Mountains Recreation and Conservation Authority

Santa Monica Bay Watershed

Amount Funded: \$230,892 **Additional Funding Obtained to Date**: \$14,325

Background

Ballona Creek drains a watershed of about 127 square miles and is the largest drainage tributary to Santa Monica Bay. The watershed has historically experienced, and continues to experience, a significant growth in population and related demand for housing, business development and coastal amenities. Also, decreased natural land surfaces have reduced infiltration of rainfall and the replenishment of groundwater. As a result, the use and reliance on imported water has increased dramatically.

Benefits to the Watershed

- Conduct monthly watershed walks. These walks invite residents to explore and become familiar with different conditions of the watershed, thus expanding the base of people who understand the complexities of urban and ecological issues facing Santa Monica Bay. Participation in these walks varies from five to 25 people.
- Revived the Task Force Education and Funding Committees for Ballona Creek. The Funding Committee has refocused its efforts on project implementation and the Education Committee has completed a draft marketing plan for a public outreach campaign.
- Facilitated several different stakeholder group meetings where controversial issues were discussed.



January's watershed walk featured Ballona Creek as it passes through mid city.

These included the fresh water marsh at Playa Vista, a styrofoam ban in the City of Malibu, and revision of the Rec-1 Benificial Uses.

- Made a presentation to the Compton Creek Watersehd Task Force/Community Action Team on wetland resources and stream restoration.
- Co-lead a discussion panel on the topic of community outreach at an Urban Watersheds Conference sponsored by Heal the Bay.
- Made two separate presentations to the Dominguez Watershed Advisory Committee regarding natural resources and potential restoration opportunities in the Ballona Watershed; and on the strengths and weaknesses of watershed councils and their various structures.
- Made a presentation to the Los Angeles and San Gabriel Rivers Watershed Council on community outreach and the potential for stream daylighting to re-establish habitat and community.



Watershed Management – Partnered with the watershed coordinator for Malibu Creek, the non-profit organization Mid-Cities Neighborhood Council, North East Trees, UCLA's Institute of the Environment, Heal the Bay, and the City of Los Angeles to prepare and submit nine grant proposals totaling \$23,706,720.

Working with the Santa Monica Bay Restoration Commission to identify and recruit co-sponsors for a federal cost share agreement for the Lower Ballona Ecosystem Restoration Feasibility Study. Estimated in-kind has been developed, sample letters of intent and a memorandum of understanding have been drafted, and meetings with the Army Corps and Culver City occurred during the reporting period.

Expanded the base of stakeholders for the Ballona Creek Watershed Task Force by 18 members.

Napa County RCD

San Pablo Bay Watershed

Amount Funded: \$228,139 **Additional Funding Obtained to Date**: \$1,685,526

Background

The Napa River drains a 426 square mile watershed that discharges directly into San Pablo Bay. The Napa River and its tributaries support a diverse and almost entirely intact community of 16 native fish species, including steelhead and Chinook salmon. Recognized concerns in the river include water diversions, storm runoff, stream bank instability, lack of riparian vegetation, in filling of pools, loss of wetland, woodland and riparian area habitat, and overall habitat fragmentation and degradation.

- A cumulative total of \$1,685,526 has been obtained through various federal, state, and local programs to support the restoration, protection and enhancement of water quality, fish & wildlife habitat, natural stream processes and community relationships in the Napa River watershed.
- Completed the fourth year of well-level monitoring in Carneros Creek watershed.
- County-wide coordination and support of Watershed Awareness Month events and outreach.
- County-wide watershed maps and aerial photography delineating sub-watershed boundaries posted and available to the public on the WICC WebCenter.
- Four watershed organization administrators trained on the use and administration of group information on the WICC WebCenter.
- Initiated crafting of a creek care guide.
- Conducted photo-monitoring of restoration projects in Sulphur Creek Watershed. Also assisted a partner agency develop a method and database for measuring implementation of BMPs related to reducing non-point sources of pollution from businesses and construction sites.



Fish barrier removal project on Heath Canyon Creek – August 2004.



Culverts removed and replaced with free spanning railcar bridge – January 2005.



Watershed Management – Watershed Management Plans completed for three Napa River subwatersheds (Selby Creek, Sulphur Creek, and Carneros Creek). Each plan includes an assessment and implementation approach for on-the-ground watershed projects.

Created and launched the Watershed Information Center & Conservancy WebCenter (www.napawatersheds.org).

Development of a Watershed Forum to provide networking opportunities for diverse stakeholder groups throughout Napa County.

Ecosystem Restoration – Removed four fish barriers and restored two miles of stream in the Sulphur Creek Watershed for improved steelhead and aquatic species habitat.

Provided assistance and support to the Rutherford Dust Restoration Team in its continuing effort to develop detailed project plans for restoration of 4.5 miles of the Napa River.

Actively pursuing funding for a detailed restoration design along a one-mile reach of Carneros Creek, which supports threatened steelhead trout.

Science – Implemented and expanded a volunteer well-level monitoring program in and around the Carneros Creek watershed.

Collecting, hosting and providing to the public via the WICC WebCenter, scientific information related to the watersheds of Napa County, including various assessments, reports and data.

Nevada County RCD Lower Bear and Upper Bear Watersheds

Amount Funded: \$232,434 Additional Funding Obtained: \$5,350

Background

The watershed contains over 990 miles of streams, creeks, and rivers. Water flows into the Bear River, which drains in the Sacramento Valley. Like many areas of California, the area is growing rapidly creating tremendous pressure on the environment. Bear River is listed under section 303(d) of the Clean Water Act for mercury and diazinon. At one time, rivers teemed with salmon and steelhead, but because of increased pollution, high levels of sedimentation, and low water flows, fish populations have virtually disappeared. Fuel loads have grown enormously. Consequently, thousands of homes are now in danger from wild fires. It is critical that stakeholders work together to address issues on a comprehensive basis.

- Worked with partners to plan and conduct 53 outreach events over the past year. Provided an ideal opportunity to reach out to stakeholders throughout the watershed. More than 1,200 people attended. Events included:
 - Forty watershed/natural resource seminars conducted at the Nevada County Fair.
 - Booth at the Gold Country Fair that focused on watershed issues.
 - Soil Erosion Workshop for contractors, city, and county officials.
 - Mercury presentation at the BRWG meeting.
 - Bear River Clean-Up Day.
 - Storm drain marking event.



Bear River Watershed Group Meeting with 43 attendees.

- Coordinated and facilitated a large community shaded fuel break project, which reduced fuel, loads in the watershed. The project prevents soil erosion and protects water quality. The fuel break focus area is approximately 16 miles long encompassing 3,000 acres and involved almost 90 landowners.
- Worked with partners to implement a program that notifies homeowners who are downstream from a wastewater treatment plant in the event of a spill. More than a 100 residents were included in the program.
- Established two more water quality-monitoring sites on the south fork of Wolf Creek. These sites are important because old mines are being de-watered, which could adversely affect water quality.
- Planning a project to mark 800 storm drains in the City of Grass Valley with "No Dumping Drains to Creek" vinyl markers. Two hundred residents have volunteered to come out and participate.



Information was distributed to local schools and many of them have also committed to help in the project. In addition, 5,000 door hangers are planned for distribution with the theme "A fish lives on your street" tying in with the storm drain marking event.

Benefits to CALFED Program

Watershed Management – Attended over a 100 meetings during the first year of the grant. This has provided an ideal opportunity to meet new partners, strengthen existing relationships, and coordinate on critical community issues. Involved in more than 53 educational outreach events. Coordinated a 16-mile fuel break, which will protect many landowners within the community as well as protect water quality and control soil erosion. Obtained a grant to perform bacteria water quality monitoring for some known 303(d) impacted water bodies and other suspect sites.



Water Management – Coordinated a project/event to mark 800 storm drains in the City of Grass Valley with a "*No Dumping – Drains to Creek*" vinyl marker. Approximately 200 volunteers will participate. Local schools have also agreed to participate. Educational activities and school assemblies will educate on recycling and water quality issues. Storm water management information was disseminated to 1150 teachers and administrators. Worked with the City of Grass Valley, Nevada County, and interested residents to improve the notification process to downstream residents of the sewage treatment plant in case of an incident. Hosted seminar on Mercury in the Watershed to create awareness and provide information for community members. Promoted information on limiting fish consumption due to mercury. Supported a levee set back on the lower Bear River to reduce flooding downstream and enhance riparian habitat

Water Use Efficiency – Provided landowners hands-on instruction for planting, reducing invasive weeds, and increasing irrigation efficiency. Hosted a seminar on pasture management. Conducted workshops for small scale growers dealing with water quality issues and the Irrigated Lands Waiver issue.

Ecosystem Restoration – Worked with partners on Dry Creek at Beale AFB on a vegetative restoration and planning project for increased fish passage. On-going work and collaboration to modify existing fish ladder to become more effective. Coordinating activities for water

quality monitoring to establish baseline data for fish habitat restoration. Provided equipment and training to Beale AFB for the monitoring. So far, almost 10 acres have been restored.



Students participating in a water quality monitoring program on south fork of Wolf Creek.

Science – Students conduct monitoring activities at six sites on the south fork of Wolf Creek and Wolf Creek. Recently, two additional sites were added. The monitoring is critical since a local mine is going to be drained of water and discharged into the creek. Fifteen months of water quality data was submitted to the Technical Advisory Committee for review.

Placer County RCD

North Fork American Watershed

Amount Funded: \$234,013 **Additional Funding Obtained to Date**: \$554,500

Background

The watershed, which includes both the middle and north forks of the American River, is a key watershed in the Bay-Delta System. Total watershed area is about 950 square miles, with ownership distribution being 3/5 private lands and 2/5 public lands. Threats to watershed health include the potential for catastrophic wildfire resulting from excessive fuels and damage by diseases, increasing population, and land use decisions.

Benefits to the Watershed

- Expanded the American River Watershed Group (ARWG) stakeholder network to 40 signatories of the partnership MOU. An additional 17 individuals or groups have been identified and invited to join.
- Conducted five watershed tour events with about 80 people attending. The tours visited the Auburn Dam Site and Placer County Water Agency's new pumping plant facility (under construction), Teichert's Cool Cave Quarry, and the Colfax Wastewater Treatment Facility. Attendees included local stakeholders, Sierra Club members, legislative aides, water agency representatives, RCD staff, and a local Boy Scout troop. The tours were part

of watershed issue identification and education efforts.

- Secured an in-kind match and exchange agreement to open a new "Watershed Coordination Center" office in the Canyon View Community Center operated by Auburn Recreation District. The office will open in April.
- Two local high school teachers and three students participated in citizen volunteer water quality monitoring training with the coordinator. This training will be implemented next quarter at both schools and later in the year so the teachers and students can participate in the Water Education Summit Program.
- Visited neighboring watershed groups as part of the Regional Watershed Coordination Team, which resulted in several cooperative grant applications.
- Improved and expanded the ARWG website and the American River Watershed Web Portal with additional organizations, people, events and projects.
- Worked to strengthen regional GIS coordination and other watershed information and supported the use of historic GIS data in the ARWG website and the new Sediment Dynamics Study.







Stakeholders tour the Auburn Dam site.

Facilitated the TAC for the Sediment Dynamics Study to complete a work plan, time plan, and budget for the next two years on the project.

Benefits to CALFED Program

Watershed Management – The coordinator has taken an active role in the CSUS American River Watershed Conference Planning Committee and has prepared abstracts for presentations on watershed coordination in the North Fork American River and on the ARWG Sediment Study. This will reinforce connectivity between the Upper and Lower American River and the Bay Delta System. Partnerships with several CSUS professors are being developed that will help with future research projects in the watershed. Similar contacts with instructors at American River College are also being cultivated.



Overview of the Auburn Dam site. The Bureau of Reclamation is finalizing plans to reclaim the area.

Monitoring of water quality throughout the watershed is being identified and cataloged. The coordinator is

assisting in the preparation of a grant to inventory monitoring networks existent in the watershed for water quality, surface water, ground water, precipitation, and water use. An effort is being undertaken to determine how water is withdrawn from streams in the watershed and transferred inter-basin for various consumptive and non-consumptive uses. Information gathering and reference searching is being conducted with the goal of sharing the results on the web portal.

Science – A Technical Advisory Committee (TAC) is overseeing the accuracy of the results of the Sediment Study. The results of this sediment study are expected to include an identification of sub watersheds where increased focus on a sediment budget may be needed.

Ecosystem Restoration – The coordinator is exploring alternatives for how Placer County, U.C. Davis, and other groups may be able to help the Bureau of Reclamation implement the restoration plan for the Auburn Dam construction site. Emphasis is on the revegetation plan and preventing non-native invasive species from inundating disturbed areas.

The tour of the Colfax Wastewater Treatment Facility helped initiate implementation and testing of stewardship strategies down stream from the treatment plant by the Friends of Bunch Creek, the Placer County Department of Public Health, and the Central Valley RWQCB. The goal is to determine the extent and severity of any remaining degradation from plant discharges of raw or partially treated sewage during storm events.

Resource Conservation District of the Santa Monica Mountains

Santa Monica Bay Watershed

Amount Funded: \$171,542 **Additional Funding Obtained to Date**: \$59,495

Background

Malibu Creek is a sub-watershed of the Santa Monica Bay Watershed. Malibu Creek drains a 109 square mile area of the Santa Monica Mountains and Simi Hills, and flows into the Santa Monica Bay via Malibu Lagoon. The watershed features a wide mix of urbanized areas and wildland habitats and is a critical stopover area for migrating birds along the Pacific Flyway. There are nine pollutants of concern for the watershed on the State Water Board's 303(d) impairment list, including a high nutrient/bacteria count. Further impairments include barriers to fish migration, lagoon function, septic tank effluent, use of pesticides and fertilizers, and erosion from on-going construction, development, gardening and animal upkeep practices.

- Conducted a very successful watershed tour of Malibu Creek with over 110 participants. The tour resulted in a number of articles about the watershed being published in local newspapers.
- Provided support to Las Virgenes Municipal Water District in its effort to raise funding to construct a pipeline to redirect reclaimed water draining into a local creek to a golf course for irrigation.
- Coordinated the hiring of a filmmaker (Larry Nimmer) to produce three 1-hour videos of the 2004 Malibu Creek Watershed Tour for distribution as outreach and education materials.



Malibu Lagoon

- Worked with Mr. Nimmer, the Education Subcommittee and the TMDL Work Group to complete the final draft of the TMDL outreach/documentary video script.
- Partnered with stakeholders to support the purchase of the 500+ acre SOKA property. This property will be set aside as an open space preserve.
- Fostered efforts to have the U.S. Army Corps of Engineers Malibu Creek Restoration Feasibility Study completed. Removal of Rindge Dam and other upstream fish migration barriers may begin only after the study is finished.



Watershed Management – Recruited the support of two local communications companies to film the RWQCB's spring Water Quality Conference and have it aired on local cable networks. The program reached an estimated 100,000 households.

Developed diverse partnerships as part of a long-term plan to build an RCD-lead Santa Monica Mountains Watershed Center.

Water Use Efficiency – Partnered with West Basin Municipal Water District and the City of Malibu to promote the use of low flush toilets, water-efficient clothes washers, water brooms and other water conservation measures.

Ecosystem Restoration – Revived the years dormant Habitat and Species Subcommittee and recruited a biologist from NRCS to serve as chair. The subcommittee was subsequently awarded a grant from the City of Malibu and, through cross-agency collaboration, successfully removed a bridge on Sister Creek in Solstice Canyon.

Obtained funding from a Santa Monica Bay Restoration Commission PIE grant to create native-scaping projects and promote the use of native plants.

Storage – Partnering with TreePeople to see how best to promote the use of cisterns in the Malibu Canyon Watershed.

Sacramento Area Flood **Control Agency** Lower American River

Amount Funded: \$ 278,036 **Additional Funding Obtained to Date:**



Background

The Lower American River Watershed is comprised of three principal watersheds: Lower American River (LAR), Arcade Creek, and Dry Creek. Each watershed is unique and faces its own set of problems and issues. The LAR is dominated by Folsom Dam, which supports 25% of the Central Valley's fall run Chinook salmon population. Water temperature, flow levels, water quality, and habitat conditions are critical to both wildlife and people. Over the year, chemical contaminants such as organophosphate pesticides have entered Arcade Creek and now pose significant health concerns. Not only is improving water quality critical, but so is reducing floods. The area is almost entirely urbanized and any flooding could be catastrophic. Dry Creek is also located in an urbanized area and faces explosive population growth. Invasive weeds are spreading rapidly, water quality deteriorates from polluted storm water runoff, and the risk of flood grows as more sediment enters the creek.

- Established a multi-jurisdictional Technical Advisory Committee with representatives from Placer County, Sacramento County, the City of Roseville, California EPA, Office of **Environmental Health Hazard Assessment** (OEHHA), and SAFCA.
- Began analyzing Dry Creek Watershed technical data. As part of this process, GIS information was collected and is currently being reviewed.
- Attended meetings and began interacting with potential partners, stakeholders, and governmental agencies.



Volunteers receiving training on Benthic Macro Invertebrate sampling procedures.

Watershed Management – Improved cooperation and facilitated collaboration within the watershed. As a participant on the TAC, the watershed coordinator has the opportunity to provide input and ensure that stakeholder concerns are considered.

Science – Reviewed and analyzed GIS information, focusing specifically on impermeable surfaces throughout the watershed. The data will be used to develop projects and establish priorities. Data is being entered into a database that will allow users to find and compare information rapidly and efficiently.



Tributary to Dry Creek which provides ideal habitat for Steelhead.

San Francisquito Creek JPA

Coyote Watershed

Amount Funded: \$211,815 Additional Funding Obtained: \$397,021

Background

The watershed drains into the San Francisco Bay and consists of urban, suburban, rural residential, and wild lands. Like many coastal areas, urban development has been extensive. Consequently, there has been significant loss of aquatic and riparian habitat, severe periodic flooding, and impaired water quality. Many of the creeks have been impacted by sediment and polluted by urban runoff. About every 11 years, stream banks overflow causing wide spread damage and threatening public safety. The watershed is also home to one of the few viable native populations of steelhead trout. It is critical that stakeholders work together to protect the environment, restore habitat, and minimize damage due to flooding.

- Coordinated first phases of Army Corps of Engineer projects among JPA members.
 Facilitated interaction between governmental agencies and the public.
- Completed a watershed wide Sediment Reduction Plan.
- Worked with the Corps of Engineers to develop a plan that addresses both flooding and ecosystem restoration within the entire watershed.
- Coordinated the planning of the Salt Pond Restoration/Bay Levee project with the Corps of Engineers.
- Assisted the City of Menlo Park and Stanford University on a major construction project. Provided information to minimize the impact to the creek and on fish habitat.



Volunteers remove ivy, which is smothering the trees along the creek in East Palo Alto.

- Participated in completing 50% of the designs to improve a fish passage barrier and secured funding to complete final designs, CEQA, and permitting for four fish passage improvement projects opening 6 miles of spawning habitat to migrating steelhead.
- Selected two properties one residential and one public to construct demonstration projects showing how to reduce, slow, and clean storm water before it becomes runoff.
- Held a workshop to educate the public, including homeowners and landscaping professionals, about best practices for planting in the riparian zone.
- Oversaw the execution of seven volunteer work days that placed 1200 native plants at nine long term revegetation sites.



- Planned and participated in three "Family Creek Days," educational events on watershed functions and steelhead preservation for community members in the upper and lower watershed.
- Secured participation from five local jurisdictions in policy, code, ordinance, and operations review that will assess effectiveness of jurisdictions' development processes in protecting aquatic habitat and, where applicable, make recommendations for changes.
- Provide consultations to two landowners, two teachers, and a neighborhood group about landscaping with native riparian plants.



Volunteers planting native riparian vegetation.

- Formed two new partnerships with groups in the upper watershed to facilitate storm water and fish passage projects.
- Trained 15 new citizen observers to monitor conditions of San Francisquito Creek and its tributaries.

Watershed Program – Facilitated communication by advancing multi-jurisdictional flood management and ecosystem restoration planning efforts with two counties, five city/townships, Stanford University, and the Watershed Council. The groups are working closely together to prevent another devastating flood. In 1998, the San Francisquito Creek overflowed its banks and poured into many homes causing extensive damage. Continued to work with the City of Portola Valley to reduce sediments flowing into local creeks and rivers. Brought together diverse stakeholder groups and formed new partnerships to coordinate and work together on innovative projects throughout the watershed. Provided technical assistance to two public agencies in preparing proposals for large-scale fish passage improvement projects. Provided an ideal opportunity to leverage resources, share ideas, and build stronger partnerships. Worked with Streamkeeper and Outreach Coordinator to develop a mapping schedule for the removal and eradication of invasive weeds. Supported the San Francisquito Watershed Council by facilitating meetings, providing guidance, and assisting with projects.

Conveyance – Educated and informed residents of aging tree canopy/root systems for tree inventory.

Water Use Efficiency – Worked with numerous partners on the storm water retrofit project. It will improve water quality by altering volume, concentration, timing and location of return flows. Once completed, the project will serve as a model for homeowners showing how they can modify existing structures to reduce runoff from hardscaped surfaces.

Conveyance – Phase I of the Corps of Engineer Project has been completed. The project will improve levee integrity and flood protection.

Ecosystem Restoration - Completed a Sediment Reduction Plan to address habitat and water quality issues related to the TMDL sediment impaired listing for the watershed. Assisted homeowners and real estate agents with bank assessments. Oversaw the execution of on-the-ground work that contributed significantly to revegetation efforts. Directed staff in carrying out eight volunteer workdays where

volunteers planted 1,200 native riparian plants and removed invasive Algerian ivy from an area approximately 200 feet by 15 feet. Provided technical assistance on five planning projects. Held a "Landscaping with Native Plants" workshop. The event was well attended and provided landowners information on invasive weeds and the best way to protect their environment.



Volunteers with garbage they bagged and removed.

San Joaquin County RCD

Lower Cosumnes-Lower Mokelumne Watershed

Amount Funded: \$182,505 **Additional Funding Obtained to Date**: \$1,379,500

Background

One of the primary concerns about the lower Mokelumne River is that, as a highly controlled system, the river has lost its natural function. The lower Mokelumne River is also considered impaired for copper and zinc and is on the 303 (d) list for those two substances. More than 95% of land within the watershed is privately owned and agriculture is the predominant land use, though development pressure is converting many of these agricultural acres into home sites. Parts of the watershed also have non-native invasive species crowding out native riparian vegetation.

- Continued working with students at two Lodi Unified School District high schools involved in the Student and Landowner Education and Watershed Stewardship (SLEWS) program. Two field days were held at the Gill Creek site and one field day at the Murphy Creek site. The work of the students is helping to increase wildlife and habitat values through the projects they conduct.
- Finalized the organization of and held the first of three farm field day workshops. The workshop provided information on agricultural best management practices designed to improve water quality. About 75 farmers, farm managers and others attended the training.



Lodi high school students and mentor install native grass plugs at the Murphy Creek Project.

- Finalized a contract with the State Board to begin work on a multi-faceted grant agreement that will provide funding for education and outreach.
- Established a partnership with the Lodi-Woodbridge Winegrape Commission to create a workshop for homeowners designed to help them reduce runoff and non-point source pollution that enters runoff from urban/suburban sources.
- Continued to work with the San Joaquin Watershed Education Partnership to help teachers develop programs and sites for place-based learning activities. Also assisted them secure cultural competency training.



Watershed Management – Facilitated regular meetings of the Lower Mokelumne River Watershed Stewardship Committee. This helps to keep local stakeholders involved in and aware of issues in the watershed, and encourages collaboration and cooperation between them.

Established criteria and began awarding an annual watershed stewardship award to promote both watershed awareness and the benefits of good watershed stewardship. The award is jointly sponsored by the Lower Mokelumne River Partnership (consisting of East Bay Municipal Utility District, the California Department of Fish and Game, and the U.S. Fish and Wildlife Service) and the Lower Mokelumne River Watershed Stewardship Steering Committee.

Continued to cooperate and collaborate with other watershed coordinators on a regional and statewide basis.

San Joaquin River Parkway and Conservation Trust

Middle San Joaquin-Lower Chowchilla Watershed



Amount Funded: \$158,624 **Additional Funding Obtained to Date**: \$3,900

Background

A 1997 study for the Bureau of Reclamation determined that 60% of the historical habitat of the San Joaquin River between Friant Dam and the confluence with the Merced River had soils suitable for riparian habitat. Between 1937 and 1993, the area of riparian forest and scrub in this area decreased 28%, and the area of herbaceous riparian vegetation and marsh decreased 82%. As a result, surface and ground water levels have dwindled, and native willows and cottonwoods have been replaced by brush and weeds that do not support native wildlife. A major goal is to restore at least 185 acres of riparian habitat within the watershed.

Benefits to the Watershed

- Coordinated and helped conduct a workshop for secondary school teachers at the Teach the River Symposium. Presented a session on restoration education.
- Facilitated two community focus groups in an effort to build support for protecting the San Joaquin River within the Latino community.
- Planned and conducted several volunteer workday events at various locations along the Parkway.
- Coordinated with the East Fresno Kiwanis Club to provide protective fencing for existing restoration areas at Camp Pashayan.
- Presented a PowerPoint show on watershed education to a group of Chaffee Zoo docents.
- Coordinated with a local boy scout on his Eagle Scout project to plant valley oak trees.

Benefits to CALFED Program

Watershed Management – Coordinating with various government agencies and local stakeholder groups through forums such as the San Joaquin River Resource Management Coalition, to restoration projects in the Parkway.

Ecosystem Restoration – Conducted numerous volunteer workdays to remove Scarlet Wisteria (an invasive weed) along the San Joaquin River, and implemented a vegetation photo-monitoring program. Also conducted several volunteer river cleanup events removing several truckloads of trash.

Santa Barbara County

Santa Barbara Coastal Watershed

Amount Funded: \$202,943 **Additional Funding Obtained to Date: \$75,000**

Background

The watershed descends steeply from the Santa Ynez Mountains, onto the coastal plain, and ultimately into the Pacific Ocean. The upper reaches are relatively undisturbed while the lower portions are heavily urbanized. Twelve of the streams have been listed as "impaired." Contaminants include pathogens, nutrients, sediment, metals, and priority organics. Almost 75% of the potential habitat for the steelhead trout has been lost. The area is under tremendous pressure for further urbanization. Water flows continue to decline partly due to groundwater pumping and decreased percolation to the water table. Without a concerted effort involving diverse stakeholders, the problems will only grow worse.

Benefits to the Watershed

- Implemented "Our Water, Our World" less toxic pest management information program to reduce pesticides that can end up in creeks and the ocean.
- Reduced water and chemical use in greenhouse operations by training 27 greenhouse growers in efficient practices.
- Released a draft San Jose Creek Watershed Plan for public review. The plan will educate the community and contains implementation measures to reduce water and chemical use and improve watershed health. Presented the plan to four community groups.

Implemented a restoration project on Mission

Landowners attending an Erosion Control and

Water Management Class in Goleda.

Creek at a county park. This project involved removal of exotic plant species and replacement with native plants, and replacement of a portion of the parking lot with permeable paving to improve water quality.

Trained gardeners in resource efficient landscape practices through the Green Gardener Certification Program during spring and fall classes.

Coordinated Creek Week during the first week of October 2004. Attendees participated in a series of events to educate the community about the importance of local watersheds and ways to protect and enjoy them.

Obtained an EPA grant to develop the pilot Riparian System Management Program to streamline implementation of Flood Control mitigation restoration projects.





- Coordinated the South Coast Landscape Fair, which educated participants about landscaping techniques that protect the watershed.
- Met with local purveyors to develop strategies for promoting use of the Mobile Lab irrigation evaluations.
- Worked with student volunteers to install plants at Rocky Nook County Park restoration project.
- Increased water efficiency and decreased polluted runoff by training 30 agricultural growers at an irrigation and erosion workshop.
- Presented a summary of the San Jose Creek Watershed Plan to several community groups to raise awareness of water quality and other issues, and encourage participation.

Watershed Management – Coordinated education and outreach for the Carpinteria Creek Watershed Coalition by editing a biweekly column for the local newspaper entitled the "Watershed." Assisted with completion of final Carpinteria Creek Watershed Plan, which outlines projects to improve habitat and water quality. Participated in the Santa Barbara Task Force of the Southern California Wetlands Recovery Project (SCWRP) to provide information on County watershed efforts and to learn about opportunities for collaboration and funding support. This provided an ideal opportunity to forge new partnerships and strengthen existing ones. Worked with the Rincon



Watershed Coordinator measuring the uniformity of the sprinkler irrigation system.

Creek Watershed Council to develop a list of issues/projects for the watershed. Also, held an educational meeting on steelhead for the Rincon Creek Watershed Council to develop a watershed restoration plan. Actively participated in numerous community outreach activities throughout the watershed. Supported distribution of "Creek Care Guide" through the South Coast Watershed Resource Center. Coordinated "Creek Week" where local residents had an opportunity to learn about protecting the environment and effective ways to conserve resources. Presented information on maintaining and managing an irrigation system at the "Agricultural Irrigation & Erosion Workshop." The workshop provided information on how to reduce runoff, erosion control, and improving water quality. It was held in both English and Spanish. More than 30 growers attended. Presented information on maintaining and managing an irrigation system for landscape irrigators, in both Spanish and English. More than 25 landscapers attended.

Ecosystem Restoration – Actively involved in numerous projects throughout the area. Assisted in implementing a restoration project on Mission Creek in Rocky Nook County Park. The project included removal of exotic plant species and replacement with native plants, and replacement of a portion of the parking lot with permeable paving to improve water quality. Worked with student volunteers to install the plants at the restoration site. Completed the restoration plan for the removal of a fish passage barrier on Carpinteria Creek. Received grant extension to complete design work for bank stabilization and fish passage barrier removal project on Maria Ygnacio Creek. Completed preliminary design alternatives for

bank stabilization and restoration project at the Elks Lodge on San Jose Creek and presented it to the Elk's Board for approval.

Water Use Efficiency – Developed a curriculum for a Green Gardner Certification Program. Classes were held in the fall of 2004 and spring 2005, focusing on teaching landscape professionals about resource-efficient maintenance methods Since 2003, approximately 100 gardeners have attended and graduated from the program. Instrumental in coordinating and planning several workshops. Sponsored a water management workshop for greenhouse growers to train them in methods to reduce water and chemical use. Coordinated an irrigation and erosion workshop that trained agricultural growers on techniques to increase water efficient irrigation system. Met with local water purveyors to coordinate promotion of Mobile Lab irrigation evaluation and spring irrigation workshops. Prepared irrigation evaluation reports for growers in Carpinteria and Goleta, including information on DU, scheduling, and soils.

Sierra Valley RCD

Middle Fork Feather Watershed

Amount Funded: \$185,460 **Additional Funding Obtained to Date**: \$811,980

Background

The mountainous, forested landscape provides crucial habitat for many different species of plants and animals. Throughout the watershed, small rural communities thrive. The area hosts visitors who come to outdoor recreational activities such as hiking, biking, bird watching and skiing. As the population increases, so does the impact on the region's natural resources. The potential threat from wild fires is greater today than ever before. Old roads, once used by timber and mining companies, can contribute sediment in rivers and creeks. On the valley floor, naturally meandering streams have been altered to accommodate flow-controlled irrigation ditches. The issues are complex and the need great. Therefore, it is imperative that a comprehensive, collaborative approach be used to address the many problems facing this watershed

Benefits to the Watershed

- Finalized the Carman Valley Watershed Restoration project, a large-acreage, multi-year partnering venture that has shown definitive positive benefits to various natural resources in a large tributary to the Feather River.
- Partnered with the High Sierra RC&D and the UCCE to plan a workshop that will focus on conservation easements, water rights, restoration projects, and the Williamson Act.
- Finalized the Smithneck Creek Watershed Improvement Project Proposal. Seeking funding opportunities.



Field Tour of Little Last Chance Creek.

Benefits to CALFED Program

Watershed Management – The Sierra Valley Watershed Assessment is complete and currently being printed. This will be a major guiding document in the management of natural resources in the valley. Assisted the Upper Feather Management Group in obtaining funds to assist landowners in meeting the requirements of the Conditional Agricultural Waiver Program.

Ecosystem Restoration- Participated in the completion of the Carman Valley Watershed Restoration Project. It has improved the habitat for various bird and bat species. The rewetting of the meadows increased water availability and timing. This has increased insect populations, leading to more food for the birds and bats.



Water Use Efficiency – Completed the Carmen Valley Watershed Restoration Project, which has increased water timing in the valley and the water table. The Little Last Chance Creek project is progressing with emphasis on facilities improvements that will result in less sedimentation and increasing the base flow elevation so that more of the valley is wetted in the winter months, extending the water timing and reducing the need for early irrigation.

Sloughhouse RCD Lower Cosumnes-Lower Mokelumr and Upper Cosumnes Watersheds

Amount Funded: \$149,044 **Additional Funding Obtained to Date**:

Background

The Cosumnes River Watershed is one of California's most pristine river systems. It is a significant contributor to the San Francisco Bay-Sacramento Delta water supply and home to many threatened and endangered species. However, U.S. Army Corps of Engineers surveys show that the watershed suffers from many water quality problems including excessive sediment transport and degradation of the riverbed, erosion and channel incision, levee failure and flooding, and loss of aquatic and riparian habitat.

Benefits to the Watershed

- Coordinated and produced a Ranching Workshop in the foothill community of Jackson. The workshop was attended by 33 ranchers and covered many topics, including grazing management, regulatory programs, conservation easement opportunities, EQIP practices and water quality.
- Continued planning the first Cosumnes River Watershed Council meeting, and distributed over 60 agendas to stakeholders.
- Completed draft of the first BMP fact sheet (tailwater recovery systems) and submitted it to the NRCS for review and comment.

Assisted in coordinating efforts between agencies with water quality data needs.

Benefits to CALFED Program

Watershed Management – Met with five other watershed coordinators in El Dorado, Placer and Nevada Counties to create a watershed portal for data collection and information sharing. Participated in four Cosumnes River Task Force (CRTF) meetings and provided updates on projects in and adjacent to the watershed. Attended training sponsored by DOC to learn how to improve communication and coordination in the watershed. Initiated discussion with Florin RCD about conducting a joint "train the trainers" workshop on water quality. Polled new homeowners about their interest in and commitment to developing a watershed plan.

Storage – Coordinated a meeting between El Dorado Irrigation District and the Southeast Sacramento County Agricultural Water Authority to discuss potential recharge projects.

Ecosystem Restoration – Distributed 159 Backyard Conservation brochures to homeowners that provide information on habitat friendly landscaping, native species, and sediment reduction.





Ranching workshop in Jackson.

Solano RCD

Lower Sacramento and Upper Putah Watersheds

Amount Funded: \$208,100 **Additional Funding Obtained to Date**: \$434,450

Background

Solano County is undergoing rapid development and urbanization as a result of its proximity to the San Francisco Bay and the Sacramento Metropolitan areas. Excessive erosion and sedimentation are major concerns in the watershed. The Regional Water Quality Control Board believes agricultural runoff is an issue as well. Baseline testing is needed to provide understanding of the current state of the watershed and to plan for best management strategies and practices.

Benefits to the Watershed

The coordinator was instrumental in coordinating and attracting stakeholders to the Lake Berryessa Watershed Partnership. Through the Partnership the coordinator has facilitated summer water quality events at the lake, development of a water education poster for display at kiosks around the lake, development of a water protector pledge program for children and adults, and the creation of a website highlighting watershed activities.

Facilitated the formation of a watershed group to approach the Ag Waiver process, coordinating development of preliminary test sites, response protocols and determination of appropriate BMPs to respond to contaminant events. Stakeholders are monitoring off field flows to improve agricultural

water quality on 190,000 acres of irrigated farmland, and the coordinator has presented information about the Solano/Dixon program to regional and Central Valley peers.

- Created a "Bird Box Highway" along Pleasants Creek to provide monitored habitat for bluebirds, and actively involve local landowners in the birds' stewardship.
- Developed and completed a countywide weed mapping project to facilitate eradication of invasive exotics and foster better regional management of weed issues.
- Established a youth-based watershed stewardship program in two sub-watersheds. The High School Citizen Monitoring program for Ledgewood and Laurel Creeks involves four high schools and 220 students in hands-on care of the watersheds they live in. Lab manuals, monitoring manuals and a syllabus were created for student and teacher participants





- Began working with local partners to create a consolidated Agricultural Center for all of the ag-related agencies in Solano County.
- Partnered with Yolo County RCD to conduct a Conservation Planning for Farmers workshop, which was attended by 12 farmers.
- Save a presentation to the Solano County Board of Supervisors on the Solano Watershed Partnership.

Watershed Management – The coordinator is providing ongoing facilitation of five active watershed groups including the Solano County Watershed Partnership, the Lake Berryessa Watershed Partnership, the Dixon-Ulatis Ag Waiver Watershed Working Group, the Pleasants Creek Watershed Group and the Alamo Creek Watershed Group. Coordination of all five groups is fostering broad watershed stakeholder involvement.

Ecosystem Restoration – Completed nine Putah Creek cleanup events, funded with Integrated Waste Management grants, to remove garbage and debris, and began habitat and vegetative restoration on privately owned sections of the creek. Facilitated two restoration projects on Pleasants Creek to eradicate and control *Arundo*, restore habitat and control downstream sedimentation.

Drinking Water Quality – Created a Source Water Protection Plan for Lake Berryessa. The plan is in its final review stage and should be completed by June 2005.

Sonoma Ecology Center

San Pablo Bay Watershed

Amount Funded: \$155,193 **Additional Funding Obtained to Date**: \$181,793

Background

Land ownership in Sonoma Valley is 85% private holdings, with land uses ranging from redwood groves to chaparral, oak savannah to diked tidal marsh, vineyards to hayfields, rural estates to dense low-income neighborhoods. Watershed impacts arise from a history of ranching and agricultural uses since 1823, and increasing urbanization and ranchette development since the 1950s. However, the watershed's fishery is one of the best left in the Bay-Delta region due to its diversity and lack of non-native species.

Benefits to the Watershed

- Consulted with two landowners of housing complex sites that are under construction regarding fish passage and stream bank stability issues. Discussed the merits of using natural materials (i.e. boulders, logs and vegetation) in place of riprap and concrete.
- Actively participating on a TMDL Steering Committee that is helping to decide what TMDL implementation measures to use.
- Partnering with the Sonoma County Roads Department and other groups to fund two fish passage projects.
- Developed road remediation plans for 300 acres of newly acquired state park land.



Native plants being revegetated on the bank of Sonoma Creek. Project resulted from a partnership with Sonoma County Regional Parks and community volunteers.

- Conducted two community outreach events (an evening presentation on watershed stewardship and a half-day watershed tour).
- Developing a reach-scale restoration and enhancement approach for a five-mile stretch of Sonoma Creek between Kenwood and Glen Ellen.

Benefits to CALFED Program

Watershed Management – Working to coordinate the activities of seven watershed-based community groups in north San Pablo Bay. If these groups can articulate a shared message to funders and local governments, more resources can be leveraged than when they speak alone. Represented Sonoma Creek, the North Bay, and watershed issues in general in four regional forums: the San Francisco Bay IRWMP, the North Bay IRWMP, the Critical Coastal Areas Program, and "Conservations about Watersheds."

Ecosystem Restoration – Developed a comprehensive plan for Nathanson Creek and an application to SWR for funding via the Urban Streams Restoration Program.

Science – Designing a study with a Lawrence Berkeley Lab researcher to address shallow groundwater/surface flow dynamics.



Stockton East Water District

Lower Calaveras-Mormon Slough

Amount Funded: \$106,472 **Additional Funding Obtained to Date**:

Background

Accelerated urban growth within the valley has increased the demand for water. As water use grows, so do the conflicts. Storm water runoff, agriculture, recreation, mining, unscreened diversion operations, and other land uses have impacted water quality and wildlife habitat. Stakeholders are concerned about aquatic habitats, fish populations, and the availability of water for both people and animals. It is imperative that stakeholders work together to identify and implement water improvement and monitoring projects that restore and protect resources within the watershed.

Benefits to the Watershed

Assisted in establishing the Calaveras River Watershed Stewardship Group (CRWSG). The coordinator facilitates the meetings and ensures that information is disseminated throughout the group. CRWSG developed a mission statement, which is "to restore, protect, preserve and enhance the lower Calaveras River watershed resources through education, collaboration, and project implementation."

Developed an education website for CRWSG. It is updated monthly with news articles, fisheries reports, educational documents, and administrative information such as meeting times and agendas.

- Formed new partnerships with conservation groups, local governments, and other stakeholder groups.
- Created a PowerPoint presentation for recruitment and outreach. It provides information about the watershed and CRWSG.
- Hosted an educational tour of the Calaveras River. The event was well attended and provided participants an opportunity to learn about issues and to discuss potential solutions.
- Collaborated on a community river clean-up day. The event was well attended.
- Contributed to the development and submission of the proposal "Calaveras River: Bellota Fish Ladder Evaluation."



Calaveras River clean-up event.



Watershed Management - Instrumental in forming the Calaveras River Watershed Stewardship Group (CRWSG), consisting of 12 organizations and numerous local residents. CRWSG has agreed upon a mission statement and has begun identifying issues for the development of a Watershed Implementation Plan. During the first year, numerous partnerships have been formed with various groups, local governments, and interested stakeholders. Participated in Calaveras Fish Group meetings, a technical advisory group that provides scientific and technical expertise on anadromous fish populations. Collaborated with other conservation groups in a community Calaveras River clean-up day. Continued to expand educational and informational outreach activities. The CRWSG



Calaveras River Watershed Stewardship Group meeting.

website provides residents with information on meeting times, agendas, news articles and educational materials, including a document that identifies effective ways of preventing the spread of New Zealand mud snails.

Science – Contributed to the development and submission of the proposal "Evaluation of Juvenile *Oncorhynchus Mykiss* Migration and Life History Expression in the Calaveras River using Streamwidth Passive Integrated Transponder Technology."

Ecosystem Restoration – Participated in a review of the "Draft Interim Bellota Ladder Operations Criteria." Based on comments and recommendation received, the final version will establish a protocol for operating a fish ladder in the lower Calaveras River in a way that best facilitates passage for threatened and candidate salmonids.

Tehama County RCD Sacramento-Lower Thomes Watershed

Amount Funded: \$132,196 **Additional Funding Obtained to Date**: \$30,000

Background

The Sacramento-Lower Thomes Watershed lies in the heart of Tehama County and covers 1,055 square miles. The watershed comprises approximately 5% of the center of the CALFED Sacramento Valley Regional Area and includes a 24-mile stretch of the Sacramento River. Most small tributaries in the watershed have been used as dumps for all types of waste, and the loss of riparian vegetation in both the mainstem and tributaries has had damaging effects on salmonid populations. Other issues in the watershed include in-stream barriers, mining practices, non-native noxious species, wildfires and fuels management, and excessive sediment from wildland roads.

Benefits to the Watershed

Prepared the Tehama County Voluntary Oak Woodland Management Plan in coordination with the Tehama County Oak Woodland Advisory Committee. The plan was approved by the Tehama County Board of Supervisors, and will assist local non-profit organizations when applying for grant funding.

Coordinating the preparation of the Tehama West Watershed Assessment. The significant watersheds in the project area have been identified along with numerous resource and conservation issues.

Coordinating the field and GIS mapping work for the Tehama West Fire Plan. The plan will identify areas within the western portion of the county at risk from wildfire as well as various protective measures currently in place to reduce the intensity and impact of wildfire events.

- Completed a historical survey within the Bend Area of Critical Environmental Concern (ACEC) for the Bureau of Land Management (BLM). Also completed the first phase of an elderberry survey for the BLM. These surveys will be used to protect resources when the BLM conducts prescribed burning and other project work within the Bend area.
- Conducted several public education workshops relating to oak woodlands as well as wildfire ecology and wildfire prevention.
- Coordinate the county's Hardwood Advisory Committee and the Tehama-Glenn Fire Safe Council meetings and activities.
- Partnered with the Department of Forestry and Fire Protection in the preparation of a fire hazard component of Tehama County's DMA 2000 Multi-Hazard Fire Plan.





Oak woodland in western Tehama County.

Watershed Management – A number of new relationships and collaborative efforts have been developed in connection with the preparation of a riparian habitat and gravel mining impacts inventory of the Thomes Creek watershed located in southern Tehama County. Participation in the Tehama-Glenn Fire Safe Council continues to allow the coordinator the opportunity to develop and promote community involvement in fire related environmental issues that impact local watersheds.

Ecosystem Restoration – The array of fuel management projects that have been developed in the Tehama West Fire Plan are designed to reduce the negative impacts of wildfire. Among these undesirable effects are deterioration of vegetative cover, which often leads to the introduction of invasive weeds as well as excessive soil erosion and deterioration of water quality.

Upper Putah Creek Stewardship

Upper Putah Watershed

Amount Funded: \$153,400 **Additional Funding Obtained to Date**: \$5,000

Background

Rapid urbanization has created tremendous pressure on the natural resources within the watershed. Many residences have been built along creeks causing erosion, reducing habitat, and increasing the potential for catastrophic flooding. *Arundo donax*, a non-native noxious weed, and other brooms have proliferated and adversely affected water quality. More than 40 sites have been identified where Mercury was mined. It is imperative that stakeholders receive information to reduce polluted run-off, minimize habitat destruction, and curtail the spread of noxious weeds. A watershed coordinator would bring together stakeholders to address these critical issues and begin the process of developing baseline data.

Benefits to the Watershed

- Expanded outreach within the community by opening a Watershed Center. The facility provides residents with a place to hold meetings and contains a digital photo library that can be used for reports and articles.
- Worked with the Lake County Weed Management Area team to establish a weed removal program in the watershed. As part of the program, homeowners were contacted to obtain permission to map and eradicate weeds on their property. Already 22 homeowners have signed up for the program. Attended a workshop that provided information on establishing protocols for weed removal, many of which should be integrated into the



Noxious weed eradication will begin soon on this section of St. Helena Creek. The project is a result of collaboration within the watershed.

weed removal program. Water quality should be improved and riparian habitat protected benefiting both flora and fauna.

Partnered with the West Lake RCD to conduct a three day water quality monitoring workshop. Eighteen volunteers received training. They will begin collecting baseline data that will be used to identify problem areas. This is the third in a series of such workshops.

Collaborated with the Upper Cache Creek Watershed to produce a Quality Assurance Plan, which has been approved by the State.

Arranged to use the Montesol Ranch property for a three day water quality training session. It is an ideal location to train local residents and to stimulate community involvement. This is the fourth one in this series.



- Increased outreach activities within local schools. Participated in the yearly "Field Days in the Creek" event. This is the tenth anniversary for this function. More than 200 students received hands on watershed stewardship training on St. Helena Creek. Implemented a new "Trout in the Classroom" program.
- Began a new relationship with the Adopt-A-Watershed program. A grant has been submitted that will provide \$35,000 dollars worth of training for Land Based learning in our local schools.
- Appointed to the Sacramento River Watershed Program as a trustee. Provides an ideal opportunity to expand existing partnerships and establish new ones. Issues can be addressed on a regional basis.

Watershed Management – Attended numerous meetings with partners over the past year. Provided many opportunities to collaborate and cooperate on workshops, grants, and projects throughout the watershed. Made presentations and provided information to various stakeholder groups. Instrumental in establishing the Hamman Family Environmental Award. The first award was given to an individual who demonstrated a long-term concern for the natural environment.

The award provides an opportunity to reach out to the community and generate participation. Worked with partners to introduce "*Trout in the Classroom.*" Developed curriculum and will begin classroom instruction shortly. Arranged for



FIELD DAYS IN THE CREEK

Tenth Annual "In the Creek Field Days." Students from Middletown schools are being taught about the types of species found in Helena Creek.

use of Montesol Ranch for a three-day water quality monitoring workshop. Worked with local landowners, concerned citizens, Lake County Officials, and the State to write a grant that will restore the urban creek area in downtown Middletown.

Ecosystem Restoration – Began construction on the native plant greenhouse. Volunteers have donated equipment and other supplies. Other volunteers are learning about nursery operations so they can operate the facility themselves. Native plants will be used throughout the community to restore habitat. Applied for a grant to restore the urban area of St. Helena Creek. Sent letters to landowners requesting entry permission to map and eradicate noxious weeds.

Upper Sacramento River Exchange

Sacramento Headwaters

Amount Funded: \$163,944 **Additional Funding Obtained to Date**: \$49,381

Background

The Upper Sacramento River Watershed and surrounding Klamath-Siskiyou forests represent some of the most pristine, bio-diverse, and critical habitats in the western United States. This region faces a multitude of threats, such as hydroelectric development, resource extraction, transportation impacts, poor land use practices, human development and degraded waterways. This "headwater region" is critical to the down stream health of the Bay-Delta due to its bio-diversity richness, water abundance and ecological processes.

Benefits to the Watershed

- Implemented an on-going non-source water sampling program with the Regional Water Quality Control Board and the City of Dunsmuir. Data will be used for establishing biological baselines, and established sampling procedures in the event of a future spill or discharge.
- Completed a Community Guide to Healthy Waterways for distribution in Siskiyou County. The guide provides information on collection sites, household disposal of pollutants, alternative products, reporting, and stewardship programs.
- Coordinated an on-going citizen bio-monitoring program in partnership with the Department of Fish and Game, and established biannual



Upper Sacramento River at Tauhindauli Park. The River Exchange coordinated the removal of invasive plants and replaced them with 150 native trees and shrubs.

monitoring. Date will be established for biological baseline, and future damage assessment.

- Negotiated a community notification agreement with Union Pacific Railroad for accident disclosure in the Upper Sacramento River canyon. Improved reporting will improve community notification, and appropriate response by agencies and conservation organizations.
- Facilitated a spill response meeting and established a response protocol for responding agencies and the City of Dunsmuir. Response agencies refined protocols and established response plans and notification procedures for future spills.
- Implemented an angling survey in partnership with the Department of Fish and Game. The survey assesses angling success, angling mortality, use rates, and baseline river condition information.



Ecosystem Restoration – Worked with students and community volunteers to remove fennel and blackberry from 1½ acres of riparian habitat along the Upper Sacramento River. Planted 150 native plants in the riparian zone at Tauhindauli Park.

Coordinated a community restoration day with the U.S. Forest Service at Panther Meadows. The day's efforts resulted in the repair of degraded trails and restored watercourses. Completed trail and stream course repair on Cold Creek at the Mt. Shasta Fish Hatchery. Repaired degraded trails and surface runoff, and restored eroded stream banks. Participated in planning with the U.S. Forest Service and designed a meadow restoration project on Squaw Valley Creek.

Urban Watershed Project

San Francisco Bay Watershed

Amount Funded: \$63,600 **Additional Funding Obtained to Date**:



Background

The watershed is heavily urbanized with relatively small areas of restored ecological habitat. Many of the contaminants found in the San Francisco Bay are a result of stormwater runoff. Experience with urban runoff indicates that contaminants from road surfaces, nutrient loading from fertilizer application, and illicit dumping into storm drains contribute to the problem. Unfortunately, limited data exists and further studies are necessary. It is vital that the community work together to get a better understanding of the problems and develop appropriate strategies in order to preserve the Bay and the small areas of habitat that remain today.

Benefits to the Watershed

- Continued development of modified cooperative agreements with partners, including the National Park Service and Presidio Trust that support the restoration of Tennessee Hollow watershed and include water and macro invertebrate sampling and analysis.
- Added 4 new schools and 120 students to the educational outreach program. One group participated in eight sessions in the watershed over eight-month period. Another group of students met weekly for more than 30 weeks. All the students had an opportunity to conduct hands-on activities that not only taught them valuable skills but also improved the watershed.
- Received advance notification that the watershed coordinator had received the Crissy Field Center "Community Hero" award for work performed in the watershed for the past 10 years.
- Rebuilt water quality testing laboratory. Obtained new equipment that will be instrumental in testing and detecting contamination throughout the watershed.
- Met with educational partners, Galileo High School and San Francisco Unified School District, to double the number of students from 25 to 50 that could attend an environmental education program at the Presidio. It would allow students to meet every week for the entire school year.
- Presented educational program at the Geological Society of America international conference in Denver. Over 5,000 physical science professionals and educators attended the event. Provided a phenomenal opportunity to interact with leaders in the field and to obtain ideas for future activities, events, and educational programs.
- ◆ Joined steering committee to implement an Eco-Career day at the Presidio where over 300 students were given access to environmental job-related opportunities and workshops.

Benefits to CALFED Program

Watershed Management – Continued to expand outreach efforts within the community. Attended numerous meetings with partners and other stakeholders. Met with a coalition of 10 environmental and

community groups to discuss watershed conditions in the Presidio. Wrote over 20 comment letters discussing upcoming environmental assessment of 278 acre Tennessee Hollow watershed restoration. In addition met with the San Francisco Regional Water Quality Control Board to add Tennessee Hollow watershed to their regional sampling plan. This would provide more exposure to a greater audience and potentially increase funding opportunities. Met with several natural resource partners to discuss methods for reducing potential emerging contaminants from entering the water supply from water recycling and treatment processes. The monitoring program now covers all the creek systems within the Presidio. This was accomplished by working diligently with partners throughout the watershed. Baseline data is being collected. As additional data is collected, sources will be identified through trend analysis.

Drinking Water Quality – Worked with local partners and stakeholders to stop sewage from leaking into a local creek. Extensive coordination and collaboration were instrumental in identifying the leak and getting it repaired.

Ecosystem Restoration – Instrumental in facilitating the implementation of a long-researched project to excavate 50,000 tons of contaminated debris from a creek and "day-light" the creek in this 150-yard section of creek. Over the past year, numerous water samples have been collected and testing. This effort has been used to establish baseline data and to identify potential projects.

West Lake RCD

Upper Cache Creek Watershed

Amount Funded: \$148,414 **Additional Funding Obtained to Date**: \$156,125

Background

Upper Cache Creek Watershed (UCCW) is the most dominant hydrologic feature in Lake County, representing approximately 40% of the county's drainage area. Much of the water drains into Clear Lake, the largest natural freshwater lake within the boundaries of California. Approximately 80% of the Basin's wetlands have been lost to conversions. Nutrient rich sediment flows into Clear Lake and its tributaries, while the surrounding areas are overwhelmed with noxious weed infestations, increased fuel loads, and a reduction in wildlife habitat.

- Assisted with the formation of three new watershed groups: Cache Creek Watershed Forum, Chi Council, and Nice Watershed Council.
- Coordinated the District's 5th and 6th annual education event developing the awareness of watershed health with over 400 middle school students during the "Kids in the Creek" events.
- Worked with watershed groups and governmental agencies to plan three restoration projects on public and private lands.
- Participated in the coordination of five cleanup events to be held in October of 2005 in the UCCW.



Chi Council meeting.

- Participated in the strategic planning meetings for the mapping and eradication of non-native invasive weeds in the UCCW. In 2005, 35 individual colonies of *Arundo donax* were eradicated, equaling 19,781 square feet.
- Assisted with the second 2-day training session of volunteer water quality monitors.
- Collaborated with the Middle Creek CRMP to develop a creek assessment/survey of Middle Creek.
- Coordinated the annual display booth at the Lake County Fair. The event was extremely well attended and resulted in over 40 new volunteers signing up to support the watershed.
- Facilitated the formalization of the Nice Watershed Group to address illegal dumping, illegal OHV use, and the eradication of non-native invasive weeds in the watershed.
- Coordinated a 4-acre demonstration site to exhibit the effectiveness of goats as a biological control on French Broom.

- Coordinated the "Lake County Invasive Weed Awareness Week" tour, demonstrating the effects of non-native invasive weeds in the watershed.
- Facilitated the development of a 16-acre meadow restoration project to be implemented in July of 2005.

Watershed Management – Expanded existing partnerships and established new ones. Increased regional cooperation by working with adjoining watershed managers and coordinators. This has reduced duplication of efforts and enhanced collaboration on large projects. One example of this interaction is demonstrated by the coordinated management of non-native invasive weeds, particularly *Arundo donax* and *Tamarisk*, in the Upper and Lower Cache Creek and the Upper Putah Creek watersheds. Surveying, mapping, and eradication projects are now shared between groups and agencies allowing for the concentration of resources dedicated to these on-the-ground projects.



Eight-Mile Valley meadow restoration project field meeting.

Assisted with the formation of three new groups - the Cache Creek Watershed Forum, Chi Council, and Nice Watershed Group. These groups are comprised of local stakeholders who want to be involved in their local community. Continued outreach activities throughout the community, including giving PowerPoint presentations at the county's "Year in Review" meeting, before the Lake County Board of Supervisors, and at numerous committee and council meetings. The "Year in Review" event was hosted by the Scotts Creek Watershed Council and involved many different watershed groups. Many of the participants are organizations that actively work with the watershed coordinator. During the first year, worked with partners to submit three proposals for grants. Created and distributed maps, which can be used to make decisions within the watershed, throughout the area. Continued outreach efforts by setting up displays in several county buildings, local events, and the Lake County Fair.

Ecosystem Restoration – Worked with Chi Council's members for the scientific study of the Clear Lake hitch (the last endemic species of fish to Clear Lake). Actively involved in planning, assisting, and coordinating projects throughout the watershed. Supported Lake County Weed Management Area's work on non-native invasive weeds. Conducted the two training sessions for a local Citizens' Water Quality Monitoring Team. Provided training to volunteers for a creek survey on a 3.5-mile reach of Middle Creek, participated in the survey, and assisted with data management utilizing ARCGIS. Assisted with the development of a 16-acre meadow restoration with BLM and the Scotts Creek Watershed Council. Obtained Task Order funding with BLM for the installation of BMP on culverts in the Willow Creek watershed in Eight Mile Valley. Worked with the Schindler Creek/High Valley CRMP on the cleanup of an illegal dumpsite. Coordinated a 4-acre demonstration site for the eradication of French Broom on lands of the Robinson Rancheria Band of Pomo Indians. Coordinated a native grass-seeding project with BLM and Clear Lake High School students. Using seeds collected in previous collection activities, three students assisted with seeding two test plots on the site of a road/slide repair project. This provided an opportunity for the students to learn while getting hands-on training.

Western Shasta RCD Upper Cow-Battle / Sacramento-Lower Cow-Lower Clear Watersheds

Amount Funded: \$190,765 Additional Funding Obtained to Date:

Background

The 276,000-acre Cow Creek Watershed and the 101,000-acre Bear Creek Watershed's topography are extremely diverse, ranging from flat valleys to mountainous regions. The population has increased dramatically as people seek a more rural environment. Much of the watershed consists of commercial forestland, agriculture or rural developments. Specific issues include degraded water quality, loss of riparian habitat, excess fuel loads, noxious weeds, and the impacts to fisheries. Runoff poses a unique and difficult challenge. Several of the creeks have been identified as having excessive levels of fecal coliform during certain times of the year. Since much of the land is privately owned, it is imperative that stakeholders participate in developing solutions. The watershed coordinator is working with an already active watershed group on bringing together local residents, government entities, and concerned citizens to address the issues.

Benefits to the Watershed

- Conducted numerous outreach activities. Promoted watershed conservation, management and education including a booth at the Return of the Salmon Festival, Honey Bee Festival, Shasta District Fair and various outreach events.
- Improved communication throughout the region by attending various watershed stakeholder group meetings, interacting with governmental agencies while bringing various interest groups together to collaborate with each other.



Collecting water samples for World Water Monitoring Day.

More than 130 landowners signed agreements authorizing access to their property for watershed

related activities, such as water quality monitoring, fire rehabilitation, and continuing work on a local fuel break.

Collaborated with a local web master to produce a web page for the Bear Creek Watershed Group.

Submitted multiple articles to local newspapers highlighting issues and promoting activities within the area.

- Conducted outreach to local landowners identifying potential projects. Potential projects could include a tail water retention pond, ditch piping, fish screens, fish surveys, vegetation management, invasive weeds management, water use efficiency, in stream geomorphic channel studies and fuel breaks.
- Facilitated monthly meetings for the Cow Creek and Bear Creek watersheds.
- Presented the watershed model to students at a local elementary schools and day camps. Provided an ideal opportunity to teach students about non-point source pollution and methods for improving watershed health.
- Developed outreach materials to display around the watersheds; community maps showing watershed boundaries and different projects, fundraising flyers and power point presentations discussing the activities of the watershed groups.

Watershed Management – Increased awareness and educated local residents about watershed related issues. Involved in numerous outreach activities including setting up a booth at the Return of the Salmon Festival and the Honey Bee Festival. Both events were well attended and provided an opportunity to distribute informational brochures. Attended numerous meetings involving stakeholder groups and governmental agencies. Facilitated monthly meetings for the Cow Creek and Bear Creek watersheds. Attended a Sudden Oak Death workshop where information was provided that can be used locally to assist landowners confronting this problem. Currently developing an



WC working landowners and the UCCE to install a tailwater retention pond release board.

outreach program for the watershed. Posters have been developed, and were distributed throughout the Cow Creek Watershed. Posters feature the watershed, highlight issues, identify projects, and provide contact information.

Water Use Efficiency – Supported water quality monitoring efforts. Contractors conducting tests at 22 sites within the Cow Creek Watershed and volunteers conducted sampling at 7 locations in the Bear Creek Watershed. Awarded a grant to install three demonstration projects in the Cow Creek Watershed: A tailwater retention pond and two fish screens on large irrigation diversions. These projects will establish acceptable protocols for future fisheries and water quality/quantity enhancement projects in the watershed. We are also doing ditch piping feasibility studies on five significant ditches through out the watershed.

Ecosystem Restoration – Assisted landowners in implementing fuel rehabilitation projects. Many landowners suffered catastrophic losses due to the 10,484-acre Bear Fire in 2004. Property owners are installing fuel breaks and implementing other measures to prevent future disasters. Along with assisting landowners there have been multiple chipping days were landowners brought excess brush to central locations to have it chipped and hauled away. Worked closely with the UC cooperative Extension on data collection for fish counts and tailwater retention pond release structure. Working with the NRCS on EQIP funding to build a tailwater return pond.

Western Shasta RCD Sacramento-Upper Clear / Sacramento-Lower Cow-Lower Clear Watersheds

Amount Funded: \$202,516 Additional Funding Obtained to Date: \$29,368

Background

The watersheds are home to a variety of plants and animals, including anadromous fish. Erosion and sediment are degrading water quality in the Upper Clear Creek and reducing the capacity of Whiskeytown Reservoir. Recreationists who ride off-road vehicles in the area further exacerbate the problem. Lower Clear Creek has been severely degraded over the years. Past gravel and gold mining operations have contaminated the water jeopardizing the spawning areas for Chinook salmon and Central Valley Steelhead. Heavily wooded areas provide the ideal environment for fires; especially since fuel loads are significant. As populations increase, so does the risk of a catastrophic fire.

- Identified Upper Clear Creek's needs for fuel reduction area maintenance and began developing a plan to address the issues identified. Worked with the Shasta County Fire Safe Council to develop and distribute a Fuel Break Maintenance Brochure.
- Facilitated communication among agencies and community members regarding French Fire rehabilitation efforts. Prepared copies of Clear Creek Watershed land management documents and delivered them to French Fire Burned Area Emergency Rehabilitation Team for use in developing Burned Area Emergency Stabilization Plan. Coordinated a fire restoration community meeting and distributed numerous updates throughout the community.
- Coordinated French Gulch Upper Clear Creek Resource Management meetings and facilitated outreach activities.
- Increased public involvement in watershed stewardship and education activities. Assisted with the Watershed Stewardship Days event at the Lower Clear Creek restoration site. Students studied macro invertebrates, wrote watershed poetry, and participated in a hands-on activity where they eradicated invasive plants.
- Identified Horsetown Clear Creek Preserve's need for traffic safety correction and began seeking funds. Collaborating with partners to develop a Horsetown-Lower Clear Creek Preserve Traffic Hazard Correction Project to provide a safer parking lot and gathering spot for educational and recreational events.
- Designed and installed a three-month display at the DFG regional office reception area. Highlighted the Clear Creek restoration project and provided information on invasive weed management, wildland fuel loading, and erosion control measures.
- Developing Watershed Education Lending Library (WELL). The WELL is a resource for Shasta County schools and organizations involved in watershed research and education. WELL acts as a lending library database for water education equipment and curriculum. Groups can sign out materials for research, service learning projects and field trips.



Awarded funding for Upper Clear Creek Restoration and Monitoring Community Collaborative project from the National Fish and Wildlife Foundation Nature Restoration Trust Program. Through onsite restoration and study activities, an area of riparian habitat affected by the French Fire will be managed for native plant restoration, science based-learning, and evaluation of post-fire restoration efforts.

Benefits to CALFED Program

Watershed Management – Continued to expand existing partnerships and establish new ones. Attended numerous meetings and worked with partners to plan and conduct workshops and other events. Hosted an Adopt-A-Watershed Northern California Science Alliance meeting, which included teachers, representatives from Adopt-A-Watershed, Turtle Bay Exploration Park, Whiskeytown Environmental School and DFG. This event significantly contributed to the exchanging and sharing of information among agencies and science educators. Participated in Shasta College School of Natural Resources Advisory Board meetings, an ideal environment to establish new partnerships. Facilitated and coordinated both the French Gulch – Upper Clear Creek Resource Management Group community meetings and the board meetings every month.

Set up booths and conducted outreach activities at the *Shasta District Fair, Return of the Salmon Festival and the Honeybee Festival* where a combined estimate of more than 11,000 people attended the events. Provided a phenomenal opportunity to interact with many local residents and stakeholders, distribute written materials regarding invasive weed management, wildland fuel loading, and erosion prevention measures. Demonstrated the watershed model to visitors to educate them on how everyday activities have an impact on their watershed. Also showed the model to several classes in the local schools.

Ecosystem Restoration - Worked with willing landowners on fuel breaks throughout the watersheds. Coordinated a Valley oak acorn collection and propagation project. Chrysalis Charter School students collected and potted over 500 Valley oak acorns and 150 mixed species native acorns that will be used in restoration projects throughout the area. Assisted in improving watershed conditions by coordinating invasive weed removal projects in Lower Clear Creek Watershed restoration area through service-learning activities involving Chrysalis Charter School students. Participated in the Sacramento River Watershed Program (SRWP) "Monitoring for Whole Watershed Health" workshop. The goal of the workshop was to identify possible indicators for watershed health. Obtained 99 signed landowner agreements authorizing the RCD to perform rehabilitation projects on private land to stabilize potential erosion areas affected by the French Fire, which resulted in thirteen task orders from the Bureau of Land Management. Tasks completed included installment of five k-rail structures and eleven sandbag barriers, two miles of floatable debris removal, twenty-five miles of road monitored for effective drainage, approximately one mile of ditch clean out and two cultural resource sites stabilized.

Collaborated with local charter school in the submission of a proposal to the CA Fire Safe Clearinghouse for funding a greenhouse and propagation project. Chrysalis Charter School desires to propagate native flora for planting in burned areas. If funded and implemented, this project would tie in nicely with the Community Collaborative Project and could be useful in future restoration efforts.

Westside RCD Upper Los Gato-Avenal Watershed

Amount Funded: \$106,614 **Additional Funding Obtained to Date**: \$58,500



Background

The Arroyo Pasajero watershed and the adjacent Domengine watershed are substantially impaired due to natural geologic erosion, which is accelerated by the decline of rangeland and native riparian vegetation. Significant rainfall events create major floods that move massive amounts of sediment, containing naturally occurring asbestos and other constituents, to the valley floor. Floodwaters threaten the integrity of the California Aqueduct and reduce the water quality of aqueduct deliveries to downstream water users.

Benefits to the Watershed

- Acted as a liaison between DWR, CALFED and CRMP landowners regarding CEQA issues for an implementation grant. Secured Sustainable Conservation and Alnus Ecological to assist with these issues. Meet regularly with Sustainable Conservation to help develop a permitting program for the CRMP.
- Marketed the Arroyo Pasajero CRMP program to other agencies and programs by attending meetings and workshops, and by making presentations. Also provided information about the CRMP's program to the Secretary for the Resources Agency.
- Assisted DWR with purchasing equipment to enhance stream flow monitoring.
- \clubsuit Gathered and compiled data from rain gauges located throughout the watershed.
- Began the planning process for a watershed awareness summit to be held during May, which is designated Watershed Awareness Month.

Benefits to CALFED Program

Watershed Management – Activated a watershed planning grant for Domengine Wateshed by developing a contract for Sage Associates' work and solicited a landowner for a ranch plan.

Water Use Efficiency – Applied for grants to remove tamarisk from stream banks and replace them with native species.

Ecosystem Restoration –Manage a tree bank at Coalinga High School where students propagate native tree cuttings that are later planted in riparian areas to provide stability to stream banks. / Coordinator is researching and developing a database of threatened or endangered species in the watershed as a resource to landowners to assist them with project implementation and permitting.

Yolo County RCD

Lower Cache Watershed

Amount Funded: \$229,662 **Additional Funding Obtained to Date**: \$36,000

Background

Capay Valley is a sub-watershed of the Lower Cache Watershed. Capay Valley is a small agricultural valley bounded on its east and west sides by rugged rangeland. The valley floor is characterized mostly by small, privately owned parcels on low, flat alluvial soils. Agricultural crops include tree fruit and nut crops, permanent vine crops, fresh market and processing vegetable crops, and grains crops. The Capay Valley Watershed Stewardship Plan identifies the primary resource concerns as upland and creek bank erosion, noxious weed management, water quality, and permitting hindrances to conservation work.

- Promoted local native plant propagation by educating landowners on native plant propagation techniques at the September Cache Creek Watershed Stakeholders Group meeting.
- Coordinated with local authorities to obtain permits for bank stabilization projects along Cache Creek.
- Increased the amount of land with conservation practices by facilitating compromises between a landowner and the farmer leasing the property.
- Increased awareness of safe pesticide application by supplying herbicide training materials to landowners conducting weed control in a conservation project area.
- Increased interest and awareness in tamarisk and *Arundo* control by recruiting landowners along Cache Creek to partner in a grant proposal to control tamarisk along the creek.



A team consisting of the watershed coordinator, landowners, and a landscape architect student assessing a design for a whole farm conservation plan that the student prepared illustrating the conservation practices that the landowners envision implementing on their property. This is part of an annual 2-day Farm Conservation Planning Workshop put on by the Yolo County RCD in cooperation with Solano RCD and UC Davis. Each workshop typically serves between 10 and 15 local farmers and landowners.

- Hosted a tour of weed infestation areas for representatives of a local funding agency in an effort to recruit funding.
- Supported local landowners to organize a new tributary group and helped them apply for funding.
- Fostered support for local ranch road maintenance by meeting with county officials to discuss options.



- Coordinated volunteers for erosion control and revegetation projects in the watershed. Projects included installing willow wattles to control erosion on property in Rumsey, and planting native vegetation for wildlife habitat on the County Road 45 project with the help of the SLEWS program.
- Coordinated and helped present a Conservation Planning Workshop in March. The workshop resulted in three ranch plans being developed for landowners in Capay Valley.

Watershed Management – Held repeated meetings with landowners in the Hamilton/Cross Creek subwatershed, coordinated with the U.S. Fish and Wildlife Service and held meetings with local agencies in regard to a WCB grant for invasive species control. Also facilitated the signing of landowner agreements and project implementation. Coordinated with a researcher from UC Berkeley to obtain digital imagery resources that have been developed through collaborations with Cache Creek Conservancy, USDA Ag Research Service Biological Control and UCB. The information is being used to help landowners strategize weed eradication efforts along Cache Creek. Participated in the Cache Creek Watershed Forum and supported the group by helping to secure funding. Articles were submitted to local papers for Cache Creek Watershed activities.

Ecosystem Restoration – Met with staff from Cache Creek Conservancy, Audubon, the Rumsey Rancheria, and Yolo County to start developing a proposal for tamarisk control and revegetation for submittal to the Wildlife Conservation Board Riparian Habitat Conservation Program. The County Road 45 project created a grassed waterway to help control erosion and reduce sediment. Coordinated three Garbage Clean-up Grant sites that were planted with native vegetation. Coordinated with a landowner the implementation of willow pole planting.

Yolo County RCD

Lower Sacramento Watershed

Amount Funded: \$188,026 Additional Funding Obtained: \$1,024,008

Background



Willow Slough is a subwatershed of the Lower Sacramento Watershed. The Willow Slough Watershed consists of hilly rangeland and relatively flat valley farmland used for fresh market and processing vegetables crops, row and field crops, tree fruit and nut crops, permanent vines, pasture and grazing land. Primary resource concerns in the region are flooding, soil erosion, sedimentation, water quality, non-native invasive weeds and wildlife habitat.

Benefits to the Watershed

- Planned and conducted four landowner workshops with topics covering wildlife friendly water structures, long-term maintenance of restoration sites, and conservation planning (parts I and II). Total attendance was approximately 70 landowners.
- Identified project location and installed native planting along Little Lamb Valley Slough. Cooperated with the SLEWS program to complete the project. Native trees and shrubs were planted on one field day, and gully protection, deer-cage construction/installation and blue bird box mounting was conducted on the second field day. This project established a connection between two other separated



Volunteers in the SLEWS program place netting for gully protection on property along Little Lamb Valley Slough.

plantings along the slough, and a fourth landowner has been contacted to extend the plantings even further.

- Initiated conservation planning with a landowner along Airport Slough (south central Yolo County) who is attempting to recruit two to three adjacent neighbors.
- Developed a positive working relationship with the district manager of the Yolo County Flood Control and Water Conservation District. Completed a vegetation pilot project on YCFCWCD's Chapman Reservoir with help from local partner Audubon California Landowner Stewardship Program.
- Partnered with the county to develop an Arc/GIS map of installed regional conservation practices to identify areas of need and promote resource sharing by partners. Also helped to develop a Yolo County sub-watershed delineation map.

- Made several presentations about watershed issues at local meetings and conferences (e.g. California Society for Ecological Restoration, CARCD and the Rotary Club).
- Scheduled two landowner workshops on water use efficiency and pump efficiency for this spring in cooperation with the Mobile Water Lab and Solano RCD.

Watershed Management – The coordinator assisted in organizing and participated in the regional Conservation Summit. Worked with Solano RCD, the local NRCS office, Audubon California Landowner Stewardship Program, and the Center for Land-Based Learning to conduct an intensive, two-part farm conservation planning workshop and developed conservation plans and funding options for ten landowners. Participating at the formative level with the new Delta RC&D Council and Yolo Basin Water Quality Group. Co-drafted a small watershed project proposal along several miles of Chickahominy Slough subwatershed. Actively participated in the local Water Quality Coalition (RWQCB Conditional Ag Waiver Program).

Yuba County RCD Lower Feather / Lower Yuba / Lower Bear Watersheds

Amount Funded: \$165,096 Additional Funding Obtained to Date: \$5,000

Background

The Yuba River and Lower Bear River pass through Yuba County ultimately delivering water to the Feather River on the county's western border. Water quality is a major issue in these watersheds with Diazinon, an organophosphate, used in agricultural operations, being a common pollutant in these rivers. Rural and urban development in the upper watersheds is causing increased runoff and sediment transport in the lower drainage areas. And flood damage on irrigated lands is causing increased erosion.

- Assisted with the formation of the Butte-Yuba-Sutter Sub-Watershed Coalition. The coalition is generating support for the Ag Waiver program and conducting monitoring on sites affecting the Lower Feather River Watershed.
- Taught four science classes at Sutter Union High School. The instruction focused on the importance of water quality and monitoring, and included in-class analysis of water samples taken from three local sources (Feather River, Wadsworth Canal, and school tap water). The analysis determined the samples' turbidity, dissolved oxygen, temperature and pH. A discussion on the health of the local watershed and its impact on the community's economy and culture followed the water analysis.



Coordinator Ryan Bonea (center) attending DOC watershed training workshop.

- Developing an Oak Woodland Management Plan for Yuba County that will promote the preservation of oak timberland through improved urban and rural management practices and future conservation easements.
- Obtaining funding to carry out an education and outreach program to bridge language, cultural and other barriers that hamper immigrant landowners' participation in various agency technical assistance and cost-share programs.
- Developing an education garden at Dobbins Elementary School. The garden will utilize native plants that are drought tolerant to help teachers, students and their parents understand the importance of water conservation. A signboard will display a poster that explains the water cycle using the local watershed as an example.



Developed a website for the RCD that demonstrates the goals and objectives of the district, and the progress the coordinator is making towards improving water quality in the Feather River. The site may be found at: www.co.yuba.ca.us/ycrcd

Benefits to CALFED Program

Watershed Management – Facilitated a stakeholder meeting in October to develop a watershed assessment plan and address priority cleanup sites along waterways in Yuba and Sutter Counties. In attendance were representatives from Yuba County RCD, Sutter County RCD and several local and state agencies. Working with Jayne Battey, PG&E, and the Pacific Forest and Watershed Stewardship Council to allow Yuba County RCD to become the caretaker of a 40-acre parcel of native woodland southwest of Englebright Reservoir (part of bankruptcy settlement).