

California Department of Conservation 2004-07 Watershed Coordinator Grant Program



*Watershed Coordinators attending Training
Workshops in Redding*

Annual Report #1
October 30, 2005

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.

The WCGP is among the few state grant programs that require performance measures from grantees, and a quarterly accounting of how the measures are met. 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, 2005. Information received from the grantees has been reviewed by the DOC staff and is presented in this report. Also included in this report is a table, which summarizes the total amount of additional funding obtained through the efforts of the coordinators since the start of the 2004 grant program.



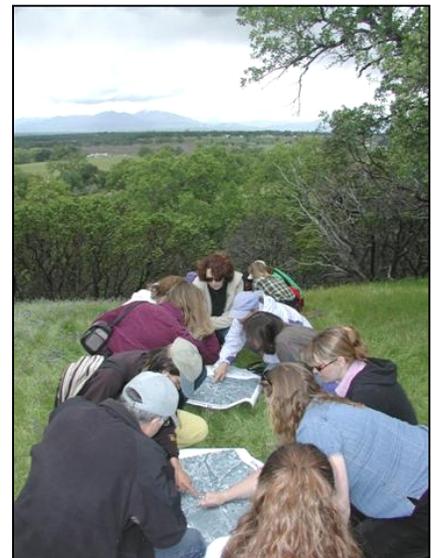
Watershed coordinators receiving field training at the Fresno workshops.

As the Additional Funding Table shows, the coordinators have secured over **\$12 million** in additional watershed funding since the start of the 2004 grant program. 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 \$59 million for additional watershed work. **The \$12 million obtained by the coordinators represents a 20% 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, and benefits to the CALFED Program are listed. Please refer to the individual fact sheets for details.

We are pleased to report that the main accomplishments of the watershed coordinators for the third quarter period of the current grant program are as follows:

- ◆ Thirty-three (33) restoration projects were in progress or completed. Restoration projects included bank stabilizations, fish ladder installations, barrier removals, etc.
- ◆ Seventeen (17) water-quality monitoring projects are being completed.
- ◆ Ten (10) watershed assessments or plans were completed.
- ◆ Twenty-five (25) workshop/training sessions were conducted on a range of conservation issues including water monitoring, non-native invasive species, and the agricultural waiver program.
- ◆ Four (4) new watershed stakeholder groups were established.
- ◆ Seventy-three (73) outreach events, focusing on educating the public about local watershed issues, were held at public venues such as county fairs and local festivals.
- ◆ Six (6) watershed cleanup events were held, resulting in the removal of hundreds of pounds of trash from local watersheds and involving dozens of community volunteers.
- ◆ Nine (9) watershed tours were conducted.
- ◆ Twenty-two (22) watershed publications were completed.



Watershed coordinators at the training workshop in Redding.

In 2005, DOC organized a series of training workshops for watershed coordinators, titled “Tools and Methods of Watershed Conservation” in partnership with CBDA, CARCD, and NRCS. These workshops covered topics such as watershed stewardship, meeting facilitation, communication techniques, conservation corridor planning, and permit guidance. The workshops were held in Redding and Fresno and included field exercises. The trainings were well attended with 24 coordinators present at the Redding workshops, and 22 coordinators participating at the Fresno workshops. There are plans to conduct another series of workshops in 2006.

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 have been successful in energizing their communities and getting more people involved, as evidenced by the most recent quarter where four new watershed groups were established and six 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.



Watershed coordinator training workshop in Fresno.

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 coordinator positions. They have been extremely successful in securing \$12 million in additional watershed funding in just one year; the majority of this funding is designated for 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 and partners. Losing well-established coordinators would be devastating and would erase much of the gain made over the past 5 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 a designated coordinator.

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.

Table 1: Additional Funding Requested/Awarded to Date

Grantee Name	Cumulative Requested	Cumulative Awarded
Alpine County	\$161,497.00	\$26,510.00
Arroyo Seco Foundation	\$320,000.00	\$0.00
Battle Creek Watershed Conservancy	\$661,870.00	\$635,980.00
Butte County RCD	\$517,697.00	\$186,000.00
Central Modoc RCD	\$298,000.00	\$57,500.00
Central Sierra RC&D	\$1,362,000.00	\$0.00
Chowchilla-Red Top RCD	\$2,100.00	\$2,100.00
Coastal San Luis RCD	\$1,090,464.00	\$664,302.00
Colusa County RCD	\$1,084.00	\$58,202.00
Contra Costa Public Works Department	\$415,837.00	\$35,689.00
Contra Costa RCD	\$89,475.00	\$33,004.00
Dear Creek Watershed Conservancy	\$198,170.00	\$38,170.00
Earth Resource Foundation	\$26,500.00	\$6,500.00
East Merced RCD	\$2,371,733.00	\$2,400,000.00
El Dorado Irrigation District	\$27,500.00	\$27,500.00
Fall River RCD	\$0.00	\$0.00
Friends of Deer Creek	\$2,672,100.00	\$197,610.00
Georgetown Divide RCD	\$430,440.00	\$127,100.00
Glenn County RCD	\$0.00	\$0.00
Los Angeles & San Gabriel Rivers Watershed Council	\$255,945.00	\$128,535.00
Mariposa County RCD	\$0.00	\$476,405.00
Mojave Desert / Mountain RC&D	\$1,637,441.10	\$1,575.00
Mountains Recreation and Conservancy Authority	\$23,721,045.00	\$14,325.00
Napa County RCD	\$4,321,267.00	\$1,685,526.00
Nevada County RCD	\$29,639.00	\$5,350.00
Placer County RCD	\$200,000.00	\$554,500.00
RCD of the Santa Monica Mountains	\$2,236,395.00	\$59,495.00
Sacramento Area Flood Control Agency	\$0.00	\$0.00
San Francisquito Creek JPA	\$1,330,461.00	\$397,021.00
San Joaquin County RCD	\$556,000.00	\$1,379,500.00
San Joaquin River Parkway and Conservation Trust	\$333,900.00	\$3,900.00
Santa Barbara County Water Agency	\$86,000.00	\$75,000.00
Sierra Valley RCD	\$811,980.00	\$811,980.00
Sloughhouse RCD	\$0.00	\$0.00
Solano RCD	\$1,346,411.00	\$434,450.00
Sonoma Ecology Center	\$2,518,953.00	\$181,793.00
Stockton East Water District	\$901,371.00	\$0.00
Tehama County RCD	\$187,000.00	\$30,000.00
Upper Putah Creek Stewardship	\$115,800.00	\$5,000.00

Grantee Name	Cumulative Requested	Cumulative Awarded
Upper Sacramento River Exchange	\$780,000.00	\$49,381.00
Urban Watershed Project	\$0.00	\$0.00
West Lake RCD	\$154,843.00	\$156,125.00
Western Shasta RCD (Sac-Upper Clear)	\$1,801,531.00	\$0.00
Western Shasta RCD (Upper Cow-Battle)	\$1,495,524.00	\$29,368.00
Westside RCD	\$175,000.00	\$58,500.00
Yolo County RCD (Lower Cache)	\$980,250.00	\$36,000.00
Yolo County RCD (Lower Sac)	\$1,438,093.00	\$1,024,008.00
Yuba County RCD	\$1,414,143.00	\$5,000.00
Totals	\$59,475,459.10	\$12,098,804.00

Table 2: Quarterly Accomplishments

Categories	Total	Watershed / Location
Public Education / Outreach Events Conducted	73	
Watershed Cleanup Events Conducted	6	Upper Cache Creek Watershed tributaries, Upper Merced River, San Joaquin River
Workshop / Training Events Conducted	25	
Watershed Assessments / Plans Worked On or Completed	10	Cosumnes/American/Bear/Yuba River upper watersheds, Fall River, Upper Kern Basin, Carpinteria Creek, Sierra Valley Watershed, Bear Creek, Selby Creek, Carneros Creek, Cosumnes River
Citizen Water Quality Monitoring Programs Created or Data Collected	17	Big Chico Creek; Mokelumne River; Marsh Creek; Fall River, Traverse Creek, Hangtown Creek, Kern River, Wolf Creek (South Fork), Upper Putah Creek Watershed, Redwood Creek, Tennessee Hollow Watershed, Cow Creek Watershed, Upper Merced River
K-12 Education Curriculum Developed	9	Countywide Envirothon Program
Watershed Websites Created / Updated	14	
Restoration Projects Planned or Conducted	33	Pennington Creek, Dairy Creek, Pit River, Battle Creek, Santa Ana Watershed, Fall River, Squirrel Creek (tributary to Deer Creek), Little Deer Creek, Fannon Lake, Dry Creek (Beale AFB), Mission Creek, Carmen Creek, Little Chance Creek, Upper Clear Creek, Sulphur Creek, Alhambra Creek, Kirker Creek, Solstice Creek, Gill Creek, Murphy Creek, San Joaquin River, Pleasants Creek, Sonoma Creek, Little Lamb Valley Slough
Watershed Materials (brochures, maps, newsletters, etc.) Published	22	
Watershed Tours Conducted	9	Clear Creek Watersheds (Upper and Lower), Ballona Creek
Conservation Plans Developed	2	
Invasive Weed Removal Projects	8	Strentzel Meadow
New Stakeholder Groups Established	4	Stewardship Through Education (STE) Group - Upper Mokelumne Watershed; Upper Fresno River; Nice Watershed Group
Technical Reports / Databases Created	5	
Regional Coordination Teams / Tech Review Committees Created	7	
Fuel Break Projects Worked On or Completed	1	
Technical Support Provided to Landowners or Local Agencies	31	
Water Irrigation Research or Data Collection Projects Worked On	1	

Alpine County

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



Amount Funded: \$138,473

Additional Funding Obtained to Date: \$26,510

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

- ◆ Recruited nine (9) more citizen water quality monitors and established three (3) additional monitoring sites. There are now more than 15 volunteers.
- ◆ Established new partnerships in the Stanislaus, Mokelumne, and American River Watersheds to cooperate and collaborate on monitoring and restoration activities.
- ◆ Partnered with local school to implement a project that will map watersheds and establish a water quality-monitoring program that will provide information to the community.
- ◆ Obtained \$13,000 for three stream bank stabilization projects within the Upper Carson River Watershed.
- ◆ Assisted in organizing an educational event that will teach participants how to decrease sediments flowing into Bear Creek and Bear Lake. Stakeholders will learn methods that they can implement themselves.
- ◆ Coordinated planning efforts to conduct a revegetation project within Hope Valley to decrease bank erosion, encourage sediment and nutrient trapping in meadow, and increase infiltration.
- ◆ Worked with stakeholder to get the proper permits to conduct small-scale bioengineering project to reduce sediment to the East Fork of the Carson River.
- ◆ Conducted training for 15 volunteers on photo, habitat and water quality monitoring techniques.



Alpine Volunteer Water Quality Monitors learn how to identify local riparian plant species.

Benefits to CALFED Program

Ecosystem Restoration – Hosted the Fourth Markleeville Creek Day. Volunteers assisted in restoring/revegetating streambanks along the East Fork of the Carson River. Partnered with the local school to conduct field day where students learned how to conduct monitoring and to remove noxious weeds. The students also produced a conceptual map that will be used to identify priority project sites. Established a GIS database of photo monitoring points to monitor an increase or decrease in the quality of habitat throughout the watershed. Working with the Technical Advisory Committee, which consists of various stakeholders, to restore ½ mile of floodplain within the Upper Carson Watershed.

Watershed Management – Actively working with partners on the Alpine Watershed Group to address resource concerns within the community. Encouraging communication between stakeholders, which has been tremendously facilitated by and within the Alpine Watershed Group. Also collaborating with adjacent watersheds to ensure a regional approach to important issues. Actively participating in the Tahoe Sierra Integrated Regional Water Management Group to prioritize regional efforts. Shared information with other groups to avoid duplication of efforts. Collecting data that will be used to develop a series of assessment reports for watersheds throughout the area. Assist stakeholders in identifying and prioritizing projects. Developed a website that provides information to the local community on resource issues and watershed topics.



Students from Woodfords H.S. determine the coordinates of the Alpine Volunteer Water Quality Monitors sites.

Arroyo Seco Foundation

Los Angeles Watershed



Amount Funded: \$214,360

Additional Funding Obtained to Date:

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 and the lower portion of the stream classified as an impaired water body under the Clean Water Act. As the population increases, so will the need to address these critical issues.

Benefits to the Watershed

- ◆ Conducted eleven presentations to diverse audiences consisting of more than 380 people. Stakeholders were provided information on the Arroyo Seco Watershed and the Bay Delta System emphasizing the importance of water conservation and quality.
- ◆ Completed an analysis of water consumption in watershed communities by utilizing "A Water Budget for the Arroyo Seco."
- ◆ Met with four local water agencies to develop water conservation and water quality education campaign. Efforts focused on high consumption neighborhoods.
- ◆ Held a public forum on the CALFED program at the Pasadena Museum of History. Thirty people attended this event which featured a prominent speaker from the Metropolitan Water District of Southern California and the CALFED Bay Delta Advisory Council.
- ◆ Participated in planning, coordinating, and delivery of the "Healthy Watersheds" workshop held in Altadena. Presented information on source water and water conservation. Other topics included watershed awareness, native plant landscaping and stormwater BMPs. Over 60 residents attended the event.
- ◆ Partnered with the Los Angeles County Department of Public Works to conduct water quality sampling, which will help guide future water quality testing, development of BMPs, public outreach, and identification of non-point source pollution.



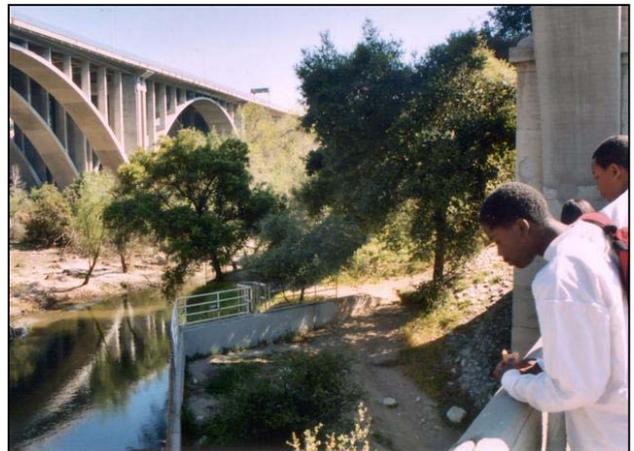
Participants at the Healthy Water Workshop.

- ◆ Provides administrative and logistical support to the Council of Arroyo Seco Organizations (CASO). Over forty organizations have been represented at the meetings, providing information and collaborating on important watershed issues.
- ◆ Maintains and updates the Arroyo Seco Foundation’s website, which provides local residents with important information. More than 90 local watershed events were publicized on the site.

Benefits to CALFED Program

Watershed Management – Worked with partners and developed the Council of Arroyo Seco Organizations (CASO), a forum to allow groups to discuss watershed related issues. More than 40 organizations have participated in four meetings. Members are cooperating on many important issues throughout the watershed. Set up a Water History Exhibit at the Pasadena Museum of History. Visitors are provided information on water conservation, hydrology, watershed management, contamination, and the Raymond Basin. Conducted “*Healthy Watersheds*” program emphasizing Altadena source water issues, water quality and water conservation. Assisted in developing the Altadena workshop on water issues in the foothills. Over the past year, held more than a dozen outreach events and presentations that provided local residents with information on water conservation, water quality, and ecological restoration. Conducted a tour for local students that focused on the importance of water in the community. The watershed coordinator dressed up in historical garb and provided students with a unique historical perspective. The students learned how water had an impact in shaping their environment and how it is still relevant today.

Drinking Water Quality – Assisted the LA County Department of Public Works to complete a water quality baseline study. Reviewed the water quality data and coordinated with North East Trees (NET) on developing Best Management Practices (BMPs) and storm water projects. This information will be used to guide future water quality testing, implement a citizen-monitoring program, and develop local outreach programs. Using data presented in “*A Water Budget for Arroyo Seco Watershed*” communities with patterns of high water consumption were identified. Contacted the Foothill Municipal Water District to set up meetings with several water agencies in these areas to discuss water conservation and water quality education campaigns. Wrote a draft partnership agreement to address conservation issues and to implement an education program.



Students from a local middle school take a field trip to the Arroyo Seco to learn more about the history of water development within the area.

Water Use Efficiency – Worked with partners to collect information that will be used to implement water conservation programs throughout the region. Participated in the “*Healthy Watersheds*” workshop where homeowners were provided information on many topics including how watersheds function, reducing runoff, creating a water-wise garden, and how to conserve water in their home. Co-sponsored and developed content for the Water History Exhibit at the Pasadena Museum of History. More than 1,500 people attended the exhibition. Partnered with Altadena Foothills Conservancy on developing a grant for water efficient pocket park.

Ecosystem Restoration – Advanced environmental stewardship programs by working with North East Trees to identify and develop habitat projects in the Arroyo Seco. Provided support and publicity on Pasadena’s Arroyo Seco stream restoration projects. Co-sponsored the “*How Pasadena Fits into the California Water Picture.*” Emphasized water conservation and ecological restoration. Submitted a grant with City of Pasadena for restoration of Arroyo Seco tributary creek

Battle Creek Watershed Conservancy Upper Cow-Battle Watershed



Amount Funded: \$87,918

Additional Funding Obtained to Date: \$635,980

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

- ◆ Conducted outreach activities at the Manton Apple Festival and the Return of the Salmon Festival. A display booth was set up and information was distributed to attendees. Both events provided the WC an opportunity to interact with local residents and continue outreach in the community.
- ◆ Participated in Greater Battle Creek Watershed Working Group monthly meetings which focus on identifying critical watershed issues and prioritizing them based on community needs.
- ◆ The Nature Conservancy (TNC) recognized BCWC during an event for its contributions to local conservation projects. The WC was instrumental in the planning and implementing many of these projects.
- ◆ Continued updating the BCWC website. This website includes more than 65 documents and reports, hundreds of watershed related articles, links to other governmental and non profit groups, and updates on upcoming events and activities.



North Fork Battle Creek

Benefits to CALFED Program

Watershed Management – Acts as liaison between private organizations, non-profit groups, and governmental organizations. Worked with Tehama County Fire Safe Council to organize workshops and educate the community. A major goal is to develop a fire plan that can be integrated with the steelhead restoration project. Provided input to the Tehama County Resource Advisory Committee on the Hazen Road Shaded Fuel Break, which provides protection from fires to local residents. Continued outreach efforts by attending meetings and ensuring that the BCWC website was up-to-date and informative.

Ecosystem Restoration – Worked with partners to continue efforts toward implementing the Creek Salmon and Steelhead Restoration Project. Acted as liaison between governmental organizations and private citizens to ensure access to private property to conduct necessary surveys.

Science – Cosponsored the California Bay-Delta Authority Ecosystem Restoration Program Steelhead Supplementation Workshop in June 2004.

Butte County RCD

Mill-Big Chico / Upper Butte / Lower Butte Watersheds



Amount Funded: \$218,338

Additional Funding Obtained to Date: \$186,000

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

- ◆ Mailed 496 brochures on dirt road rehabilitation to upper watershed landowners in Big Chico Creek Watershed. Conducted forums where information on rehabilitation techniques were presented. More than 135 stakeholders attended.
- ◆ Developed a draft oak woodlands conservation plan for 271,000 acres in Butte County.
- ◆ Held a grant-writing workshop that was attended by 53 people. Feedback surveys indicated that 90% of the respondents felt the workshop was either good or excellent.
- ◆ Worked with partners on an event to clean-up Chico's urban streams. Volunteers removed 14,000 lbs. of trash and recyclables from urban streams.
- ◆ Conducted watershed tours of both Big Chico Creek Watershed and Little Chico Watershed. Almost 30 people participated, including agency personnel, residents, and other partners.
- ◆ Developed four Memorandums of Understanding (MOUs) between various partners, establishing the basis for developing joint proposals and projects.
- ◆ Planned and conducted five watershed tours of the Butte Creek Watershed. Highlighted flood management and mitigation, fuels and fire prevention, stewardship, salmon, and erosion control.
- ◆ Participated in creating the Watershed Partnership. It is a cooperative effort involving five local watershed organization, which meets monthly to discuss issues, potential projects and ways to strengthen regional cooperation.



Bio Assessment Training for volunteers to monitor Big Chico Creek.

- ◆ Continued working with volunteers and partners on a water quality monitoring program. Sites included Clear Creek, Dry Creek, Gold Run Creek, and the Cherokee Canal. Collected samples and recorded field measurements for nitrates, ammonia, temperature, pH, turbidity, dissolved oxygen, electrical conductivity, and total dissolved solids.
- ◆ Submitted a grant proposal to the Sierra Nevada Alliance for funds to present and facilitate a series of Bio Assessment and Macro Invertebrate identification trainings in water quality.

Benefits to CALFED Program

Watershed Management – During the first year, the Watershed Partnership was developed. Watershed Groups came together and agreed to meet monthly to address regional issues and problems. Partnership members work collaboratively on projects and assist one another in seeking grant opportunities. MOUs were signed to solidify these relationships. Numerous outreach activities were held. The watershed coordinators planned and hosted several tours. Agency personnel, stakeholders, and local residents attended. Tours were conducted highlighting issues in the Little Chico Creek, Big Chico Creek, and the Butte Creek watersheds. Provided information on flood management, fire prevention, stewardship and erosion control. Information presentations were given to two local, non-watershed groups on fisheries, ecology and historic mining activity on Butte Creek. It provided a perfect opportunity to reach out beyond the traditional partners.



Public Outreach for the Richvale Agricultural Day.

A woodlands conservation plan is being written that so that local landowners can qualify for conservation easement funds to protect oak woodlands in Butte County. The plan is intended to protect almost 271,000 acres. The Partnership also worked together to conduct a grant writing workshop. More than 50 people attended. The workshop provided an ideal forum to reach out to the community and meet new people.

Ecosystem Restoration – Participated in an urban creek clean up. Volunteers removed more than 14,000 lbs. of trash and debris. The event was extremely successful.

Drinking Water Quality – Volunteers are conducting monitoring activities on numerous creeks throughout the region. Watershed coordinators are coordinating events and providing training.

Central Modoc RCD

Upper Pit Watershed



Amount Funded: \$196,330

Additional Funding Obtained to Date: \$57,500

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

- ◆ Establishing a coalition in the Upper Pit River Watershed to meet the needs of local landowners who must comply with the Irrigated Lands Waiver Program.
- ◆ Coordinating with the Pit River Watershed Alliance to promote the Pit River Watershed Assessment, prepare grant application packages and prepare a Pit River Watershed Management Plan.
- ◆ Developed a partnership with Ducks Unlimited on two planned projects (South Fork at Likely, Phase II and Pit River Land and Cattle Company Wetland and Riparian Restoration). Coordinator is also contracting for a proposed project on the Department of Fish and Game's allotment on Fitzhugh Creek.



Blair Parrot, Watershed Coordinator, collecting water quality samples from East Creek in Upper Pit River Watershed.

Benefits to CALFED Program

Watershed Management – Improved communications with several local community organizations including the Modoc County Farm Bureau, the UCCE Modoc County Farm Advisor, Modoc County Planning Department and the Modoc County Cattlemen's Associations.

Central Sierra RC&D

Upper Mokelumne Watershed



Amount Funded: \$311,591

Additional Funding Obtained to Date:

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

- ◆ Sponsored and assisted in the formation of a local watershed education organization (Stewardship through Education or STE), which will deliver watershed science learning activities to students in the classroom and out in the field. Curriculum will present information on water quality, water conservation, erosion control, fire issues, and effective ways of building partnerships within a community. STE crafted and obtained funding for an Upper Mokelumne Watershed Authority grant to implement Watershed Youth Stewardship Project, \$46,262.
- ◆ Assisted county in developing and adopting grading ordinances to protect water quality. Coordinator and partners participated in outreach events, meetings, and rewriting local grading ordinances and Best Management Practices (BMPs). Coordinator increased cooperation and communication between residents, government agencies, and local watershed groups.
- ◆ Participated in numerous outreach activities including a watershed tours, information booth at Lumberjack Days in West Point, Alpine County Creek Days, Glencoe's Fall Harvest Festival, May Watershed Festival, and other daylong events.
- ◆ Developed, trained, and supported local volunteer water quality monitoring groups. More than 20 volunteers broken down into teams monitor five geographical areas every three months. The data will be used to identify problems and develop projects. Assisted with Upper Calaveras River Volunteer Water Quality Monitoring Team training utilizing members from the Ebbets Pass Forest Watch.



STE Watershed Poster Winners participated in Watershed Tour hosted by EBMUD.

- ◆ Initiated and established public education and recreation committees focused on improving watershed education, public outreach to local schools and communities, and public access and recreational planning within the watershed.
- ◆ Assisted local agricultural producers to develop a watershed coalition and written Watershed Evaluation Reports for both Upper Mokelumne River and Upper Calaveras River watersheds to aid in compliance with the Agricultural Waiver Program and water quality protection requirements.
- ◆ Provided project leadership and assistance to the Burson Water Committee for funding of a Water Feasibility and Alternatives Analysis using DHS funds to secure potable water for the Burson community. Many private wells are contaminated and residents need alternatives.
- ◆ Worked with CalTrans to initiate erosion control and slope remediation activities on a slope failure project at the Middle Fork Mokelumne Bridge.



May Watershed Festival participants learn from watershed models.

Benefits to CALFED Program

Watershed Management – Initiated and established public education and recreation committees, which are focused on improving watershed education, conducting outreach within the community, and providing residents with access to recreational sites within the watershed. Assisted County staff in training local contractors on grading permits and water quality protection requirements. This effort will improve water quality protection measures within Amador and Calaveras counties. Participated in many outreach events and activities. Planned and conducted watershed tours, which provided an excellent forum to educate local leaders on critical issues within the watershed. Set up an informational booth at the Lumberjack Days event in West Point, the Alpine County Creek Day event, and at the Fall Harvest Festival in Glencoe. Facilitated and participated in the Upper Mokelumne River Watershed Council meetings. Attended the Calaveras County Water District Master Plan community outreach meetings for the West Point Services area. Provided input and recommendations on many issues including how best to meet the community’s long-term water needs, disposing of wastewater, and developing an effective water conservation plan. Provided liaison services between governmental agencies, private groups, and local landowners. Assisted in mediation efforts between a landowner and a housing development where runoff was impacting the landowner’s ranch.

Drinking Water Quality – Established a local Watershed Water Quality Monitoring Program. Trained more than 20 volunteers who will be collecting data at three-month intervals. Also provided support to similar projects in adjacent watersheds to ensure a regional approach and strengthen collaboration. Held four public meetings to



Water Quality Monitoring Training was provided to over 20 volunteers.

provide information and support to local irrigators for the formation of local agricultural irrigation advisory committee. Worked with CalTrans to maintain erosion sites and reduce sediment input into Middle Fork Mokelumne River from past highway construction activities.

Science – Submitted a \$1.1 million grant proposal under the CALFED Science Program. If funded, the grant would provide temperature and flow modeling for climate change predictions, improve water diversion management, water quality monitoring, and ecological protection.

Chowchilla-Red Top RCD

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



Amount Funded: \$176,430

Additional Funding Obtained to Date: \$2,100

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

- ◆ Facilitator for the Central Sierra Watershed Committee, an organization instrumental in bringing together diverse groups and approaching issues on a regional basis. The committee recently developed a brochure for property owners that provide landowners with guidance on water conservation, fire protection, septic systems, and erosion control. Printed more than 32,000 copies for distribution.
- ◆ Wrote an article on well testing that was printed and distributed throughout the watershed.
- ◆ Conducted an aerial reconnaissance of the watershed to identify heavy concentrations of *Arundo donax*.
- ◆ Subcommittee chairperson of the Sierra-San Joaquin Noxious Weed Alliance responsible for distributing a Field Guide to Noxious Weeds throughout the community. Provided training to Sierra Telephone Company and the Ponderosa Telephone Company. Distributed more than 180 books.
- ◆ Organized the Oakhurst River Parkway Creek Stewardship Day. Attendees will clean up debris and trash along the riverbank and participate in diverse watershed activities.



Aerial photo of the Arundo in the Berenda Slough in Chowchilla.

Benefits to CALFED Program

Watershed Management – Provided information on water conservation, noxious invasive weeds, and fuel reduction to 10 community groups including two rotary clubs, a Lions club, the Kiwanis, and several schools. Attended meetings on water storage, water conservation, water recycling, and water quality. Existing partnerships were solidified and new ones established. Distributed brochures throughout the community and provided guidance to local residents.

Ecosystem Restoration – Planned a river cleanup where local residents will remove debris and trash from the riverbank. Interest in the event has been very good.

Storage/Water Transfers – Attended many meetings regarding water storage and water transfers. In the process of arranging speakers from various groups to discuss these subjects to the community at a town hall type water conference/public workshop.

Coastal San Luis RCD

Central Coast Watershed



Amount Funded: \$165,977

Additional Funding Obtained to Date: \$664,302

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

- ◆ A \$315,000 grant was awarded to the district to complete an Erosion, Sedimentation and Flood Alternatives Study for Arroyo Grande Creek. The first technical advisory team meeting was held in March 2005, and included representatives from 15 separate federal, state and local agencies, as well as local landowners.
- ◆ Five projects were completed under the Moro Bay Partners in Restoration Program (permit coordination) during the first year. These projects will prevent over 1,600 tons of sediment per year from being transported downstream into riparian and wetland habitats.
- ◆ Coordinated permits, funding and monitoring necessary for a California Conservation Corps crew to conduct vegetation management within the Arroyo Grande Creek Flood Control Channel in December 2004. This work helped to reduce the risk of catastrophic flooding to adjacent farmland and residences, and enhance tree shading for the active stream channel.
- ◆ A website for the Arroyo Grande Creek Zone 1/1A Flood Control Advisory Committee was created and is updated on an ongoing basis to serve as an information resource about Arroyo Grande Creek flood control channel issues. This website is hosted on an NRCS server and can be found at www.coastalrkd.org/Zone1-1A.html
- ◆ A \$236,990 grant from the State Water Resources Control Board and the Coastal Conservancy is providing funding to design and implement best management practices in the Arroyo Grande and Pismo Lake watersheds.



Chorro Creek Bank Stabilization – native plants and trees were planted between the bio-logs.

Benefits to CALFED Program

Watershed Management – The California Association of Resource Conservation Districts' Annual Conference was hosted by Coastal San Luis RCD in November 2004. The watershed coordinator helped plan the conference, which was attended by over 250 district directors and staff. The conference highlighted the district's innovative land conservation practices and strategies during field tours, panel discussions and breakout sessions.

The Pennington Creek Highway 1 Baffle Modification project was completed in the third quarter. This project was an interim solution to improve steelhead passage pending redesign of the highway, and involved collaboration between the RCD, Fish and Game, NOAA Fisheries, the Morro Bay National Estuary Program, Caltrans and the California Conservation Corps.

The RCD has developed a countywide Envirothon Program and secured grant funding to cover the costs of the first annual competition. This project will promote local watershed stewardship and watershed education.

The RCD is sponsoring steelhead trout barrier removal projects at Pennington and Dairy Creeks. These projects will open up over eight miles of high quality steelhead habitat in the Chorro Creek Watershed on a long-term basis.

Coordinated a television broadcast on local public television of the Arroyo Grande Watershed Forum and the Walking Tour of Arroyo Grande Creek. A result of these broadcasts was increased community participation in local watershed planning efforts.

Drinking Water Quality – Completed a bank stabilization project on Chorro Creek that reduced sedimentation. This has helped the City of Morro Bay, which occasionally relies on Chorro Valley wells for its municipal water supply.

The Arroyo Grande Creek Watershed Assessment and Flooding Alternatives Study being undertaken by the RCD will evaluate long-term sustainable flood channel maintenance, which will help protect the Arroyo Grande wastewater treatment plant from flooding.



A CCC crew installing willow stakes and bundles to stabilize the stream bank at Chorro Flats.

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



Amount Funded: \$127,317
Additional Funding Obtained to Date: \$58,202

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

- ◆ Facilitated tamarisk control on three properties in cooperation with landowners, American Land Conservancy, and California Rangeland Trust. The work covered tamarisk control over several miles along Sulphur and Bear Creeks.
- ◆ Planned and coordinated a “pollinator corridor” to revegetate tamarisk-cleared areas. Over 40 species of plants are being used and evaluated for native plant restoration, erosion control, and habitat enhancement for birds, butterflies, and pollinators.
- ◆ Established research that is designed to test saline water irrigation from Sulphur Creek to promote two perennial native grass species (creeping wildrye and saltgrass) and suppress exotic annual grasses.
- ◆ Negotiated with Wilbur Hot Springs, American Land Conservancy, and a livestock lessee to construct a livestock exclusion fence in an area known for high levels of mercury and soil erosion.
- ◆ Solicited and obtained the assistance of many volunteers and professional consultants for weed control projects, ecological inventories, and erosion control.



Revegetation test plot on Sulphur Creek.

Benefits to CALFED Program

Watershed Management – Developed new partnerships with the Regional Water Quality Control Board (Janis Cooke) and Pacific Watershed Alliance (John Green) to address soil erosion and mercury issues, and lay the foundation for a watershed assessment.

Developed three PowerPoint presentations on the work being done in the Sulphur and Bear Creek Watersheds and gave talks to Janis Cooke, the RCD board of directors, and a graduate class at UC Davis.

Completed a 50-page, pictorial-narrative handbook for resort visitors at Wilbur Hot Springs on watershed stewardship work that has been conducted there.

Ecosystem Restoration – Coordinator served as a member of the BLM’s technical advisory committee for the Cache Creek Natural Area Management Plan, and provided information on grazing management and how livestock could be used as a tool to manage invasive plants.

Supervised monitoring and data collection to evaluate a wick-irrigation system for establishing native shrubs, trees, and vines in Sulphur Creek. Coordinator also completed the first year of a research project to evaluate saline irrigation to increase native perennial grasses and decrease exotic annuals.

Obtained funding from the Genetic Resources Conservation Program at UC Davis to continue an invasive plant removal program on the Bear Creek Botanical Management Area. This is a key demonstration site in the watershed that supports over 100 native prairie plants.



Removing invasive plants from the Bear Creek Botanical Management Area along Highway 20.

Contra Costa Public Works Department

San Joaquin Delta Watershed



Amount Funded: \$215,959

Additional Funding Obtained to Date: \$35,689

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

- ◆ Worked with partners to develop strategies to reduce the sediment load in Kellogg Creek. The project has been extremely beneficial because it has brought together groups that have not collaborated on projects in the past.
- ◆ Attended the Best Management Practices for Agricultural Water Quality Field Day. Provided an opportunity to meet local growers and to learn about on-farm management practices that improve water quality and wildlife habitat.
- ◆ Coordinated meetings and field tours with irrigation district staff to gather information on local agricultural practices and irrigation infrastructure, and to publicize information on federal and state incentive programs to implement water conservation and tail water reduction programs.
- ◆ Improved water quality in the San Joaquin Delta Watershed and increased awareness of Marsh Creek Watershed by helping to organize the largest Marsh Creek clean-up event with over 350 community members who picked up over 6,000 lbs. of trash.
- ◆ Increased awareness of the Marsh Creek Watershed by writing three major articles for local and regional newspapers. Also wrote a feature article for a local magazine on salmon monitoring and restoration projects in the Marsh Creek Watershed.
- ◆ Organized or helped coordinate five volunteer monitoring events; two community programs to monitor spawning salmon, two benthic macroinvertebrate sampling days with Contra Costa County and one water quality and benthic macroinvertebrate monitoring day with over 30 Freedom High School chemistry students.



Marsh Creek Clean-up Volunteers.

- ◆ Worked to improve riparian habitat along Marsh Creek by coordinating with local government agencies and developers to incorporate BMPs and riparian restoration project into the 563-unit Pinn Brothers housing development along Marsh Creek.
- ◆ Increased awareness of the Marsh Creek Watershed by speaking to 25 high school students about working to improve the creek at Freedom High School's First Annual Career Fair. Recruited six participants to get involved.
- ◆ Helped determine water quality in the San Joaquin Delta by working with Contra Costa County to coordinate East County volunteer Benthic Macroinvertebrate training.



High School students monitoring benthic macro invertebrates.

Benefits to CALFED Program

Watershed Management – Helped recruit, organize and facilitate monthly Friends of Marsh Creek Watershed meetings to protect and restore the watershed, which flows directly into the Sacramento-San Joaquin Delta. Worked with community members to organize watershed events such as creek clean-ups, removal of invasive vegetation along the creek banks, and water quality and spawning Chinook salmon monitoring programs. More than 6,000 pounds of trash was removed from Marsh Creek during a clean-up event that involved more than 350 volunteers.

Ecosystem Restoration – Discussed the implementation of Best Management Practices (BMPs) on a local landowner's property that will complement a drainage project already planned. A discharge pump will be moved so that water leaving the landowner's property will enter the drainage system at a different location, thereby reducing the amount of sedimentation that flows into Rock Slough, which is a source of drinking water for Contra Costa County residents. The BMPs, if implemented, will make this process more efficient by limiting runoff and redirecting the remaining runoff towards the pump's new location. The watershed coordinator has been instrumental in reaching out to the community and educating them on the benefits of adopting BMPs. Continued efforts toward maintaining and enhancing fish populations critical to commercial, sport, and recreational fisheries by working to remove a fish barrier on Marsh Creek to allow migrating Chinook salmon and steelhead trout to access seven miles of additional spawning habitat. Worked 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 by working with a developer, the City of Brentwood and the Contra Costa County Flood Control



Performing a Laser Land Survey to determine the feasibility of using this Best Management Practice on the property.

and Water Conservation District to restore 1,900 linear feet of riparian habitat along Marsh Creek in downtown Brentwood, one of the fastest growing cities in California.

Science – Integrating unbiased, relevant science into all water quality and benthic macroinvertebrate data collection and salmon monitoring programs in the Marsh Creek Watershed. Using this data and scientific information to guide decisions and evaluate actions to improve and protect water quality in the San Joaquin Delta and restore riparian habitat along Marsh Creek.

Contra Costa RCD Suisun Bay Watershed



Amount Funded: \$188,730

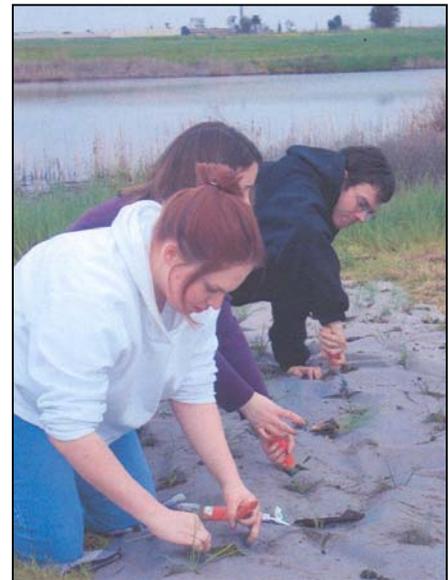
Additional Funding Obtained: \$33,004

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

- ◆ Coordinator wrote, edited and distributed a regional newsletter for the Suisun Bay watersheds (250 circulation).
- ◆ In cooperation with Contra Costa County, carried out three GPS surveys of creeks in the Kirker Creek Watershed.
- ◆ Coordinated five native planting/seed collection days in the Alhambra Creek Watershed.
- ◆ Planned and coordinated monthly weed removal efforts at Strentzel Meadow.
- ◆ Partnered with local schools to provide bioassessment training to teachers and students in a Kirker Creek subwatershed.
- ◆ Coordinated and helped conduct creek clean up projects in both the Kirker and Alhambra Creek Watersheds.
- ◆ Completed a new outreach brochure for the Alhambra Creek Watershed Council.
- ◆ Worked with “Partners for the Watershed” to carry out two native planting days on Kirker Creek.
- ◆ Updated and maintained a website to provide conservation information to communities in the watershed.



Los Medanos College students plant native bunchgrass at Dow Wetlands, Kirker Creek Watershed.

Benefits to CALFED Program

Watershed Management – Worked with school cooperators to integrate restoration activities into the local curriculum.

Wrote or helped develop four grant proposals to support community-based restoration efforts.

Attended numerous meetings of regional conservation and watershed groups.

Participated in ten community outreach events.

Assisted the Alhambra Valley Creek Coalition carry out its strategic planning process at stakeholder meetings.

Ecosystem Restoration – Collaborated with the Alhambra Creek Environmental Education Collaborative to bring students and other community volunteers together to work on the Sky Ranch restoration site.

Awarded \$10,000 in mitigation funding to enhance habitat along Kirker Creek.

Coordinated numerous restoration events in the Kirker Creek and Alhambra Creek Watersheds. These activities included invasive plant removal, planting native species in riparian and upland areas, and several creek clean-ups.

Deer Creek Watershed Conservancy

Mill-Big Chico Watershed



Amount Funded: \$192,099

Additional Funding Obtained: \$38,170

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

- ◆ Encouraged and supported Best Management Practices (BMPs) within the Deer Creek Watershed by facilitating and successfully completing the rangeland grant.
- ◆ Identified and prioritized erosion and sedimentation worksites for Phase II of the Deer Creek Watershed Erosion and Sedimentation Project by facilitating field trips with board members and representatives from government agencies.
- ◆ Provided assistance and support for the formation of the Shasta-Tehama Water Education Coalition (STWEC), a non-profit organization dedicated to water quality education and monitoring with the goal of reducing non-point pollution.
- ◆ Coordinated annual meeting and public workshop to discuss and present information on watershed issues to local stakeholders including topics on water quality, fisheries, STWEC, and an overview of current projects.



Phase II of the Deer Creek Watershed Erosion and Sediment Control Project will reduce the adverse impact from high flows.

Benefits to CALFED Program

Watershed Management – Coordinated board meetings and invited agency representatives to discuss and prioritize watershed needs and set management goals within the watershed. Reviewed objectives set forth in the Watershed Management Strategy and began to outline and revise priorities. Expanded the organization's mailing list to ensure local residents are informed about important issues. Member of the Technical Advisory Committee for the Tehama/Glenn Fire Management Plan and attends the Tehama

County Fire Safe Council meetings. Both organizations provide an ideal forum to address the community's concern over potentially devastating fires.

Ecosystem Restoration – Held discussions and facilitated field trips with governmental agencies to identify and prioritize erosion and sedimentation work sites for Phase II of the Deer Creek Watershed Erosion and Sedimentation Project.

Water Transfers – Submitted a grant proposal and received funding for the installation of a Denil-type fish ladder on the Cone-Kimball diversion Dam located on lower Deer Creek. Working with agencies and other partner on the permit process. Once completed, ground work will begin.

Science – Completed drafts for both the Monitoring Plan and the Modeling Plan for the Restoration and Flood Management project. Both were distributed for review. Completed detailed cross section surveys on Deer Creek.

Provided support to a project that installed tracer gravel transects and measured the tracer gravel movements from a high-flow event. Assisted with the installation and monitoring of crest-stage gauges for the Restoration and Flood Management project. Completed a draft Hydrology/Geomorphology existing conditions technical memorandum. Finished a data catalog containing existing Deer Creek references/resources.



The Cone-Kimball Diversion Dam will soon be reconstructed with a fish ladder. This will allow fish to reach the water above the dam during periods when irrigation diversions occur.

Earth Resource Foundation

Santa Ana Watershed



Amount Funded: \$178,135

Additional Funding Obtained to Date: \$6,500

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

- ◆ Held Santiago Creek Week during March 2005. The event involved four nonprofit organizations, the County of Orange, City of Santa Ana, and the City of Orange. Activities included history walks, butterfly and bird watching, a festival, an extensive tour, and a visioning workshop for the watershed.
- ◆ Received a grant from the University of California at Santa Barbara to develop a watershed plan focusing on water conservation and efficiency.
- ◆ Implemented “Working at the Watershed Level” program at five high school science classes/clubs.
- ◆ Collaborated on three grants with the City of Santa Ana for restoration and water conservation.
- ◆ Worked with Orange County Water District, Municipal Water District of Orange County, and several nonprofit groups at monthly strategy meetings to identify sources of funding for water conservation and restoration.
- ◆ Participated in the Human Broom Cleanup which involved 125 high school students who picked up more than 300 bags of trash at the mouth of the Santa Ana River.
- ◆ Founded a watershed association for the entire Santa Ana Watershed whose primary focus is water conservation with over 265 stakeholders.



Human Broom Beach Cleanup over 125 high school students at the mouth of the Santa Ana River.

- ◆ Organized a river cleanup that involved more than 150 volunteers. More than 300 bags of trash were removed from the first four miles of the Santa Ana River.

Benefits to CALFED Program

Watershed Management – Received a grant from the Bren School of Environmental Management for analysis of Alternative Watershed Strategies Addressing Water Conservation, Water Quality, and Land Management. Worked with partners to develop a strategy team to determine the benefits of forming a Resource Conservation District in Orange County. Created the Santa Ana River Watershed Alliance (SARWA) to ensure that stakeholder concerns were addressed and to facilitate communication among local groups. Served on committee for Inner Coastal Cleanup Day securing sponsorships and advertisements, recruiting volunteers, and distributing promotional materials throughout the area. Worked with The Wildlands Conservancy to identify watershed problems and concerns so that viable solutions can be developed that benefit the community and local residents. Coordinated with the Orange County Green Vision Project to map Orange County areas of concern within the watershed. Working with the Orange County Coastkeepers, Clean Water Team, Surfrider, and the Citizens Watershed Monitors of Orange County regarding water testing, bioassessment, and other monitoring sites.

Ecosystem Restoration – Worked with the City of Santa Ana to write three grants that focused on restoration projects throughout the watershed. Planned, organized, designed, and planted native plant garden at Pico Elementary School in Santa Ana. The event included more than 100 students and 30 volunteers. Identified five key projects for ecosystem restoration focusing on arrundo removal, ground water replenishment, lighting enclosed creeks, habitat, and wetland restoration. These projects were identified to meet the needs of the community and to address stakeholder concerns within the watershed. Also continued to reach out to local residents and expand the organization’s volunteer database.



Santiago Creek

Science – Implemented the “Working in the Watershed” level program in five high schools. Assisted with the Human Broom Beach Cleanup. More than 300 bags of trash were collected. Urban refuse was identified and categorized to better understand the problem and to develop appropriate long-term solutions. Identified 20 sites for urban refuse collection and analysis for the “Working at the Watershed” high school program along the Santa Ana River. This is a critical activity that must be completed before recruitment can begin of high schools.

East Merced RCD

Middle San Joaquin-Lower Merced- Lower Stanislaus Watershed



Amount Funded: \$286,957

Additional Funding Obtained to Date: \$2,400,000

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

- ◆ Coordinated a workshop for landowners on the Irrigated Lands Conditional Waiver Program. The coordinator provided information on Best Management Practices and distributed water quality test kits. Approximately 25 people attended the training.
- ◆ Coordinator has been proactive about educating state and local officials to the condition and needs of the watershed. Attended the CARCD Day in the Capital event and apprised legislators of the activities of the Merced River Stakeholders.
- ◆ Underwent training from Sustainable Conservation for a coordinated permitting program and began determining appropriate practices for the watershed.
- ◆ Provided training to three school staff to support a K-12 education element utilizing Adopt a Watershed curriculum.
- ◆ Facilitated the Merced River Stakeholders meetings. The MRS has adopted an information exchange focus versus a project focus in the past year.



Lia McLaughlin (far right) with the U.S. Fish and Wildlife Service providing information to the public on non-native invasive species at the Merced River Fair.

Benefits to CALFED Program

Watershed Management – Planned and conducted the first ever Merced River Summit to bring together staff representing seven agencies and groups (Merced Irrigation District, Upper Merced River Watershed Council, Merced River Stakeholders, East Merced RCD, Mariposa County RCD, Merced Education Research Initiative, and UC Merced) that are conducting work on the river. This group will continue collaborative efforts through the Merced River Alliance. Worked toward sustainability of watershed efforts by securing additional funding for project, permitting and outreach efforts.

El Dorado Irrigation District

South Fork American Watershed



Amount Funded: \$214,157

Additional Funding Obtained to Date: \$27,500

Background

The South Fork American River watershed is located in one of the fastest growing regions of the Sierra Nevada. The population growth in the Sierra is expected to grow between 100-500% in Sierra counties over the next ten years. This growth will increase tourism, recreation and residential development, exerting extensive impacts on water demand, water quality and natural habitat. Aging water infrastructure, energy production, old mining operations and past logging practices continue to challenge the preservation and restoration of our natural resources. In addition, climate change is predicted to shrink the Sierra snow pack by 36% in the next 50-100 years. Changes in temperature could exacerbate drought, flooding and wildfires. For these reasons, it is imperative that a comprehensive and coordinated watershed approach be used to protect our natural resources from current and upcoming issues.

Benefits to the Watershed

- ◆ Created a Regional Watershed Coordination Team to identify issues, facilitate funding and coordinate activities within the Cosumnes River watershed, North Fork, Middle Fork and South Fork of the American River Watershed.
- ◆ Established the American River Watershed Portal, a web based online library of information about the American River Watershed: <http://www.americanriverwatershed.net>. This portal will centralize and simplify the process of accessing watershed information and keeping track of activities.
- ◆ Educated the public, stakeholders and agency staff on the connectivity between upper and lower American River issues through a presentation at the American River Watershed Conference April 21-23 at Sacramento State University.
- ◆ Provided stakeholders and the public with information regarding the controversial Weber Creek restoration project. Enhanced communication and facilitated cooperation with downstream landowners.
- ◆ Collaborating with El Dorado County Water Agency and stakeholders throughout the South Fork Watershed to develop a drought plan with priority actions and alternatives for additional water supply.
- ◆ Established a regional water management group of water agencies, power utilities and conservation groups in the Cosumnes, American, Bear and Yuba (CABY) river watershed's to submit a grant application for the Proposition 50 Integrated Regional Water Management Program.



American River Watershed Conference.

- ◆ Working with the Regional Watershed Authority, an entity comprised primarily of water purveyors in the Sacramento area, to coordinate their Integrated Regional Water Management Plan with the Upper American Watershed. Their implementation package includes a watershed management project to address septic leakage issues in the upper South Fork of the American River Watershed.
- ◆ Drafting a proposal with the Sacramento River Watershed Program to include interactive GIS mapping for the Sacramento Watershed, and specifically the American River Basin through the Watershed Portal.

Benefits to CALFED Program

Watershed Management – Developed a database consisting of government agencies, watershed groups, businesses, environmentalists, and landowners. The database is used to facilitate communication and to provide concerned citizens with critical information. Submitted an Integrated Regional Water Management Plan (IRWMP) for the Cosumnes, American River, Bear, and Yuba River upper watersheds. This plan will improve regional watershed management, increase coordination between water agencies, water districts, watershed groups, and non-profits, and ensure that limited resources are directed to priority projects within the community. Established a Regional Watershed Coordination Team to address regional issues. The group meets monthly to ensure collaboration, cooperation, and to facilitate communication among its members. Finalized the American River Watershed Portal for the benefit of all users interested in the activities, data, and projects within the watershed. This will increase stakeholder participation and educate local residents about the organization and their watershed.

Water Use Efficiency – Developed a recognition program to reward homebuilders and developers that have adopted water efficient methods in design, construction, and landscape. Included the strategy to “Maximize the use of recycled water to offset potable and non-potable water needs” and “Optimize water conservation to offset potable and non-potable water needs” in the Water Conservation Field Service Program application.

Ecosystem Restoration – Included environment and habitat protection and eight strategies in the IRWMP application for protecting and enhancing environmental resources. This will ensure that these issues are addressed when implementing projects locally.

Drinking Water Quality – Drafting a proposal for a GIS interactive mapping system for the American River Basin to establish baseline water quality data through a GIS interactive mapping model. This project would identify gaps in water quality data and/or identify potential non-point source contamination. Worked with the Regional Watershed Authority to include a watershed project to address septic leakage issues in the upper South Fork of the American River watershed.



EID drought workshop.

Water Storage/Conveyance – EID hosted the third of four initial drought preparedness workshops on April 15 2005. More than 25 people from the community, in addition to EID and Water Agency staff, attended the session. Included were members of the Drought Advisory Committee, formed to assist EID and the Water Agency in developing a strategic plan to prepare for and address the effects of drought.

Fall River RCD Lower Pit Watershed



Amount Funded: \$195,518

Additional Funding Obtained to Date:

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

- ◆ Began a Fall River monitoring program. Responsible for developing the draft monitoring plan, obtaining funding for the program, and securing the equipment necessary to conduct monitoring activities along the river.
- ◆ Completed the draft Perennial Pepperweed Management and Monitoring Plan, which was submitted to the Technical Advisory Committee for review.
- ◆ Wrote articles for the RCD newsletter that was distributed throughout the community. The articles discussed critical issues, encouraged community involvement, and educated local residents on agricultural and environmental topics.
- ◆ Compiled information for watershed, noxious, and aquatic weed protocols. Will begin collecting information for planning and proposal development. A bibliography will be published and integrated with the local Geographic Information System (GIS) database.
- ◆ Mapped Purple Loosestrife in the Fall River sub-watershed. Provides basic information that will be incorporated into the RCD Purple Loosestrife Management Plan. Once implemented, the plan will be instrumental in controlling this noxious weed within the watershed.
- ◆ Conducted water monitoring on private property. Landowners volunteered to provide access to assist in improving water quality. Landowner involvement has continued to grow throughout the area.
- ◆ Worked with the Pit River Watershed Alliance, Shasta Weed Management Area, Modoc County Weed Management Group, and other partners on the Fall River RCD's Watershed Program to minimize duplication of efforts and ensure a comprehensive approach in dealing with local issues.

Benefits to CALFED Program

Ecosystem Restoration – Completed several elements of the Watershed Management Program including a draft management plan that focused on perennial pepperweed, a noxious weed that has invaded riparian

habitats and degraded ecological diversity of the McArthur swamp. A proposal was also completed describing the control work that will be done on the swamp. The project was approved for funding and work will commence this year. The watershed coordinator has been working diligently with local landowners. As a result, several landowners have allowed access to their property to perform water quality monitoring work and to map noxious weeds. During the past year, numerous articles have been written and distributed. This provides residents with information on upcoming events, ongoing projects, and actions they can take to prevent fires and reduce the spread of noxious weeds.

Ecosystem Restoration – Planning has been completed on several plans to eliminate noxious weed infestations throughout the watershed. During the later part of 2005, on-the-ground activities will begin to reduce noxious weed satellite populations.

Drinking Water Quality – Water quality monitoring has begun along the Fall River. The information collected will be used to improve water quality in the river.

Friends of Deer Creek

Upper Yuba Watershed



Amount Funded: \$196,385

Additional Funding Obtained to Date: \$197,610

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 pesticide and herbicide runoff, and erosion 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. Sedimentation of sand, silt, clay, and fine particulate matter make it difficult for fish to spawn and for people to enjoy the water for recreation.

Benefits to the Watershed

- ◆ Researched and selected two restoration sites: An abandoned road crossing on Squirrel Creek, a major tributary to Deer Creek; and Little Deer Creek, a quarter mile section that flows through Pioneer Park in Nevada City.
- ◆ Developed and distributed a brochure informing stakeholders and property owners about our Squirrel Creek Restoration Project and the need for a healthy watershed. The brochure also includes information on the harmful effects of sedimentation and how we are creating a riparian vegetation "buffer" zone to prevent erosion and provide shade to cool the water.
- ◆ Researched, developed, and prepared a draft "Good Roads, Clear Creek" program. Assistance was provided by the Mattole Restoration Council, SWRCB representatives, USFS, and county personnel.
- ◆ Developed a mercury working group knowledgeable on mercury contamination representing individuals from CRWQCB, USGS, Forest Service, City of Nevada City, NID, County sanitation officials, Universities of Reno and Davis, and stakeholders from the Deer Creek Watershed.
- ◆ Designed a collection and laboratory protocol for measuring algae dry mass, which will be used along with benthic macroinvertebrate studies, as a measure of the health of the watershed.
- ◆ Began a GIS aerial mapping program of the watershed that will identify land owners and areas of disturbance within riparian zones.
- ◆ Developed a restoration plan for the Deer Creek watershed based on the Deer Creek Coordinated Resource Management Plan (CRMP).



Volunteer identifying macroinvertebrate samples.

- ◆ Coordinated experts to speak at future workshops on areas of erosion and roads that contribute to sediment deposition in the creek. The information will be used to assist the city of Nevada City in developing grading ordinances to reduce sediment entering waterways.
- ◆ Researched alternative methods of tertiary treatment of foothill wastewater treatment plants, particularly wetlands applications. A report was generated discussing the options and potential impacts.
- ◆ Began developing a plan with Nevada City to implement effective tertiary treatment at the Nevada City Wastewater Treatment Plant. Three alternative treatments are being discussed for implementation. They are ultraviolet disinfection, land application of biosolids, and a constructed treatment wetland.
- ◆ Designed a Mercury Assessment and Remediation Survey for the Deer Creek Watershed. This survey will help to quantify mercury sources in order to conduct effective, scientifically-sound remediation with measurable benefits, and target remediation resources where they will have the greatest impact.

Benefits to CALFED Program

Water Management – Numerous outreach activities were conducted over the past year to educate stakeholders and to stimulate local involvement. A meeting held near the end of 2004 to discuss mercury issues was attended by more than 35 stakeholders. Comments were collected and used by the Mercury Working Group in their decision making process. Landowners were notified and offered an opportunity to participate in the Sierra Nevada Mercury Working Group, Native Plant Revegetation project, and a Roads and Sediment workshop. The Mattole Restoration Council was contacted to find out about their “Good Roads, Clear Creeks” program, which has been highly successful in reducing sedimentation. Consequently, the coordinator and other staff members began developing a similar program specifically designed for the Deer Creek Watershed. FoDC staff conducted an inventory of roads and identified parcels and landowners who may benefit from the “Good Roads, Clear Creeks” program. We began working with the Tahoe National Forest and Nevada County Department of Transportation to build the “Road’s” inventory database. The Watershed Coordinator participated in writing grants to secure long-term support for the watershed and provide funding for projects within the watershed.



Collecting macroinvertebrate samples from Deer Creek.

Water Use Efficiency – The Watershed Coordinator worked with the Nevada Irrigation District and local citizens to develop a grant that will increase water conservation and recycling in the Deer Creek Watershed.

Ecosystem Restoration – Two restoration sites were chosen: An abandoned road crossing on Squirrel Creek, a major tributary to Deer Creek; and Little Deer Creek, a quarter mile section that flows through Pioneer Park in Nevada City. A brochure informing stakeholders and property owners about our Squirrel

Creek restoration was designed and distributed. The Watershed Coordinator involved community members and the Bitney Springs High School Community Service class in our creek restoration projects.

Science – FoDC created a laboratory space for training volunteers to identify macroinvertebrates and chemically assay nutrients (nitrates, phosphates, ammonia, etc.), bacteria (total coliform & e-coli), total suspended solids, and algae. The lab has space for up to ten students. A Mercury Advisory Group was developed to assist in a synoptic survey of the Deer Creek Watershed. We completed an investigation of known tertiary treatment of wastewaters being conducted in other watersheds. We designed a collection and laboratory protocol for measuring algae dry mass, which will be used along with benthic macro invertebrate studies, as a measure of the health of the watershed. We began an Algae Biomass Study and conducted a Diurnal pH Study to assess temporal variations. We conducted a Turbidity Meter Calibration Study to refine turbidity monitoring to use as a surrogate for suspended sediment in monitoring. FoDC continues to monitor water quality to better support ecosystem health. Results from water quality data, sets parameters for future restoration and remedial efforts; and applications for new funding.

Georgetown Divide RCD

South Fork American



Amount Funded: \$123,386

Additional Funding Obtained to Date: \$127,100

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

- ◆ Worked with Watershed Coordinators from the South, North, and Middle Forks of the American River to establish the Regional Watershed Coordination Team (RWCT). Provides an ideal forum to address issues on a regional basis, share information, and cooperate on grant applications.
- ◆ Assisted in creating and promoting the American River Watershed Portal and online database. Stakeholders can find out about upcoming events and ongoing projects, post data, and share information and resources.
- ◆ Obtained grant money from Sierra Nevada Alliance to purchase equipment for monitoring activities. Volunteers collect data throughout the area, which is used to identify potential problems and the types of projects that would be most beneficial to the community.
- ◆ Completed another year of the Watershed Education Summit (WES). WES invites a select group of students from area high schools to join agency representatives and professionals in the upper watershed for a three-day intensive data collection effort utilizing water quality, habitat data, and channel survey techniques. Almost 50 students participated and the event in an excellent education and outreach opportunity within the community.
- ◆ Supported the RCD, SFARWG, and the Agricultural Watershed Group in applying for a grant that will provide agricultural communities with the knowledge, understanding, and tools necessary to make resource-based decisions.



Traverse Creek Water Quality Training Day.

- ◆ Organized several educational outreach events including a workshop on Mountain Lion Awareness, a Water Quality Stream walk, and a class on Photo Point monitoring. Each event consisted of more than 40 participants and provided attendees with useful information.
- ◆ Established a Volunteer Citizen Monitoring Group in Traverse Creek Watershed. Almost 40 volunteers were given training, which consisted of three days of orientation to monitoring, a day in the field using equipment, and a day learning the proper way to walk a stream and document information using photos. The volunteers are already out in the watershed, gathering data. This is critical since Traverse Creek was identified in the SFAR Stewardship Strategy as an area of concern because of water quality, road density, and sedimentation parameters.
- ◆ Established a Volunteer Citizen Monitoring Group in Hangtown Creek Watershed. A teacher and his group of high school students are collecting data and monitoring the creek.

Benefits to CALFED Program

Watershed Management – Facilitated monthly South Fork American River Watershed Group (SFARWG) meetings. Prepares agendas, records minutes, and conducts outreach activities to boost participation. The meetings provide local residents an opportunity to discuss critical issues and offer their input. Actively working with other groups to ensure a coordinated, collaborative approach to critical issues in the community. Worked with the Fire Safe Council to create a post fire rehabilitation resource document that the community can use to avert future disasters and refer to in the event of a fire. Actively collaborating on the Integrated Regional Water Management Plan with the other watershed coordinators to ensure a regional approach.

Ecosystem Restoration – Organized a native grass planting at Traverse Creek. The RCD developed a Xeriscape garden at the local library. It was a success and has stimulated tremendous interest within the community. Consequently, the watershed coordinator is expanding the project and is creating another Xeriscape garden with high school students at the El Dorado County Fairgrounds. This site will have greater exposure and provide an opportunity to educate more residents about the benefits of local plants and effective methods of conserving water. Worked with partners to secure funding for fuels management projects in the upper watershed. Planned and conducted a work day on Traverse Creek where volunteers removed non-native plants, planted natives, and also performed trail maintenance.

Drinking Water Quality – Collecting water quality data from monitoring activities along Hangtown Creek and Traverse Creek which will be used to determine the best type of projects to implement so that water quality will be improved.

Science – Assisting UC Davis researcher to begin looking at Periphyton as a biological indicator in the American River. Currently pursuing funding and developing a plan.

Glenn County RCD
Upper Stony/Sacramento-
Lower Thomes Watersheds



Amount Funded: \$78,292

Additional Funding Obtained to Date:

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

- ◆ Successfully negotiated with a local landowner the use of 100 acres of his property for an eradication and revegetation demonstration site.
- ◆ Coordinated and facilitated four Landowner Advisory Committees with more than 40 attendees to discuss landowner issues and concerns within the watershed.
- ◆ Coordinator acted as a mentor for Student and Landowner Education in the county's Watershed Stewardship Program (SLEWS). Coordinator also participated in a Willows School District program, instructing teachers on environmental education.
- ◆ Conducted five workshops with a local high school on habitat restoration field techniques.
- ◆ Began drafting a landowner agreement for projects to be implemented in the watershed.

Benefits to CALFED Program

Watershed Management – The coordinator made ten informational presentations to local groups, government agencies, and schools on Stony Creek, watershed programs and native vegetation issues. The coordinator also met with countless individuals to establish contacts and build trust in the community. Compiled relevant watershed literature such as past assessments and studies and wrote an annotated bibliography summarizing basic information and data gaps. Submitted four newspaper articles promoting restoration projects in the watershed. Also wrote and circulated a quarterly newsletter to all landowners in the watershed.

Los Angeles & San Gabriel Rivers Watershed Council

Los Angeles / San Gabriel Watersheds



Amount Funded: \$249,854

Additional Funding Obtained to Date: \$128,535

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%. Water conservation is a significant challenge with the focus on reducing outdoor water consumption.

Benefits to the Watershed

- ◆ Nearly completed a comprehensive native plant profiler, image library and information database that will be utilized by restoration and landscape specialists to determine appropriate plant materials for watershed projects. The database includes information on more than 250 taxa.
- ◆ Raised approximately \$128,000 for invasive weed mapping needs in the watershed.
- ◆ Planning continues on a series of annual sustainable landscape workshops that are targeted for landscape and restoration design professionals.
- ◆ Submitted a full proposal to NFWF for a large scale native seed collection, banking and distribution program. The proposal was developed in collaboration with Rancho Santa Ana Botanic Garden.



Frank Simpson, Drew Ready (WC) and Nancy Steele are members of the Landscape Ethic Committee.

Benefits to CALFED Program

Watershed Management – The coordinator is a member of several active committees including the Watershed Council’s Landscape Ethic Committee, the California Department of Food and Agriculture’s Weed Management Area Committee, and the California Native Plant Society Horticulture Subcommittee. Membership on these committees has allowed the coordinator to facilitate a number of interagency discussions on collaborative projects.

Ecosystem Restoration – Prepared a PowerPoint presentation on sustainable landscape practices that discusses grass cycling, composting, mulching, hydrozoning, micro emitters and evapotranspiration - based irrigation. Gave presentation to the “Year Around Garden Club” at Rancho Santa Ana Botanic Garden.

Mariposa RCD

Upper Merced Watershed



Amount Funded: \$155,654

Additional Funding Obtained to Date: \$476,405

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 dependant 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

- ◆ Implementing an Action Plan developed in cooperation with the BLM. The Action Plan includes monitoring impacts on the riparian zone of three popular recreation sites with the goal of reducing litter, erosion, trail braiding, and inappropriate toileting.
- ◆ Volunteers restored a 2.5 mile section of the South Fork Trail between Hites Cove and the Savage-Lundy Trail junction.
- ◆ Completed the second year of yellow starthistle eradication along five miles of campground access roads.
- ◆ Conducted four river cleanup projects during the year. Activities included cleanups of swimming holes, removal of graffiti from rocks along the Merced River, and quarterly litter patrols.
- ◆ Coordinated and held a weed warrior day in the North Fork drainage.



South Fork Trail of the Upper Merced River during wildflower season.

Benefits to CALFED Program

Watershed Management – Set up a new office for the Upper Merced River Watershed where volunteers, agency staff, the executive committee, and the watershed coordinators can work, meet and share resources. Identified and obtained existing agency plans for the Upper Merced River Watershed for reference by stakeholders. Obtained a grant from the State Water Resources Control Board to develop an alliance between the Upper Merced River Watershed Council and the Lower Merced Stakeholders. Attended scoping meetings and public hearings, and provided comments on proposed revisions to the BLM's Sierra Planning Area Management Framework and to the National Park Service's Merced River Plan.

Ecosystem Quality – Helped identify and train docents for the Hites Cove Trail during wildflower season on four weekend mornings. Docents provided information on the trail, safety precautions, wildflower identification, and watershed stewardship.

Drinking Water Quality – Participated in an Outfitter Workshop where the coordinators presented information on the watershed to rafting companies and discussed how to reduce impacts, especially on water quality and the spread of invasive species, at launch and recovery locations and campsites.

Teams of citizen monitors were trained and have assessed water quality at 11 sites along the Merced River. Data will be used to assess the health of the watershed.

Mojave Desert/Mountain Resource Conservation & Development Council

Upper Kern / South Fork Kern Watersheds



Amount Funded: \$216,236

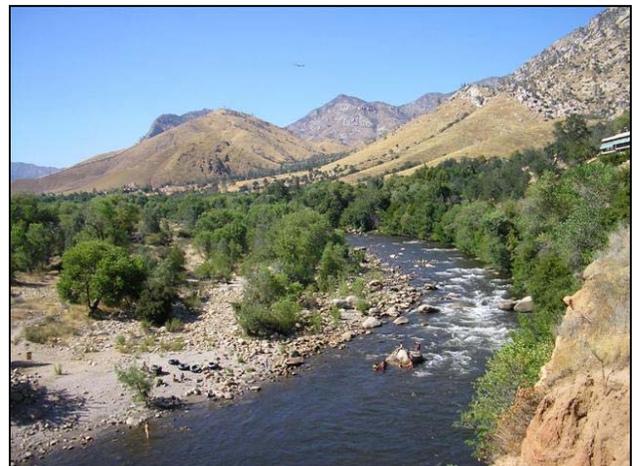
Additional Funding Obtained: \$1,575

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

- ◆ Assisted in obtaining the necessary permit and crew to remove debris and obstructions in the South Fork of the Kern River. This will improve water quality and allow water to flow as intended.
- ◆ Presented information to numerous groups including the Pacific Forest and Watershed Lands Stewardship Council.
- ◆ Worked with two local schools and the Kern Valley Cemetery to prepare applications for arsenic mitigation grants.
- ◆ Participated in conducting water quality testing of irrigation runoff at the Kern River Golf Course.
- ◆ Supported efforts to establish a program for inner city and disadvantaged youth to experience a wilderness experience.
- ◆ Gave PowerPoint presentation regarding MCL of arsenic compliance issues at the Kern River Valley Chamber of Commerce meeting.
- ◆ Researched and presented 22 sustainable development principles to the Kern County task force drafting the Kern River Valley Specific Plan. The Plan will specify design guidelines, development, conservation issues and economic development considerations for the next 20 years.
- ◆ Provided input to the Task Force implementing the Upper Kern Basin Fishery Resources Management Plan.



North Fork of the Kern River.

Benefits to CALFED Program

Water Management – Attended numerous meetings including the Kern River Valley Joint Tourism meeting where the watershed coordinator was able to interact with stakeholders and provide residents with information about the goals and objectives of CALFED and how the Kern River Valley is a partner in that effort. Participation in numerous outreach events including the Turkey Vulture Festival and the Kern River Preserve also provided an ideal opportunity to inform local residents about the CALFED program and to recruit volunteers. Set up a display at the Whiskey Flat Days. Materials were distributed to stakeholders. Developed a partnership with the Kernville Union School District to develop educational materials and student participation in watershed activities. A local biologist agreed to instruct a class on monitoring water quality in streams. This provides an opportunity to recruit and train additional volunteers to monitor local creeks and streams. Provided the Fire Safe Council with information on re-vegetation of areas that were mechanically cleared for fire protection. Partnered with several local groups to plan a bike path around Lake Isabella for recreational use by local residents and visitors to the area. Worked with other partners to collect water quality data at the local golf course. Water use efficiency data will be collected and used to determine the amount of water now used on the golf course. Comparing this data to data gathered after best management practices are put into effect will show any reduced usage in water from the river. Progress on identifying willing landowners to participate in the installation of new water control structures, which will enhance stream flow and improve irrigation diversions continues. Old structures have been evaluated and new design specifications are being developed. This will not only benefit both the landowners and endangered species in the area, but the amount of water available to Central Valley farms downstream of the project.



South Fork of the Kern River.

Worked with other partners to collect water quality data at the local golf course. Water use efficiency data will be collected and used to determine the amount of water now used on the golf course. Comparing this data to data gathered after best management practices are put into effect will show any reduced usage in water from the river. Progress on identifying willing landowners to participate in the installation of new water control structures, which will enhance stream flow and improve irrigation diversions continues. Old structures have been evaluated and new design specifications are being developed. This will not only benefit both the landowners and endangered species in the area, but the amount of water available to Central Valley farms downstream of the project.

Ecosystem Restoration. – Assisted in securing a permit and the crew to remove debris and obstructions in the South Fork of the Kern River. The blockage reduces water flows, which poses numerous problems. Worked with partners to submit a grant proposal for control of invasive Purple Loosestrife along the South Fork of the Kern River. Participated in two task forces for implementation of the Upper Kern Basin Fishery Resources Management Plan. Continued to reach out to local landowners. Visited and inspected several existing irrigation diversions. All these outreach activities help us to preserve and improve the habitat of the endangered Southwest Willow Fly Catcher which resides in the South Fork of Kern River and the Golden Trout habitat of the upper Kern River watershed.

Drinking Water Quality – Provided assistance to several organizations that manage water systems to ensure that water quality standards and certifications are met. New Federal regulations pertaining to reduction in levels of arsenic in drinking water take effect January 2006. Currently several workshops are being planned to introduce the issues of managing arsenic levels for small water users. Industry representatives will demonstrate new ideas, equipment and methodologies for reducing arsenic levels. We will work with California Rural Water Association and help with grant applications for small water users. Effective management and cooperation within the community will ensure the diversity of water providers within the area. Currently, public water systems draw on multiple aquifers for drinking water, which reduces the potential of overuse of any one aquifer and reduces future dependence on surface water.