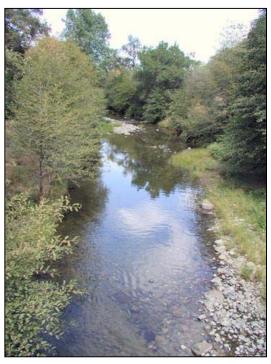
California Department of Conservation

2004-07 Watershed Coordinator Grant Program



South Fork Elder Creek, Tehama County

Ninth Quarter Report March 30, 2005

California Bay-Delta Authority Interagency Agreement #4600002373



Summary of Grant Program

This report covers the period of October 1, 2004 to December 31, 2004. Information received from the grantees has been reviewed by the DOC staff and is presented in this report. Also included in this report are two tables. Table 1 summarizes the coordinators' accomplishments and activities during the current quarter. Table 2 summarizes the total amount of additional funding obtained through the efforts of the coordinators since the start of the grant program.

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

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

Over \$8.5 million in additional watershed funding has been secured by the coordinators since the start of the grant program. This additional funding is the result of grant writing and fundraising activities conducted by the coordinators.



Watershed coordinators receiving field training at the DOC workshops

- Six watershed cleanup events were held, resulting in the removal of hundreds of pounds of trash from local watersheds and involving dozens of community volunteers.
- Forty-two (42) outreach events, focusing on educating the public about local watershed issues, were held at public venues such as county fairs and local festivals.
- Forty (40) restoration projects were in progress or completed. Restoration projects included bank stabilizations, fish ladder installations, barrier removals, etc.
- Eleven workshop/training sessions were conducted on a range of conservation issues including water monitoring, non-native invasive species, and the agricultural waiver program.

In late November and early December, in partnership with CBDA, CARCD, and NRCS, we coordinated a series of training workshops, geared for watershed coordinators, titled "Tools and Methods of Watershed Conservation." These workshops covered topics such as watershed stewardship, meeting facilitation, communication techniques, conservation corridor planning, and permit guidance. The workshops were held in Redding and Fresno and included field exercises. The trainings were well attended with 24 coordinators present at the Redding workshops, and 22 coordinators participating at the Fresno workshops.

The workshops included a number of group activities and role-playing scenarios to give participants an opportunity to practice their new



DOC watershed coordinator training workshop in Redding

skills and build partnerships. Surveys completed by participants at the end of the workshops gave high marks to all training sessions and instructors. Coordinators praised the usefulness of the training sessions and the excellent cooperation between agencies to present these highly successful workshops.

Table 1: Quarterly Accomplishments

Categories	Total	Watershed / Location
Public Education / Outreach Events Conducted	42	
Watershed Cleanup Events Conducted	6	Kirker Creek, San Joaquin River, Kelsey Creek
Workshop / Training Events Conducted	11	
Watershed Assessments / Plans Worked On or Completed	11	Bear Creek, Ulatis-Dixon Sub-watersheds, Nathanson Creek, Lower Feather River, Upper Carson River, Arroyo Seco, Battle Creek, Deer Creek, Carpinteria Creek, Sierra Valley Watershed
Citizen Water Quality Monitoring Programs Created or Data Collected	20	Upper Merced River, Carneros Area (Napa County), Lake Berryessa, Big Chico, Cherokee Watershed, Traverse Creek (sub-watershed), Wolf Creek, Redwood Creek
K-12 Education Curriculum Developed	8	
Watershed Websites Created / Updated	7	
Restoration Projects Planned or Conducted	40	Pennington Creek, Arroyo Grande Creek, Sulphur Creek, Strentzel Meadow, Upper Merced River, Heath Canyon Creek, Spring Creek, Murphy Creek, Upper Sacramento River, East Fork Carson River, Middle Fork Mokelumne River, Little Deer Creek, Traverse Creek, Beale AFB, San Francisquito Creek, Carpinteria Creek, San Jose Creek, Little Last Chance Creek, Carman Creek
Watershed Materials (brochures, maps, newsletters, etc.) Published	15	
Watershed Tours Conducted	10	Arroyo Grande Creek, Ballona Creek, Malibu Lagoon, Cache Creek, Los Angeles Watershed, Little Chico Creek, Upper Mokelumne River
Conservation Plans Developed	3	
Best Management Practices Implemented	11	
Invasive Weed Removal Projects	7	San Joaquin River, Upper Sacramento River, San Joaquin River
New Stakeholder Groups Established	6	Hamilton Creek, Honcut/Lower Feather River, Concow Watershed
Technical Reports / Databases Created	10	
Regional Coordination Teams / Technical Review Committees Created	2	
Fuel Break Projects Worked On or Completed	2	
Technical Support Provided to Landowners or Local Agencies	12	
Water Irrigation Research, Monitoring or Data Collection Projects Worked On	3	Kirker Creek

Table 2: Additional Funding Requested / Awarded to Date

Grantee Name	Cumulative Requested	Cumulative Awarded
Alpine County	\$10,000	\$4,000
Arroyo Seco Foundation	\$22,256	\$22,256
Battle Creek Watershed Conservancy	\$642,380	\$635,980
Butte County RCD	\$173,147	\$144,450
Central Modoc RCD	\$57,500	\$57,500
Central Sierra RC&D	\$1,072,000	\$0.00
Chowchilla-Red Top RCD	\$2,100	\$2,100
Coastal San Luis RCD	\$653,802	\$653,802
Colusa County RCD	\$1,084.00	\$46,634
Contra Costa Public Works Department	\$338,766	\$0.00
Contra Costa RCD	\$29,874	\$29,874
Deer Creek Watershed Conservancy	\$0.00	\$0.00
Earth Resource Foundation	\$26,500	\$6,500
East Merced RCD	\$2,371,733	\$2,350,000
El Dorado Irrigation District	\$5,000	\$0.00
Fall River RCD	\$0.00	\$0.00
Friends of Deer Creek	\$1,425,500	\$197,610
Georgetown Divide RCD	\$43,500	\$18,157.02
Glenn County RCD	\$0.00	\$0.00
Los Angeles & San Gabriel Rivers Watershed Council	\$165,945	\$128,535
Mariposa County RCD	\$475,905	\$475,905
Mojave Desert / Mountain RC&D	\$330,000	\$0.00
Mountains Recreation and Conservancy Authority	\$14,325	\$0.00
Napa County RCD	\$3,421,267	\$818,598
Nevada County RCD	\$8,714	\$0.00
Placer County RCD	\$554,500	\$554,500
RCD of the Santa Monica Mountains	\$1,027,225	\$29,920
Sacramento Area Flood Control Agency	\$0.00	\$0.00
San Francisquito Creek JPA	\$1,172,331	\$247,311
San Joaquin County RCD	\$1,370,000	\$1,370,000
San Joaquin River Parkway and Conservation Trust	\$33,900	\$3,900
Santa Barbara County Water Agency	\$75,000	\$75,000
Sierra Valley RCD	\$25,000	\$25,000
Sloughhouse RCD	\$0.00	\$0.00
Solano RCD	\$1,346,411	\$226,450
Sonoma Ecology Center	\$2,144,822	\$112,750
Stockton East Water District	\$901,371	\$0.00
Tehama County RCD	\$72,000	\$0.00
Upper Putah Creek Stewardship	\$0.00	\$0.00
Upper Sacramento River Exchange	\$477,500	\$41,102
Urban Watershed Project	\$0.00	\$0.00
West Lake RCD	\$150,775	\$150,775
Western Shasta RCD (Sac-Upper Clear)	\$0.00	\$0.00

Grantee Name	Cumulative Requested	Cumulative Awarded
Western Shasta RCD (Upper Cow-Battle)	\$38,849	\$29,368
Westside RCD	\$175,000	\$58,500
Yolo County RCD (Lower Cache)	\$114,500	\$36,000
Yolo County RCD (Lower Sac)	\$999,008	\$0.00
Yuba County RCD	\$1,096,816	\$0.00
Totals	\$23,066,306	\$8,552,477

Alpine County

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

Amount Funded: \$138,473

Additional Funding Obtained to Date: \$4,000

Background

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

Benefits to the Watershed

- Completed the Upper Carson River Watershed Stream Corridor Conditions Assessment. Establishes the foundation for future planning, restoration, and improvements in the watershed.
- Recruited nine volunteer water quality monitors and established three new water quality-monitoring sites.
- ◆ Identified erosion control and riparian revegetation projects and partnerships in Kirkwood Meadow, Markleeville, and Bear Valley Meadow to restore banks degraded by excessive recreation and improve water quality.
- Developed and implemented educational project with classroom and field activities involving local high school students in water quality monitoring and database management.



Volunteers planting willow stakes on the East Fork of the Carson River during the Markleeville Creek Day 2004.

Benefits to CALFED Program

Ecosystem Restoration - Assisted in hosting the Fourth Markleeville Creek Day. Volunteers revegetated stream banks along the East Fork of the Carson River and removed invasive species. Raised more than \$4,000 to host the first Kirkwood Creek Day.

Watershed Management - Formed new partnerships with watershed groups and coordinators in adjacent basins collaborating in outreach and educational efforts. Applied for membership on the Alpine County Resource Advisory Committee to ensure that restoration efforts are coordinated maximizing resources. Worked with the local high school to integrate watershed management into the curriculum. Students are participating in the water quality monitoring effort and database management. Also increased the number of volunteers participating in quarterly water quality monitoring events in Alpine County. As a result, the group is monitoring physical and chemical parameters at eight sites.

Arroyo Seco Foundation

Los Angeles Watershed

Amount Funded: \$214,360

Additional Funding Obtained to Date: \$22,256

Background

The Arroyo Seco watershed is located within the larger Los Angeles Watershed. It connects the San Gabriel Mountains with downtown Los Angeles. Contamination and growing water consumption in some neighborhoods has led to tremendous stress on the watershed and increased reliance on imported water sources. Creeks, rivers and groundwater throughout the watershed are plagued with perchlorate, trash, bacteria and volatile organic compounds, leading to the closure of ten local wells and the designation of the critical spreading grounds at the mouth of the Arroyo as a Superfund site. The Watershed Coordinator Program aims to address theses critical issues though broad-based education and action programs.

Benefits to the Watershed

- More than 60 Altadena residents expanded their awareness of watershed issues and appropriate conservation measures at the "Healthy Watersheds" workshop.
- Conducted a bus tour of the watershed to provide information to stakeholders about important issues. Fifty-five people participated in the tour.
- Co-sponsored a four month exhibition, "Flowing Water, Fruitful Valley," on the history of the watershed and local water development at the Pasadena Museum of History.
- Participated in an event at the Pasadena Museum of History where more than 100 people learned about the importance of water in Native American culture.
- Supported the City of Pasadena's watershed restoration project by providing local residents with information on habitat restoration.

Healthy A homeowner's guide to taking care of your bit of the watershed... LEARNABOUTYOURWATERSHED! How our watershed functions... Where our water comes from... Help in creating a water-wise garden... Ways to conserve water in your home... Although the waterwise garden... Ways to conserve water in your home... Although the waterwise garden... Ways to conserve water in your home... Although the waterwise garden... Ways to conserve water in your home... Although the waterwise garden... Ways to conserve water in your home... Although the waterwise garden... Ways to conserve water in your home... Although the waterwise garden... Ways to conserve water in your home... Although the waterwise garden... The water wat

Benefits to CALFED Program

Watershed Management – The Council of Arroyo Seco Organizations (CASO) has developed ongoing forum for communication and collaboration about watershed related issues.

Water Management – Co-sponsored and developed content for the Water History Exhibit at the Pasadena Museum of History. More than 1,500 attended the exhibition. Displays included information on hydrology, watershed management, contamination, groundwater issues and the Raymond Basin, CALFED, and water conservation.

Drinking Water Quality – Promoted improved water quality by completing Arroyo Seco water quality baseline sampling with LA County Public Works and coordinating with North East Trees on development of Best Management Practices and storm water projects. This information will also be used to implement a citizen-monitoring program and develop outreach programs.

Ecosystem Restoration – Advanced environmental stewardship programs by working with North East Trees to identify and develop habitat projects in the Arroyo Seco. Co-sponsored the "*How Pasadena Fits into the California Water Picture*." Emphasized water conservation and ecological restoration.

Battle Creek Watershed Conservancy

Upper Cow-Battle Watershed

Amount Funded: \$87,918

Additional Funding Obtained to Date: \$635,980

Background

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

Benefits to the Watershed

- Conducted outreach activities at the Manton Apple Festival. More than 5,000 people attended. The display included photos and provided the opportunity to distribute informational brochures to stakeholders from throughout the watershed.
- Organized and facilitated a meeting where the Coleman National Fish Hatchery steelhead supplementation program was discussed. Provided an ideal forum for discussion between partners and stakeholders.
- Worked with the Manton Volunteer Fire Department on a plan to hold a workshop to develop a comprehensive fire plan for the community.



North fork of Battle Creek

Set up an outreach booth at the *Return of the Salmon Festival* at the Coleman National Fish Hatchery. Provided local residents with information and materials.

Benefits to CALFED Program

Watershed Program - Acted as liaison between landowners and government agencies so that surveys can be done on private property. Worked with the Tehama County Fire Safe Council to organize workshops that address fire issues in the community. A major goal is to develop a fire plan that incorporates a fuel break to protect the Battle Creek area where salmon restoration is planned. Represented the Battle Creek Watershed Conservancy Board at the Greater Battle Creek Watershed Working Group meetings where issues concerning the Battle Creek Salmon and Steelhead Restoration Project were discussed. Coordinator acted as liaison between Conservancy Board and agencies involved in the Restoration Project. Updated BCWC website to include links to federal and state agencies involved in the Battle Creek Salmon and Steelhead Restoration Project. Worked with Kier Associates, subcontractor responsible for the KRIS Battle Creek database system, on completion plan for Version 2 of the KRIS Battle Creek Program. This program contains the Battle Creek Watershed Assessment, which will be used by federal and state agencies involved in the Restoration Project. Worked on the final draft of Proposition 50 CALFED Watershed Grant Program Grant Agreement between the State Water Resources Control Board and the Battle Creek Watershed Conservancy.

Butte County RCD

Mill-Big Chico / Upper Butte / Lower Butte Watersheds

Amount Funded: \$218,338

Additional Funding Obtained to Date: \$144,450

Background

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

Benefits to the Watershed

- Conducted four tours focusing on sub-watersheds. Provided stakeholders with information to better understand the issues confronting the community.
- Worked on forming two new watershed groups in the Honcut/Lower Feather River and the Concow Watersheds.
- Expanded the citizen-monitoring program by providing volunteers with additional training.
- Worked on a grant-writing workshop that is planned for next quarter.

Monitored and collected data at a road demonstration project
where tributaries cross a rehabilitated road. Recent rains provided an opportunity to witness first flows and the potential impact of sediment.



Tour of Little Chico Creek.
Focused on urban/rural interface
in the watershed.

Benefits to CALFED Program

Watershed Management - Conducted monthly meetings that included representatives from throughout the watershed. Facilitated collaboration and cooperation on projects and activities. Reached out to non-traditional partners including local Native American Tribes. Worked on an oak woodlands management plan of Butte County. Will allow landowners to seek funding for conservation easements and oak woodlands protection.

Water Quality - Expanded the citizen-monitoring program by providing additional training to volunteers. Continued monitoring activities on Big Chico and Cherokee Watersheds. Held presentations and a field day on dirt road rehabilitation.

Water Transfers - Hosted a tour highlighting the research being conducted on the Lower Tuscan Areas of Butte County. Described local efforts to protect and enhance the recharge area.

Central Modoc RCD

Upper Pit Watershed

Amount Funded: \$196,330

Additional Funding Obtained to Date: \$57,500



Background

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

Benefits to the Watershed

- The Upper Pit River Watershed Assessment was completed. The Pit River Watershed Alliance is now reviewing the assessment and working on strategies to address data gaps.
- The RCD's water quality monitoring program is currently being fully implemented.
- Working with the City of Alturas in the development of an urban storm water-monitoring plan.
- Successfully conducted the 2nd Annual College Student
 Watershed Tour. Twelve students from the Watershed and
 Resource Management Program at Feather River
 Community College participated. The coordinator will
 continue to develop this event as a significant outreach
 opportunity for community college students throughout the region.



College students from Feather River Community College tour a revegetation project on Witcher Creek.

- Coordinated with the Bureau of Land Management in Susanville for an in-kind contribution of 100 rolls of geo-jute erosion control netting (worth \$7,500), which was used in on-going stream restoration projects.
- ♦ Attended three meetings of the Pit River Tribal Council at the X-L Ranch and conducted four site visits to assist with local watershed issues. Also conducted four site visits to private ranches to assist local landowners deal with stewardship problems.

Benefits to CALFED Program

Watershed Management - Facilitated coordination and assistance among government agencies, other organizations, and local watershed groups (met with numerous stakeholder groups, including the Pit Tribe and NRCS, to improve coordination with upcoming projects and dealing with watershed issues). Also supported education and outreach with a student tour, and continued support and assistance in the development of the River Center's programs.

Central Sierra RC&D

Upper Mokelumne Watershed

Amount Funded: \$311,591

Additional Funding Obtained to Date:

Background

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

Benefits to the Watershed

- Nosted the Upper Mokelumne River Watershed Tour. Event was well attended and provided an opportunity to interact with numerous stakeholders from throughout the watershed.
- Supported effort to establish an education committee and a recreation committee within the watershed council to expand public outreach within the community.
- ♦ Worked with the Burson Water Committee to secure funding for a Burson Community Public Water System to replace contaminated groundwater. Many local wells are contaminated which requires the community to rely on tanker trucks for potable water.
- Conducted outreach at the Alpine County Creek Day Event and also set up a booth at the Lumber Jack Days Event.
- Initiated collaborative restoration project with CalTrans for slope stabilization and water quality protection at Highway 26 Middle Fork Mokelumne Bridge.



Alpine County School District activity in the Upper Watershed, which included students from Markleeville and Kirkwood areas.

Benefits to CALFED Program

Drinking Water Quality - Established a local watershed Volunteer Water Quality Monitoring Program. Reviewed historical water quality monitoring and watershed assessment projects to identify needs within the community. Held four public meetings to provide information and support to local agriculture irrigators for the formation of local agriculture irrigation advisory committees and develop coalition strategies. Participated in numerous outreach activities to educate and communicate with stakeholders from throughout the watershed. Worked with CalTrans to reduce sediments from highway construction activities.

Science - Submitted grant proposal to fund temperature and flow characterization study for the Upper Mokelumne River Watershed.

Watershed Management – Completed three public outreach events that have improved public awareness and stakeholder interactions. Attended Upper Mokelumne Watershed Council meetings, which promote collaboration and integration among watershed groups.

Chowchilla-Red Top RCD

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

Amount Funded: \$176,430

Additional Funding Obtained to Date: \$2,100



Background

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

Benefits to the Watershed

- Presented and distributed watershed, water conservation, and invasive/noxious weeds information at seven community group meetings.
- Assisted the Central Sierra Watershed Committee in the development and printing of a Property Owner Brochure, which included information on water conservation, fire protection, septic systems, erosion, and other topics to be mailed out to all residents in Mariposa and Eastern Madera County along with distribution by hand at various business, events, and fairs.
- Prepared and submitted an application to get funding for a "Creek Stewardship Day."



Students being trained in water – quality monitoring

- Wrote an article for the local newspaper on "Well Testing Program" offered by Madera County and the Central Sierra Watershed Committee. Provides landowners an opportunity to test their well water for contaminants.
- Worked with the San Joaquin River Parkway and the City of Chowchilla to partner to eradicate *Arundo donax* along rivers within the watersheds.

Benefits to CALFED Program

Watershed Management - Attended several meetings for the water transference plan from Redinger Lake to the mountain area to assist with surface water issues. Participated in stakeholder meetings. Volunteered as committee chair for two projects with the Central Sierra Watershed Council (CSWC). Worked with the Forest Service, Oakhurst River Parkway, and the Madera County Fire Safe Council to set up partnerships with projects.

Water Management - Spoke at community organization meetings discussing and distributing information on "50 Ways to Conserve Water."

Coastal San Luis RCD

Central Coast Watershed

Amount Funded: \$165,977

Additional Funding Obtained to Date: \$653,802

Background

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

Benefits to the Watershed

- Helped to plan and coordinate the California Association of Resource Conservation District (CARCD) Annual Conference. The conference was attended by more than 250 people and included panel discussions and workshop sessions that focused on resource conservation. A field tour (with over 50 participants) highlighting the district's watershed conservation practices and strategies was held.
- The Pennington Creek Highway 1 Baffle Modification Project was completed and is going as planned according to the project engineer and CDFG fisheries biologist. The project required collaboration between the RCD, Department of Fish and Game, Morro Bay National Estuary Program, NOAA Fisheries, Caltrans, and the California Conservation Corps (CCC).
- Developed a display and promotional information for the Envirothon and the CARCD Speak-off Contest. The coordinator also attended and used the display at the TEECH Fair held in San Luis Obispo, which attracted K-12 environmental teachers.
- Helped the San Luis Obispo Land Conservancy prepare a fish passage grant proposal.
- Assisted with permitting, funding, and the establishment a monitoring program for the CCC to conduct vegetation management within the Arroyo Grande Creek to reduce flooding and enhance tree shading of the active channel.



Arroyo Grande Creek before clearing project



Arroyo Grande Creek after clearing project

Benefits to CALFED Program

Watershed Management – Funding in the amount of \$637,802 was awarded to the RCD during the quarter. This funding resulted from coordination and collaboration from multiple government agencies, watershed stewardship groups, stakeholders, and landowners.

Water Use Efficiency – Three conservation plans were developed and 11 BMPs were installed on properties throughout the watershed. These BMPs increased water use efficiency by reducing sedimentation and non-point source pollution.

Colusa County RCD

Upper Cache Watershed (Sub-watershed Bear Creek)

Amount Funded: \$127,317

Additional Funding Obtained to Date: \$46,634



Background

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

Benefits to the Watershed

- Facilitated a meeting with the BLM to discuss soil erosion, mercury issues and possible ways to move forward with a watershed assessment.
- Corresponded with John Green, a geomorphologist with Pacific Watershed Associates (PWA), to bring in PWA for grant writing and watershed assessment work.
- Organized and supervised revegetation work with American Land Conservancy (ALC) and Wilbur Hot Springs (WHS) to enhance a riparian area "Caretaker's Creek" as part of a post-tamarisk eradication program.
- Initiated a revegetation research project with ALC and WHS using four key riparian floodplain plant species: mugwort, ambrosia, narrow-leaf goldenrod, and creeping wildrye.
- Worked with ALC, WHS and a livestock lessee to construct a livestock exclusion fence in the Sulphur Creek Valley area known for high levels of mercury and soil erosion.
- Completed preliminary data analysis for saline water irrigation research for native-grass enhancement and weed suppression at Wilbur Hot Springs in cooperation with NRCS and WHS.
- Attended the 2-day coordinator training workshops sponsored by DOC and CARCD.

Benefits to CALFED Program

Watershed Management – Began initial work to produce a watershed assessment to address soil erosion and mercury issues in Bear Creek Watershed. Helped to organize a planning team to conduct the assessment. New partnerships with USDA and USDA-NASA centered on cooperative ecosystem restoration programs were also initiated.

Ecosystem Restoration – The coordinator facilitated major new riparian restoration and revegetation research in Sulphur Creek watershed, a tributary to Bear Creek. In cooperation with NRCS, WHS and ALC, the coordinator helped complete the first year of saline water irrigation research and data analysis for native-grass enhancement and exotic grass suppression on Wilbur Hot Springs property.

Contra Costa Public Works Department

San Joaquin Delta Watershed

Amount Funded: \$215,959

Additional Funding Obtained to Date:

Background

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

Benefits to the Watershed

- Met with partners to discuss the excessive sedimentation of Kellogg Creek and the impact on Delta water quality and the Water District's intake structure on Old River. Discussed and developed a strategy to obtain funding. Separate but complementary grant applications were submitted to the State Water Board's Agricultural Water Quality Grant Program by the Contra Costa RCD and the Contra Costa Water District.
- Participated in a local work group meeting hosted by NRCS, which brought together farmers, ranchers, and private landowners. Provided an opportunity to network and meet new stakeholders.
- Confirmed existence of spawning fall-run Chinook salmon in Marsh Creek by organizing two community volunteer events to monitor fall-run Chinook salmon in Marsh Creek.



Surveyors preparing for a land survey of 200 acres of irrigated farmland. Information will be used to implement BMPs.

- ♦ Increased awareness of Marsh Creek's importance to the community by getting front-page story on salmon and monitoring in local press.
- Partnered with the City of Brentwood and Contra Costa Flood Control and Water Conservation District (CCFCWCD) to improve the design of a local housing development to incorporate and protect Marsh Creek.

Benefits to CALFED Program

Drinking Water Quality/Water Use Efficiency - Worked with partners and a landowner to identify the type and location of beneficial management practices that would assist in the implementation of the Rock Slough drainage management project. Conducted a scoping meeting with other organizations to identify sedimentation problems along Kellogg Creek.

Watershed Management - Assisted Friends of Marsh Creek Watershed to monitor salmon, restore riparian habitat, and increase the awareness about Marsh Creek within the local community.

Ecosystem Restoration - Worked with developers, City of Brentwood, and CCFCWCD on a plan to restore 1,900 linear feet of riparian habitat along Marsh Creek. It will increase habitat for threatened species, rehabilitate the natural hydrology, and protect the local community.

Contra Costa RCD

Suisun Bay Watershed

Amount Funded: \$188,730

Additional Funding Obtained to Date: \$29,874



Background

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

Benefits to the Watershed

- Planned and conducted a Creek Cleanup and Restoration Day in the Kirker Creek Watershed. Over 150 volunteers removed 2.5 tons of trash and invasive weeds from the creek.
- Watershed cooperators completed a GPS survey of the lower segment of Kirker Creek and presented the findings at a watershed stakeholders meeting.
- Assisted in planning seven restoration days at the Strentzel Meadow/Mt. Wanda restoration site in the Alhambra Creek Watershed. Cooperators removed invasive plants and replaced them with native species, and applied mulch to reduce weed growth at Dow Wetlands.



A volunteer removes trash and debris from Kirker Creek.

- Provided grant writing support to several local stakeholder groups resulting in \$24,500 being awarded for projects in the Alhambra Creek and Kirker Creek Watersheds.
- Updated and maintained the watershed website.
- Attended the watershed coordinator training workshops sponsored by DOC and CARCD.
- ♦ Wrote, edited, and distributed a regional watershed newsletter.

Benefits to CALFED Program

Watershed Management – Worked with the local school district to integrate restoration activities into the curriculum, and attended meetings of several conservation/watershed groups to improve their coordination and collaboration.

Ecosystem Restoration – Facilitated several restoration days and a creek clean-up day that resulted in the removal of invasive plants, the planting of native species in riparian and upland areas, and the collection and removal of trash and debris from an active creek system.

Deer Creek Watershed Conservancy

Mill-Big Chico Watershed

Amount Funded: \$192,099

Additional Funding Obtained to Date:



Background

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

Benefits to the Watershed

- Reviewed objectives identified in the Watershed Management Strategy. Began to outline and revise priorities to ensure that stakeholder needs are addressed.
- Began to collect information and data from resource agencies to use in researching funding opportunities within the watershed.
- ♦ Worked with the Tehama RCD to expand the Tehama/Glenn Fire Management Plan to include residents in the area. The watershed coordinator will ensure that stakeholder issues and concerns are considered when developing the fire plan.
- Held discussions and facilitated field trips with representatives of the USFS to identify and prioritize erosion and sedimentation worksites for Phase II of the Deer Creek Watershed Erosion and Sedimentation Project.
- Coordinated project management activities for the lower Deer Creek Restoration and Flood Management Project. Working on drafting, revising, and submitting required documentation to move the project forward.

Benefits to CALFED Program

Watershed Management – Contacted former Watershed Action Committee members and conducted stakeholder outreach activities in an effort to energize and create interest in watershed issues. Held discussions and facilitated meetings with local stakeholders to discuss water quality issues and potential solutions including water exchange and water use efficiency programs. Facilitated stakeholder meetings and worked with local governments and other agencies to improve coordination, cooperation, and collaboration.

Earth Resource Foundation

Santa Ana Watershed

Amount Funded: \$178,135

Additional Funding Obtained to Date: \$6,500

Background

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

Benefits to the Watershed

- Participated in the Human Broom Beach Clean up. More than 125 high school students participated and picked up over 300 bags of trash. Provided an ideal opportunity to teach future stakeholders about watershed issues, including on how river, storm drains, streets and oceans are interconnected. The students also participate in workshops on renewable energy, water conservation, restoration, Native American art, ocean pollution, and steelhead trout.
- ♦ Identified four restoration projects. Began working with partners to get funding and develop the implementation plan necessary to move the projects forward.



Students from Pico Elementary School plant native plants as part of Bridge Week

Organized World Water Monitoring Day for high school students. More than 20 students participated.

Benefits to CALFED Program

Watershed Management – Held three workshops where the Santa Ana River Watershed Alliance (SARWA) began developing a plan to address specific concerns and issues in the watershed. Developed and distributed sponsorship packet for Santiago Creek Week activities. Provides an opportunity to interact with stakeholders and partners. Also, submitted a grant to Bren School of Environmental Management for Analysis of Alternative Watershed Management Strategies addressing water conservation, water quality, and land management.

Ecosystem Restoration – Planned, organized, designed and planted native garden at Pico Elementary School, involving more than 100 students and 30 volunteers.

East Merced RCD

Middle San Joaquin-Lower Merced-Lower Stanislaus Watershed

Amount Funded: \$286,957

Additional Funding Obtained to Date: \$2,350,000



Background

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

Benefits to the Watershed

- Facilitated a summit meeting between major Merced River advocacy organizations to increase collaboration between agencies and other stakeholders.
- Facilitated a Merced River Stakeholders group meeting.
- Planned and scheduled irrigated lands training workshops for local landowners. Test kits will be distributed as part of the workshops.
- Coordinator partnered with Community Alliance with Family Farmers to conduct a field trip to the confluence of Dry Creek and the Merced River to examine a sedimentation problem with local officials.
- Worked towards increasing watershed funding by submitting three Proposition 50 grant proposals.
- Working with Sustainable Conservation regarding grant funding to work on permit coordination.
- Attended DOC watershed coordinator training workshops.

Benefits to CALFED Program

Watershed Management – Helped to establish new partnerships with UC Merced and Merced River Education Initiative and facilitated the first biannual Merced River Summit Meeting. Also assisted three partners (East San Joaquin Water Quality Coalition, Department of Pesticide Regulation, and San Joaquin County RCD) in preparing separate Proposition 50 grant applications for water quality projects on Mustang Creek.

El Dorado Irrigation District

South Fork American Watershed

Amount Funded: \$214,157

Additional Funding Obtained to Date:

Background

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

Benefits to the Watershed

- Finalized the American River Watershed Portal for the benefit of all users interested in the activities, data, and projects within the watershed.
- Worked with the Regional Watershed Authority, an entity comprised primarily of water purveyors in the Sacramento area, to develop an Integrated Water Management Plan that includes components of watershed management.
- Partnered with the Sierra Environmental Business Council, Sierra

 Nevada Alliance, and the Sierra Nevada Water Caucus to develop an

 Integrated Regional Water Management Plan for a pilot sub-region within the Sierra Nevada.
- Began drafting a proposal for a GIS interactive mapping system for the American River Basin.
- Assisted with outreach activities for the South Fork Watershed Group to broaden stakeholder participation to the agricultural community and other water purveyors in the region.
- ♦ Worked with the American River Conservancy to implement the Spivey Pond Restoration Project.

Benefits to CALFED Program

Watershed Management – Conducted outreach activities throughout the watershed. Partnered with government agencies and watershed groups on a GIS interactive mapping system to establish baseline water quality data. Worked with America River Conservancy to implement the Spivey Pond Restoration Project.

Water Use Efficiency - Developed a draft recognition program to reward homebuilders and developers who incorporate water efficient methods in design, construction, and landscape projects.

Drinking Water Quality - Assisted in preparing a water quality program that will assess the impacts of recreational structures on Silver Lake. Worked with the American River Watershed Groups, Resource Conservation Districts, and the Placer County Water Agency on a GIS interactive mapping system to establish baseline water quality data.

Water Management – Began drafting an Integrated Regional Water Management Plan for the Consumes, American, Bear and Upper Yuba watersheds. This plan will improve regional water management, increase water supply reliability, and enhance coordination between water districts.



Enjoying the American River

Fall River RCD

Lower Pit Watershed

Amount Funded: \$195,518 **Additional Funding Obtained to Date**:

Background

The Lower Pit River watershed spreads across northeastern California. Water drains into Shasta Lake and ultimately into the Sacramento River. The watershed's diverse landscape offers opportunities and challenges in aquatic, forest, and rangeland ecosystems. Invasive species and non-point source pollution impact watershed ecosystems and the resources they support. Noxious and aquatic weeds, including Eurasian watermilfoil, perennial pepperweed, and purple loosestrife obstruct water flow to hydropower facilities, reduce agricultural production, and alter ecosystem function of fish, plants, and wildlife. Tributaries to the Pit River are also impaired by non-point source pollution impacts. The Fall River is listed as an "impaired water body."

Benefits to the Watershed

- Developed draft physical and biological management plans for Eurasion watermilfoil.
- Published article in the District newsletter emphasizing noxious weeds impacts and current activities to them.
- Presented Milfoil identification, impacts, and management options at public meetings. Provided forum to meet new stakeholders and increase community involvement.
- Worked with local landowners to develop spray program for Purple Loosestrife.
- Prepared a perennial pepperweed draft management plan for the watershed.
- Conducted site visits on private property to begin monitoring for aquatic weeds and water quality.



CDFA staff scientist discussing distribution of Purple Loosestrife biocontrol agents in the Lower Pit River watershed.

Benefits to CALFED Program

Watershed Management - Coordinated University of California research staff and private landowners to develop water quality and aquatic weed monitoring. Completed draft perennial pepperweed plan for distribution to technical advisory group. Conducted Purple Loosestrife monitoring and produced map which demonstrates the positive outcomes of a successful biological program on noxious weeds. Visited private landowners and communicated opportunities to participate in the California Department of Food and Agriculture Purple Loosestrife Spray program. Participated in meetings and other outreach activities designed to build partnerships and facilitate stakeholder involvement.

Friends of Deer Creek

Upper Yuba Watershed

Amount Funded: \$196,385

Additional Funding Obtained to Date: \$197,610

Background

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

Benefits to the Watershed

- Conducted a "town hall" Mercury Working Group meeting to involve citizens and stakeholders in a restoration effort.
- Involved community volunteers to continue work on a project that will restore a quarter mile section of Little Deer Creek.
- Researched and reported on wastewater alternatives for local tertiary wastewater treatment plants.
- Created a restoration plan based on the Deer Creek Coordinated Resource Management Plan.
- Coordinated individuals to speak at a future workshop on sediment and erosion; specifically targeted upon areas of erosion and roads that contribute to sediment deposition in the creek.



Deer Creek - Nevada City

Benefits to CALFED Program

Ecosystem Restoration/Science - Partnered with professionals from the SWB, Forest Service, USGS, City of Nevada City, County sanitation officials, University of Reno and Davis, Nevada Irrigation District and invited local citizens and stakeholders to research problems of mercury and methyl mercury in the Deer Creek watershed. Continued to evaluate water quality, conduct bacteria studies, and collect information on macro- invertebrates.

Ecosystem Restoration - Involved local children and youth in creek restoration efforts.

Science - Researched and assessed physical, biological and social processes that will address and improve the wastewater treatment effluent from local treatment plants.

Watershed Management - Researched and assessed conditions within the Deer Creek watershed using the Deer Creek Coordinated Resource Plan in order to create a watershed restoration plan. Continued to partner with community stakeholders to solicit and write grant applications to secure long-term support to affect and improve conditions in the greater watershed system.

Georgetown Divide RCD

South Fork American

Amount Funded: \$123,386

Additional Funding Obtained to Date: 18,157.02

Background

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

Benefits to the Watershed

- Collaborated with the Regional Watershed Coordination Team (RWCT) and the American River Conservancy to submit proposals to the Sierra Nevada Alliance (SNA) that address protection and restoration needs throughout the watershed.
- Presented the Watershed Education Summit to the American River Watershed Group to solicit participation and to increase cooperation throughout the region.
- Entered data collected by local high school students into the World Water Quality Monitoring database.
- Facilitated the South Fork American River Watershed Group meeting. Provided an opportunity to directly address stakeholder issues and concerns.



Volunteers collect water samples for a monitoring program on the American River.

Posted information to the American River Watershed Portal, a website that allows stakeholders to access information from many different sources.

Benefits to CALFED Program

Science - Supported UC Davis researcher in writing a proposal to establish Algae sampling on the American River. Project will investigate the use of periphyton on rocky substrate as a cost-effective indicator of environmental condition and impacts in river tributary to the Delta.

Watershed Management - Completed and submitted an application for funding of Creek Stewardship Day in Traverse Creek, a priority sub-basin. Promoted local stewardship by establishing a Citizen Water Quality Monitoring Program in Traverse Creek sub-watershed. Trained school and citizen groups to began collecting and compiling viable baseline water quality and habitat data from sub-watersheds. Coordinated a community event to disseminate information on wildlife issues to people living in the urban-wild land interface in the watershed.

Ecosystem Restoration - Worked with USFS to plant native grasses as part of restoring Meadowbrook Nature Area in Traverse Creek.

Glenn County RCD

Upper Stony/Sacramento-Lower Thomes Watersheds

Amount Funded: \$78,292

Additional Funding Obtained to Date:



Background

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

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

Benefits to the Watershed

- Conducted outreach to local landowners and government agencies.
- Completed a watershed newsletter.
- Compiled agency literature pertaining to the Stony Creek watershed.
- Began developing informational handouts for watershed issues.
- Created a mailing list of landowners within the Stony Creek watershed.
- Participating with the Center for Land Based Learning SLEWS program.

Benefits to CALFED Program

Watershed Management - Coordinated planning of governmental and non-governmental organizations that are conducting water quality monitoring in and around the Stony Creek watershed.

Los Angeles & San Gabriel Rivers Watershed Council

Los Angeles / San Gabriel Watersheds

Amount Funded: \$249,854

Additional Funding Obtained to Date: \$128,535



Background

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

Benefits to the Watershed

- Supported the writing and publication of two newsletters that disseminated information on sustainable landscaping best management practices.
- Participated in the CA Department of Agriculture's Weed Management Area Committee.
- Participated in the Watershed Council's monthly Landscape Ethic Committee.
- Met with partner agency, Theodore Payne Foundation, to discuss outreach opportunities.
- Continued development of the database programming and design phases of the native plant image library.
- Prepared a project plan and wrote a pre-proposal for funding from the National Fish and Wildlife Foundation for a native seed bank facility.
- Working with staff from the Recreation and Parks Department of the City of Los Angeles on a project involving a major landscaping effort near an ecologically sensitive area. The coordinator is proposing that the city utilize native plant species in landscape planning.

Benefits to CALFED Program

Ecosystem Restoration – Development of the native plant image library/database continues and will provide landscape design and architecture firms with appropriate locally native plan information. The coordinator is also working on a multi-agency effort to establish a new seed bank, storage, and distribution facility.

Mariposa RCD

Upper Merced Watershed

Amount Funded: \$155,654

Additional Funding Obtained to Date: \$475,905

Background

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

Benefits to the Watershed

- Planned quarterly water quality monitoring events. Completed the first event with 33 trained volunteers collecting water quality data at 11 sites in the Upper Merced River Watershed.
- Coordinated a meeting between archeologists and a representative of the Mariposa Indian Council regarding planned actions to protect Bower Cave from unauthorized access.
- Completed an action plan for Jordan Creek/Bower Cave.
- Restored a two and one-half mile stretch of the South Fork Trail between Hites Cove and the Savage-Lundy Trail junction. Ten volunteers worked for eight hours removing brush, cutting back poison oak, and repairing the trail.
- Established photo monitoring points at three BLM recreational sites.
- Attended DOC watershed coordinator training workshops.



Volunteers remove brush and poison oak from the South Fork Trail of the Upper Merced River

Benefits to CALFED Program

Ecosystem Quality – Monitoring of recreational impacts along the Merced River between the North Fork and El Portal is occurring quarterly and will provide data for mitigation efforts.

Drinking Water Quality – Coordinated the collection of water quality data at 11 sites along the Upper Merced River Watershed. A Quality Assurance Program Plan for the Upper Merced River Watershed has been approved by the Quality Assurance Officer of the State Water Resource Control Board.

Water Supply – The Merced River is a major tributary to the Bay Delta System. By gathering data on current conditions in its watershed, the Upper Merced River Watershed Council will be able to identify and plan restoration actions that will protect the water supply. Monitoring activities are funded by a Proposition 13 Phase II grant.

Mojave Desert/Mountain Resource Conservation & Development Council

Upper Kern / South Fork Kern Watersheds

Amount Funded: \$216,236

Additional Funding Obtained to Date:

Background

The area provides tremendous recreational opportunities for millions of people. Visitors kayak, ride bicycles, motorcycles or horses, boat, fish, hike or simply relax. As the population increases so do the challenges. Trash is thrown into rivers and along riverbanks while unwary visitors spread non-native and noxious weeds. Over the past several years, fires have burned hundreds of thousands of acres contributing to sedimentation, erosion, and the destruction of habitat. Not only are the spawning areas for the Golden Trout threatened, but also so is the largest contiguous cottonwood-willow riparian habitat in the San Joaquin-Sacramento River drainage. The demand for water downstream is immense. Kern Valley's diverse communities can come together to have a positive impact.

Benefits to the Watershed

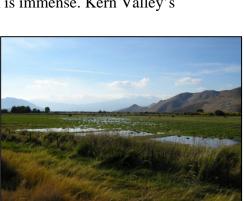
- Presented information to the Kern River Valley Chamber of Commerce on watershed issues.
- Assisted in obtaining a permit and organizing CDF seasonal fire crews for the removal of dead and downed trees and limbs along a seven-mile stretch of the South Fork to reduce sedimentation and increase flow in the river channel.
- Presented 22 model development principles designed to protect a watershed to members of a Kern County Task force soliciting input for the Kern River Valley Specific Plan.
- Partnered with the Kernville Union School District and enlisted volunteers to develop educational materials.
- ♦ Had a watershed information display at the Turkey Vulture Festival at the Kern River Preserve. Conducted outreach activities and interacted with many local stakeholders.
- Compiled literature on post-fire erosion control and revegetation efforts after recent fires.

Benefits to CALFED Program

Watershed Management - Conducted site visits to gather information pertinent to local irrigation diversion points and irrigation ditch systems along the South Fork of the Kern River.

Drinking Water Quality - Worked with 10 out of 65 small Mutual Water Companies to apply for funding to meet the new maximum contaminant level for arsenic. Two systems submitted pre-applications for grants for arsenic mitigation totaling \$150,000.

Water Use Efficiency - Collected baseline water usage and quality data from irrigation runoff. The data gathered will help determine the best management practices for irrigation efficiency and to determine potential water contaminants in the runoff to improve water quality and quantity for ground water recharge in the San Joaquin Valley. By keeping small systems viable, we are able to assist them in maintaining their ground water sources rather than relying on larger commercial water providers. Supply source diversity decreases impacts to water usage from the river and lake.



Flood Irrigation in the South Fork area of the Kern River Valley

Mountains Recreation and Conservation Authority

Santa Monica Bay Watershed

Amount Funded: \$230,892

Additional Funding Obtained to Date:

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

- Collaborated with Malibu Creek Watershed Coordinator to develop a project proposal for a garden coordinator, who would work with homeowners to de-lawn, and teach about the uses of native plants in landscaping.
- Performed a survey of stakeholder interests that will be used to inform discussions about the direction and purpose of the Ballona Creek Task Force.
- Initiated monthly watershed walks for interested stakeholders. Tour occurred in the Westlake District of Central Los Angeles at Lafayette Park. Discussion centered on a buried stream that has the potential to be day lighted.
- Developed symposia on the Ballona Creek Watershed Management Plan for the Headwaters to Ocean Conference in October.
- Toured buried creek sites with Department of Water

 Resources staff to determine potential candidate sites for day lighting projects. Property owners are being contacted to enlist their support.



Stakeholders of the Ballona Creek Task Force pause by the Power of Water sculpture at Lafayette Park, site of a buried stream that Task Force members identified as a daylighting opportunity in their Watershed Management Plan.

Benefits to CALFED Program

Watershed Management – Met with political strategist Leo Briones of Centaur North Strategic Communications who expressed interest in working on an outreach program that will focus on densely populated areas of the watershed to communicate values of watershed management. The coordinator directed Mr. Briones to North East Trees, a partner agency, to help develop the project.

Ecosystem Restoration – Developed and facilitated a symposium on Urban Stream Restoration in conjunction with The River Project. Also prepared a PowerPoint presentation to introduce the topic.

Drinking Water Quality - Attended Cleaner Rivers through Effective Stakeholder TMDLs (CREST) meetings. Participated in discussions and recommended approaches that satisfy TMDLs which are harmonious with removal of concrete from channels and day lighting of storm drains.

Napa County RCD

San Pablo Bay Watershed

Amount Funded: \$228,139

Additional Funding Obtained to Date: \$818,598



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.

Benefits to the Watershed

- The Carneros Creek Stewardship Group is moving toward agreeing to a Watershed Management Plan for the watershed and beginning to develop priority actions for that plan.
- The Sulpher Creek Watershed Task Force is moving toward agreeing to a Watershed Management Plan for the watershed.
- Watershed Forum is providing an on-going networking opportunity for stakeholders to communicate about watershed issues in a neutral setting.
- Presentations and outreach regarding the WICC WebCenter given to Environmental Education Coalition of Napa County, NCRCD Board, and WICC Board.
- WICC WebCenter being populated with watershed images, information, reports and data, and is becoming an online community communication and management tool for existing watershed groups.

Dam concrete apron in Heath Canyon Creek prior to removal.

Benefits to CALFED Program

Ecosystem Restoration – Worked with the Sulpher Creek Watershed Task Force to implement a DFG/NRCS grant to remove four fish barriers on Heath Canyon Creek, resulting in 1.5 miles of the stream being restored for fish habitat. The creek supports threatened steelhead trout and Chinook salmon. Implemented a stream restoration project along a half-mile stretch



First 2005 winter flows in Heath Canyon Creek with concrete apron removed.

of Spring Creek (funded from DWR Urban Streams). Assisted the Rutherford Dust Restoration Team in developing detailed project plans for the restoration of 4 miles of the Napa River. Submitted a collaborative grant to ERP for monitoring of restoration efforts at Napa-Sonoma Marsh and lower Napa River.

Water Management – The fourth season of groundwater monitoring in the Carneros area is complete. Coordinated local volunteer effort to monitor groundwater wells for water quality.

Nevada County RCD

Lower Bear and Upper Bear Watersheds

Amount Funded: \$232,434

Additional Funding Obtained to Date:



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 and most of western Nevada County is declared a high fire severity zone. Thousands of homes are now in danger from wild fires and forest health has been compromised. It is critical that stakeholders work together to address issues on a comprehensive basis.

Benefits to the Watershed

- Selected additional water quality monitoring sites on the south fork of Wolf Creek above and below an old mine site that will be reopened soon. Data collected will be used to determine future projects and restoration activities along the creek.
- Recruited teachers at a school to participate in the water qualitymonitoring program. Trained teachers and volunteers on the methods and processes involved in collecting samples.
- Assisted on a project on Beale AFB to modify a fish ladder. The existing fish ladder is antiquated and needs modifications to allow fish passage.



Teaching students how to monitor water quality.

Presented information at the *Small Land Owner* workshop in Escalon. Collaborated with 7 counties of UC Extension Farm advisors, NRCS, other RCDs, and watershed coordinators.

Benefits to CALFED Program

Watershed Management - Attended more than 27 stakeholder meetings. Interacted with residents, government agencies, and watershed groups. Coordinated a large community shaded fuel break project encompassing 3,000 acres and approximately 16 miles long that will reduce fuel loads and prevent soil erosion and protect water quality. Presented the project to the County Board of Supervisors and to more than 250 residents at various community meetings. Educated landowners on watershed issues and effective BMPs. Letters of support were received from the County, homeowner associations, CDF, USFS, Fire Districts, and others.

Water Use Efficiency - Worked with landowners to reduce invasive weeds and increase irrigation efficiency. Used a hands-on instructional approach that actively involved the landowner.

Science - Submitted 15-months worth of water quality monitoring data to the Technical Advisory Committee. Will be used for decision-making purposes and to prioritize projects.

Water Management - Assisted the City of Grass Valley with their notification process in case of a spill from the wastewater treatment plant. Working on a system to notify downstream users of any impairment to water quality and to post signs at public crossings.

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

- Created the "Regional Watershed Coordination Team (RWCT) consisting of watershed coordinators in the area. This will increase information transfer and improve communication among area coordinators.
- Developed the American River Watershed Portal, at: http://americanriverwatershed.net and wrote a press release to advertise the new web portal. Also improved the ARWG website. The portal is an important tool in improving watershed outreach and education.
- Moderated and facilitated three American River Watershed Group (ARWG) meetings. Increased the ARWG contact list from 160 to 202 stakeholders.
- Assisted the Bear River Watershed Group with the prioritization of projects.
- Participated in planning for the California State University Sacramento American River Conference.
- Participated in the California Aquatic Bioassessment Workgroup meetings at U.C. Davis.
- Drafted a grant application to establish a "Creek Week" program and submitted it to the Sierra Nevada Alliance. Assisted three separate watershed groups prepare similar grants applications.
- Participated in the Dry Creek Conservancy's survey of this year's salmon run.

Benefits to CALFED Program

Watershed Management – The coordinator is facilitating community-based partnerships at American River Watershed Group and the Placer County Fire Safe Alliance meetings.

Science – The coordinator is implementing a Sediment Dynamics Study and is inventorying existing water quality monitoring activities. The coordinator is also participating on the planning committee for the American River Watershed Conference, which is scheduled for April 2005 at California State University, Sacramento.

Ecosystem Restoration – Identifying potential problem areas and examining potential solution alternatives. Also searching for sources of funding to support on-the-ground projects.

Resource Conservation District of the Santa Monica Mountains

Santa Monica Bay Watershed

Amount Funded: \$171,542

Additional Funding Obtained to Date: \$29,920

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.

Benefits to the Watershed

- Assisted with the Heal the Bay's efforts to restore Malibu Lagoon via media outreach. Coordinator also worked to ease tension between different stakeholder groups to allow the project to move forward.
- Working with high school and graduate level students to place them in internships with watershed organizations. Coordinator is also promoting watershed-relevant positions in the community in order to maximize the best use of human resources.
- Promoted the Malibu Household Hazardous/Electronic Waste Collection event.



Tour of Malibu Lagoon to educate stakeholders about the restoration project.

- Working with several stakeholder groups and landowners to find ways to remove bullfrogs from the Malibu Creek Watershed and protect upstream populations of threatened Red-legged frogs.
- Obtained a \$15,000 Supplemental Environmental Project grant via Las Virgenes Municipal Water District and the Regional Water Quality Control Board.

Benefits to CALFED Program

Watershed Management – The coordinator is working with North Santa Monica Bay Watershed Task Force members and the Malibu Creek Watershed Management Council to explore funding opportunities for both structural and non-structural BMPs to improve water quality.

Ecosystem Restoration – The coordinator is supporting an effort to complete restoration of Malibu Lagoon. Coordinator also worked with NRCS staff to review potential restoration sites eligible for funding through the federal WHIP and EQIP programs.

San Francisquito Creek JPA

Coyote Watershed

Amount Funded: \$211,815

Additional Funding Obtained to Date: \$247,311

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 eleven 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 fish. It is critical that stakeholders work together to protect the environment, restore habitat, and minimize damage due to flooding.

Benefits to the Watershed

- Worked with the town of Portola Valley to develop a citizen's guide to bank stabilization plan to reduce sediment erosion.
- Informed and educated residents about the hazards of tree root exposure and loss of canopy.
- Planned and conducted three "family creek days" that included educational events on watershed functions and steelhead preservation.
- Submitted grant application to DWR for a bank stabilization project that includes nine residents, Children's Health Council (non-profit), and City Of Menlo Park.
- Convened Steelhead Task Force to set priorities for remaining fish passage improvement projects and to assess opportunities to conduct a water budget study.



Volunteers plant native plants along San Francisquito Creek in Palo Alto at the Waverley Street pedestrian bridge.

Benefits to CALFED Program

Watershed Program - Conducted outreach to groups including an organization dealing with horses and a local water company. These activities build partnerships and stimulate collaborative discussions. Provided technical expertise to two public agencies to submit strong proposals for large-scale fish passage improvement projects. Leveraged CALFED investment in coordinated local watershed planning by a factor of 1.17 within the first nine months of the grant period. Conducted two educational events covering steelhead conservation.

Conveyance - Completed phase I of the Army Corps Flood Damage Reduction and Ecosystem Restoration Project. Advanced multi-jurisdictional flood management and ecosystem restoration planning effort with two counties, five city/townships, Stanford University, and the Watershed Council.

Ecosystem Restoration - Organized and managed the execution of five volunteer workdays involving 81 volunteers at five restoration sites. Reintroduced native riparian plants to damaged sites in the riparian corridor. Worked with restoration ecologist to develop assessment protocols for SFWC sites that will incorporate Best Management Practices (BMPs).

San Joaquin County RCD

Lower Cosumnes-Lower Mokelumne Watershed

Amount Funded: \$182,505

Additional Funding Obtained to Date: \$1,378,000

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.

Benefits to the Watershed

- Working with the Lodi-Woodbridge Winegrape Commission, developed a program to help local residents reduce non-point source pollution from their homes.
- Planning an agricultural education field day to educate producers on best management practices (BMPs) to improve water quality.
- Presented a session on building watershed partnerships at the CALFED Science Conference.
- Facilitated the meetings of the Lower Mokelumne River Watershed Stewardship Steering Committee. These meetings increase cooperation among various stakeholders and encourage participation in watershed activities.



Coordinator John Brodie demonstrating willow cutting planting techniques to students involved in the SLEWS program at the Murphy Creek project site.

- Submited a grant to CALFED for a 3-year monitoring program to measure the success of the Murphy Creek Fish Passage Improvement Project.
- Coordinator was instrumental in establishing and expanding the Student & Landowner Education and Watershed Stewardship (SLEWS) educational program into San Joaquin County. This program provides outreach and education to students, landowners, teachers, and cooperators.
- Working with the San Joaquin Watershed Education Partnership to help teachers develop programs and educational materials regarding the watershed and water-quality issues.

Benefits to CALFED Program

Watershed Management – Worked with other watershed coordinators on a regional basis to increase local participation in projects. Discussion included successful approaches to increase community interest and cooperation with watershed concepts.

Drinking Water Quality –Planning an agricultural field day designed to educate producers on BMPs to help improve water quality.

Ecosystem Restoration – Coordinated a SLEWS project to collect willow cuttings, acorns, and other native plants for the Murphy Creek Watershed restoration project. Also trained students in revegetation techniques.

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

- Organized a project to remove the invasive weed Sesbania punicea (Scarlet Wisteria) from the Procter/Broadwell/Cobb property.
- ♦ Good progress being made on the Riverbottom Park Project. Organized volunteer groups to remove *Sesbania punicea* and garbage from Riverbottom Park. Plan is to work with the City to restore the river bottom and eradicate other invasives such as yellow starthistle (*Centaurea solstitialis*).
- Coordinated a down-river canoe cleanup with River Steward volunteers.



Volunteers helping with garbage removal

- Continued planning work on future habitat restoration projects.
- Coordinated with a prospective Eagle Scout regarding his Eagle project to plant Valley Oak trees on the San Joaquin River Parkway.
- Attended a two-week Watershed Partnership Training Seminar sponsored by the Environmental Protection Agency.

Benefits to CALFED Program

Ecosystem Restoration – Organized two volunteer groups of CSU Fresno students to remove invasive weeds along the San Joaquin River.

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

- Coordinated Creek Week, which is a series of events that educate the community about the importance of local watersheds and ways to protect and enjoy them.
- Organized the South Coast Landscape Fair. Educated participants on landscaping techniques that protect the environment and preserve the watershed.
- Released the Draft Carpinteria Creek Watershed Management Plan. Collecting comments and answering questions regarding the document.
- Obtained an EPA grant to develop the pilot Riparian System Management Program to streamline implementation of restoration projects on County owned land.



Participants in the 2004 South Coast Sustainable Landscape Fair learn about efficient irrigation, integrated pest management, and green waste reduction.

Benefits to CALFED Program

Watershed Program - Participated on the Santa Barbara Task Force for the Southern California Wetlands Recovery Project, which provides information to stakeholders about the watershed. Held an educational meeting on steelhead for the Rincon Creek Watershed Council to develop a restoration plan. Supported distribution of "*Creek Care Guide*" through the South Coast Watershed Resource Center. Implemented Creek Week activities to educate the community about local watersheds.

Ecosystem Restoration – Finished the preliminary restoration plan for removal of a fish passage barrier on Carpinteria Creek and received comments from the Carpinteria Creek Watershed Coalition. Completed preliminary engineering and design for the restoration project at the Elks Lodge on San Jose Creek. Worked with student volunteers to install plants at Rocky Nook County Park restoration project.

Water Use Efficiency - Completed fall Green Gardener Certification Program classes. Gardeners received the training necessary to assist stakeholders in developing efficient irrigation systems on their land. Met with local water purveyors to coordinate promotion of Mobile Lab Irrigation evaluation and spring irrigation workshops. Prepared irrigation evaluation reports for growers in the area.

Sierra Valley RCD

Middle Fork Feather Watershed

Amount Funded: \$185,460

Additional Funding Obtained to Date: \$25,000



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

- Led the collaboration to affect the Carman Valley watershed restoration project.
- Organized and supervised Loyalton High School students in the revegetative planting project.
- Collaborated with the Sierra County Fire Safe Council on projects of mutual interest.
- Managing the development of the Sierra Valley Watershed Assessment Report.
- As applicant, SVRCD with the City of Loyalton, Sierra Pacific Industries, Department of Fish & Game, Sierra County and USFS – applied for a grant to the Urban Streams Restoration Program for the restoration of Smithneck Creek in and above Loyalton.



Loyalton High School student assisting with revegetation project

Benefits to CALFED Program

Ecosystem Restoration/Watershed Management - Developing restoration project(s) in the northeastern portion of the watershed with at least one large private landowner. Little Last Chance Creek is a major tributary to the Middle Fork Feather River, regulated by flow above by Frenchman Reservoir. Additional landowners have expressed interest in restoration projects and field visits are planned in the spring when snow cover is gone.

Storage - Completed a large-scale, multi-year restoration project in Carman Valley that, based on preliminary monitoring data, is increasing the water table and the water timing in the Carman Creek watershed, a significant contributor to the Middle Fork Feather River.

Water Use Efficiency - Partnered with UCCE to develop a water rights/restoration workshop.

Sloughhouse RCD

Lower Cosumnes-Lower Mokelumne 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

- Developing fact sheets for five separate BMPs, the first of which will focus on tailwater recovery systems.
- Scheduled the first Ranch Water Quality Management Planning workshop for March 10, 2005, in Ione. These workshops provide ranchers with the tools needed to improve water quality on their properties.
- Distributed 150 Backyard Conservation brochures to local realtors, a housing development, the River Valley Garden Club members, and the Cosumnes River Public Advisory Committee. Conservation practices outlined in the brochure, if implemented, would lead to improved water quality.
- Preparing agenda and locating speakers for the first Cosumnes River Watershed Council meeting in April.
- Participated in several different watershed stakeholder meetings and provided updates regarding watershed activities/efforts.
- Met with representatives of the SE Sacramento County Agricultural Water Authority and The Fisheries Foundation to discuss partnering on upcoming grants and watershed projects.
- Attended the watershed coordinator training workshops sponsored by DOC in Redding.

Benefits to CALFED Program

Drinking Water Quality – Met with SWRCB staff to discuss developing a Quality Assurance Program Plan (QAPP). Tested different water quality equipment from SWRCB to determine what equipment would work best in the watershed. Working with Florin RCD to plan a water quality monitoring "train the trainers" workshop.

Watershed Management – Continued working with five other watershed coordinators on the development of an internet watershed portal and data sharing. Initially, the Cosumnes River was to be included in the American River Watershed Portal, but the agencies and groups within the Cosumnes River watershed have decided to create a separate portal for the Cosumnes River with links to the American River portal. Also partnered with two other RCDs to prepare a draft grant for riparian improvements, nutrient management, and comparing in-stream testing to lab results.

Solano RCD

Lower Sacramento and Upper Putah Watersheds

Amount Funded: \$208,100

Additional Funding Obtained to Date: \$226,450



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

- Collected and mapped data for Lake Berryessa water quality testing sites.
- Worked with the Lake Berryessa Watershed Partnership to submit a grant proposal to fund education and outreach programs for the lake.
- The Ulatis-Dixon sub-watershed monitoring plan was approved by the Area 5 Regional Water Quality Control Board. The plan is being implemented and testing has begun.
- Submitted 5 other grant proposals for beneficial watershed programs. These include a proposal to SWRCB to demonstrate sound BMPs, and a proposal to the National Fish and Wildlife Foundation to expand county-wide weed mapping.



Installing a grass swale on the Klug property. The swale will act as a biofilter and small wetland.

- Added the Cities of Vacaville and Fairfield to the Lake Berryessa Watershed Partnership.
- Planned and held the largest ever Native Plant Sale and Wildlife Education Fair at Solano RCD's Conservation Education Center. The sale provides native plants to residents at a low cost and educates people on the benefits to the watershed.
- ♦ Implemented a flood awareness outreach program to thousands of stakeholders in flood prone areas.
- Facilitated five sub-watershed group meetings attended by 25 stakeholders.

Benefits to CALFED Program

Watershed Management – Assisted the county in starting a flood awareness outreach program. Three flyers and a poster, in both Spanish and English, were widely distributed throughout the county. The coordinator is also implementing a youth-based watershed education program on two sub-watersheds. The High School Citizen Monitoring Program of Ledgewood and Laurel Creeks involves four high schools and over 220 students in hands-on care for their watersheds.

Ecosystem Restoration – The coordinator has identified two restoration sites and completed plans and contracts for work to begin in January. Lum Farms and the Klug Family have agreed to take small areas of their farms out of production to install grass swales and tailwater ponds.

Sonoma Ecology Center

San Pablo Bay Watershed

Amount Funded: \$155,193

Additional Funding Obtained to Date: \$112,750

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

- Completed an evaluation of all potential fish passage barriers created by road crossings, and completed schematic designs to remove two of the barriers. The goal is to increase spawning habitat accessible to salmonids.
- Coordinated with the Sonoma County Water Coalition to develop a water budget. Also met with researchers at Lawrence Berkeley Laboratory regarding a study crucial to improving patterns of water use in the watershed.
- Applied for approximately \$500,000 for Nathanson Creek and made progress planning for the restoration of Sonoma Creek between Glen Ellen and Kenwood. The grant would improve salmonid rearing and passage habitat in the watershed.
- Continued monitoring sediment runoff from remediated road sites in Jack London State Historic Park, to determine effectiveness of sediment remediation completed and proposed for the watershed.
- Participated in a meeting with the City of Sonoma and concerned citizens about storm water management on Fryer Creek.

Benefits to CALFED Program

Watershed Management – Working to organize a new Stuart/Calabazas sub-watershed group.

Ecosystem Restoration – Completed an evaluation of all potential fish passage barriers created by road crossings, and completed schematic designs to remove two specific barriers. Also published and distributed 250 copies of a Limiting Factors Analysis on sediment TMDL to landowners and other stakeholders. Developed a comprehensive restoration plan for Nathanson Creek and applied for funding through the DWR Urban Streams Restoration Program.

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

- Supported a local river clean-up event on the lower Calaveras River that provided an ideal forum to develop and build new partnerships and promote Calaveras River Watershed Stewardship Group (CRWSG).
- Worked on a database that contains monitoring information that will be used to determine project priorities and develop a watershed implementation plan.
- Prepared a PowerPoint presentation that will be used for outreach and recruitment purposes.
- Developed a website for CRWSG. Provides information to residents within the watershed, as well as fishery data for agency personnel.
- Participated in the DOC "Tools and Methods of Watershed Conservation" training workshops.



Volunteers cleanup litter along the lower Calaveras River on November 20, 2004

Benefits to CALFED Program

Watershed Management – Worked with local government, federal and state agencies, non-profits, and local residents to form the Calaveras River Watershed Stewardship Group (CRWSG). Successfully conducted the first meeting with 23 interested stakeholders attending. Participated in Calaveras Fish Group meetings, a technical advisory group that provides scientific and technical expertise on anadromous fish populations. Collaborated with local government and conservation groups in planning a Calaveras River Festival that will serve as a forum for education, recruitment and restoration.

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" for \$757,173.

Ecosystem Restoration - Developed educational material intended to help prevent the spread of New Zealand Mud Snails, an invasive species which is found in the Calaveras River, and posted information on the CRWSG website. Contributed to the development and submission of the proposal "Calaveras River: Bellota Fish Ladder Evaluation" for \$144,198.

Tehama County RCD

Sacramento-Lower Thomes Watershed

Amount Funded: \$132,196

Additional Funding Obtained to Date:

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

- ♦ In cooperation with The Nature Conservancy and the Tehama County Hardwood Advisory Committee, organized the drafting, review and approval of the final draft Tehama County Oak Woodland Management Plan.
- Assisted in the preparation of a final draft version of the fire hazard component found within the county's DMA 2000 multi-jurisdictional, multi-hazard fire plan.
- Assisted in completing work on the first phase of fieldwork for an elderberry survey.
- Served as a liaison between the Tehama County Resource Advisory Committee and the Tehama-Glenn Fire Safe Council.
- Coordinated with Tehama County and the City of Corning to develop a scope of work for an *Arundo* eradication-planning project on two streams in the Corning urban area.
- Conducted an education workshop that focused on preparing rural homes and properties for wildfire as well as the environmental impacts to watersheds that are caused by wildfire events.

Benefits to CALFED Program

Watershed Management – The coordinator's participation in the Tehama-Glenn Fire Safe Council, coordination of the Tehama West Watershed Assessment, and the preparation of the Tehama West Fire Plan continue to provide ample opportunities to develop and promote coordination and collaboration on fire related environmental issues that impact local watersheds.

Drinking Water Quality – During the reporting period, critical sub-watersheds were identified in the Tehama West Watershed Assessment process. With this new information, the fuels assessments being conducted in the Tehama West fire planning process can be expanded to include those small sub-watersheds that greatly impact water quality within the major tributaries flowing into the Sacramento River.

Upper Putah Creek Stewardship

Upper Putah Watershed

Amount Funded: \$153,400

Additional Funding Obtained to Date:

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

- Instrumental in creating the Hamman Family Environmental Award, which will be presented to an individual or group that has demonstrated a concern for the natural environment.
- ◆ Initiated efforts to have the Aquatic Ecological Assessment Workshop in the Upper Putah Creek Watershed area.
- Arranged for the use of the Montesol Ranch youth camp for a three-day citizen-training program.
- Worked with partners to institute "*Trout in the Classroom*" in the local school District. Developed curriculum and will begin classroom instruction next winter.



Citizen monitors hard at work

- Initiated request for water sampling multi-meter from local partner, request granted.
- Received training from a state partner on establishing protocols on water sampling that will be used in a citizen monitor training program.
- Facilitated a meeting to introduce the proposed restoration of urban St. Helena Creek.

Benefits to CALFED Program

Watershed Management – Coordinated and directed the Upper Putah Creek Stewardship's fourth annual meeting. This was an ideal forum for building partnerships and interacting with stakeholders. Participated in a two-day workshop on Aquatic Biology Workgroup. Provided an opportunity to meet new partners and establish contacts. Co-sponsored the Aquatic Ecological Assessment Workshop with the Upper Cache Creek watershed coordinator. Conducted outreach activities at meetings and provided information to attendees on watershed related efforts. Effective outreach activities to partners, sponsors and stakeholders has increased long-term sustainability and is building a foundation for future growth. Capacity building was advanced by co-sponsoring meetings and workshops.

Ecosystem Restoration – Worked with state partner on concepts for proposed stream restoration project. Began writing grant proposal to restore urban St. Helena Creek.

Upper Sacramento River Exchange

Sacramento Headwaters

Amount Funded: \$163,944

Additional Funding Obtained to Date: \$41,102

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

- Improved water quality through completion of trail and watercourse repair components (bank stabilization and herbicide treatment for scotch broom) for the Hatchery project.
- Developed and published a community water quality resource guide.
- Coordinated a three-way agreement between the Department of Fish and Game, the City of Dunsmuir and the River Exchange for the development and management of the recently acquired Rhinesmith Property. Also removed two acres of blackberry and one acre of fennel, and planted 100 riparian trees at the Rhinesmith revegetation site.



Fifth graders at Dunsmuir Elementary School learn about watersheds and the water cycle.

- Improved response and sample collection of spills through establishment of a water quality response team with the Regional Water Quality Control Board and community partners.
- Improved participation and involvement by the community through coordination of a community restoration project at Panther Meadows with the U.S. Forest Service and conservation partners.
- Conducted seven restoration and stewardship fieldtrips involving over 300 students. Fieldtrips included native planting at Tauhindauli Park, invasive plant control, riparian studies, erosion control, and wildlife habitats.

Benefits to CALFED Program

Water Quality – Successes this reporting period include trail and watercourse repair at the intake of the Mr. Shasta Fish Hatchery trial project, monitoring and removal of illegal fire rings at public fishing accesses, implementation of a water quality response team with the RWQCB for sample collections following a spill, building horse barriers to reduce compaction and degradation of stream banks at the Hatchery project, water quality monitoring of storm drain discharge in Dunsmuir, storm drain stenciling with local students, riparian vegetation planting, trail drainage repair, and community restoration outings.

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

- Expanded the educational outreach program by adding two more schools. New students participate in eight "hands-on" sessions in the watershed.
- Modified and conducted ongoing sampling program at local creek. The monitoring program now covers all creeks within the Presido.
- Relocated to a new facility. Rebuilt the water quality-testing laboratory to increase capability to test water quality and provide background information for ongoing studies.
- Presented educational program at the Geological Society of America international conference. More than 5,000 physical science

professionals and educators attended. Provided an opportunity to discuss issues and develop contacts.

Met with representatives from Galileo High School and San Francisco Unified School District to double the number of students attending the Presidio weekly to complete the laboratory portion of their honors environmental science course.

Benefits to CALFED Program

Watershed Management – Continued meeting with partners, agencies and other stakeholders to discuss issues and develop effective strategies. Met with a coalition of 10 environmental and community groups to discuss watershed conditions in the Presidio, including an upcoming assessment of 278 acres of the Tennessee Hollow watershed restoration.

Drinking Water Quality - Identified a source of coliform bacteria leaking into a local creek. The leak was repaired eliminating this contaminant from entering the local water supply. Conducted water quality sampling at 10 sites in Redwood Creek to provide data to protect salmon population from polluted runoff. Collected sampling data from multiple locations and reported on problem areas within the watershed leading to better understanding of urban pollution source from city sewers. During this period more than 60 samples were collected for analysis.

Ecosystem Restoration - Coordinated activities with the Presido Environmental Council to stress the need for a maximum restoration alternative within the Tennessee Hollow Watershed.



Watershed Coordinator conducting water quality testing

West Lake RCD

Upper Cache Watershed

Amount Funded: \$148,414

Additional Funding Obtained to Date: \$153,025.42

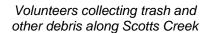
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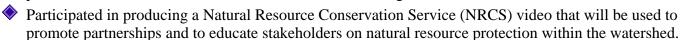
Cache Creek Watershed is the most dominant hydrologic feature in Lake County representing approximately 40% of the county's drainage area. Much of the water drains into Clear Lake, the largest natural freshwater lake within the boundaries of California. Approximately 80% of the Basin's wetlands have 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.

Benefits to the Watershed

- Partnered with the Upper Putah Creek Stewardship watershed coordinator to conduct the Aquatic Ecological Assessment workshop, which trained 20 volunteers in water quality monitoring protocols.
- Coordinated and participated in the annual CRMP Creek Cleanups. One group involved in the event cleaned up a 3-mile section of Kelsey Creek.
- Assisted with the annual Lake County Roads Clean-up event.

 More than 60 volunteers picked up trash and other debris along more than 200 miles of roads throughout the area. The volunteers picked about 1.5 tons of trash and filled more than 150 bags of trash.





Benefits to CALFED Program

Watershed Management – Facilitated and improved coordination, collaboration, and assistance among government agencies, local government, non-profits, and stakeholders. Worked with four local CRMP groups to ensure that issues are addressed on a regional basis. Met with BLM staff and contractor representatives for the installation of culverts and repairs of the road in the Eight Mile Valley Restoration Project.

Ecosystem Restoration - Trained Chi Council's members on the procedures to conduct a scientific study of Clear Lake Hitch, an endemic species of fish (*Lavina exilicauda chi*). Coordinated and planned nonnative invasive weed eradication projects throughout Lake County. Held the first training for the Citizen Water Quality Monitoring teams within the county. Coordinated a native grass-seeding project with BLM and Clear Lake High School students. Using seeds previously collected, students seeded two test plots on the site of a road/slide repair project.

Drinking Water Quality - Conducted point source water quality clean-up events, removing trash and debris from several local creeks.

Western Shasta RCD

Upper Cow-Battle / Sacramento-Lower Cow-Lower Clear Watersheds

Amount Funded: \$190,765

Additional Funding Obtained to Date:

Background

The watershed's topography is 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 declining fish populations. Runoff poses a unique and difficult challenge. Many 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 will bring together local residents, government entities, and concerned citizens to address the issues.

Benefits to the Watershed

- Promoted watershed conservation and management with a booth at the Return of the Salmon Festival. The event was well attended and provided a unique opportunity to interact with stakeholders.
- Attended the Sudden Oak Death Workshop. Participants included governmental agencies, local residents, and nonprofits. Interacted with diverse groups and established new contacts.
- Networked with agencies and improved knowledge about watershed issues by interacting with other watershed coordinators at the DOC *Tools and Methods of Watershed Conservation* training workshops.



A water quality monitoring site on Oak Run Creek

Benefits to CALFED Program

Watershed Management - Signed up landowners to participate in the Fenders Ferry Road Fuel Break. This fuel break will be instrumental in reducing the potential for a catastrophic fire. Assisted with outreach activities associated with the Cow Creek Watershed Management Group's (CCWMG) Watershed Management Plan. The plan includes strategies for improving water quality and habitat for fish and wildlife. The Bear fire caused extensive damage in the area and required extensive rehabilitative efforts. Assisted landowners and crews with sand bagging and seed mulching in an effort to revegetate the areas burned by the fire. Voted onto the Board of Trustees for the Sacramento River Watershed program.

Drinking Water Quality - Presented the Watershed model to two groups of junior high students at Evergreen School. Provided students with information on watershed health.

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 catastrophic fires.

Benefits to the Watershed

- Worked with partners on developing 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 set up 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.
- Worked with the Shasta County Fire Safe Council to develop and distribute a Fuel Break Maintenance brochure.

Benefits to CALFED Program

Watershed Management - Increased information exchange and collaboration among agencies and science educators by hosting an Adopt-



Students potting the native acorns they collected

A-Watershed Northern California Science Alliance meeting, which included teachers, representatives from Adopt-A-Watershed, Turtle Bay Exploration Park, Whiskeytown Environmental School and DFG. Participated in Shasta College School of Natural Resources Advisory Board meeting to identify partnership opportunities to work together on watershed related issues. Set up a booth to conduct outreach activities at the *Return of the Salmon Festival* where more than 9,000 people attended the event. This event provided an opportunity to interact with many local residents and stakeholders, and 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 affect the watershed.

Ecosystem Restoration - 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. Obtained 37 signed landowner agreements authorizing the RCD to perform rehabilitation projects on private land to stabilize potential erosion areas affected by the French Fire.

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

- Submitted grant proposal to the National Fish and Wildlife Foundation (NFWF) for invasive weed removal.
- Working with a local rancher, who has a 1200-acre ranch in the Domengine Watershed, to develop a ranch plan.
- Worked on contracts for a Proposition 13 watershed planning grant for the Domengine Watershed.
- Continued follow-up work with DWR and CALFED regarding CEQA/PEIR process to keep the CRMP eligible for state funding.
- Attended CARCD Area IX Meeting and gave presentation on CRMP activities.

Benefits to CALFED Program

Water Use Efficiency – Finalized the Sage Associates' contract for the Proposition 13 grant, which will enable them to begin working on ranch plans and the Regional Domengine Watershed Management Plan. Also identified two additional 1,000 + acre ranches as candidates for adopting ranch plans.

Drinking Water Quality – Coordinator is striving to resolve issues with DWR so that \$240,000 in project implementation funding can be used by landowners to prevent flooding and sedimentation from eroding streambeds.

Ecosystem Restoration – Submitted a proposal for a NFWF Pulling Together Initiative (PTI) Grant for invasive weed removal. Also researched other grant programs that would fund ecosystem restoration work.

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.

Benefits to the Watershed

- Hosted a tour of tamarisk infestation sites on Cache Creek for the Wildlife Conservation Board and the Rumsey Community Fund to recruit funding for weed removal.
- Supported local landowners to organize a new tributary group and apply for funding.
- Met with county staff in the field (near Capay) to discuss road maintenance and soil runoff into a local creek. Resource materials on ranch roads were provided to the county staff.
- Controlled erosion in Rumsey by developing and installing willow wattles under direction from an NRCS engineer.
- Worked with a local landowner to plant native grasses along her roadsides.
- Working with the Student & Landowner Education and Watershed Stewardship (SLEWS) Program, planted native vegetation on County Road 45.



Flyer advertising community workshop on invasive species

Benefits to CALFED Program

Watershed Management –Met with representatives from NASA, Cache Creek Conservancy, UC Davis, and the USDA to discuss how NASA products can help with weed control work along Cache Creek.

Ecosystem Restoration – Helped to develop and conduct a community training session on controlling Tamarisk and *Arundo* in Capay Valley in November. Also helped plan and coordinate the construction of two ponds, a swale connecting them, and revegetation of the ponds with riparian species.

Yolo County RCD

Lower Sacramento Watershed

Amount Funded: \$188,026

Additional Funding Obtained to Date:



Background

Willow Slough is a sub-watershed 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

- Produced watershed boundary delineation map for Willow Slough.
- Actively participating in the Ag Futures Alliance, which is shaping the formation of the Delta RC&D Council.
- Establishing ties with the Clarksburg Advisory Committee to discuss local issues.
- Planning and notification completed for five landowner workshops scheduled for Spring 2005. The workshops will cover conservation planning, wildlife friendly water structures, long-term maintenance of restoration sites, and water use efficiency, and pump efficiency.

Benefits to CALFED Program

Watershed Management – Worked collaboratively with Yolo County Flood Control and Water Conservation District to prepare and submit a CALFED WUE grant proposal.

Ecosystem Restoration – Working with a landowner in Lamb Valley to plant native species to stabilize an eroding drainage area.

Yuba County RCD

Lower Feather / Lower Yuba / Lower Bear Watersheds

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



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.

Benefits to the Watershed

- Developed a collaborative network for watershed coordinators in the Sacramento Valley. Worked closely with 10 other watershed coordinators in the Sacramento Valley to develop an action plan. The 10 coordinators will continue to meet and collaborate on a regular basis.
- Held a stakeholder meeting to create a combined management plan for the Lower Feather River Watershed. The group developed management direction and determined priority project sites for the watershed.
- Coordinating with 10 different organizations (such as UC Davis, UC Cooperative Extension, Ducks Unlimited, and Sutter County RCD), submitted a \$1.1 million proposal to the Central Valley RWQCB Water Quality Grant Program to determine BMP effectiveness for the Feather River



Clark Lateral in the community of Oliverhurst. If awarded, a grant from DWR would fund the clean up and stabilization of this stream course.

- Diazinon TMDL in orchards and through BMP implementation, and improve the quality of agricultural wastewater discharge entering the Lower Feather River Watershed.
- Currently developing a proposal for the DWR Urban Stream Restoration Program to improve flow, stream bank integrity, water quality and species habitat on the Clark Lateral (drainage for the Clark Slough) and to reduce localized flooding in the community of Olivehurst.
- Created a website for the RCD (<u>http://www.co.yuba.ca.us/ycrcd/default.htm</u>) and will continue to add information to it.

Benefits to CALFED Program

Watershed Management – Gathering information to develop a Lower Feather River watershed assessment plan that will address water quality and quantity, land cover, species diversity, and assess human disturbances. GIS data from a study done on the American Basin will be used to determine current conditions. Upon completion, the assessment will fill a large data gap for the region and be made assessable online as part of a watershed portal that will include assessment data from the Yuba and Bear River Watersheds as well.

The coordinator gave four science class presentations at Sutter Union High School on the importance of water quality and monitoring. The lessons focused on in-class monitoring of water samples taken from three local sources (Feather River, Wadsworth Canal, and school tap water) for turbidity, dissolved oxygen, temperature and pH. The monitoring exercise was followed by a discussion on how water quality can affect the health of the watershed, as well as the local economy and culture. The coordinator has also started pooling ideas, information and stakeholder interest for the development of a Lower Feather River watershed assessment plan. The assessment will address water quality and quantity, land cover and species diversity, human disturbances on the watershed, and use GIS data to determine the condition of the landscape.