

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 re-opened 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 quality-monitoring 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.
- ◆ 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.



Teaching students how to monitor water quality.

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.
- ◆ 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.



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

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.
- ◆ Submitted 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.



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

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.
- ◆ 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.



Volunteers helping with garbage removal

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.
- ◆ 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.



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

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 Thames Watershed



Amount Funded: \$132,196

Additional Funding Obtained to Date:

Background

The Sacramento-Lower Thames 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.
- ◆ 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.



Citizen monitors hard at work

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.
- ◆ 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.



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

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 Presidio.
- ◆ 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.



*Watershed Coordinator
conducting water quality testing*

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 Presidio Environmental Council to stress the need for a maximum restoration alternative within the Tennessee Hollow Watershed.

West Lake RCD

Upper Cache Watershed



Amount Funded: \$148,414

Additional Funding Obtained to Date: \$153,025.42

Background

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 Clean-ups. 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.
- ◆ Participated in producing a Natural Resource Conservation Service (NRCS) video that will be used to promote partnerships and to educate stakeholders on natural resource protection within the watershed.



Volunteers collecting trash and other debris along Scotts Creek

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 non-native 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 non-profits. 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.



Students potting the native acorns they collected

Benefits to CALFED Program

Watershed Management - Increased information exchange and collaboration among agencies and science educators by hosting an Adopt-A-Watershed Northern California Science Alliance meeting, which included teachers, representatives from Adopt-A-Watershed, Turtle Bay Exploration Park, Whiskeytown Environmental School and DFG. 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

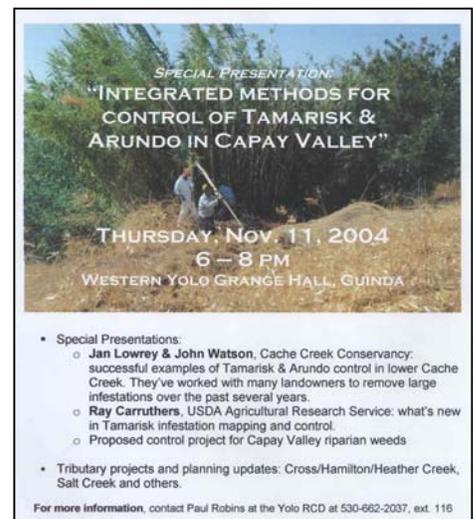
Additional Funding Obtained to Date: \$36,000

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

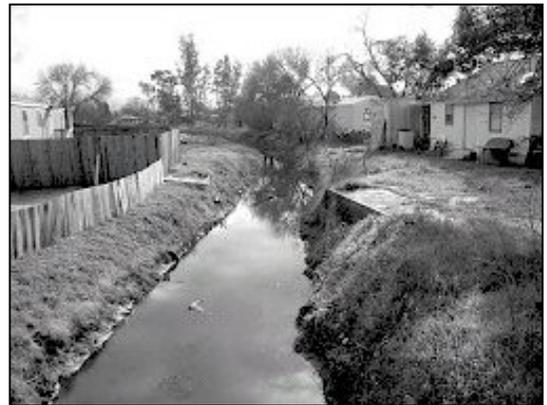
Additional Funding Obtained to Date:

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 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 (<http://www.co.yuba.ca.us/ycrcd/default.htm>) and will continue to add information to it.



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

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.