoration program the coordinator collaborated with the USFS and county representatives to plan remediation of the water quality degradation caused by recreational activities in the South Fork American River watershed. Furthermore, environmental and habitat needs are addressed within the CABY IRWMP. The CABY objectives will help the region attain higher regional water quality.

**Drinking Water Quality** – In support of Drinking Water Quality program goals the coordinator worked on developing a GIS interactive mapping system for the American River Basin to establish baseline water quality data. The project will help identify gaps in water quality data and potential sources of NPS contamination.

### **Performance Measures**

**Watershed Goal 1:** Assessment and evaluation of future projects and/or programs within the SFAR will consider their impact(s) on the watershed as a whole including, but not limited to: water quality; measures needed to protect and restore habitat and fisheries; best management practices to reduce flooding, control erosion and sedimentation; and management activities required to maintain a reliable water supply, while balancing economic and environmental impacts.

**Objective 1:** Ensure a holistic watershed review for construction/improvement programs and projects that balances economic and environmental impacts.

**Performance Measure:** Identify and collaborate on a minimum of seven projects or programs for watershed restoration, monitoring, and/or preservation that involve multi-stakeholder participation.

### **Progress:**

- The RWCT, involving the region’s Watershed Coordinators as voices of their stakeholders groups in the CABY region, provides a venue to collaborate and discuss potential monitoring, restoration, education, and preservation strategies in the watersheds. This is an excellent group for generating ideas and creating regional synergies.
- Held regular meetings with all department heads at EID to update management on watershed activities and assist, where appropriate, on a watershed review of EID construction and improvement projects.
- Secured grant funding for the creation of a CABY IRWMP. The grant helped to fund regional collaboration in water resource management and will aid in the identification of watershed needs through stakeholder participation.
- Met with USFS representatives and El Dorado County Environmental Health managers to

assess regional needs regarding the impacts of recreational activities on the SFAR watershed. Both organizations are interested in developing a cooperative program, with EID as the lead agency. The next steps will be to conduct a presentation for the recreational cabins' homeowners association and obtain a grant to fund the process.

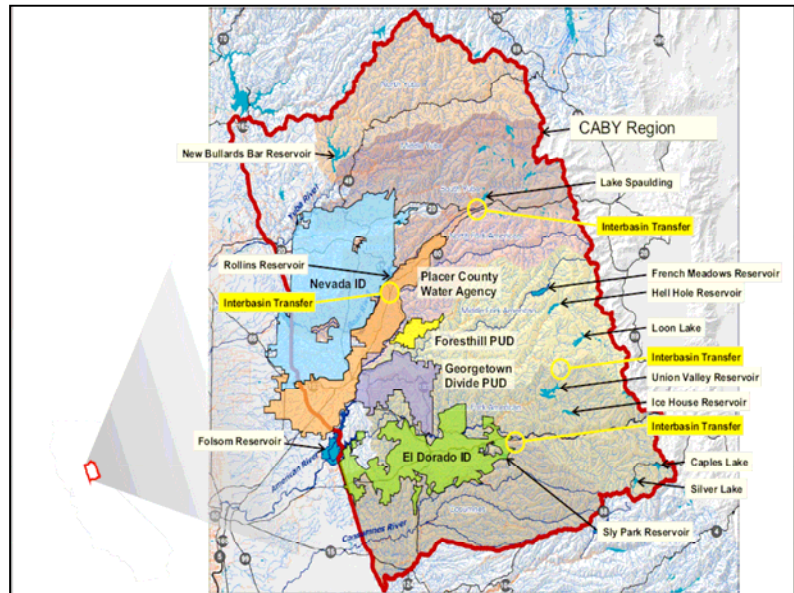
**Watershed Goal 2:** To ensure that members of the public at large appreciate their personal responsibility to protect water quality, quantities, and environmental resources for future generations.

**Objective 1:** Increase public awareness of water quality issues/concerns within the SFAR watershed.

**Performance Measure:** Public awareness increased by 10%; Nonpoint source contaminants in identified high target areas reduced by 20%. Programs and activities implemented.

**Progress:**

- Addressing NPS issues will be a large component of the CABY IRWMP process. The coordinator is the Workgroup Manager of the Water Quality Workgroup IRWMP. The workgroups objectives include several strategies that will focus watershed attention on NPS concerns. Specifically, the group has submitted a grant proposal for water quality assessment, monitoring, and reporting within the four regional watersheds. The workgroups plan also includes and an objective dealing with sediment issues and forestry management, one of the largest challenges to water quality in the region.
- The watershed model purchased by the El Dorado County and Georgetown Divide Resource Conservation District and EID will educate the public on concerns facing urban water quality, and the interconnectedness of the watershed as a whole.
- The coordinator participated in the American River Watershed Conference by conducting a presentation on upper American River watershed issues. Another EID staff member gave a presentation on the Project 184 (EID's hydroelectric/water project). These presentations provided better understanding about upper and lower American River issues and opened the lines of communication.
- Created a tri-fold pamphlet to educate the public and gain greater participation in the CABY IRWMP.



CABY Regional Watershed Map

- Participated in the planning process for the Home and Garden show in Placerville. The planning process included creating curriculum for public interaction, choosing prizes for a “Wheel of Fortune,” and familiarization with the Watershed Model.
- Helped to plan EID’s Customer Appreciation Day (CAD). The event typically attracts over 700 people. All participants receive valuable information about the watershed.
- Developed the American River Watershed Portal to provide a library of information about regional watershed issues to the public. The site also includes a calendar with information about upcoming watershed events.

**Objective 2:** Develop a watershed-wide drought protection plan and public education campaign for SFAR.

**Performance Measure:** Collaborative watershed-wide drought protection plan completed; Public awareness increased by 10%; Programs and activities implemented.

**Progress:**

- Hosted the third of four initial drought preparedness workshops. More than 25 people from the community, in addition to EID and Water Agency staff, attended the session. The workshop Included members of the Drought Advisory Committee, a committee formed to assist EID and the Water Agency in developing a strategic plan to prepare for and address the effects of drought.
- Phase II of the Drought Preparedness Planning effort has been initiated. Completion is scheduled for February 2007.
- The CABY IRWMP process included BMP drought preparedness education for water resource stakeholders and the public.

**Fall River RCD**  
Lower Pit Watershed



**Amount Funded:** \$195,518

**Additional Funding Obtained to Date:** \$311,582

**Background**

The Lower Pit River watershed spreads across northeastern California. Water drains into Shasta Lake and ultimately into the Sacramento River. The watershed’s diverse landscape offers opportunities and challenges in aquatic, forest, and rangeland ecosystems. Invasive species and non-point source pollution impact watershed ecosystems and the resources they support. Noxious and aquatic weeds, including Eurasian watermilfoil, perennial pepperweed, and purple loosestrife obstruct water flow to hydropower facilities, reduce agricultural production, and alter

ecosystem function of fish, plants, and wildlife. Tributaries to the Pit River are also impaired by non-point source pollution impacts. The Fall River is listed as an “impaired water body.”

### **Benefits to the Watershed**

- ◆ Facilitated noxious weed mapping and control projects for private landowners. The coordinator facilitated weed control projects by helping private landowners with application equipment and supplies and established monitoring sites to determine efficacy of their control efforts.
- ◆ Assisted the Regional Water Quality Control board with its surface water-monitoring program.
- ◆ Performed channel surveys with UC Davis.
- ◆ Developed grant proposals to obtain funding to address non-point source pollutant impacts in the watershed.
- ◆ Provided technical assistance for perennial pepperweed control and herbicide efficacy monitoring projects on 3 private properties. Over 1200 acres were surveyed in the spring and summer 2005. Nearly 15% of the acres surveyed were infested. Coordinated treatments with Shasta County and private landowners. Telar was applied to approximately 190 acres. Monitoring treatment efficacy continued through the Fall 2006.
- ◆ Coordinated in-kind contributions of herbicide, spray truck and ATV with application equipment, and herbicide between CDFA and private landowners. The coordinator developed a perennial pepperweed wetland monitoring station at a private ranch surrounded by wetlands on the northeastern edge of the McArthur Swamp. Monitoring sites were established to determine the efficacy of a new aquatic herbicide Renovate® registered for aquatic use in wetlands.
- ◆ Monitored basic water quality parameters, nutrients, total suspended solids, and bacteria in the Fall River each month.
- ◆ Coordinated and presented a “Twilight Tour” to Fall River landowners and representatives from the California Department of Food & Agriculture, CA Department of Fish and Game, US Fish and Wildlife Service, and other stakeholders.
- ◆ Displayed noxious weed and FRRCD restoration efforts at the Intermountain Fair in September 2005.
- ◆ Completed and circulated Fall River Eurasian watermilfoil draft management plan to Fall River landowners and agency stakeholders.
- ◆ Completed Fall River physical and biological assessments with UCD Davis Aquatic Ecosystems Analysis Laboratory and Watershed Science Group.



*Conducting water quality monitoring*

- ◆ Completed 2006 Regional Water Quality Control Board Fall River surface water quality monitoring. Throughout the year, the Watershed Coordinator measured basic water quality parameters with equipment donated by the Pit River Watershed Alliance (PWA). The WC coordinated analysis of nutrients, bacteria, and total suspended solids with the Regional Water Quality Control Board, PWA, and a private lab. During the winter 2005, data was organized and analyzed by the coordinator and prepared for publication.

### **Benefits to CALFED Program**

**Ecosystem Restoration** - Ecosystem restoration projects, including noxious weed mapping, implementation of chemical and biocontrol strategies, and herbicide efficacy monitoring were conducted on private lands throughout the Lower Pit River Watershed. Approximately 1200 acres were surveyed and 200 acres of perennial pepperweed control activities were coordinated by the Watershed Coordinator. The Coordinator also facilitated control projects of other A-rate weeds including Scotch Thistle and Squarrose Knapweed and C-rated weeds, such as yellow starthistle.

The coordinator and the RCD Board president met with CA Department of Fish and Game staff to discuss three Fall River watershed non-point source pollution reduction goals. The meeting was the first step towards meeting DFG regulatory requirements necessary to complete the restoration projects.

The coordinator also facilitated Fall River channel surveys in collaboration with the University of California Davis, Aquatic Ecosystems Analysis laboratory. Activities completed by the coordinator to help complete the surveys included: contacting landowners to obtain permission to access the river through private property and conducting repeated monitoring at three locations.

The coordinator obtained in-kind support from the UC Davis Watershed Science group. The Watershed Science group collaborated with the coordinator to establish benchmark elevations for the channel cross-sections.

Finally, the coordinator concluded the 2005 noxious weed outreach activities by establishing three perennial pepperweed monitoring transects with private landowners of the –D- Ranch. The transects help owners of –D- Ranch to measure the efficacy of their noxious weed control efforts.

**Drinking Water Quality** – The Fall River is used as a drinking water source for most of the landowners with homes on the Fall River. The coordinator implemented a monthly water quality monitoring program. The coordinator also provided the Regional Water Quality Control Board Program with monitoring data and, the RWQCB provides funding for laboratory analysis of *E. coli*, nitrates, and other basic water quality parameters.

### **Performance Measures**

**Goal:** Reduce Noxious Weeds and improve the watershed conditions on tributaries to Fall River.

**Objective #1:** Coordinate a strategy to develop, prioritize, and implement a noxious weed management plan.

**Performance Measure:** Management plan, strategy meetings, community outreach, FRRCD Board of Directors Presentations.

**Progress:**

- Created management plans for perennial pepperweed, Eurasian watermilfoil, and Purple Loosestrife. The plans include recommendations for controlling the core infestation on the McArthur Swamp. PG&E has provided the Fall River Cattlemen’s Association with funding to spray the large infestation.
- To supplement the cattlemen’s association’s activities, the coordinator worked with the Shasta Weed Management Area to treat satellite populations on smaller private lands. The plan is currently being implemented and the partners have obtained two years of funding from the CA Department of Food and Agriculture.
- A plan to implement a Eurasian watermilfoil control program was drafted. The coordinator worked with partners to implement Phase I (Baseline Monitoring) of the program. As part of this effort, the coordinator obtained \$35,000 from Region 5 RWQCB to perform river channel surveys, physical cross-sections, macroinvertebrate monitoring, and studies to correlate aquatic plants and insects associated with native plants and Eurasian watermilfoil. The results have been reported in a final technical report “Fall River 2005 Macroinvertebrate and Channel Cross Section Monitoring.”
- Participated in monitoring, collecting, and release of Purple Loose Strife leaf-eating bio-control insects around the Fall River Valley. The draft management plan includes finding funding to train local individuals to collect and release the leaf-eating beetles throughout the other areas.

This performance measure is 75% complete.

**Objective #2:** Develop a monitoring program that supports the weed management plan.

**Performance Measure:** 12 newsletter articles, nine progress reports, two annual reports (and one final report), four individual landowner meetings, two landowner access agreements, one work site training, and two days at the district fair.

**Progress:**

- Wrote three newsletter articles to educate stakeholders about the watershed and keep the community informed about watershed projects.
- Completed six progress reports to keep RCD board members informed about watershed activities.
- Submitted two annual reports to the Department of Conservation.
- Conducted four individual landowner meetings to gain access to river segments in the Fall River sub-watershed.



- Coordinated meetings with two private landowners (one in Upper Fall River and Lower Fall River) and managers to gain access to the Fall River for Eurasian watermilfoil and water quality monitoring activities. Access was granted for monitoring activities.
- Held three meetings with private ranches to implement the perennial pepperweed control project.
- Held a meeting with the Fall River Wild Trout Foundation president who is also a landowner on the Fall River. The meeting was held in a canoe on the Upper Fall River, which allowed participants to observe the impacts of sedimentation and discuss potential rehabilitation projects. The landowner considered providing access to the FRRCD for its monitoring activities.
- Conducted a landowner meeting with Vineyard Springs Reach residents to garner support for the FRRCD aquatic plant management program. An MOU is being planned between landowners and the Fall River Resource Conservation District.
- Met with two separate landowners on the Upper Fall River. The meeting discussed the health of the aquatic ecosystems and current watershed program activities to monitor the Fall River. The landowners agreed to grant FRRCD access to the river through their property.
- Obtained river access from several Fall River landowners to perform channel survey work by UC Davis.

**Objective #3:** Promote a district-wide natural resource education program that reached out to landowners and agency partners

**Performance Measure:** Results of document review, one meeting with landowners and Advisory Group, list of monitoring sites, monitoring protocol, long-term monitoring plan for watershed, compile monitoring data.

**Progress:**

- Reviewed Pit River Watershed Alliance WQ monitoring data, Shasta County Ag Department Perennial pepperweed maps, surveyed and created purple loosestrife maps in 2004.
- Met with the Technical Advisory group to discuss watershed and weed monitoring. The Technical Advisory Group met with the Pit River Watershed Alliance to coordinate water quality monitoring in the watershed.
- Met with local landowners, the Central Modoc and Pit RCDs, the Regional Water Quality Control Board, USFS, BLM, and NRCS to review available water quality monitoring data for the Fall River.

**Objective # 4:** Coordinate the development of a grant proposal to implement additional remediation strategies

**Performance Measure:** Funding list, one meeting with Fall River Technical Advisory Group, two draft proposal for grant funding, two final funding proposals.

**Progress:**

- Prepared a draft perennial pepperwood management proposal, circulated the draft, and submitted the proposal to the CDFA Partners support grant program. The proposal was funded and four ranches within the Fall River Valley joined the containment plan. Work was initiated in May 2005
- Drafted and submitted a proposal for perennial pepperweed control work on BLM land. The proposal was funded and noxious weed removal work began on BLM lands.
- Met with the Technical Advisory Group and presented Draft weed management strategies for Eurasian watermilfoil. Portions of the draft management plan have been initiated.
- Researched funding opportunities for noxious weed management projects and began developing a funding list.

# Friends of Deer Creek

## Upper Yuba Watershed



**Amount Funded:** \$196,385

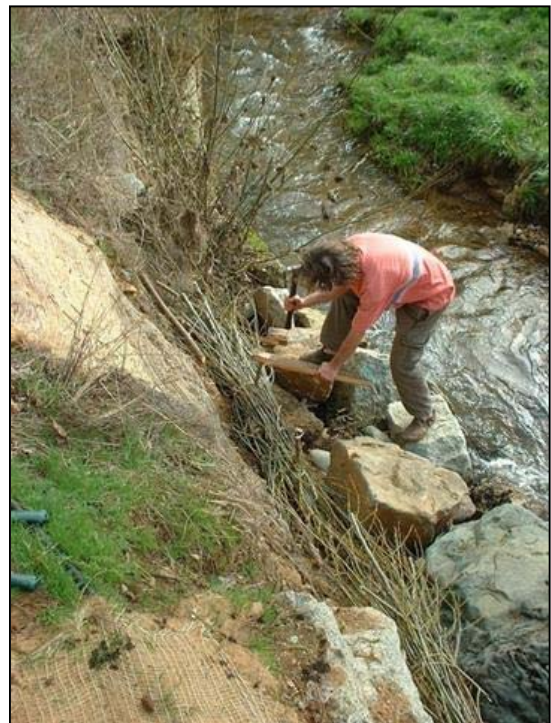
**Additional Funding Obtained to Date:** \$37,335

### Background

Deer Creek is a major tributary within the Upper Yuba Watershed and provides water to the Bay-Delta system. Rapid population growth is causing dramatic changes to the environment and exerting tremendous pressure on the region's natural resources. Past mining practices, increased fertilizer and herbicide runoff, erosion, and sedimentation from residential development have contributed to the creek's degradation. The area's high fuel loads and rural setting makes it very susceptible to fires. Due to mercury contamination from decades of gold mining, the State posted a fish consumption advisory for mercury.

### Benefits to the Watershed

- ◆ Led storm-based mercury sampling to assess mercury loads in the watershed under different flow conditions. The sampling data provides foundational information for the required TMDL and any remediation activities.
- ◆ Designed an upgraded mercury and TSS sampler to be used from bridges in high-velocity mountain streams. The sampler has the potential to improve accuracy of heavy metal sampling in watersheds throughout the Sierra foothills by making it feasible to sample from the faster-moving main current, which carries the greatest concentrations of suspended metals and sediment.
- ◆ Trained and involved volunteers in mercury sampling, flow data collection, and restoration techniques such as willow wattling.
- ◆ Facilitated the installation of three new staff gauges on Deer Creek and its tributaries, and a flow sensor and data logger on the main stem of Deer Creek, which collects data at 15-minute intervals. The new equipment will help characterize flow patterns in Deer Creek and provide detail about the timing and level of flows on tributaries needed for calculating mercury loads.
- ◆ Drafted Best Management Practice (BMP) summary documents for construction and grading that will help strategically address long-term erosion prevention. The documents are designed to increase stakeholder knowledge of Erosion Control Codes, BMPs that meet them, and



*A volunteer staking willow wattles on Deer Creek*

improve Erosion Code enforcement.

- ◆ Led bank stabilization efforts on the Little Deer Creek. The work helped stop additional erosion of banks scoured during the 12/31/2005 flood. The installed measures successfully prevented further erosion during another flood in March.
- ◆ Drafted a Restoration Strategy, which outlined issues to be addressed by restoration efforts on Lower Deer Creek.
- ◆ Wrote 4 grant proposals that would provide funding for strategic watershed improvement projects, and continue long-term work underway. Projects include mining contamination assessment and remediation; technical capacity building, BMPs, education, collaboration with community affiliates, strategic actions for water quality and habitat on Deer Creek, and flow and lower Deer Creek Salmonid habitat restoration. Additionally, the coordinator submitted a proposal in partnership with local stakeholders to obtain funding for a project that would prioritize and plan for the clean up of mercury-laden tailings identified as hotspots by FODC's mercury synoptic survey currently underway.
- ◆ Sampled sediment loads in dirt road runoff and conducted inventories of selected problem roads in the Deer Creek watershed.
- ◆ Developed a mercury sampling plan and protocols for the Regional Water Quality Control Board (RWQCB) sponsored mercury study on Deer Creek.
- ◆ Developed erosion control and non-point source pollution outreach materials for residents.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator completed activities to increase citizen knowledge of the watershed and promoted watershed partnerships. This year the coordinator: Trained and involved citizen volunteers in mercury sampling, flow data collection, and restoration efforts such as willow wattling. Collaborated with community partners to submit grant proposals for mining contamination assessment and remediation, technical capacity building, BMP education efforts, habitat restoration, and planning water quality and habitat improvement projects. The coordinator also held meetings with local stakeholders, conducted outreach to neighborhood associations, and met with landowners of an historic mine site.

**Ecosystem Restoration** – This year the watershed coordinator completed several activities in support of the ecosystem restoration program. The coordinator: Drafted Best Management Practice documents to help increase stakeholder knowledge of Erosion Control Codes, BMPs that meet them, and improve Erosion Code enforcement; Led bank stabilization efforts on Little Deer Creek to stop erosion banks scoured by the 12/31/05 flood; Drafted a Restoration Strategy to start planning for restoration efforts on Lower Deer Creek; Led storm-based mercury sampling efforts to assess mercury loads in the watershed under different flow conditions; Completed an ecological study at four sites along Deer Creek to help prioritize future restoration sites; and, involved high school students in hands-on educational activities at two restoration sites;

**Science** – In support of the CALFED Science program the coordinator designed an upgraded mercury and TSS sampler that can be used from bridges to conduct sampling in high-velocity mountain streams. The coordinator also facilitated the installation of three new staff gauges on Deer Creek and its tributaries, and a flow sensor and data logger on the main stem of Deer Creek, which collects data at 15-minute intervals. The new equipment will help characterize flow patterns in Deer Creek and provide detail about the timing and level of flows on tributaries needed for calculating mercury loads.

### **Performance Measures**

**Goal:** Improve the water quality of Deer Creek by increasing stakeholder participation in watershed conservation, protection, and restoration.

**Objective # 1:** Develop and implement a long-term restoration plan for mitigating the impacts of mercury deposition, transportation, and transformation in the Deer Creek watershed.

**Performance Measure:** 10% decrease in mercury bioaccumulation and transport into the Bay-Delta region.

#### **Progress:**

- Developed a mercury working group that was subsequently divided into two sub-groups to better reflect their purposes. The Mercury Advisory Group consists of scientists and researchers with technical expertise. The Mercury Community Affiliates includes local stakeholders and partners. The coordinator acts as a liaison to ensure cooperation between the two groups.
- Designed and revised a synoptic survey. The coordinator also updated the synoptic survey plan and procedures and, trained staff and volunteers in mercury and TSS storm sampling procedures.
- Developed a plan for measuring flow at various points in the watershed. Staff gauges were installed and data was collected. A flow data logger was installed at a downtown Nevada City site and data is now being recorded at 15-minute intervals. The coordinator set up a database for the mercury and TSS data.
- Continued to compile historical and current data on mercury contamination.
- Submitted eight grant proposals to secure funding for projects identified in the restoration plan.



*A volunteer uses the new mercury sampler.*

**Objective # 2:** To develop a sediment control program for the Deer Creek watershed focused on systematic ways of preventing future erosion and sedimentation problems to Deer Creek.

**Performance Measure:** 20% decrease in sedimentation into the Deer Creek watershed from roads.

**Progress:**

- Met with the Mattole Restoration Council to help develop a plan for the Deer Creek Watershed.
- Contacted local residents of large and private parcels to solicit input and held a meeting with the USFS.
- Conducted photo documentation and road inventories. As a result, three problem roads were identified and Total Suspended Sediment data is now being collected.
- Submitted three grant proposals to secure funding for public education on erosion and sediment control. The grants would provide funding for workshops and the development of educational resources.
- Submitted the final drafts of the Best Management Practice guidelines to the City of Nevada City for their review.

**Objective #3:** To develop a restoration plan that includes the evaluation, development, and implementation of alternative tertiary wastewater treatment facilities in the Deer Creek watershed.

**Performance Measure:** 40% decrease in nutrients entering the Deer Creek watershed from wastewater treatment plants.

**Progress:**

- Worked with Nevada City to develop a plan for implementing effective tertiary treatment of wastewater below the Nevada City Wastewater Treatment Plant.
- Submitted a proposal to obtain funding for project implementation.

**Objective #4:** To develop and implement a restoration plan for the Deer Creek watershed.

**Performance Measure:** The restoration of three sites in the Deer Creek watershed.

- Developed a restoration plan and continue to update and refine the plan as necessary.
- Conducted an ecological study at four sites along Deer Creek to help prioritize future restoration sites identified in the restoration plan.
- Submitted five proposals to obtain funding to implement the projects identified in the restoration plan.
- Restoration work has begun at two sites.

## Georgetown Divide RCD

### South Fork American



**Amount Funded:** \$123,386

**Additional Funding Obtained to Date:** \$880,193

### Background

The watershed is located within the fastest growing region of the Sierra Nevada. Water quality is affected by many factors including timber and mining operations, agricultural runoff, industrial facilities, and recreational use. The threat of catastrophic fires is of paramount concern. Urban pockets are scattered throughout the area, often surrounded by thick vegetation. Fuel loads are growing rapidly. Structures, habitat, animals, and people are threatened. Although numerous reservoirs provide water for local use, hydroelectric production, and agricultural purposes, it is insufficient to meet everyone's needs. Competing demands create conflicts, which can only be resolved through collaboration and cooperation.

### Benefits to the Watershed

- ◆ Facilitated the development of a Citizen Water Quality Monitoring program. The program is now fully operational and data is being collected on a monthly basis at strategic monitoring locations.
- ◆ Developed El Dorado County Agricultural Watershed Group Technical Advisory Committee Signatory of Participation document to set and define the responsibilities of each member.
- ◆ Developed a GIS template to provide landowners and partnering agencies with maps of their property at no cost. Maps will be used to plan best management practice implementation.
- ◆ Held a "Protecting Your Home and Land from Wildfire" workshop for stakeholders including private property owners and agency representatives.
- ◆ Worked with the County of El Dorado and the CVRWQCB to provide private landowners with technical assistance to implement erosion and sediment control best management practices. Over 25 Vegetation Establishment Guidelines Manuals, created by the coordinator, have been distributed.
- ◆ Coordinated permit applications and documentation required for the Finnon Lake Dam Reconstruction project. Permit applications completed include CEQA, US Army Corps Nationwide 404 permit, US Fish & Wildlife Endangered Species Survey and Biological Opinion, California Department of Fish & Game Stream Alteration Permit – 1600, Division of Safety of Dams (DSOD) engineering and specifications approval and permit, Central Valley Water Quality Control Board 401 Certification permit, and development of a Storm Water Pollution Prevention Plan (SWPPP) pertinent to local grading ordinance permit requirements. Completion of these documents was expedited through coordination with

partnering agencies including the Mosquito Volunteer Fire Department, Department of Conservation, International Union of Operating Engineers, Department of Water Resources, and the USDA Natural Resources Conservation Service. The proposed repair involves the complete removal and reconstruction of the embankment to bring the lake back to its original capacity of 350 acre-feet. The project will ultimately benefit the fisheries, wetland and upland habitats within the project area.

- ◆ Finalized a grant contract with the State Water Resources Control Board. The grant will fund creation of an Agricultural Stewardship Strategy for the South Fork American River.
- ◆ Worked with Indian Education Alliance, El Dorado Irrigation District, University of California Cooperative Extension, and the local fire safe council. Workshops included: Floods and watershed disasters attended by 15 participants; an Irrigation Efficiency Workshop that 25 participants attended; and, Protecting your Home and Land from Wildfire that 30 participants attended.
- ◆ Completed a Big Canyon Creek restoration plan for the Gold Bug Park Committee and the City of Placerville. The plan describes strategies to remove invasive species, revegetation recommendations, and erosion control management practices. Implementation will include partnership with the California Conservation Corps and USFS.
- ◆ Participated in the CABY (Cosumnes, American, Bear, and Yuba) Integrated Regional Watershed Management Planning (IRWMP) process.
- ◆ Helped the community of Chrome Ridge complete an evacuation route proposal in coordination with the USDA Natural Resources and Development Council. The coordinator completed maps and evacuation route design for the final proposal that was subsequently awarded in March 2006.
- ◆ Managed pre-fire fuels reduction programs on the Auburn Lakes Trails Evacuation Route and the Sly Park/Uncle Tom's fuel load reduction activities.

### **Benefits to CALFED Program**

**Watershed Management** – In support of the CALFED Watershed Management program the watershed coordinator: Worked with El Dorado Irrigation District and UC Cooperative Extension to host an irrigation efficiency workshop. Over 25 people attended this workshop, which focused on water conservation and water quality management practices. The coordinator also: coordinated the El Dorado County Agricultural Watershed group; and, participated in the Cosumnes, American, Bear, and Yuba Integrated Regional Watershed Management Planning (IRWMP) process.

**Ecosystem Restoration** – The coordinator facilitated the completion of environmental permitting and application documentation required for the Finnon Lake Dam Reconstruction project. Permits completed included CEQA, US Army Corps Nationwide 404 permit, US Fish & Wildlife Endangered Species Survey and Biological Opinion, California Department of Fish & Game Stream Alteration Permit – 1600, Division of Safety of Dams (DSOD) engineering and specifications approval and permit, Central Valley Water Quality Control Board 401 Certification permit, and development of a Storm Water Pollution Prevention Plan (SWPPP)



pertinent to local grading ordinance permit requirements. The coordinator expedited the completion of these documents through coordination with partnering agencies including the Mosquito Volunteer Fire Department, Department of Conservation, International Union of Operating Engineers, Department of Water Resources, and the USDA - Natural Resources Conservation Service. The project will involve reconstructing the dam and returning the lake back to its original capacity. As a result, native fish populations critical to sport and recreational uses will be enhanced.

Additionally the coordinator provided landowners with erosion and sediment control inspections and information about management practices aimed at protecting water quality and the natural hydrologic functioning of the watershed. And, helped the El Dorado County Noxious Weed Group to develop a noxious weed priority list to reduce their impacts and prevent additional introductions that compete with and destroy native species.

### **Performance Measures**

**Goal:** To promote and improve the health and condition of the South Fork American River watershed through stewardship and education to a measurable extent.

**Objective # 1:** Facilitate and improve coordination, collaboration, and assistance among government agencies, other organizations, and local watershed groups.

**Performance Measure:** Development of an MOU for the SFARWG, agendas, meetings minutes, attendance records, Signatory of Participation Document for TAC, comprehensive mailing list, GIS database, Resource/Agency Review Binder, monthly, quarterly, annual, and final reports required.

### **Progress:**

- Developed El Dorado County Agricultural Watershed Group Technical Advisory Committee Signatory of Participation document to define the responsibilities and services to be provided by each member of the committee.
- Completed agendas, minutes, and correspondence for El Dorado County Agricultural Watershed Group.
- Completed a comprehensive mailing list of all landowners participating in the El Dorado County Agricultural Watershed Group.
- Updated the resource/agency review binder on a monthly basis.
- Participated in the CABY (Cosumnes, American, Bear, and Yuba) Integrated Regional Watershed Management Planning (IRWMP) process.

**Objective # 2:** Significantly reduce the risk to life, property, and watershed health from wildfire through support of fuel management education and outreach components of the Stewardship Plan.

**Performance Measure:** “Fire Safe Landscaping Plant Guide” and five community workshops, 400 residential services with 10,000 tons material chipped, Fuel Hazard Map.

**Progress:**

- Developed a “Fire Safe Landscaping Plant Guide” to be used as an educational tool within the watershed.
- Developed “Protecting Your Home and Land from Wildfire” workshop agenda.
- Helped the community of Chrome Ridge develop a grant proposal that will fund the establishment of fire hazard evacuation routes. The proposal was selected for funding.

**Objective # 3:** Restore more natural hydrologic function and reduce rates of accelerated erosion and sedimentation through adaptive management and monitoring strategies.

**Performance Measure:** 500 homeowner erosion control guides produced and distributed; three years of water quality data, five citizen monitoring groups developed.

**Progress:**

- Provided technical assistance to private landowners on erosion and sediment control best management practices. Over 25 Vegetation Establishment Guidelines Manuals have been distributed.
- Completed a resource conservation brochure to provide landowners with information about the watershed and available assistance from the RCD.
- Developed a citizen water quality monitoring program that is now fully operational. Data is being collected on a monthly basis at strategic monitoring locations.

**Objective #4:** Maintain a set of principles that promote watershed stewardship, ecosystem restoration, water quality, and provides the basis for setting criteria for watershed management activities.

**Performance Measure:** Funding secured to ensure sustainability of Coordinator position, Implementation of Upper Hangtown Creek Watershed Restoration Plan, Development of a SFAR Watershed Management Plan

**Progress:** The coordinator submitted proposals to sustain the coordinator position, implement projects, and develop watershed management plans. This resulted in \$880,193 in secured funding to date. This performance measure is complete. However, the coordinator will continue to pursue funding opportunities as they become available.

**Objective #5:** Maintain a set of principles that promote watershed stewardship, ecosystem quality, water quality, and provides the basis for setting criteria for funding watershed activities.

**Performance Measure:** Hangtown Creek Watershed Plan Complete, Implementation of Upper Hangtown Creek Watershed Restoration Program, A minimum of five grant applications

submitted to implement priority projects, Watershed Management Implementation Plan developed for SFAR.

**Progress:** Participated in the CABY (Cosumnes, American, Bear, and Yuba) Integrated Regional Watershed Management Planning (IRWMP) process. The coordinator is currently a member of the Planning Committee and Co-chair of the Water Quality Working Group.

## **Glenn County RCD**

### **Upper Stony/Sacramento- Lower Thomes Watersheds**



**Amount Funded:** \$78,292

**Additional Funding Obtained to Date:** \$0

### **Background**

The Stony Creek Watershed encompasses approximately 700 square miles of public and private land in Glenn, Colusa and Tehama Counties, and is the second largest Sacramento River tributary on the west side of the Sacramento River. *Arundo donax* and *Tamarix* have colonized much of the lower reach of the creek, and three dams built in the upper watershed have disrupted channel morphology. Natural gravel flow and recruitment has been blocked causing greater channel scouring and bank erosion. Access of anadromous salmonids to the upper reaches of the creek has also been blocked. In addition, water quality sampling by DWR has detected elevated levels of mercury in the sediment.

The watershed coordinator position is currently being funded through the CBDA Costa-Machado Water Act of 2000. The DOC grant will be used to sustain the position from June 2006 through June 2007.

### **Benefits to the Watershed**

- ◆ Worked with California State University Chico students to map approximately 200 acres of *Arundo donax* in the lower Stoney Creek watershed.
- ◆ Held seven watershed tours for government agencies and environmental scientists.
- ◆ Helped four landowners complete environmental permitting applications.
- ◆ Held a Stoney Creek watershed tour as part of the California Invasive Plant Council Annual Conference.
- ◆ Helped write an Ecosystem Restoration Program proposal for developing a coordinated permit and Safe Harbor Agreements for Glenn County.
- ◆ Submitted a \$400,000 proposal to DWR to fund the development of a Stoney Creek watershed management plan.
- ◆ Wrote and distributed a request for proposals to find a subcontractor for work on the watershed assessment and demonstration site projects. The coordinator also created a selection committee and facilitated the selection process. The committee selected the River Partners to complete the work.
- ◆ The coordinator created a landowner agreement for the demonstration project. The agreement was subsequently adopted by the RCD.

- ◆ Held a stream ecology and range management workshop for 30 teachers.
- ◆ Negotiated a contract with the River Partners for their sub-contract work on the demonstration project.
- ◆ Submitted a CEQA letter of exemption and began the permitting process for the demonstration site.
- ◆ Created and distributed a newsletter to help keep the public informed about watershed activities.

### **Benefits to CALFED Program**

**Watershed Management** – In support of the CALFED watershed management program goals, the coordinator held five watershed tours, conducted outreach to landowners and government agencies, started a watershed assessment, developed a monitoring program, and held LAC and TAC meetings.

**Ecosystem Restoration** – In support of the Ecosystem Restoration program goals concerning noxious weeds, the coordinator started an *Arundo donax* mapping project and started a demonstration project that exhibits *Arundo donax* and Tamarisk removal techniques.

**Science** - Began a remote sensing mapping research project that will identify plant species by their physical characteristics.

### **Performance Measures**

At the time of the second annual report, the grant had not yet started. As a result, progress on performance measures was not reported.

# Los Angeles & San Gabriel Rivers Watershed Council

Los Angeles / San Gabriel Watersheds



**Amount Funded:** \$249,854

**Additional Funding Obtained to Date:** \$136,747

## **Background**

The watersheds of the Los Angeles and San Gabriel Rivers cover 1,513 square miles, from the San Gabriel Mountains in the north to the Pacific Ocean at Long Beach. The two have been prehistorically linked as a single-braided channel system, and they share two major aquifers (Central Basin and Main San Gabriel Basin). The Los Angeles and San Gabriel watersheds are among the most heavily impacted by urbanization in Southern California. Imported water needs range between 55 and 65 percent. Water conservation is a significant challenge with the focus on reducing outdoor water consumption.

## **Benefits to the Watershed**

- ◆ Completed and published the Plant Profiler to help facilitate a new understanding of the conservation values of native plants. The online database contains information and photos of native water use efficient plants recommended for restoration and sustainable landscaping projects along the Los Angeles and San Gabriel Rivers.
- ◆ Secured funding and in-kind donations for a Sustainable Landscape Design Seminar. The coordinator then planned the implementation of the seminar. Twenty-six (26) landscape architects and five graduate students attended the one-day seminar. Seminar speakers included a native plant botanist, ecologist, nurseryman, landscape architects, and horticulturists. Feedback was extremely positive. Proceeds from registration fees will be used to conduct two additional seminars for landscape architects and project managers.
- ◆ Created a weed watch card. The card lists invasive plant species and non-invasive alternatives. Users can keep the card in their wallet or purse for easy access when shopping for plants. Over 50,000 copies will be distributed throughout southern California.
- ◆ Worked with the University of California Cooperative Extension on a proposal for funding a firewise landscaping research and education program.
- ◆ Participated in the LADPW LA River master plan meetings.
- ◆ Conducted outreach to the city of Long Beach concerning the planning of a residential demonstration project.
- ◆ Further developed the “Watershed Wise Gardening” outreach program. This program encourages municipal officials and elected representatives to use water use efficient native and Mediterranean plant materials for municipal landscaping needs.
- ◆ Worked with partners to develop a program to help facilitate sustainable landscape planting that consists primarily of native plants. The coordinator wrote an initial proposal to fund seed

mapping, collecting, banking and distribution. This will provide locally native plant propagules to growers for watershed restoration and landscaping efforts.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator worked with partners on a variety of educational efforts that have helped build local capacity to address watershed issues. Specifically the coordinator: 1) Developed a nonnative weed card that provides the user with information about weeds used in landscaping and native alternatives. 2) Worked with University of California Cooperative Extension to plan a firewise landscaping and education program. 3) Worked with California Native Plant Society (CNPS) and RSABG to plan outreach activities. 4) Collaborated with a variety of agencies on grant proposals and outreach activities. 5) Worked with partners to plan and seek funding for a native seed resources program. 6) Wrote educational newsletter articles.

**Water Use Efficiency** – A Landscape design seminar was held for landscape architects. The seminar focused its curriculum on techniques to conserve water in the landscape. The seminar included presentations on native plant materials for drought tolerant gardening and stormwater reduction best design practices. The coordinator's effort to develop the Plant Profiler website have also supported the goals of the water use efficiency program. The website provides decision makers, landscape architects, landowners, and others with information necessary to make water use efficient planting decisions.

### **Performance Measures**

**Goal:** A new understanding of the habitat and water conservation values of native plants.

**Objective 1:** Relevant educational outreach to groups such as youth, home gardeners, opinion leaders, design professionals, and public officials.

**Performance Measure:** A new understanding of the habitat and water conservation values of native plants.

#### **Progress:**

- Continued the development and organization of the Sustainable Landscape Program resource library.
- Planned joint outreach efforts with California Native Plant Society and RSABG.
- Planned a joint weed education and outreach effort with University of California Extension.
- Held a sustainable landscape seminar for landscape architects.
- Created and published a Plant Profiler website at <http://www.theplantprofiler.com>. The Plant Profiler includes images and information for native plants.

**Objective 2:** Promotion and implementation of the landscape ethic among agencies and organizations.

**Performance Measure:** A distinctive Southern California style of sustainable landscape planting, in which native plant communities have first priority, particularly in sensitive areas such as adjacent to extant native habitat and along river corridors.

**Progress:**

- Coordinated the planning of the sustainable landscape program workshop. The coordinator developed a speaker list and curriculum for the workshop, which targeted ASLA members.
- Further developed a “Firewise” landscape resource library.
- Researched low fire risk plant taxa. Fire resistance is a plant attribute included in the Plant Profiler database.
- Initiated research into infiltration BMPs and demonstration projects in the watershed.
- Conducted outreach to the city of Long Beach concerning the planning of a residential demonstration project.

**Objective 3:** Adoption of appropriate agency policies and landscape ordinances by local jurisdictions, and development of urban forestry programs with emphasis on native plants and weed management.

**Performance Measure:** Wide use of appropriate locally native plants, and selective use of well-adapted native cultivars, native hybrids and Mediterranean species.

**Progress:**

- Sent letters in support of AB1881, the draft water conservation in landscaping law.
- Sent support letter for SB 1608 which requires the use of native and Mediterranean plant materials in publicly funded transportation corridor landscapes.
- Reviewed landscape task force report and distributed it within the Landscape Ethics Committee. The report was submitted to the Governor.

**Objective 4:** Propagation, planting and maintenance of native plants and elimination of noxious exotic weed species by appropriate parties such as growers, nurseries, landscape contractors, and maintenance workers.

**Performance Measure:** Wide use of appropriate locally native plants, and selective use of well-adapted native cultivars, native hybrids, and Mediterranean species.

**Progress:**

- Supported the development of an Invasive Weed Management System to compile invasive weed maps for the Los Angeles County Weed Management Area.
- Developed an invasive plant card that lists invasive plants and non-invasive alternatives.
- Supported a planning effort to develop a native seed bank for watersheds within Los Angeles County. Funding is currently being sought for this effort.
- Gathered native and Mediterranean plant availability lists from local specialty nurseries.



## Mariposa RCD Upper Merced River Watershed



**Amount Funded:** \$155,654

**Additional Funding Obtained to Date:** \$2,776,382

### **Background**

The Upper Merced River Watershed is generally considered to be in good condition; however, there are no systematic studies supporting the watershed's status. The economic vitality of local communities is uniquely dependent on the watershed's good health; recreation and tourism to Yosemite National Park are the basis of the county's economy. Downstream users of the river are also dependent on its water quality. Collection of baseline data is needed to help formulate future land use decisions and actual conditions in the watershed.

### **Benefits to the Watershed**

- ◆ Coordinated volunteer water quality monitoring efforts. Twelve new volunteer monitors were trained bringing the total number of volunteers to 33. Water quality readings were collected at 14 separate sites three times during the year.
- ◆ Published the completed watershed management plan, *A Collaborative Action Strategy for the Upper Merced River Watershed*, in cooperation with agency representatives and stakeholders. The plan is being distributed to 10 agencies and 2 libraries.
- ◆ Worked with the Bureau of Land Management to lease a Waipuna Hot Foam System to attack invasive species along 5 miles of the Briceburg Road, a road directly adjacent to the river.
- ◆ Trained 8 docents for the Hites Cove Trail wildflower season visitors. The docents meet hikers at the busy trailhead where they pass out a descriptive flyer and answer questions.
- ◆ Established a Watershed Portal as part of the Digital Library. Resources and research publications were posted to the Watershed Portal to provide watershed stakeholders with easy access to the information.
- ◆ Worked with a field technician to monitor thistle growth along the Wild and Scenic Merced River Trail on a monthly basis.
- ◆ Worked with the Lower Merced River watershed coordinator to create the Merced River Watershed Alliance. The alliance includes upper and lower Merced River watershed groups and stakeholders.
- ◆ Planned and coordinated a South Fork Trail clean-up day that involved 14 volunteers who cleared seven miles of overgrowth and brush.
- ◆ Worked with partners to create solutions to problems caused by visitors using the watershed for recreational purposes. New trash cans were placed near popular swimming holes to reduce trash left on watershed beaches.

## **Benefits to CALFED Program**

**Watershed Management** – The coordinator produced and published a watershed management plan, *A Collaborative Action Strategy for the Upper Merced River Watershed*. This plan was produced in cooperation with representatives from a variety of agencies and other stakeholders. The coordinator also helped build the capacity of the community to address watershed issues, by posting existing watershed publications and research to an internet watershed portal. In addition, the coordinator facilitated the monitoring of recreational impacts on the watershed on a quarterly basis.

**Ecosystem Restoration:** Monitored invasive species growth along the Wild and Scenic trail to assess growth. In partnership with BLM, the coordinator leased a Waipuna Hot Foam system to control invasive species growth. The coordinator met with County officials and representatives from other agencies to develop an invasive species removal plan for the watershed. As a result of the coordinators work, invasive species removal has occurred on over 10 miles of trail next to the Merced River.

**Drinking Water Quality:** The coordinator facilitated quarterly volunteer water quality monitoring at 14 different sites to assess water quality.

## **Performance Measures**

**Goal:** Protect and improve the health of the Upper Merced River Watershed.

**Objective 1:** Reduce impact of visitors' recreational uses on the Upper Merced River Watershed.

**Performance Measure:** Reduce littering and vandalism at three BLM recreational sites by 25%.

### **Progress:**

- Impacts were monitored throughout the year with photo monitoring and visual inspection.
- Garbage containers have been placed at several recreation sites that were previously without garbage receptacles.
- Prepared informational materials for BLM to use with rafting companies: "Merced Wild & Scenic River 2006 Commercial Rafting Stipulations." The coordinator also prepared a presentation to be used with rafting companies about leaving the watershed as they found it, "leaving no trace."
- Worked with BLM to create an action plan for recreational impacts.

**Goal:** Improve coordination among public and private interests in the Upper Merced River Watershed.

**Objective 1:** Extend outreach to underserved areas of the watershed.

**Performance Measure:** 50% increase in funded projects (from 2 to 4).

**Progress:**

- Obtained a Prop. 13 CALFED grant for the Merced River Alliance.
- Submitted a proposal for a South Fork Trail rehabilitation project and another for funds to obtain legal expertise on nonprofit articles of incorporation.
- Meet with Stanislaus National Forest personnel to discuss invasive species issues and the protection of sacred areas.

**Objective 2:** Establish membership organization with 100 charter members.

**Progress:**

Working to obtain nonprofit status. Nonprofit status is necessary before members can be recruited.

# Mojave Desert/Mountain Resource Conservation & Development Council

Upper Kern / South Fork Kern Watersheds



**Amount Funded:** \$216,236

**Additional Funding Obtained to Date:** \$6,121

## Background

The area provides tremendous recreational opportunities for millions of Californians and others. Visitors kayak, boat, fish, hike, ride motorcycles, or simply relax. As the population increases so do the challenges. Trash is thrown into the rivers and along riverbanks while unwary visitors spread non-native and noxious weeds. Over the past several years, major fires have burned hundreds of thousands of acres contributing to sedimentation, erosion, and the destruction of habitat. Not only are the spawning areas for the Golden Trout threatened, but also so is the largest cottonwood-willow riparian habitat in the Western United States. This provides habitat to many important animal and plant species. The demand for water downstream is immense and can only be resolved if the diverse communities cooperate and work together to resolve local issues.

## Benefits to the Watershed

- ◆ Planned and held an irrigation efficiency workshop in conjunction with a water efficient, fire resistant native plant sale. The plant sale promoted Xeriscaping landscaping principles.
- ◆ Organized three field trips with NRCS Engineers and Soil Conservationists to conduct a site evaluation of diversion and distribution structures and tailwater recovery/return systems for South Fork Kern River stakeholders on the South Fork Kern River.
- ◆ Held a meeting with Kern County General Services Agency staff and a representative from the Kern County Board of Supervisors regarding obtaining a permit to allow the Kern County Fire Department to remove woody vegetation from the South Fork Kern River channel between the Fay Ranch Road and Sierra Way bridges.



*Volunteers gather Pinyon Pine Seeds to be used in the restoration of the Manther Fire area.*

- ◆ Met with NRCS Geologists to discuss developing a return irrigation flow sediment monitoring program on the South Fork Kern River. As a result of the meeting the coordinator purchased sediment monitoring equipment for use during the 2006 irrigation season.
- ◆ Hosted a booth at the Whiskey Flats Day public event to distribute educational watershed material, and irrigation efficiency literature to a large number of community members.
- ◆ Worked with MD-M RC& D staff to submit a CALFED Watershed Program Prop. 50 Grant Concept Proposal.
- ◆ Participated in a community action committee to review the first draft of the Kern Valley Specific Plan. The coordinator submitted recommendations for including additional provisions regarding land use affecting the watershed.
- ◆ Met with CCC staff and staff from the US Forest Service, Bureau of Land Management, California Department of Fish & Game, Kern River Preserve, and Cerro Coso College to discuss employing a non-resident work crew to provide a low cost labor force for watershed protection and preservation projects.
- ◆ Organized a Lake Isabella's homeowners Irrigation Efficiency Workshop. Presenters included representatives from UCCE, Irrrometer Corporation, NRCS, and the Oasis Garden Club of Indian Wells Valley who presented information on soil moisture monitors, improving water application, and xeriscaping.
- ◆ After a recent water use efficiency workshop, Kern Valley Golf Course implemented techniques to reduce irrigation and fertilizer demand. Furthermore, the Golf Course is now conducting water sampling. The sampling results are being provided to USFS and the coordinator is adding them to a database.
- ◆ Organized a Pinyon pine seed gathering and planting day. 13 volunteers planted 40 pounds of Pinyon seeds in 20 plots. Gathered seeds will be stored for a long term restoration demonstration project in the Manter fire burn area.
- ◆ Worked with the Kern County Water Agency to provide water conservation education for students at three public elementary and middle schools in Kern Valley.

### **Benefits to CALFED Program**

**Watershed Management:** In support of the CALFED Watershed Management program the coordinator completed the following activities:

- Worked with private and public stakeholders along the South Fork Kern River to improve channel maintenance, irrigation diversions, and tailwater recovery to reduce erosion and improve water use efficiency.
- Worked with NRCS Geologists and an NRCS Soil Conservationist to conduct an assessment that will help establish a sediment monitoring program to measure sediment loads in return irrigation flows.
- Worked with MD-M RC&D staff to submit a CALFED Watershed Program, Prop. 50, Chapter 7 Grant Concept Proposal.
- Helped California Department of Fish and Game contact South Fork Kern River stakeholders about a meeting to discuss a proposed Purple Loosestrife noxious weed eradication project.

**Water Use Efficiency:** To help meet Water Use Efficiency program goals the coordinator:

Organized three irrigation efficiency workshops. As a result of one of the workshops, the Kern Valley Golf Course grounds manager has implemented the techniques learned at the workshop and reduced both water and fertilizer use at the golf course. Two other workshops were held to promote homeowner irrigation efficiency through Xeriscaping.

**Ecosystem Restoration:** In support of CALFED Ecosystem Restoration program goals the coordinator:

- Worked with MD-M RC&D staff and CRWA to conduct an arsenic compliance workshop for small mutual water systems.
- Identified Kern Valley water systems with compliance problems and confirmed their contact information. Worked with CDFG on invasive species eradication projects.
- Organized a volunteer pinon pine and seed planting day as part of an effort to restore the 2000 Manther fire burn area.

### **Performance Measures**

**Goal 1:** Reduce water demand and consumption in the Upper Kern River Watershed resulting in increases to “real water” volumes in the Lower Kern River, making more water available for ground water recharge in the San Joaquin Valley.

**Objective 1:** Increase Irrigation efficiencies for 3 sectors of water users: Home owners, Kern Valley Golf Course, Small Mutual Stock Companies in the Kernville Area.

**Performance Measure:** Improve water use efficiency by 15%.

### **Progress:**

- Obtained contact information for homeowner organizations and groups in order to organize homeowner water use efficiency workshops.
- Worked with Kern County Water Agency water education staff to obtain school water education materials.
- Organized and conducted an irrigation efficiency workshop for Kern Valley Golf Course. Following the workshop the golf course implemented some of the techniques learned at the workshop.
- Organized two homeowner irrigation efficiency workshops, which included presentations about irrigation efficiency and Xeriscaping. One workshop was held in conjunction with a MD-MRC&D native plant sale.
- Developed tri-fold Watershed coordinator informational brochures and worked with MD-M RC&D to print 175 copies. The brochures were distributed at community events.

- Provided and presented age appropriate watershed information, including information specific to the Kern River watershed, to 240 Kindergarten through 4th grade students from the three Kern Valley schools during Native American Heritage Days.
- Obtained irrigation efficiency educational materials from NRCS, California Rural Water Association, Kern County Water Agency, and Indian Wells Water District for use at the irrigation efficiency workshops and for distribution at community events.
- Worked with Oasis Garden Club of Indian Wells Valley to obtain a comprehensive list of sources for native and xeriscape plants and seed for distribution at the homeowner water use efficiency workshops.
- Organized three site evaluations by NRCS Engineers and Soil Conservationists to evaluate diversion and distribution structures and tailwater recovery/return systems of stakeholders on the South Fork Kern River. Following the evaluations, NRCS assessed the information and issued recommendations for potential improvements.
- Helped the Kern Valley Golf Course Grounds Superintendent evaluate water and fertilizer reduction as a result of relocating portions of their irrigation system.

**Goal 2:** Improve water quality of the South Fork Kern River to the main Kern River by reducing sediment concentrations from farming activities and improving timing of release of ground and surface waters after fires.

**Objective 1:** Reduce sediment entering the South Fork Kern River from erosion caused by irrigation diversions by replacing damaged irrigation boxes in the field ditches to better control irrigation operations.

**Performance Measure:** Sediment reduced from these source sites reduced 20%.

**Progress:**

- Reviewed and complied existing studies.
- Identified watershed stakeholders, developed a contact database, and began developing partnerships.
- Recruited the NRCS Soil Conservationist and NRCS engineers to perform evaluations of irrigation diversion structures on ranches.
- Organized a site visit to evaluate diversion and distribution structures on ranches in the upper two thirds of the watershed.
- Met with Kern County Services Agency and Kern County Board of Supervisors staff to discuss obtaining a permit for woody vegetation removal from the South Fork River channel.

**Objective 2:** Create an erosion/sediment mitigation plan for future fires affecting private lands to expedite protection and revegetation measures reducing the sediment loads in the North and South Fork of the Kern River.

**Performance Measure:** Final plan documents reach at least 30% of private landowners in the watershed.

**Progress:**

- Helped identify erosion and sediment problems and began developing an action plan and timetable for implementing corrective measures.
- Worked with NRCS Geologists to begin the process of establishing a South Fork Kern River sediment monitoring program to measure sediment loads in return irrigation flows at four locations.

**Goal 3:** Improve ecosystem health by increasing in-stream flow in the South Fork Kern River.

**Objective 1:** Improve Irrigation Water Management in the farming/ranching community of the South Fork Kern River Valley and find a solution to sediment build up in and around existing structures in the South Fork of the Kern River. These structures include bridges and main irrigation water take outs

**Performance Measure:** Improve Water use efficiency by 10%.

**Progress:**

Worked with NRCS to identify problems with irrigation diversion and distribution structure on ranches in the watershed. NRCS subsequently developed recommendations for measures to improve identified problems.

**Goal 4:** Watersheds restored improving Golden Trout habitat in the Upper Kern watershed. Water quality and quantity improved for Willow Flycatcher habitat in the South Fork Kern.

**Objective 1:** Include private ranching operations as partners in the Forest Service's Fisheries Management Plan

**Performance Measure:** 25% of ranchers in the area adopt BMP for improving water quality.

**Progress:**

- Developed a database with contact information for resident property owners in the watershed.
- Met informally with South Fork Kern River stakeholders regarding irrigation diversion and distribution systems. The coordinator met with different stakeholders on several occasions to develop a consensus of the kind and extent of assistance that would meet their needs and the needs of the watershed.
- Provided assistance to CDFG by notifying, identifying, and contacting private stakeholders on the South Fork Kern River about a proposed Purple Loosestrife noxious weed eradication project meeting.



- Attended Sierra Nevada–Cascade Conservation Grant Program Input Workshop to provide input regarding the importance of conservation easement grants. The coordinator also obtained application requirements and information for local stakeholders interested in participating in the easement program to preserve valuable watershed and unique habitat for several listed endangered and threatened species.

**Objective 2:** Improve and expedite revegetation activities in Manter burn area on both public and private lands.

**Performance Measure:** 10% reduction in sediment and optimum timing of release of water flows into the South Fork Kern from upper watershed.

**Progress:**

- Worked in cooperation with BLM, Tribal TANF, three Tribal groups and organizations, Kennedy Meadows Homeowners Association and other interested stakeholders to hold a volunteer Pinyon Pine seeds gathering day. Volunteers gathered 40 pounds of seed.
- Coordinated a volunteer Pinyon Pine seed planting and gathering day as part of a long-term restoration demonstration project in the Manter fire burn area. Forty pounds of Pinyon seeds were planted in twenty, one half to one-acre plots. GIS coordinates were recorded and entered into a database.
- Attended bi-annual Kennedy Meadows Property Owners Association to provide information about the revegetation of 2000 Manter fire burn area and recruit volunteers for the Pinyon Pine seed gathering and planting.

**Goal 5:** Improve and promote community-based collaboration efforts.

**Objective 1:** Bring the communities of Kernville, Lake Isabella, and Weldon together to understand their impacts on the Kern River, and the positive impacts they might have on the CALFED Bay Delta program.

**Performance Measure:** 50% increase in the awareness of problems concerning the Kern River Watershed.

**Progress:**

- Worked with Kernville Union School District and the South Fork Union School District have agreed to work a water education program into the curriculum.
- Provided watershed education to 240, K-4th grade students from the three Kern Valley schools during Native American Heritage Day. The coordinator provided students with age appropriate watershed information.
- Compiled materials and developed displays for watershed education at community events.
- Developed tri-fold Watershed coordinator informational brochures for distribution at community events.

- Attended Kern River Valley Pride Day to distribute literature and talked with over 50% of participants about watershed health.
- Presented update of watershed goals, objectives, and activities and offered support to the Kern Valley Fire Safe Council. The council to agreed to adopt and follow BMPs when undertaking fuel reduction projects to protect watershed.

**Objective 2:** Preserve water quality and quantity while promoting community based watershed efforts in new Developments.

**Performance Measure:** 50% of new developments sign on to the idea of using BMP in their projects.

**Progress:**

- Worked with Kernville Chamber of Commerce River Walk Committee to encourage the incorporation of BMPs into the River Walk Project.
- Participated in a community action committee and reviewed the first draft of the Kern Valley Specific plan. The coordinator submitted comments that strengthened draft provisions and provided recommendations for additional provisions regarding land use affecting the watershed.