

# Mountains Recreation and Conservation Authority

## Santa Monica Bay Watershed



**Amount Funded:** \$230,892

**Additional Funding Obtained to Date:** \$335,667

### 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

- ◆ Provided coordination for the Army Corps of Engineers Lower Ballona Ecosystem Restoration Feasibility Study. The Santa Monica Bay Restoration JPA is the local sponsor of the feasibility study and will be required to provide local funding for the study. The Coordinator has worked to solicit in-kind contributions to help provide local match from California Coastal Conservancy, City of Los Angeles, County of Los Angeles, and SMBRA.
- ◆ Held 13 tours of the Ballona watershed, one tour of the LA River Greenway, and seven Ballona Creek watershed walks. These tours help to broaden stakeholders understanding of watershed issues.
- ◆ Conducted eight public presentations that covered stream restoration and protection challenges, Ballona watershed issues, the pros and cons of forming a nonprofit organization or a Joint Powers Authority, and developing a stream protection ordinance.
- ◆ Provided historic stream maps to the LA River revitalization planning team, LASGRWC, and the river project.
- ◆ Began developing a new program that will provide Public Works officials with training about fluvial geomorphology and stream restoration.
- ◆ Provided technical support to the Gabrielino/Tongva Springs Foundation.



*Watershed coordinator Jessica Hall (on left) with a Stone Canyon Reservoir Tour participant.*

- ◆ Worked with Heal the Bay’s Stream Team manager and the UCLA’s Institute of the Environment SEA-LABB coordinator to plan Stone Canyon Reservoir restoration projects.
- ◆ Worked with West and Central Basin Water Districts to submit an IRWM planning grant proposal.

### **Benefits to CALFED Program**

**Water Use Efficiency** – The coordinator participated in the Integrated Regional Water Management Plan (IRWMP) planning process, which is a next step for the Ballona watershed. As part of the IRWMP process the coordinator developed a Lower Franklin Canyon Park proposal, which will provide funding for the creation of a treatment wetland that will creatively reuse flow for irrigation at the park.

**Watershed Management** – In support of the CALFED Watershed Program goals the coordinator met with Los Angeles City staff and Department of Fish and Game representatives regarding looming culvert installation planned for a reach of Stone Creek. The coordinator also continued Ballona Greenway committee meetings to develop an opportunities and constraints report for increasing habitat, recreation, and water conservation projects along the channel.

**Ecosystem Restoration** – The coordinator provided support to Los Angeles County in executing their Earth Day dune-planting event in April, which included over 90 children from a local school. The coordinators role included obtaining food donations, helping with event set-up, and speaking to children about the Ballona Creek Watershed. Planting occurred on the Ballona channel levee adjacent to the Ballona Wetlands and Del Rey Lagoon. The coordinator also prepared for a project that will create geomorphic “regional curves” for the Los Angeles region. Specifically the coordinator developed a contract and scope of work with Natural Channel Design, conducted budget review and approval, identified 15 reference streams, coordinated housing for the consultant team, and planned the logistics of their visit.

### **Performance Measures**

**Goal:** Promote water conservation; improve water quality and ecosystem quality through implementation of a comprehensive Watershed Management Plan

**Objective #1:** Facilitate implementation of the Ballona Creek Watershed Management Plan by seeking funding for priority projects identified in the Management Plan

**Performance Measure:** Total amount of funding secured for implementation of projects recommended by the Watershed Management Plan. Number and Percentage of actions initiated, in progress, or completed during the project period. The estimated amount of pollutant loading reduction and acreage of restored habitats associated with the implemented projects.

## **Progress:**

- Participated in South Bay Integrated Regional Water Management Plan (IRWMP) development: including attendance at planning meeting, and proposal of projects in Ballona watershed, including demonstration projects in the Ballona Watershed Management Plan.
- Organized conference call with City of Los Angeles Mayor's environmental deputy & Coastal Conservancy (County Supervisor Burke's office and Los Angeles Council District 11 also invited, not participating) to discuss resources available for acquisition of federal post office land up for auction.
- Met with UCLA's Institute of the Environment to collaborate on restoration of Stone Creek. UCLA is acting as the lead, and has submitted a grant request for \$30,000.
- Met with the RCD of the Santa Monica Mountains (RCDSMM) to collaborate on a nativescaping and Kenter Creek restoration project. The RCDSMM is acting as the lead and has submitted a request for funding for each project.
- Met with a consultant for the City of Los Angeles, Jennifer Gronberg of Camp Dresser McKee, to discuss potential projects from the Ballona Creek Watershed to include in the Integrated Regional Water Management Plan proposal for Prop 50 Chapter 8. I provided her with a CD-Rom of about 20 potential or existing projects, and submitted 5 demonstration projects for inclusion in the plan. These projects included: Mar Vista Park retrofit, Street Retrofit, Baldwin Hills Trail and BMPs, Lafayette Park Creek Daylighting, and Oxford Flood Control Basin.
- Met and communicated regularly with the Mid-Cities Neighborhood Council and North East Trees to facilitate a partnership and develop a grant proposal for the Ballona Creek Greenway. North East Trees submitted a grant request of \$1,000,000.
- Attended a Mid-Cities Neighborhood Council Meeting to present the Ballona Watershed Plan and discuss Greenway opportunities.
- Met with residents of Kenter Creek to discuss possibilities for restoring the creek with technical assistance from the RCD SMM.
- Met with Department of Water Resources staff, Susan Woolam, about creek restoration projects in the Ballona Plan.
- Contacted member of Wilshire Country Club about opportunity to seek creek restoration funding for Arroyo del Jardin de los Flores, which runs through their golf course.
- Submitted a concept proposal on behalf of Santa Monica Bay Restoration Commission to the DWR/CALFED Watershed Program for a Fluvial Geomorphologist position who would serve as a technical resource for the Lower Ballona Ecosystem Restoration Feasibility Study, develop other stream restoration projects, conduct stream mapping and inventory of resources, and develop regional design curves for restoration.
- A \$400,000 grant request submitted by North East Trees was awarded for a pollution control bio-treatment/native landscaping project along part of Ballona Creek. The coordinator helped the Mid-City Neighborhood Council and North East Trees develop a partnership and helped develop the grant proposal.
- Contacted schools in the Ballona Creek watershed to identify willing sites for a natives landscaped garden. As a result the following schools were included in the Prop 50 proposal:

10th Street Elementary School, University Elementary School, University High School, Stoner Avenue Elementary School, and Selma Avenue Elementary School.

- Revised four IRWM proposals on behalf of the City of Los Angeles Bureau of Sanitation for: a Mar Vista Recreation Center Retrofit, Lafayette Park Creek Daylighting, Baldwin to Ballona Trail & BMPs, and a Street Retrofit.
- Submitted two SEP (Supplemental Environmental Program) proposals: for a Ballona Creek Greenway Maintenance Trust Fund and Ballona Creek Watershed Education Projects.

**Objective #2:** Provide administrative support to the BCWTF. Facilitate the transition of the Task Force into a long-term self-sustainable organization for oversight and coordination of watershed restoration activities.

**Performance Measure:** Task Force meeting attendance and membership inclusiveness. Amount of long-term funding secured.

**Progress:**

The coordinator provides support for the BCWTF on an ongoing basis.

**Objective #3:** Support education and outreach to broaden the base of stakeholders and build up community support and participation in watershed restoration activities

**Performance Measurement:** Number of cities, agencies, and community organizations pledging their support for implementation of the Management Plan. Amount of media coverage.

**Progress:**

- Provided support to the County of Los Angeles in executing their Earth Day dune planting event in April, with over 90 children from a local school. The coordinator obtained donations of food, assisted in event set-up, and spoke to children about the Ballona Creek Watershed. Planting occurred on the Ballona channel levee adjacent to the Ballona Wetlands and Del Rey Lagoon.
- Conducted three Ballona Watershed presentations.
- Designed and staffed an informational Ballona Creek watershed table at the Los Angeles Valley College Earth Day event.
- Conducted watershed tours for the Army Corps of Engineers (2 tours), SMBRC staff, a UCLA Extension Landscape Architecture Student, and the Ballona Networking Group.



*Watershed coordinator conducts a presentation about the watershed at an Earth Day event.*

- Held a meeting about stream protection issues with a deputy from County Supervisor Knabe's office.
- Provided a Los Angeles River Greenway tour for the Mid-Cities Neighborhood Council, to demonstrate what a greenway along Ballona could be like.
- Gave presentations about the watershed and the management plan to: the Brookside Neighborhood Association, with a special emphasis on the tributary in their backyards; the Brentwood Community Council; the Mid-Cities Neighborhood Council; the RCD of Santa Monica Mountains; Dominguez Watershed Advisory Committee; and, the Ballona Wetlands Symposium.
- Held meetings with the consultants developing the City of Los Angeles Integrated Water Resources Management Plan.
- Presented the Stream Spirit Rising DVD, about stream day lighting, at the Los Angeles and San Gabriel Rivers Watershed Council, and at Flor y Canto, a community art space in the Arroyo Seco Watershed
- Gave a presentation to the community about stream restoration opportunities and challenges at the Compton Creek Action Team in the Compton Creek watershed.
- Met with staff from Supervisor Yvonne Braithwaite Burke's office about the Ballona Creek Watershed Management plan. Staff expressed interest in seeing a cost-benefit analysis for the projects proposed in the plan.
- Held meetings with local and federal politicians to promote the Ballona Creek Watershed Management Plan.
- Held meetings with non-government organizations and other stakeholders to obtain support for the Management Plan.

**Objective #4:** Develop and facilitate implementation of projects/measures that optimize water resources to reduce dependence on imported water

**Performance Measurement:** Number of new projects initiated/implemented in the watershed. The estimated amount of water reclaimed/recycled and the reduced amount of water use as the result of the newly implemented projects.

**Progress:**

- Worked with the Task Force to consider including a section on the status of reservoirs and lakes filled with imported water in the Management Plan.
- Held watershed tours to promote smart growth and sustainable development measures that have the benefit of integrated water supply, water conservation, water recycling and runoff management. The tours included visits to the Silverlake and Franklin Canyon reservoirs and a discussion of water conservation issues related to ongoing maintenance as offline reservoirs.
- Conducted tours of Stone Canyon Reservoir to help participants better understand current management practices related to reservoirs and maintenance of Stone, Franklin, Hollywood, and Silverlake reservoirs as offline reservoirs.

- Strategized with an LA City College professor on campus planning issues, native landscaping, and creek day lighting.

**Objective #5:** Coordinate implementation of a community-based watershed monitoring program. Enhance the citizen/volunteer monitoring efforts in the watershed

**Performance Measurement:** Amount and quality of the monitoring data

**Progress:**

- Attended monitoring subcommittee meetings and began to create a database to house data from Ballona Creek Watershed projects.
- Began obtaining information on projects and studies from stakeholders.
- Recruited a volunteer water monitor postgraduate student from Cal State Los Angeles to test water and sediment quality in the headwater streams. The coordinator was also able to refer the student to other agencies to conduct testing in the Ballona estuary.
- Worked with the monitoring committee to establish goals and objectives, design an information storage system to compile data relevant to the Ballona Creek Watershed, and create a monitoring plan.
- Recruited new volunteer monitors through the Baykeepers Beachkeeper program.

## Napa County RCD San Pablo Bay Watershed



**Amount Funded:** \$228,139

**Additional Funding Obtained to Date:** \$1,687,926

### 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

- ◆ Cooperated with the Sonoma Ecology Center watershed coordinator to form the North Bay Watershed Network. The network promotes coordination among organizations involved in stewardship of San Pablo Bay natural resources. The network has resulted in an increase in groups sharing protocols, approaches, information, and expertise. Organizations that would not have worked together previously are partnering on projects as a direct result of the watershed network.
- ◆ The coordinator submitted a total of \$2,348,295 in grant requests to fund watershed monitoring, road improvement and sediment reduction projects, and watershed assessments.
- ◆ Provided assistance and partnered with various watershed groups and organizations to submit an additional \$2,750,000 in grant requests that would improve the health of the Napa River Watershed.
- ◆ Worked with partners on detailed restoration plans for 4.5 miles of the Napa River near Rutherford.
- ◆ Worked on restoration plans for a one mile stretch of Carneros Creek.
- ◆ Designed fish barrier removal projects on Dry Creek and on the Napa River.
- ◆ Produced and published *Caring for Creeks in Napa County: Management Tips for Streamside*



*WICC Strategic Planning Workshop*

Property Owners. The publication received broad approval from various stakeholders including regulatory agencies, agricultural groups, environmental groups, scientific organizations, property rights advocates, and others.

- ◆ Helped the North Bay Water Reuse Program survey landowners in the Carneros Creek watershed. The Water Reuse Program is attempting to expand the use of reclaimed water in the North San Francisco Bay.
- ◆ Assisted the Selby Creek Watershed Partners and BioEngineering Institute in their efforts to fund the restoration of 1.5 miles of stream and 16 acres of riparian vegetation.
- ◆ Worked with partners to coordinate and publicize the Coastal Clean-Up Day. Over 400 volunteers contributed over 1,200 hours of time to help clean-up Napa County waterways. As a result, 4,280 pounds of trash and 1,130 pounds of recyclable material were removed from local waterways. There was a 29% increase since last year in the number of volunteers participating in the event.
- ◆ Held a Stewardship and Restoration of Urban Creeks workshop.
- ◆ Trained six volunteer water quality monitors.
- ◆ Coordinated and publicized 12 “Watershed Awareness Month” activities including four hikes, two festivals, three educational workshops, two birding trips, and one water quality monitoring training. The workshops covered watershed concepts and issues, wetlands as a vital resource, and riparian buffers for fish and wildlife.
- ◆ Coordinated completion of the spring well monitoring program (100% volunteer effort) in Carneros Creek.
- ◆ Facilitated the Watershed Information Center and Conservancy (WICC) Board of Director’s Strategic Planning Workshop and draft watershed information center strategic plan development, including prioritization of watershed action items.

### **Benefits to CALFED Program**

**Watershed Management** – The watershed coordinator completed several activities that supported the Watershed program goal to improve coordination, collaboration, and assistance among government agencies, other organizations, and local watershed groups.

The coordinator: 1) Worked with the Sonoma Creek watershed coordinator to facilitate the development of the North Bay Watershed Network. The network promotes cooperation and coordination among organizations involved in community-driven stewardship of natural resources in the North Bay. 2) Provided ongoing maintenance of the WICC Web Center that houses watershed data and reports, provides a calendar of watershed events, and facilitates watershed group capacity building and communication. 3) Facilitated stream restoration design with local stakeholders on Carneros Creek.

The coordinators also supported Watershed Program goal of supporting focused education and outreach efforts by: developing a creek care publication that had broad support from a diverse group of stakeholders; coordinating the May 2005 and May 2006 Watershed Awareness Month activities, and coordinated and conducted a workshop to promote watershed partnerships.

**Water Use Efficiency** – The coordinator worked with partners to support the Water Use Efficiency Program objective to facilitate implementation of Water Use Efficiency actions at the local level. Activities included: Continued participation in the Napa Berryessa Regional Water Management Group which meets to discuss a variety of water management strategies; providing assistance to the North Bay Watershed Association in planning and conducting outreach for a conference on the topic of water and regionalism; and, providing assistance to the Napa Sanitation District in gathering stakeholder input for a proposed water recycling project.

**Ecosystem Restoration** – The coordinator provide grant writing assistance to Napa County and Rutherford Dust Restoration Team in seeking funding for the final phase of restoration and habitat design and the first phase of project implementation. These projects will support the Ecosystem Restoration Program (ERP) goal of improving water quality to support healthy aquatic ecosystems and the goal to Protect and/or restore functional habitat types in the Bay-Delta estuary.

The coordinator also coordinated the development of conceptual restoration designs for a one-mile reach of Carneros Creek to improve water quality and support steelhead. This activity also supports the ERP goal to improve water quality to support healthy aquatic ecosystems. The work also supports the ERP goal of supporting the recovery of at risk species in San Francisco Bay and the watershed above the estuary.

### **Performance Measures**

**Goal:** Restore, enhance, and protect water quality, plant and animal species and habitats, natural stream processes and community relationships in the watershed so that it may sustain present and future generations.

**Objective 1:** Improve water quality and restore aquatic and terrestrial habitat.

**Performance Measure:** 50 acres of land and/or 10 miles of stream restored, enhanced or otherwise protected; 10 fish barriers removed.

**Progress:** As a result of the coordinators efforts, 4 fish barriers were removed on Heath Creek and Sulphur Creek. Two miles of stream were restored in the Sulphur Creek watershed. Over 1.5 miles of Heath Creek were restored for use as steelhead spawning and rearing habitat as a result of a dam removal. A half of a mile was restored on Spring Creek. About 1.75 to 3.5 miles of stream were enhanced through clean-up efforts facilitated by the coordinator at 7 sites in the Napa River watershed. The coordinator worked with partners to develop detailed designs for 1.5 miles of Selby Creek and designs for restoration work on 4.5 miles of the Napa River near Rutherford. Conceptual designs for a



*Volunteers picking up trash during a watershed clean-up event.*

restoration project on one mile of Carneros Creek have been completed. Priority road improvement and sediment reduction projects have been identified for the Sulphur and Carneros Creek watersheds. And, a fish barrier removal project is currently being planned on Dry Creek.

This performance measure is over 50% complete.

**Objective 2:** Improve water and watershed management in the San Pablo Bay watershed.

**Performance Measure:** 10% increase in implementation of best management practices related to water conservation and non-point source pollution prevention and a 10% increase in public support for the use of recycled water for irrigation.

**Progress:** The coordinator has gathered baseline information regarding non-point source pollution prevention. Strong community support for recycled water has been developed in the Milliken-Sarco-Tulocay and Carneros regions of the watershed. The local sanitation district is actively promoting the expansion of their recycled water system.

**Objective 3:** Improve water and watershed management in the San Pablo Bay watershed.

**Performance Measure:** Ensure the long-term viability of programs that support restoration, enhancement, and protection of watershed resources.

**Progress:** The coordinator has obtained \$2,000,000 to support the goals of this work plan through various federal, state, and local programs. A cumulative total of \$6,669,561 has been requested to support restoration, enhancement, and protection of watershed resources. In addition, the watershed coordinators have actively helped other organizations apply for an additional \$2.75 million, which would also further the goals of this work plan. Finally, the Watershed Information Center and Conservancy of Napa County and the Napa County Board of Supervisors adopted a Funding Options Plan as a first step in developing a funding strategy for local watershed improvement projects and capacity building.

## **Nevada County RCD**

### **Lower Bear and Upper Bear Watersheds**



**Amount Funded:** \$232,434

**Additional Funding Obtained to Date:** \$10,350

### **Background**

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

### **Benefits to the Watershed**

- ◆ Involved many stakeholder groups in watershed improvement and educational projects.
- ◆ Coordinated a community-wide storm drain marking project and created a door hangtag. Student volunteers labeled 800 storm drains and distributed door hangtags in the City of Grass Valley to help raise watershed awareness and reduce dumping into storm drains.
- ◆ Coordinated a community wide shaded fuel break project, which involved representatives from the community, homeowner associations, private landowners, and federal agencies.
- ◆ Coordinated over fifty educational seminars. Over one thousand people attended to increase their awareness of natural resources issues and concerns within the watershed.
- ◆ Coordinated volunteer water quality monitoring and collection of data. The coordinator presented the data to the Technical Advisory Committee for approval.
- ◆ Collaborated with local agencies to identify possible point sources of pollution, including failing septic systems and infrastructure.
- ◆ Completed the SWAMP compliant Phase II Monitoring Plan with sub-watershed groups. The plan targets strategic areas where there are known or expected impacts or where the State has listed the water body as impaired.
- ◆ Coordinated an all day seminar for horse owners that taught Best Management Practices, good horse management practices, weed eradication techniques, and pasture management. The coordinator and partners created a map of each participant's land and worked one-on-one with all 52 participants to identify potential natural resource concerns and identify areas to implement BMPs. The coordinator is planning an additional seminar due to the popularity of this first seminar.

- ◆ Participated in the Integrated Regional Water Management Planning (IRWMP) process for the upper Cosumnes, American, Bear and Yuba watersheds (CABY). The coordinator represented the priorities identified in the Bear River Management Plan to the workgroups.
- ◆ Hosted a public forum with the Land Stewardship Council to give stakeholders a chance to provide input about the conservation of land owned by PG&E. The coordinator presented information to the group on the Bear River watershed effort and the opportunity to collaborate on PG&E land conservation issues.
- ◆ Created and distributed informational publications on the importance of pollinators for nurseries and the public at the Nevada County RCD native plant giveaway.
- ◆ Collaborated with USGS, Stillwater Sciences, Wolf Creek Community Alliance and the Nevada County RCD to coordinate a mercury research project on Bear River.
- ◆ Supported and participated in the Great Yuba River Clean Up Day. More than 9,000 pounds of trash and recyclables were pulled from the river. The event was a tremendous success and provided an ideal opportunity to conduct outreach and recruit new volunteers.

### **Benefits to CALFED Program**

**Watershed Management** – In support of the watershed management program, the watershed coordinator:

- Participated in the Integrated Regional Water Management Planning (IRWMP) process. As part of the process the coordinator provided Bear River identification priorities and concerns to the work groups and water purveyors.
- Continued to host watershed meetings and public forums to involve stakeholders in identifying issues and concerns and increase awareness of watershed issues.
- Conducted site visits to assist landowners with identifying natural resource concerns on their properties to help them understand and address the issues.

**Water Use Efficiency** – To help meet Water Use Efficiency program goals the coordinator worked with stakeholders to provide them with education on irrigation practices, irrigation conversions to improve efficiency, grazing management, and cost share practices to help implement projects to improve water use efficiency.

**Ecosystem Restoration** – In support of Ecosystem Restoration Program goals the coordinator:

- Submitted a grant proposal to fund further research and restore a stream reach to reduce methylation of mercury and decrease bio-accumulation.
- Taught landowners how to install buffer and filter strips on their land to filter nutrients and protect water quality on their land.

**Science** – In support of Science program goals the coordinator:

- Continued coordinating water quality monitoring, collecting and inputting data and presenting the data to Technical Advisory Committee for approval.
- Completed a SWAMP compliant Phase II Monitoring Plan with sub-watershed groups.

- Worked with USGS to submit a grant proposal to further mercury research in the Bear River.

### **Performance Measures**

**Goal:** To ensure a healthy, sustainable, economically viable, watershed for future generations.

**Objective # 1:** Developing long- term coordination.

**Performance measure:** Bear River CRMP completed and priorities identified, 10 MOU's signed and six outreach activities completed.

#### **Progress:**

- The Bear River Management Plan was completed. The plan prioritizes watershed projects and concerns.
- Ten MOU's have been signed. MOUs were signed with Beale Air Force Base, PG&E, Fire Safe Council of Nevada County, US Forest Service, Wolf Creek Community Alliance, High Sierra Resource Conservation & Development, Yuba County RCD, Nevada County Farm Bureau and Placer County Water Agency, and the Idaho-Maryland Mining Corp.
- Over 100 public watershed seminars have been conducted. Almost 1900 people attended the educational watershed events.
- Over 100 new volunteers have participated in implementing watershed projects to date.
- Over 120 outreach projects have occurred, including public seminars, River Clean-up Days, Public forums, Hazard Notification System planning, storm drain marking, and more.

This performance measure is complete.

**Objective #2:** Continue to expand water quality monitoring and begin improving water quality.

**Performance Measure:** Acquired baseline data from a minimum of ten locations. Three Bear River Management Plan recommendations implemented.

#### **Progress:**

- Several actions recommended in the management plan were completed. A Hazard Notification System was developed to warn downstream users in the event of a spill at the wastewater treatment plant, mercury education and warning signs were installed, educational seminars were presented, a storm drain marking project was implemented, and water quality monitoring was conducted. All of these actions were recommended in the Bear River Management Plan.
- Nevada County RCD and Wolf Creek Community Alliance collaborated to develop a Phase II Water Quality Monitoring Plan.

This performance measure is 60% complete.

**Objective #3:** Promote Best Management Practices for fire safe activities to preserve or enhance water quality and habitat.

**Performance Measure:** 90% of fire safe agencies are promoting BMP for watershed health.

**Progress:**

- The coordinator facilitated a community shaded fuel break project near the cities of Grass Valley and Nevada City.
- The coordinator began developing a “How To Manage the Vegetation on Your Property” publication sponsored by PG&E to teach landowners BMPs and encourage them to consider multiple watershed health objectives when treating their land.

**Objective #4:** Enhance and restore habitat, flow and improve water temperature to increase anadromous fish and trout fisheries to sustainable levels in the Bear River and other streams.

**Performance Measure:** Restore 10 acres of riparian habitat.

- The coordinator worked with Beale AFB on their efforts to restore over 10 acres of habitat. Project post monitoring is currently being conducted.
- The coordinator also attended IRWMP planning group meetings to represent the Bear River and the identified Bear River priorities. The planning group is made up of stakeholders from the upper Cosumnes, American, Bear and Yuba watersheds (CABY). The group is working together to develop an Integrated Regional Water Management Plan.

**Resource Conservation District of  
the Santa Monica Mountains**  
Santa Monica Bay Watershed



**Amount Funded:** \$171,542

**Additional Funding Obtained to Date:** \$613,412

**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**

- ◆ Conducted a Visioning Process to solicit project ideas from the Malibu Creek Watershed Council members to be incorporated into the Los Angeles Integrated Regional Watershed Management Plan. The ideas will be incorporated into the plan. The coordinator also worked with other key stakeholders such as California State Parks to make sure key projects make it into the IRWMP.
- ◆ Worked with MCWC to add a 45th action item that addresses the need to transform energy use in the region. As a result new stakeholders with energy use concerns have joined the council.
- ◆ Lead lobbying efforts to obtain funding for the USACE Malibu Creek Environmental Restoration Feasibility Study. The study will explore the possibility of removing Rindge Dam. The coordinator obtain support letters from Heal the Bay, several local mayors, Assemblymember Fran Pavley, Senator Sheila Kuehl, concerned citizens, and more.
- ◆ Supported Wetlands Recovery Project day in Sacramento in order to help bring more funding into the watershed related projects.
- ◆ Developed partnerships with Las Virgenes Municipal Water District, West Basin Municipal Water District, and Water District 29 to find a way to create a Native-scaping project patterned after the Tahoe RCD "Backyard Conservation" program.
- ◆ Conducted a native plant sale to provide Santa Monica Mountains residents with water-efficient native plants for landscaping. Over 2,500 plants were sold.

- ◆ Held a Malibu Creek Watershed Tour to highlight Malibu Creek watershed concerns, showcase existing watershed projects, and provide participants with valuable information about the watershed.
- ◆ A video of the tour “A Watershed Experience: the Malibu Creek Watershed Tour” was created and shown on local television stations in five cities and two public access cable stations.
- ◆ Created an educational video, “the Clean Water Act and Our Backyards: Improving Water Quality in the Santa Monica Mountains”, to provide viewers with information about the Clean Water Act and how to improve water quality.
- ◆ Worked with A.E. Wright middle school to plan a native garden that will be constructed on school grounds to be used as a teaching site.

### **Benefits to CALFED Program**

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

- Worked with partners to conduct a native plants sale. Over 2,500 drought tolerant water plants were sold to Santa Monica Mountains residents for landscaping.
- Began planning the development of a native plants video that will teach viewers about the water saving benefits of native plants.
- Wrote and published several articles promoting the use of Native Plants and providing readers with information about the water use efficiency of Native Plant landscaping.
- Wrote grants to obtain funding for native plant gardens in local schools.
- Conducted outreach efforts to promote water use efficiency including distributing the Clean Water Act and Living Lightly in the Watershed guides.
- Worked with the City of Malibu to plan the development of an E.T. Controllers installation and refund program.

**Watershed Management** – In support of the Watershed Management Program the coordinator:

- Worked with other watershed groups and agencies to collaborate on potential projects.
- Worked with local schools to plan implementing native plants teaching gardens on school grounds.
- Partnered with the Gabrielino/Tongva Tribe to plan a restoration project on Kuruvunga Springs.
- Held a Malibu Creek Watershed Tour to educate participants about the watershed.

**Ecosystem Restoration** – Although the watershed is technically outside of the Ecosystem Restoration Program jurisdiction, the coordinator supported the goals of the program by:

- Helping with the effort to obtain funding for the completion of the USACE Malibu Creek Environmental Restoration Feasibility Study which is exploring the possibility of removing Rindge Dam.

- Worked with stakeholders to develop plans for removing cement out from the Calabasas portion of the creek. Grant funding has been obtained for the project but engineering designs are still under development.

### **Performance Measures**

**Objective 1:** Coordinate Malibu Creek Watershed Advisory Council Meetings.

**Performance Measure:** 1. 25% of stakeholder surveys returned to Coordinator 2. Three stakeholders will seek funding from sources on available grants list.

#### **Progress:**

- Completed a Stakeholder survey in 2004.
- Sent out a Stakeholder Survey via email for 2005 in January of 2006.
- Malibu City is currently coordinating a very large Prop 50; stakeholders have co-funded grant writers to manage the project.
- The Ballona Creek Watershed Coordinator wrote a Prop 50 Watershed Coordinator grant as a result of a suggestion made by the coordinator in December 2005.
- Stakeholders supplied project ideas to the IRWMP project after encouragement by the coordinator.

**Objective 2:** Collaborate with other watershed groups in the Santa Monica Bay Watershed.

**Performance Measure:** 1. MCW Coordinator meets with Ballona Stakeholders annually to exchange watershed planning ideas and goals. 2. MCW Coordinator and Topanga Creek Watershed Committee meet annually to exchange watershed planning ideas and goals.

#### **Progress:**

- Met with the Ballona Creek Watershed Coordinator on a regular basis to exchange planning ideas and goals.
- Attended the 2005 Ballona Creek Watershed Walk.
- Met with the Topanga Creek Watershed Coordinator to discuss shared goals and the potential for collaborating on projects.
- Partnered with the Ballona Creek Watershed Coordinator on a Proposition 50 “Go Wild” Native-scaping project.

**Watershed Goal 2:** Increase residential community awareness of watershed issues.

**Objective 1:** Maintain and expand current watershed awareness by updating *the Living Lightly Guide*.

**Performance Measure:** 1.Coordinator obtains resources to publish and re-distribute revised

*Living Lightly Guide*. 2. Living Lightly Guide revision reaches 100,000 Watershed households. 3. Two Southern California watershed groups adopt a “Living Lightly” type document for their own watersheds

**Progress:**

- Obtained over \$51,000 to fund reprinting the Living Lightly Guide.
- Distributed 19,000 revised Living Lightly Guides throughout the watershed.
- Over the next 3 years, the Living Lightly Guides will be distributed by Las Virgenes Municipal Water District and Los Angeles County Department of Public Works Water District 29 to all new homeowners throughout the watershed.
- The City of Malibu has agreed to distribute the guide to every home within the city.

**Objective 2:** Build watershed awareness by conducting media outreach.

**Performance Measure:** 1. Two watershed-focused articles in local newspapers each year. 2. Two watershed events or issues covered on Cable TV each year.

**Progress:**

- Created a three-hour documentary about the 2004 Malibu Creek Watershed Tour called “A Watershed Experience”. The documentary has been shown on city TV stations in Santa Monica, Malibu, Calabasas, and on two cable access stations.
- The coordinator worked with City of Calabasas to film the Native Plants sale. The film will provide information about using native plants for landscaping.
- Developed an educational video about improving water quality called, “The Clean Water Act and Our Backyards: Improving Water Quality in the Santa Monica Mountains”.

**Watershed Goal 3:** Reduce water use within watershed homes and gardens.

**Objective 1:** Encourage development of rebate program for City of Malibu for low-flush toilets, dual-flush toilets and low-water use washing machines.

**Performance Measure:** 1. Rebate programs advertised in City of Malibu news media and Malibu newspapers. 2. WBMWD becomes MCWAC stakeholder. 3. WBMWD presents rebate program at one City of Malibu event and distributes rebate information to residents aged over 50.

**Progress:**

- This performance measure is complete. The coordinator worked with the City of Malibu and Malibu newspapers to advertise rebate programs.
- WBMWD has signed on to become a member of the MCWAC.
- WBMWD and City of Malibu hosted several events at the Malibu Farmers Market to promote the ultra-low-flush toilets/water-efficient clothes washer rebate program.

**Objective 2:** Develop stakeholder-driven plan to promote “California Friendly” gardening.

**Performance Measure:** 1. Six MCWAC or MCW stakeholders establish “California Friendly” Garden Subcommittee, meet bi-monthly. 2. Gardening Subcommittee holds annual “California Friendly” Garden event with 25 participants in each year beginning in 2004 – 2007. 3. “De-lawning” party receives media coverage on cable TV and two local newspapers. 4. Coordinator solicits sites for “De-lawning” event. 5. Coordinator submits 1 grant or pursues three other funding sources for garden coordinator position.

**Progress:**

- The California Friendly Garden subcommittee has held one meeting.
- Obtained a PIE grant received from Santa Monica Bay Restoration Commission to fund: The development of six articles on Native-scaping to be published locally; a Native Plants Sale; a Delawning Party; and, the creation of a Native-scaping Teaching Garden.
- Held a Native Plants Sale and sold over 2,500 native plants.
- The A. E. Wright elementary school agreed to host a native plant demonstration garden.
- Developed a partnership with three water districts to plan the development of a backyard conservation program modeled after the program developed by Lake Tahoe RCD.

**Watershed Goal 4:** Increase water re-use throughout watershed.

**Objective 1:** Build support for water re-use within the watershed.

**Performance Measure:** 1. Publication of 5 articles over 3 years on re-use options in local newspapers. 2. 15 MCWAC stakeholders visit TreePeople and LVMWD water re-use demonstration sites.

**Progress:**

- Talked to TreePeople staff about conducting presentations on cisterns for local City Councils. The staff has expressed an interest.
- Proposed that cistern use, greywater use, and turning treated effluent into potable water be included as potential projects as part of the IRWMP process.

**Watershed Goal 5:** Meet and exceed nutrient/bacteria TMDLs by limiting sources of non-point source pollution.

**Objective 1:** Facilitate development of TMDL video for public education/outreach program.

**Performance Measure:** 1. Funding acquired to create TMDL video. 2. Video completed and 45 MCWAC stakeholders view video at MCWAC meeting. 3. Plan implemented to present video to a minimum of 10 MCW community groups each year through 2007. 4. 100 surveys returned after 10 video viewings.

**Progress:**

- Obtained \$25,000 for the TMDL video.
- A script was approved by Malibu Creek Watershed Advisory Council Education Subcommittee.
- The video has been completed. The first public screening was held in December 2005.
- The film is now being shown at City TV stations in Malibu, Santa Monica, Calabasas, Agoura Hills, Westlake Village, Thousand Oaks and on the Charter Communications public access cable channel.

**Objective 2:** Obtain funding for a Santa Monica Horse Outreach/Education Coordinator to determine impact of horses on pollution within the creek.

**Performance Measure:** Coordinator writes 2 grants or develops other funding sources for Horse Outreach/Education Coordinator.

**Progress:**

- Submitted several interrelated SEP proposals to the Regional Water Quality Control board in attempt to obtain funding for a horse outreach and education coordinator. These proposals were not selected for funding.
- Included a discussion of horse related water quality issues in the water quality video.
- Held meetings with the County Planner and a Board of Supervisors staff members to highlight horse BMPs currently used in the watershed.

**Objective 3:** Continue to work with watershed cities and agencies to implement “Plan Blue,” a collaborative effort to reduce non-point source pollution.

**Performance Measure:** 1. Plan Blue document completed and utilized by MCW cities. 2. Plan Blue annual revision plan adopted and scheduled. 3. Plan Blue revision meetings occur annually, with participation of 4 cities and Los Angeles Dept. of Public Works. 4. Participating Plan Blue cities meet NPDES standards.

**Progress:**

The development of Plan Blue was delayed due to the key architect of the plan taking maternity leave. The planning will move forward when there is an opening in her schedule.

**Watershed Goal 6:** Continue momentum on priority ecosystem restoration projects.

**Objective 1:** Support completion of Rindge Dam Feasibility Study.

**Performance Measure:** 1. Forty public outreach meetings held over three years by CalTrout expert to educate public about Steelhead Trout and Rindge Dam blockage issues. Total of 400 people attend meetings. 2. Funding acquired to complete Rindge Dam Feasibility Study.

**Progress:**

- Attended and supported USACE-lead meetings designed to solicit information to complete the Rindge Dam Feasibility Study.
- Lead an extensive lobbying effort in attempt to obtain funding to complete the study.

**Objective 2:** Build upon previous coordinator's efforts to implement top ten Lagoon Task Force recommendations.

**Performance Measure:** 1. Inventory of Malibu Lagoon properties is created. 2. Task Force develops plan to address priority parcels around the Lagoon.

**Progress:**

- Local philanthropist/activist Ozzie Silna has an inventory of the Lagoon properties in place.
- Hired an employee to manage the permit process for the planned Lagoon Restoration project designed by Heal the Bay on behalf of California Department of State Parks and Recreation.
- Sent a Notice of Preparation to all stakeholders as part of the permit process.
- A priority parcel, the Chili Cook-off site, has been obtained by Malibu City.

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



**Amount Funded:** \$278,036

**Additional Funding Obtained to Date:** \$157,523

### **Background**

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

### **Benefits to the Watershed**

- ◆ Coordinated a habitat survey project on Clover Valley Creek by working with the DCC contractor and volunteers. The survey collected information regarding barriers and habitat for anadromous fish.
- ◆ Provided planning and oversight of water quality monitoring activities. The data is used to develop projects that will lead to improved habitat, water quality, and compliance with stormwater permits.
- ◆ Engaged agencies and local government in several grant proposals that will lead to more cooperative watershed management. Proposals included: a full proposal to the CALFED Watershed PSP to continue monitoring in the Dry Creek Watershed and extend it to other watersheds in the American Basin; a proposal led by CalEPA OEHHA was submitted to the SWRCB Consolidated PSP to obtain funding to fill data gaps on sediment; a Sacramento River Watershed Program proposal was submitted to obtain funding for Secret Ravine fish passage improvement; a proposal was submitted to the Anadromous Fish Restoration Program to improve citizen spawning survey in Dry Creek Watershed, and, a grant was awarded by REI for work with the City of Rocklin to improve Johnson-Springview Park.
- ◆ Worked with representatives from the American Motorcycle Association, Placer County, Audubon, Cities of Roseville and Rocklin, and the state ORV Recreation Commission to develop an ORV facility in West Placer that will include a large amount of open space.

- ◆ Worked with the members of the Auburn Ravine and Pleasant Grove Coordinated Resource Management groups to consolidate them. There are plans to consolidation with the Dry Creek Watershed Council as well.
- ◆ Participated in planning with CalEPA OEHHA and others to engage SACOG planners in a discussion about including low impact development measures in the SACOG Blueprint guiding development in the five county region.
- ◆ Worked with an environmental consultant to organize a meeting of area engineers to employ Low Impact Development measures in local development projects. LID will result in more watershed friendly development in the Dry Creek Watershed and surrounding watersheds.
- ◆ Continued developing the public involvement portion of the Secret Ravine Restoration Project. This included working with the Placer County Flood Control District to plan the hiring of a coordinator to manage Sierra College involvement. The Project will implement the Dry Creek Watershed Flood Control Plan and increase instream habitat for salmonids and other species by installing 50 root wads and reconnecting the floodplain.
- ◆ Participated in meetings to create a regional long term *Sesbania* management program based on the initial program developed by Sacramento Area Flood Control Agency. *Sesbania* is an invasive plant that has become a problem in valley riparian areas. The coordinator was able to follow up with local governments and agencies to secure \$15,000 for the program. This is the first regionally funded maintenance program and may serve as a model for a variety of regionally funded maintenance activities.
- ◆ Coordinated the Creek Week committee, which is organizing the tenth annual creek week. This event is the major watershed education and public outreach event for the watershed and neighboring watersheds. Over 400 people participate in the workdays and educational events.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator conducted numerous activities to support the goals of the CALFED Watershed Program. Including:

- Coordinating a citizen habitat survey on Clover Valley creek
- Implementing a regular water quality-monitoring program in the watershed. Data is used to develop management plan actions that will lead to improved habitat, better water quality, and compliance with stormwater permits.
- Organized a consolidation of the Auburn Ravine and the Pleasant Grove Coordinated Resource Management groups.
- Continued development of the public involvement portion of the Secret Ravine Restoration Project.
- Coordinated comments on the Clover Valley development project DEIR that were favorably received regarding setting up a monitoring program as part of the mitigation measures.
- Coordinated the Creek Week committee in organizing the tenth annual creek week. The event will provide watershed education and outreach for residents within the watershed and neighboring watersheds.

**Ecosystem Restoration** – In support of Ecosystem Restoration Program goals the coordinator helped create a regional *Sesbania* management program.

**Science** – The coordinator supported the goals of the Science program by investigating the relationship between water quality parameters and the benthic macroinvertebrate community and, investigating the contribution of the Steelhead Creek watershed to organic carbon loads in the Delta.

### **Performance Measures**

**Goal:** Reduce run-off; improve water quality; and improve aquatic and terrestrial habitats, and the ecosystem function of the Dry Creek Sub-Watershed.

**Objective 1:** Strengthen the organizational capacity of the Dry Creek Watershed Council (DCWC) to provide continuous long-term management of the Dry Creek Watershed and improve the coordination between the DCWC and the watershed groups in the two other watersheds comprising the Lower American River (LAR) Watershed (HUC #18020111).

**Performance Measure:** Compilation of spatial and numeric watershed data; creation of a DCWC website featuring the watershed data, meeting announcements, minutes, organizational information and relevant links to the websites in the other watersheds of the LAR HUC; implementation of funded watershed restoration projects; development of grant proposals to fund future goal related projects.

### **Progress:**

- Data continues to be gathered as part of DCC monitoring programs. The data is being catalogued in PDF and database format for entry into the BDAT database program.
- There is no available funding for website development but a DCC volunteer is using the DCC website to post information.
- Work has continued on the Secret Ravine Restoration Project and the Miners Ravine Restoration Project.
- Three proposals have been developed and submitted, and work plans are being developed for two others.

**Objective 2:** Develop and implement a focused education and outreach program to promote an integrated, watershed-based approach to land-use planning in the Dry Creek Watershed.

**Performance Measurement:** Establish an executive level oversight group; complete a series of informational presentations to local planners, design engineers and developers; convene a workshop on the principles of watershed-based land-use planning and the value of minimizing imperviousness in urban infrastructure and subdivision design; create a working group to develop a specific set of recommendations for modifying urban planning and design requirements in the Dry Creek watershed; and support a demonstration project illustrating good design for existing and new development.

**Progress:**

- A presentation is planned to a group of local engineers and another presentation to SACOG planners is scheduled.
- Convened a workshop on the principles of watershed-based land –use planning and the value of minimizing imperviousness in urban infrastructure and subdivision design.
- Created a working group to develop a specific set of recommendations for modifying urban planning and design requirements in the Dry Creek Watershed.
- Sacramento County and Roseville are working on stormwater measures that will incorporate recommendations for modifying urban planning and design requirements in the watershed. The Placer Regional Stormwater group is working on similar measures.
- Demonstrations of rain gardens to mitigate stormwater from individual sites are planned with city of Roseville and Roseville Joint Union High School District.

# San Francisquito Creek JPA

## Coyote Watershed



**Amount Funded:** \$656,815

**Additional Funding Obtained to Date:** \$3,907,056

### **Background**

The watershed drains into the San Francisco Bay and consists of urban, 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**

- ◆ Facilitated four volunteer workdays to plant 300 native plants at SFWC's long-term revegetation sites and remove invasive plants from 300 linear feet of creek. The workdays involved 70 volunteers. These efforts strengthened native cover on 600 linear feet of creek side land and provided community residents with education on watershed stewardship and native planting techniques.
- ◆ Coordinated an effort to complete 50% designs for a fish passage improvement at McGarvey Gulch. The site is currently blocking access to 0.25 miles of prime spawning and rearing habitat for steelhead.
- ◆ Released funds to a partner to complete designs for a project to improve passage at a barrier that impedes fish access to 3.6 miles of prime spawning and rearing habitat on Los Trancos Creek.



*Volunteers removed approximately 320 bags of trash and other assorted nonnatives at a watershed workday.*

- ◆ Developed a new partnership with Urban Creeks Council to conduct a pilot project in upper San Francisquito. The project will help landowners assess creek side land management issues on two headwater tributaries. The project will assist landowners, who own approximately 80% of the land in the watershed, in undertaking creek-friendly restoration projects.
- ◆ Oversaw construction of two demonstration projects to retrofit landscaping to reduce, slow, and clean storm waters. One site is on a residential driveway and the other is on a municipal parking lot. The projects involved replacing impervious surfaces with permeable ones such as pervious concrete, unit pavers, and grass pave. It is estimated that these projects will reduce runoff by approximately 0.8-acre foot/year.
- ◆ Worked with a restoration ecologist to develop a scientifically rigorous, volunteer-based monitoring protocol to help SFWC develop best management practices to ensure the long-term sustainability of its restoration sites. This work will help safeguard existing restoration efforts from reinvasion by invasive species on approximately 4000 linear feet of stream bank. Results from the monitoring may help other watershed groups and landowners ensure the long-term sustainability of their restoration efforts.
- ◆ Talked with a teacher at a school in the upper watershed about two small-scale creek side projects on campus. The projects will raise awareness about the creek and teach the principles of stewardship to approximately 150 students and their families.
- ◆ Encouraged broad public participation in the Flood Damage Reduction and Ecosystem Restoration Project feasibility study. The coordinator participated in feasibility study planning discussion and disseminated information to SFWC members about providing input to the feasibility study being conducted by San Francisquito Creek JPA and the US Army Corps of Engineers.
- ◆ Completed a contract with the Sonoma Ecology Center to conduct a second phase of *Arundo donax* mapping and removal.
- ◆ Worked with Streamkeepers and San Francisquito Watershed Council volunteer monitors to track a paint spill in a San Francisquito Creek tributary to determine when the paint arrived in the mainstem of the creek.
- ◆ Conducted an annual “maintenance walk” through San Francisquito Creek with seven agency staff to mark debris sites and identify plant materials that need to be removed.
- ◆ Treated 16 resprouts of *Arundo donax* on land in the middle and lower watershed.

### **Benefits to CALFED Program**

**Watershed Program** - In building a partnership with Urban Creeks Council to conduct a landowner assistance pilot project, the coordinator fostered the kind of broad collaboration encouraged by the Watershed Program to promote integration among community-based watershed efforts and to raise the public profile of watershed conservation. The coordinator also worked with SFWC staff to write grant proposals for \$389,244 to support SFWC’s work. This effort supports the Watershed Program goal of bringing technical expertise and other resources to local watersheds. Finally, the coordinator continued to expand existing partnerships and build new ones.

**Water Use Efficiency** – The creek side landowner assistance pilot project that the coordinator collaborated with partners to create seeks to reduce impacts from impervious surface, thereby helping to meet CALFED’s goal of improving water quality by altering the volume, concentration, timing, and location of return flows. The coordinator also worked with SFWC to develop an action plan to promote irrigation systems that will improve water use efficiency and enhance instream flows. Finally, the coordinator supported and participated in storm water runoff retrofit projects that help to improve water quality by altering volume.

**Ecosystem Restoration** – The coordinator completed activities that support the Ecosystem Restoration Program goal of aiding in the recovery of steelhead (a listed species), rehabilitate natural processes related to stream channels and to protect and restore functional habitat; and the goal of reducing negative impacts from invasive species. Specifically the coordinator:

- Worked with SFWC to secure 50% designs for two fish passage improvement projects;
- Secured funding for final designs for a third fish passage improvement project;
- Worked on mapping and removing the remaining stands of *Arundo donax*;
- Planned for the long term sustainability of SFWC’s restoration sites by developing monitoring protocol to help guard against reinvasion;
- Coordinated volunteer workdays that helped reduce the negative impacts of invasive species by increasing the density of native species;
- And, participated in discussions and dissemination of information to members about the SFC JPA/USACE Flood Damage Reduction and Ecosystem Restoration Project feasibility study.

**Levee System Integrity** - By participating in the San Francisquito JPA as an Associate Member and member of the Management Team, the coordinator supports the JPA’s work to ensure that levee maintenance and habitat needs are met.

### **Performance Measures**

**Goal # 1:** Improve and maintain aquatic and riparian habitat within the watershed.

**Objective # 1:** Maintain and enhance in-stream flows and reduce impacts of impervious surfaces on watershed hydrology.

**Performance Measure:** Permanent water use efficiency gains and storm water runoff reductions totaling up to 3-acre feet per year (1 million gallons per year).

### **Progress:**

- Participated in discussions about potential water budget study to be included with the San Francisquito Creek JPA / U.S. Army Corps of Engineers Flood Damage Reduction and Ecosystem Restoration project feasibility study. The study would offer a unique opportunity to examine trends in the hydrologic function of the watershed and to understand impacts of withdrawals and impervious surface on flows.

- Identified irrigation systems as the most relevant focus for an evaluation of opportunities to improve water use efficiency and enhance in-stream flows. The coordinator began gathering information for an action plan. These systems could save at least 1 million gallons per year in withdrawals and/or storm water runoff if operating at peak efficiency.
- Hired a consultant to draft a policy, code, ordinance, and operations review of local agencies' storm water management practices and develop recommendations of areas for improvement.
- Completed two grant proposals to fund projects that will sustain in-stream flows and reduce the impacts of impervious surfaces. One proposal was for a project to enhance monitoring at SFWC's storm water demonstration sites. The other was a pilot project to provide technical consultations to landowners.

**Objective 2:** Restore native riparian vegetation along San Francisquito and tributary creeks

**Performance Measure:** 1000 linear feet of stream bank revegetated with native riparian plants

**Progress:**

- Worked with Urban Creeks Council to plan a pilot project on 1-2 tributaries in the upper watershed. The intent of the project is to provide technical consultations to landowners with bank erosion problems or interest in reducing impervious surface on their properties. The project has the potential to produce revegetation projects that will exceed SFWC's goal of 1000 linear feet of revegetated stream bank.
- Worked with partners to identify and prioritize sites for invasive species removal. The coordinator secured funding and began developing a mapping and eradication plan for *Arundo donax*.
- Developed monitoring protocol to assess the success of SFWC's revegetation sites. The monitoring will measure percent cover, densities of native and nonnative plant species, and other parameters to determine the sustainability of the sites' development trajectory. The results will help SFWC plan maintenance efforts.
- Oversaw 23 volunteer workdays that resulted in 1,693 native plants planted at SFWC's long-term revegetation sites. Additionally, invasive plants were removed from 1,500 linear feet of streambank. This effort involved 520 community volunteers. Volunteers also removed approximately 320 bags of trash from the mainstem of San Francisquito Creek.
- Provided advice to eight property owners about the use of native plants in their restoration projects.

**Objective 3:** Restore habitat connectivity for steelhead trout by remediating barriers to migration passage.

**Performance Measure:** Access to 18.5 miles of spawning and rearing habitat improved for adult steelhead.

**Progress:**

- Worked with partners from the Steelhead Task Force to draft a list identifying and prioritizing barriers to steelhead passage to 18.5 miles of spawning and rearing habitat.
- Coordinated the development of 50% designs on two barriers to steelhead passage to 2.8 miles of prime spawning and rearing habitat in the upper watershed.
- Facilitated the release of funds to a partner to assist with the completion of designs for a fish passage improvement project at a barrier that currently impedes access to 3.6 miles of prime spawning and rearing habitat for steelhead in the upper watershed.
- Wrote and submitted three grant proposals for \$207,618 and helped two partners secure grants for five projects to improve passage for steelhead migrating from the Bay to the upper watershed.
- Presented information about steelhead in the San Francisquito watershed at one public meeting and three community events.

## 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 90% 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**

- ◆ Facilitated meetings of the Lower Mokelumne River Watershed Stewardship Steering Committee. These meetings keep local stakeholders involved in implementing the Lower Mokelumne River Watershed Stewardship Plan, allows the committee to review the plan and make changes to meet changing needs of the community and stakeholders, and the meetings keep stakeholders up to date on activities in the watershed. Stakeholder participation in the Committee is increasing and the committee is taking on additional projects
- ◆ Planned and oversaw an agricultural water quality best management practices field day in the watershed. The field day was held in conjunction with government agencies and non-governmental organizations to meet their needs while promoting best management practices to reduce non-point source pollution that enters the river. The field day strengthened relationships between government agencies and non-governmental groups, and provided taught agricultural producers how to reduce non-point source contamination.
- ◆ Continued to work with the SLEWS coordinator on a project site in the watershed. The coordinator worked with SLEWS staff to select the site, the types of plants to be planted at the site, and the students that would be involved with the program. The coordinator also secured equipment for the project site. During the school year students participated in a restoration project that included developing a planting plan, removing non-native invasive species, planting native plants, and monitoring the success of the project.
- ◆ Continued to work with the San Joaquin Watershed Education Partnership (SJWEP) to promote using the Mokelumne Watershed as a focal point for place-based learning activities.
- ◆ Promoted the successes achieved in the watershed at several local, regional, and statewide meetings.

- ◆ Continued to cooperate and collaborate with other watershed coordinators on a regional and statewide basis to help increase cooperation and collaboration and share information.
- ◆ Worked with partners to submit two grant applications for restoration projects that would make improvements at Lodi Lake and provide educational opportunities.

### **Benefits to CALFED Program**

**Watershed Management** – In support of the Watershed Management program, the coordinator:

- Facilitated meetings of the Lower Mokelumne River Watershed Stewardship Steering Committee.
- Helped recruit students for a FARMS/Leadership program in the watershed.
- Served as a mentor for SLEWS program activities a project site in the watershed.
- Helped plan the ongoing Mokelumne River activities of the San Joaquin Education Partnership.
- Participated in Coastal Clean-up day activities along the Mokelumne River at Lodi Lake Park.
- Planned and co-hosted a second agricultural water quality best management practices field day in the watershed.
- Worked in partnership with the city of Lodi and the Lodi-Woodbridge Winegrape Commission to finalize a non-point source runoff workshop for urban/suburban residents.
- Wrote grant proposals to fund restoration and other activities in the watershed.
- Participated in regional and statewide watershed groups and councils, including TOPPS and SJCDWQC in San Joaquin County, the CARCD/DOC Watershed Coordinators group, and the CALFED Watershed Subcommittee.

### **Performance Measures**

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

**Objective # 3:** Continue the involvement of diverse stakeholders in the Lower Mokelumne River Watershed Stewardship Steering Committee

**Performance Measure:** 10% increase the number and diversity of active participants in the steering committee, 50% increase in the number of non-project related news stories about Steering Committee Efforts, and a 20% annual increase in the number of hits on the RCD website pages devoted to the watershed stewardship plan and watershed owner's manual.

**Progress:**

- A 10% increase in the number and diversity of active participants was achieved. The new participants have continued to attend the steering committee meetings. Meetings typically include 10-12 people, with absentees or non-participants rotating month to month. The original work plan called for quarterly meetings, but these meetings have been increased to monthly as the committee undertakes additional projects.
- The 50% increase in non-project related news stories has been achieved and exceeded. In addition to stories about restoration projects in the watershed, meeting notices have been published in the newspaper as well as notices of the agricultural best management practices field day.
- Visits to the website have increased above the 20% goal.

**Objective # 4:** Create a greater involvement of school systems and educational institutions in watershed improvement and outreach efforts.

**Performance Measure:** 20% increase the number of teachers and students doing projects in the lower Mokelumne River Watershed, a 30% increase in field trips to the watershed involving the watershed coordinator.

**Progress:**

A 20% increase in the number of teachers and students doing projects in the watershed has been achieved, as has the 30% increase in the number of field trips. These performance measures have been achieved through the coordinators work with the SLEWS program.

**Objective #5:** Expand education and outreach about runoff control and non-point source pollution for both agricultural and urban-suburban stakeholders.

**Performance Measure:** 5% % increase in dissolved oxygen, 5% increase in water clarity, 10% increase in applications for assistance through NRCS EQIP water quality/quantity programs and 10% increase in applications for NRCS WHIP program.

**Progress:**

- Water Quality data collected by the city of Lodi through its storm drain detectives program indicates overall improvement for dissolved oxygen levels in 2006 when compared with 2005 figures. There were a few monitoring stations that remained nearly the same from year to year, while others showed decreases in dissolved oxygen levels. Some of this may be due to different natural river conditions in 2005 and 2006 however; some sites did show as much as a 25% improvement in dissolved oxygen levels (mg/L) when compared with the previous year.
- Applications for assistance through the NRCS EQIP program have declined rather than increased in terms of total number of applications. This may be due in part to changes to the rules that now favor a smaller numbers of recipients for larger amounts of money.

- The number of applications for assistance through the NRCS WHIP program have also declined.

**Objective #6:** Increase capacity building in the watershed.

**Performance Measure:** Secure funding for restoration and other projects, including continuation of the watershed coordinator's work; conduct tours for local/state/federal agency personnel, NGO's, and other watershed coordinators; make presentations to CBDA, the California Watershed Council, and other state/regional watershed organizations.

**Progress:**

The coordinator has received a total of \$1.37 million in funding for restoration and other watershed improvement projects. During past year, two grant proposals were submitted for work in Lodi Lake and for a watershed education project.

# San Joaquin River Parkway and Conservation Trust

Middle San Joaquin-Lower  
Chowchilla Watershed



**Amount Funded:** \$158,624

**Additional Funding Obtained to Date:** \$450,400

## **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**

- ◆ Began mapping *Arundo donax* during a January volunteer workday. Clusters were identified on hand drawn maps for future GPS location. One 350-acre property was mapped.
- ◆ Conducted an acorn planting project at the river center.
- ◆ Began implementing the Jensen River Ranch habitat enhancement project and Riverbottom park project.
- ◆ Recruited students to help propagate native plants for the Jensen River Ranch project. The coordinator has obtained a commitment from students at CART high school and other schools and community groups have expressed an interest.
- ◆ Began weed eradication at Jensen River Ranch with community volunteers. Volunteers were educated about invasive weeds and the protection necessary for Valley Elderberry Longhorn Beetle habitat.
- ◆ Coordinated Camp Pashayan clean-up with East Fresno Kiwanis Club. Small mammal and bird habitat was improved by the creation of new cover from predators.



*Volunteers at work during an Oak Thistle Removal Day.*

- ◆ Coordinated the purchase of a Habitat Conservation Easement between the City of Fresno and the San Joaquin River Parkway Trust to protect new Valley Elderberry Longhorn Beetle habitat at Riverbottom Park. The city will provide biological monitoring while the Trust holds and monitors the easement.
- ◆ Conducted a Watershed Model presentation for a FARMS program field trip. The coordinator created models with diatomaceous earth to teach high school students how watersheds function and how surrounding land uses impact watersheds.
- ◆ Worked with California State University of Fresno students and other volunteers to remove Bull Thistle from Parkway properties.
- ◆ Negotiated the final details of the Sycamore Island Ranch acquisition. The acquisition will be important for future San Joaquin River restoration projects.

### **Benefits to CALFED Program**

**Watershed Management** – In support of Watershed Program goals, the coordinator involved community volunteers in river clean-up activities, involved high school students in monthly stewardship days and native plant propagation for future restoration projects, held stakeholder meetings to educate and inform the community about the watershed and projects within the watershed.



*The San Joaquin River*

**Ecosystem Restoration** – In support of the Ecosystem Restoration program, the coordinator: Continued planning habitat enhancement at Riverbottom Park with the help of a college intern; Began implementing the Jensen River Ranch Habitat Enhancement project in partnership with DWR, San Joaquin River Conservancy, and the City of Fresno; Worked with volunteers to remove a Bull Thistle infestation; Began mapping *Arundo donax* infestations as part of the *Arundo* Eradication and Coordination Program; and, worked with volunteers to conduct numerous river clean-ups and invasive species removal workdays.

### **Performance Measures**

**Goal:** Protect and restore riparian, upland, and aquatic habitat through a community-based restoration program

**Objective 1:** Establish program to solicit and maintain community involvement in the implementation of restoration activities.

**Performance Measure:** Number of acres restored through community-based restoration program.

**Progress:**

- Began implementing the weed eradication portion of the Jensen River Ranch Project. The project includes approximately 120 acres of riparian, wetland, and oak savanna habitat.
- Continued to recruit and maintain River Steward volunteers through monthly workdays, regular communication, presentations, newsletter articles, and a Teach the River Symposium workshop.
- Coordinated with the city of Fresno to finalize environmental compliance for the Riverbottom Park project.
- Began mentoring an intern who will create a planting design for the Riverbottom Park project.
- Coordinated with Kiwanis, Cub Scouts, Boy Scouts, and high school students to implement cleanup projects and raise awareness about upcoming restoration projects.

**Objective 2:** Design, develop and implement discrete watershed conservation, maintenance and restoration activities.

**Performance Measure:** Amount of funding secured for project planning and implementation.

**Progress:**

- Secured a grant from the San Joaquin River Conservancy for Invasive Weed Eradication at Jensen River Ranch.
- Subcontracted with the Sonoma Ecology Center for the *Arundo donax* Education and Coordination program.

## **Santa Barbara County**

### **Santa Barbara Coastal Watershed**



**Amount Funded:** \$202,943

**Additional Funding Obtained to Date:** \$80,000

#### **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**

- ◆ Completed the San Jose Creek Watershed Plan and held a public meeting to present the final plan. Efforts are underway to begin implementing the Plan.
- ◆ Coordinated efforts to secure permits for two steelhead barrier removal projects in the watershed. These projects were identified as high priorities in the Carpinteria Creek Watershed Plan.
- ◆ Met with the Rincon Creek Watershed Council to guide development of the Rincon Creek Watershed Plan.
- ◆ Worked with TetraTech to conduct a data gap analysis and to prepare a work plan to guide fieldwork for the Rincon Creek Watershed Plan.
- ◆ Promoted use of the irrigation evaluation lab to help reduce polluted runoff and increase irrigation efficiency. The coordinator sent mailings to the agricultural community to publicize the availability of the mobile lab.
- ◆ Conducted a water use efficiency workshop for stakeholders. The workshop covered choosing the correct hardware to insure uniform water application; maintenance and management to keep the system’s high efficiency; and scheduling techniques to avoid under- and over-irrigation. The workshop was presented in both English and Spanish. More than 27 people attended.
- ◆ Implemented the Green Gardener Certification Program advanced training to help educate landscape maintenance professionals in resource efficient landscaping practices. The course was offered in both English and Spanish. As of August 2005, there are 63 certified Green Gardeners in the South County, 23 of which are certified as Advanced Green Gardeners (which means that they have completed a more intensive course). In the North County, there are 31 certified Green Gardeners, 15 of which are Advanced Green Gardeners.

- ◆ Promoted the *Our Water, Our World* (OWOW) program to educate the community about increasing irrigation efficiency and using less toxic pest control alternatives. The coordinator distributed brochures and visited eight hardware and nurseries that distribute pesticides.
- ◆ Initiated the Restoration Network web site, which will be a resource for people implementing restoration projects throughout the south coast.
- ◆ Completed irrigation system evaluations at four avocado ranches to evaluate existing hardware and scheduling and to provide recommendations to reduce run-off and increase irrigation efficiency.
- ◆ Completed irrigation system evaluations at one ranch that used a total of 20 irrigation systems. The coordinator evaluated the existing systems and provided recommendations for potential improvements to improve efficiency.
- ◆ Conducted extensive stakeholder outreach in the Carpinteria Creek and Rincon Creek Watersheds, through participation in monthly meetings and through a BBQ to update stakeholders on the status of watershed planning efforts. Sixty people attended the BBQ, which helped in obtaining landowner support for watershed planning efforts.
- ◆ Completed a draft white paper on watershed planning in Santa Barbara County, which included a detailed summary of watershed planning efforts underway in Napa, Sonoma, Contra Costa, Santa Clara, Ventura, and Riverside Counties. The paper contains recommendations for what role the County could play in future watershed planning efforts.

### **Benefits to CALFED Program**

**Watershed Management** - In support of CALFED Watershed Program goals, the coordinator:

- Coordinated education and outreach for the Carpinteria Creek Watershed Coalition by editing a bi-weekly column for the local newspaper entitled “In the Watershed.” Topics covered included OWOW point-of-sale education program on least-toxic pest control, Earth Day events, and the Carpinteria Creek Watershed Plan.
- Participated in the Santa Barbara Task Force of the Southern California Wetlands Recovery Project to provide information on County watershed efforts and to explore opportunities for collaboration.
- Organized an educational tour of the highway 101 culvert on Rincon Creek for the Rincon Creek Watershed Council, to learn about restoration alternatives.
- Completed revisions, based on public comments, to the San Jose Creek Watershed Plan.
- Distributed the “Creek Care Guide” through the South Coast Watershed Resource Center.
- Sponsored Earth Day exhibits to educate participants about the Green Gardener Certification Program and the OWOW.
- Completed the Final San Jose Creek Watershed Plan and released it to the public in December 2005. Worked with URS Corporation to develop the Riparian System Management Program under a grant from the US EPA.

**Ecosystem Restoration** – In support of the Ecosystem Restoration Program the coordinator helped coordinate permitting for two key restoration projects that will remove barriers to fish passage.

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

- Conducted three irrigation workshops: one for greenhouse growers, one for landscape professionals, and one for open field agriculture. Each workshop was conducted in partnership with the Cachuma Resource Conservation District's watershed coordinator. The workshops were designed to instruct growers and landscapers: how to reduce the use of pesticides and fertilizers; reduce run-off through proper selection of irrigation hardware; conduct proper water scheduling, and use an integrated pest management approach. Each workshop was conducted in English and in Spanish.
- Sponsored a landscape irrigation class to train professional landscapers in water efficient irrigation techniques and systems. Information was presented and distributed in both English and Spanish.
- Prepared irrigation evaluation reports for growers in Carpinteria and Goleta, which included information on DU, scheduling, and soils.
- Secured \$5,000 in funding from the US Bureau of Reclamation to revise the irrigation evaluation brochures.

### **Performance Measures**

**Goal:** Improve water use efficiency, water quality, and ecosystem restoration within the watersheds.

**Objective 1:** Increase water use efficiency within the watersheds by improving agricultural and landscape irrigation.

**Performance Measure:** Decrease water use by 10% in landscapes and agricultural operations that utilize Mobile Lab services.

#### **Progress:**

- Conducted three irrigation workshops a year: one for greenhouse growers, one for landscape professionals, and one for open field agriculture. Each class teaches professionals how to improve the efficiency of their irrigation systems. The CIMIS hotline and free irrigation evaluations are promoted during these workshops.
- Worked with the Cachuma Resource Conservation District to perform irrigation evaluations on a regular basis.

**Objective 2:** Improve water quality by reducing nonpoint source pollutants from agricultural and landscape maintenance operations, such as nutrients and pesticides.

**Performance Measure:** Conduct three annual irrigation workshops. Distribute less toxic pest management information at a minimum of ten locations throughout the watershed.

**Progress:**

In addition to the activities performed to meet the Objective 1 performance measure, the coordinator promoted the *Our Water, Our World* program. The program teaches homeowners and professionals how to use less toxic alternatives to pesticides. The coordinator promotes the program through newspaper articles, newspaper ads, and by handing out brochures about the program at community events.

**Objective 3:** Facilitate ecosystem restoration through the development of watershed plans and implementation of pilot projects.

**Performance Measure:** Produce at least two watershed plans (Carpinteria, San Jose), and develop and implement pilot Riparian System Restoration Program; seek grant funds for implementation of pilot projects.

**Progress:**

- Both the Carpinteria Creek Watershed Plan and San Jose Creek Watershed Plan have been finalized. The coordinator is working to assist stakeholders in implementing aspects of each Plan. In Carpinteria Creek, the coordinator continues to assist in facilitating permitting for removal of barriers to fish passage. And, in San Jose Creek, the coordinator has been developing a Riparian System Management Program under a separate grant from US EPA, to help prioritize riparian restoration projects that will be used as mitigation for flood control projects.
- Helped guide the development of the Rincon Creek Watershed Plan. The coordinator attends monthly meetings of the Rincon Creek Watershed Council and provides guidance to a consultant in preparing the Watershed Plan. The Santa Barbara County's engineering technician is also preparing the GIS for the project.

**Objective 4:** Increase opportunities for coordination among various groups implementing watershed improvement projects.

**Performance Measure:** Implementation of a list-serve for watershed coordination newsletter.

**Progress:**

- Attended regular meetings among various groups involved in regional watershed planning such as the Wetlands Recovery Project, the San Antonio Creek Coordinated Resource Management Plan committee, the Agricultural Watershed Coalition, and Cachuma Resource Conservation District.
- Researched the best method to help various groups in coordinating watershed planning efforts. A regional restoration network or list-serve is one idea for doing this. The coordinator is continuing to investigate the feasibility of a list-serve.

**Objective 5:** Develop a strategy for incorporating watershed protection and restoration into County operations.

**Performance Measure:** Compile report and recommendations for a County role in watershed management.

**Progress:**

Prepared a draft white paper about the role the County could play in regional watershed planning. The paper included a summary of what other counties are doing in California with respect to watershed planning in terms of their organization, funding, staffing, etc. The white paper is currently being reviewed and discussed by the highest levels of the County government. The white paper has served as a catalyst for discussions about how the County should participate in watershed planning.

## Sierra Valley RCD Middle Fork Feather Watershed



**Amount Funded:** \$185,460

**Additional Funding Obtained to Date:** \$850,680

### 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

- ◆ Worked with the US Forest Service and the CA Department of Fish and Game to begin building a long-term management plan for Antelope Valley.

- ◆ Started developing an action plan that will focus on education and outreach. This effort will involve developing a partnership with the USFS and Plumas-Sierra Weeds Group, to further the control and eradication of noxious weed populations in the Sierra Valley.

- ◆ Worked in partnership with the University of California Cooperative Extension (UCCE) Proposition 50 grant coordinator to help gather information through research and monitoring of seven key sites in the watershed.

- ◆ Coordinated the second annual Barns, Birds, & Barbeque (BBB) event. The watershed coordinator worked with the RCD Manager to coordinate the event with a diverse group of organizations. Over 300 people attended the event and learned about the watershed through booths, tours, and a native plant walk.



*The watershed coordinator conducts water quality monitoring with UCCE staff*

- ◆ Developed a close partnership with the Feather River Coordinated Resource Management group (FRCRM), on Little Last Chance Creek. The FRCRM secured funding for restoration work on a four-mile stretch of the creek. The coordinator provided assistance with stream monitoring (temperature probe placement & frog surveys) and will continue to collaborate with FRCRM.
- ◆ Assisted with the execution of the Department of Fish and Game (DFG) and SVRCD Master Lease Agreement. SVRCD will manage five areas within Sierra Valley ensuring that lands are properly grazed and protected. The coordinator also provided DFG with recommendations on rehabilitation strategies related to the Harding Fire and input on resource needs.
- ◆ Worked with Sierra Valley Groundwater Management District to identify and address common issues and concerns.
- ◆ Partnered with High Sierra RC&D and the UCCE in developing a workshop on water rights/restoration projects.
- ◆ Worked with the Honey Lake Valley and Central Modoc RCDs to identify and secure funding to purchase water-monitoring equipment.
- ◆ Established a program to conduct noxious weed spraying in the community.

### **Benefits to CALFED Program**

**Watershed Management** - The coordinator supported the goals of the CALFED Watershed Program by providing stakeholders with educational opportunities and providing assistance to local landowners groups. This year the coordinator facilitated the Barns, Birds & Barbeque event. This event was crucial in educating the public about the Sierra Valley Watershed. Over 300 participants attended the event. The coordinator was also instrumental in initiating training for the Sierra County Fire Safe Council and Watershed Council. Finally, the coordinator provided local landowners on Little Last Chance creek with assistance in starting a Coordinated Resource Management group to repair and improve the watershed of Little Last Chance Creek. The coordinator contacted all the Little Last Chance Creek residents, DFG, and FRCRM watershed experts to begin designing watershed improvement projects.

**Ecosystem Restoration** – The coordinator supported the goals of the ecosystem restoration program by starting a noxious weed spraying program in the watershed. The coordinator worked with Plumas/Sierra Ag. Commissioner, UC Cooperative Extension and Monterey Forum to secure \$40,000 and initiate a spray program.

**Drinking Water Quality** – The coordinator worked with UCCE staff to help gather information through research and conducting water quality monitoring at seven key sites in watershed. The seven monitoring sites include: Little Last Chance, Middle Fork Feather River, Perry Creek, Turner Creek, Smithneck Creek, Steel Bridge and Upper Cold Creek.

### **Performance Measures**

**Goal:** Improve watershed conditions on the tributaries to the Middle Fork Feather River.

**Objective 1:** Utilizing the Sierra Valley Watershed Action Plan and the Sierra Valley Watershed Assessment, seek opportunities to implement identified watershed improvement projects, including sponsoring education workshops.

**Performance Measure:** Develop a community watershed action plan for Sierra Valley Watershed.

**Progress:**

The coordinator compiled a list of recommendations from Sierra Valley Coordinated Resource Management group (SVCRM) and the Watershed Assessment Report. The coordinator also conducted a survey of various watershed stakeholders to determine priorities for watershed improvement projects. This information will be critical in developing the Watershed Action Plan (WAP).

Other activities the coordinator completed to help achieve this performance measure include:

- Developing a partnership with the Department of Fish and Game to manage five wildlife areas during 2006. This partnership includes collaborating on potential projects and gathering data on priority areas.
- Working with DFG & Tahoe USFS on developing a long-term management plan for Antelope Valley
- Completed the Watershed Assessment Report and distributed it to watershed groups and other stakeholders. The reports findings will be incorporated into the WAP.

This performance measure is approximately 45% complete.

**Objective 2:** Seek funding opportunities for Action Plan-identified watershed improvement projects in the Sierra Valley watershed.

**Performance Measure:** Apply for at least 2 grants/agreements to implement watershed improvement projects in the Sierra Valley watershed.

**Progress:** The coordinator has applied for and obtained funding for several watershed improvement projects. Specifically the coordinator:

- Completed a Master Lease Agreement with DFG. Under the agreement SVRCD will manage five areas within Sierra Valley ensuring that lands are properly grazed and protected. This agreement will provide the RCD with funding to pay for additional watershed coordination.
- Secured funding for a 2006 noxious weed program that will help protect the watershed.
- Finally the coordinator obtained capacity building funding through the Plumas Forum and the Monterey Settlement. This funding was used to hire a district manager with is assisting the watershed coordinator with research and competing the WAP.

This performance measure is complete.

**Objective 3:** Utilizing community outreach in a priority area previously identified by the SVCRM, develop a watershed action plan that addresses resource concerns, including known concerns of hydrophobic soils and flood control.

**Performance Measure:** Apply for at least 2 grants/agreements to implement watershed improvement projects in the Sierra Valley watershed and sponsor at least one educational workshop.

**Progress:** The coordinator has obtained funding and coordinated educational events. Progress towards completing this performance measure includes:

- Securing a grant for a Sustainable Agriculture workshop. This workshop will provide demonstrations of Best Management Practices to the local agricultural community.
- Received an ATTRA grant that will provide local landowners with assistance and education about sustainable agricultural alternatives.
- Secured a grant for 2005 Barns Birds & Barbeque educational event.
- Secured funds in 2005 for a *Tools for Working Landscapes* workshop, which promoted good land stewardship in Sierra Valley.
- Conducted a Conservation Easement/Williamson Act workshop in 2005.

This performance measure is complete.

## **Sloughhouse RCD**

### **Lower Cosumnes-Lower Mokelumne and Upper Cosumnes Watersheds**



**Amount Funded:** \$149,044

**Additional Funding Obtained to Date:** \$53,550

### **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.

Note: The watershed coordinator left her position in early 2006. The new coordinator was not yet in place when the second annual report was due.

### **Benefits to the Watershed**

- ◆ Helped five ranch owners and managers complete water quality plans for their property.
- ◆ Submitted a \$176,997 concept proposal to the Department of Water Resources for education and outreach in the watershed.
- ◆ Assisted in World Water Quality Monitoring Day in which students from 4 high schools and 2 elementary schools tested water quality.
- ◆ Recruited five landowners to attend a Farm Water Quality Workshop.
- ◆ Collected an additional \$1,300 in cash contributions for the Cosumnes River Watershed Portal.
- ◆ Recruited five speakers to present information about the watershed at Cosumnes River Watershed Council meetings.
- ◆ Submitted two educational articles about the watershed for the Farm Bureau newsletter and attended various meetings to inform watershed residents about current watershed activities.

### **Benefits to CALFED Program**

**Watershed Management** – This quarter the coordinator supported CALFED goals of working with the community to improve watershed health and promote collaboration among community watershed efforts. The coordinator provided information to watershed council members, gathered information and donations for a watershed portal, attending several meetings to share and gather information, worked with landowners to create water quality plans, and provided an opportunity for students to learn about water quality monitoring.

**Ecosystem restoration** – This quarter the coordinator submitted a \$176,997 grant proposal to DWR to fund a Resident’s Guide to Watershed Enhancement Using Best Management Practices. The coordinator also worked with the community to create water quality plans and monitor water quality.

**Goal:** Improve and protect watershed resources through cooperative, comprehensive, and watershed-wide resources management by all public and private stakeholders

**Objective # 1:** Manage watershed resources in a manner that promotes improved watershed health

**Performance Measure:** To ensure available resources for watershed improvement are used in the most cost efficient, effective, and beneficial manner, success of this objective will be gauged by the successful installation of a watershed-wide management structure to (be) deemed successfully installed when one Watershed Council has been created, one Watershed Management Plan has been developed, and four grants in support of Watershed Council goals and/or Watershed Management Plan objectives have been submitted. Additionally, five Cosumnes River Task Force meetings will be conducted.

**Progress:**

- Five Cosumnes River Task Force meetings conducted.
- The Cosumnes River Watershed Council has been created and three meetings have been held.
- The coordinator worked with the Council to determine the goals of the watershed management plan. They decided that the first step would be to develop a Watershed Portal for the Cosumnes River (on-line library).
- The Coordinator obtained \$2,250.00 in cash contributions towards the creating of a Watershed Portal.
- The Coordinator secured the domain name [www.cosumneswatershed.net](http://www.cosumneswatershed.net) for the portal and signed a contract with Wolf & Associates to create the portal.

**Objective 2:** Implement the Watershed Management Plan on a local level through the development of a Watershed Stewardship Program.

**Performance Measure:** To ensure goals and objectives identified within Watershed Management Plan are implemented at a local level, 4 watershed Stewardship Groups will be formed, 4 local management plans will be created, the Watershed Coordinator will attend 2 water quality trainings, 8 training workbooks will be prepared, water quality monitoring equipment will be purchase 8 trainers will be trained, 8 water quality monitoring sites will be identified, 4 water quality monitoring snap shot days will be conducted including the transferring of results to the America's Clean Water Foundation.

**Progress:**

Four Watershed Council Subcommittees were formed, including: Fire, Biological Resources, Water Resources and Education & Outreach.

**Objective # 3:** Implement watershed education and outreach programs that promote improved water quality, water conservation, and ecosystem preservation and restoration.

**Performance Measure:** To ensure outreach and education programs are having a positive effect, 15 ranches will be checked for BMPs implementation and their assessments reviewed for indications of improvement. To be deemed successful, 10 ranches will have implemented BMPs and their assessment will indicate improvements. In addition a BMPs committee will have been formed, 5 BMPs fact sheets will be developed, BMPs fact sheets will be made available to the public, 6 workshop presenters will be selected for the Ranch Water Quality Management Planning Workshops, 3 training sessions will be attended by the Watershed Coordinator, 1 Workshop Instructor's manual will be prepared, 3 Ranch Water Quality Management Planning Workshops will be conducted, 3 tours of ranch conservation projects will be conducted, a minimum of 15 ranch plans will have been completed, a minimum of 6 cost share/grant applications will be submitted, 400 Backyard Conservation packets will be distributed, and 25% of the follow-up surveys will be completed and returned.

**Progress:**

- Created two BMP fact sheets. One for small landowners with noxious weed infestations and one for landowners with invasive species problems.
- Worked with Solano RCD on a Farm Water Quality Workshop. The coordinator recruited 6 participants from Sacramento County.

## **Solano RCD**

### **Lower Sacramento and Upper Putah Watersheds**



**Amount Funded:** \$208,100

**Additional Funding Obtained to Date:** \$343,450

### **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**

- ◆ Submitted over \$2 million in funding proposals to further watershed enhancement, restoration, and conservation activities throughout the watershed.
- ◆ Started a collaborative conservation partnership with Yolo and Solano County restoration and conservation agencies and organizations. The group will allow members to leverage resources, create collaborative proposals, and share expertise.
- ◆ Worked with Yolo RCD to develop the Ag Water Quality Program to help farmers effectively implement practices to help meet Sacramento Valley Regional Water Quality Control Board conditional waiver requirements.
- ◆ Worked with a variety of large and small stakeholder groups to implement conservation projects on private property.
- ◆ Worked with a variety of county agencies to provide education and outreach within the watershed. The coordinator helped implement the Solano County Water Agency's Flood Education program, Fairfield Suisun Sewer District's (FSSD) high school Watershed Education Program, the Putah Creek Discovery Corridor's Waterways elementary school program, and a new Watershed Explorers program sponsored by FSSD and Vallejo Sanitation and Flood Control District.
- ◆ Conducted the annual Solano Weed Management Area meeting.
- ◆ Began working with landowner in Quail Canyon to develop a watershed group.
- ◆ Facilitated a conservation partnership between Solano and Yolo RCDs, land trusts, NRCS, and conservation based nongovernmental organizations.
- ◆ Coordinated the combined efforts of Solano and Napa County environmental management departments to improve recycling and oil waste reduction in Lake Berryessa, leverage grant funds, and share expertise to improve water quality.
- ◆ Planned a Solano County Flood Preparedness manual for distribution in Fall 2006.

## **Benefits to CALFED Program**

**Watershed Management** – In support of the Watershed Program goal of improving collaboration between agencies, watershed groups, and stakeholders, the coordinator: facilitated the Yolo-Solano Conservation Partnership; facilitated the Solano County Weed Management Area meetings; participated in the Putah Creek Discovery Corridor Cooperative; and facilitated the Lake Berryessa Watershed Partnership Science Committee.

**Ecosystem Restoration** – The coordinator facilitated the completion of an oak restoration project on Solano Land Trust properties.

**Drinking Water Quality** – The coordinator worked with partners to help develop an oil waste reduction and recycling program for Lake Berryessa.

## **Performance Measures**

**Goal 1:** Facilitate and participate in expanded and improved regional and subwatershed collaboration to improve stewardship capacity at multiple levels.

**Objective 1:** Facilitate the Solano Watershed Partnership Group, bringing together agency and NGO personnel across the region to collaborate and prioritize watershed goals.

**Performance Measure:** At least 25 regional representatives committed to attending quarterly meetings and directing staff and cash resources toward watershed goals, demonstrated by a letter of commitment to the program.

### **Progress:**

- Facilitated Ag waiver annual meetings, which were attended by an average of 40 stakeholders.
- Facilitated the Solano County Weed Management Area working group, comprised of agency and private stakeholders. The coordinator planned and conducted two annual meetings, in 2005 and 2006, to provide outreach and information to watershed stakeholders.
- Facilitated the Yolo-Solano Conservation Partnership formation and regular meetings. The partnership includes representatives from Yolo, Dixon, and Solano RCDs, Solano Land Trust, the Center for Land Based Learning, and CA Audubon.

**Objective 2:** Facilitate integrated coordination of the Putah Creek Watershed, working with watershed managers and stakeholders from four counties.

**Performance Measure:** Active stewardship group of 30 regular, committed participants, source water protection plan for Lake Berryessa, USEPA Water Quality grant objectives are met.

- The Lake Berryessa Watershed Partnership has met quarterly to:

- Complete a draft of a Source Water Protection Plan;
- Plan summer outreach and education activities, including oil recycling at all marinas, a Water Protector Outreach boat, and participation in lake events such as Summer Splash and National Marina Day;
- Secure funding to increase lake outreach resources and personnel.

**Objective 3:** Facilitate existing and emergent stewardship group development.

**Performance Measure:** Membership documentation and work plans for new stewardship groups, watershed management plans for Sweeney and Pleasants Creek.

**Progress:**

- Worked with stakeholders from Quail Canyon to begin developing a Pleasants Creek watershed group.
- Worked with Alamo Creek stakeholders to develop a creek restoration plan below the Vacaville sewage facility.

**Goal 2:** Improve water quality in the Ulatis-Dixon subwatersheds.

**Objective 1:** Monitor and reduce non-point source pollution entering the watershed from rural lands.

**Performance Measure:** Baseline pollution constituents determined; stewardship responses determined and implemented.

**Progress:**

- Coordinated the implementation of a monitoring plan.
- Ensured that water quality testing occurred as scheduled.
- Helped form a Yolo-Solano Ag Water Quality Working group consisting of Yolo, Dixon, and Solano RCDs, NRCS, Ag Commissioners, and the Farm Bureau. The purpose of the group is to design and implement a program to help landowners meet SWRCB's conditional ag waiver requirements.

**Goal 3:** Increase stakeholder understanding and ability to serve as good watershed stewards.

**Objective 1:** Develop a comprehensive, measurable watershed education program for all stakeholders.

**Performance Measure:** Watershed education plan with buy-in and financial support by ten partners; self-evaluation from 150 participants per year, measuring watershed behavioral changes made in response to program.

**Progress:**

Worked with partners to develop plans for watershed educational activities at Lake Berryessa and the greater watershed.

**Objective 2:** Develop a suite of specialized education programs to address “hot” issues in the watershed.

**Performance Measure:** Stand-alone and specialized education modules, with buy-in and financial support by three partners, self-evaluation of 100 participants per year, measuring behavioral and educational changes resulting from specialized education.

**Progress:**

- Worked with Solano RCD Biologist to create readers, lab manuals, monitoring manuals, and syllabi for four high school classrooms.
- Implemented the Waterways primary education program for Solano County elementary school students to teach students about the Putah Creek watershed at Lake Solano.
- Developed the Watershed Explorers program with funding from Fairfield Suisun Sewer District and Vallejo Flood and Sanitation district. The program will take southwest Solano County elementary school students into the watershed to learn about the watershed and how they can help conserve it.

**Objective 3:** Install and monitor discrete watershed restoration projects around the watershed to demonstrate best management practices and results.

**Performance Measure:** Three demonstration watershed improvement projects installed per year; monitoring information for practice efficacy provided quarterly to SRCD’s website.

**Progress:**

- Two on-farm demonstration projects have been completed. Monitoring is currently being conducted.
- A creek restoration/mitigation project was completed on Rindler Creek. Monitoring is currently underway.
- Work is ongoing at two oak restoration sites on Solano Land Trust properties.

**Goal 4:** Increase durability of stewardship activities with innovative partnerships and funding scenarios.

**Objective 1:** Develop a comprehensive, measurable funding strategy for the watershed to move important projects away from the vagaries of soft money funding.

**Performance Measure:** Partner support and buy-in for a watershed wide funding strategy, \$500,000 in secured funding for projects supported by this proposal.

**Progress:**

- Received a Water Quality Grant in partnership with Yolo County RCD. Solano RCD's share is \$208,000.
- Secured contracts for restoration and biomonitoring work with Vallejo Sanitation District.
- Wrote a Yolo-Solano Ecosystem Restoration Program grant in partnership with Yolo County RCD and CA Audubon. The proposal requested \$2,001,450 to expand watershed-wide partnerships and collaboration in restoration activities.
- Developed a Yolo-Solano Conservation Partnership stakeholder group.

## Sonoma Ecology Center San Pablo Bay Watershed



**Amount Funded:** \$155,193

**Additional Funding Obtained to Date:** \$591,793

### **Background**

Land ownership in the Sonoma Creek watershed is 85% private, 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, logging, and farming since 1823, and increasing urbanization and ranchette development since the 1950s. However, the watershed's fishery is one of the best remaining in the Bay-Delta region due to its diversity and lack of non-native species.

### **Benefits to the Watershed**

- ◆ Worked with Napa River watershed coordinator to create the North Bay Watershed Network. The network is a forum for over 15 watershed groups and organizations to share successful approaches and materials, and coordinate efforts.
- ◆ Provided assistance to over 50 landowners, residents, newspapers, and officials. The coordinator helped community members improve streamside land use practices, conserve water, and manage natural resources.
- ◆ Installed, monitored, and modified several instream installations that provide passage and shelter for fish and other aquatic species. The projects were also used to teach the community about the watershed.
- ◆ Provided input to several planning and policy processes that affect land and water in the watershed.
- ◆ Continued reach-scale restoration programs at Nathanson Creek and at Sonoma Creek near Glen Ellen.
- ◆ Helped residents recover from the damage caused by the 12/31/2005 flooding. The coordinator provided technical advice on debris management, flood facts, stream functions, historical context, and repair options to over 30 landowners and three newspapers.
- ◆ Helped to sustain the Sonoma Creek Watershed Conservancy. The conservancy consists of several agricultural, environmental, and regulatory entities
- ◆ Presented a slide show to the community at a flood forum. Over 175 people attended the forum.
- ◆ Provided a prioritized list of fish passage barriers to the Center for Ecosystem Management and Restoration. The Center is currently coordinating fish barrier priorities throughout the San Francisco Bay area.
- ◆ Provided detailed recommendations to Deer Creek Estates, a condominium association on Sonoma Creek regarding water use, streamside practices, and member education.

## **Benefits to CALFED Program**

**Watershed Management** – In support of Watershed Program goals the coordinator:

- Participated in the local TMDL steering committee;
- Built a collaborative network of local watershed groups in the North San Francisco Bay;
- Participated in the San Francisco Bay IRWMP and North Bay IRWMP processes;
- Built subwatershed groups tied to reach scale restoration initiatives;
- And, educated landowners and residents about land and water use practices that help conserve resources.

**Ecosystem Restoration** – In support of Ecosystem Restoration Program goals the coordinator:

- Collaborated with Sonoma county to conduct road-related fish passage and streambank stability projects;
- Brought together several interests to find solutions to complex river and salmonid restoration needs on Sonoma Creek and tributaries;
- And, encouraged and supported riparian and aquatic habitat improvements by landowners, school children, and public agencies.

**Water Use Efficiency** – To help reach the goals of the Water Use Efficiency program the coordinator:

- Pursued partnerships with researchers, agencies, and funders to build a water budget that will inform sustainable and efficient use of water.
- Worked with other entities in Sonoma County on efforts to create policies assuring a long-term supply of water for humans and nature.

## **Performance Measures**

**Goal:** A self-sustaining population of wild salmonids in Sonoma Creek and tributaries. October through December 2005.

**Objective:** Increase summer survival of steelhead.

**Performance Measure:** Increase or no change in the 3-year moving average of steelhead per linear stream unit.

**Progress:** The coordinator has submitted proposals to CDFG and NOAA fisheries in attempt to obtain funding for follow-up steelhead population surveys.

**Objective 2:** Increase the mileage of spawning habitat accessible to migrating salmonids.

**Performance Measure:** At least 12 additional miles of spawning habitat accessible to steelhead, via physical improvements or securing funds for physical projects.

**Progress:** The coordinator facilitated the modification of a bridge apron on Calabazas Creek on Dunbar Road, which resulted in improved access to three miles of top-quality fish habitat. The coordinator also worked with the Center for Ecosystem Management and Restoration to raise money for fish passage barrier projects in Sonoma Valley.

This performance measure is over 25% complete.

**Objective 3:** Reduce sediment inputs caused by current land use practices.

**Performance Measure:** Average severity index – a measure of salmonid physiological stress based on stream water turbidity levels during and after storms – less than eight.

**Progress:** Severity index has been calculated during storms each winter using automated and grab samples. Limited Factors Analysis used data collected through the 2004/2005 winter to conclude that while turbidity and suspended sediment are problematic for salmonids, these factors are likely less damaging than the lack of shelter and summer flow.

**Objective 4:** Reduce sediment from chronically unstable stream channels.

**Performance Measure:** At least \$85,000 secured to proceed with next phase of a reach-scale channel rehabilitation project.

**Progress:** No funding has been secured for the next phase of the reach-scale channel rehabilitation project.

**Objective 5:** Optimize water usage by various sectors in Sonoma Valley and beyond.

**Performance Measure:** An increase from 2000 levels, or no change, in the 3-year average summer water levels measured at seven designated main stem and tributary sites.

**Progress:** The progress on this performance measure will be determined after the summer 2006 monitoring has been completed.

# 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**

- ◆ Established and continues to facilitate the Calaveras River Watershed Stewardship Group (CRWSG) which encourages proper management of the lower Calaveras River watershed through watershed-wide cooperation between landowners, water users, recreational users, conservation groups, and local, state, and federal agencies. The group has developed bylaws to establish the groups mission statement, objectives, organizational structure, and decision-making process.
- ◆ Worked with CRWSG to develop a table of watershed project goals and implementation. The table will be a major component of the Watershed Implementation Plan.
- ◆ Facilitated the development of a Watershed Implementation Plan consistent with the Calaveras River Habitat Conservation Plan.
- ◆ Facilitated the development of a Water Quality Improvement Program (WQIP), which will serve as a guiding document for the Calaveras River Watershed Stewardship Group.
- ◆ Developed and maintained an educational website for the CRWSG ([www.calaverasriver.com](http://www.calaverasriver.com)) which includes recent meeting agendas, meeting notes, presentations, educational material, new articles, and more.
- ◆ Assisted with community river clean up events in order to improve the condition of the watershed, form new partnerships, and promote the CRWSG.
- ◆ Developed and presented an educational poster board and brochure.
- ◆ Conducted outreach efforts to encourage more public presentation in the watershed stewardship process. Efforts included sending mailers to over 100 residents along the Calaveras River corridor, distributing and posting flyers, posted announcements on community calendars, created a public service announcement for a local radio station, and published articles in the Stockton East Water District newsletter.
- ◆ Submitted a concept proposal to DWR for the “Calaveras River Watershed Management

Planning (Phase II): Watershed Implementation Plan and Habitat Studies”.

- ◆ Continued efforts to identify opportunities and submit applications for ongoing watershed coordinator position and watershed project funding.
- ◆ Conducted an evaluation of juvenile *Oncorhynchus mykiss* migration and life history expression in the Calaveras River using Streamwidth Passive Integrated Transponder Technology.
- ◆ Monitored Calaveras River downstream juvenile salmonid migration at Shelton Road using a rotary screw trap.

**Benefits to CALFED Program**

**Watershed Management** – In support of the CALFED Watershed Program goals the coordinator: formed partnerships with various groups, local governments, and interested stakeholders to promote collaboration and integration among community based watershed efforts; participated in Calaveras Fish Group meetings to help provide scientific and technical expertise on anadromous fish populations; Began developing a research monitoring and watershed improvement project database; and, maintained an educational website.

[Zoom Out](#)

<div style="background-color: #808000; color: white; padding: 5px; text-align: center; font-weight: bold;">The Calaveras Watershed Stewardship Group Mission</div> <p><i>To Restore, Protect, Preserve, and Enhance the Lower Calaveras River Watershed Resources through Education, Collaboration, and Project Implementation.</i></p> <ul style="list-style-type: none"> <li>The Calaveras River Watershed Stewardship Group (CRWSG) is a citizen based team that encourages preservation and proper management of the Calaveras River Watershed through cooperation between all participating and interested parties.</li> <li>Members are working towards developing a Watershed Implementation Plan that will identify long range goals for watershed management and will serve as a guiding document for the CRWSG.</li> <li>Currently, the CRWSG is developing goals and objectives and writing bylaws.</li> <li>The CRWSG seeks to prioritize watershed enhancement projects and acquire funding to implement them.</li> </ul> <div style="background-color: #808000; color: white; padding: 2px; text-align: center; font-size: small;">Go to <a href="http://www.calaverasriver.com" style="color: white;">www.calaverasriver.com</a> for more information on the CRWSG.</div>	<div style="background-color: #808000; color: white; padding: 5px; text-align: center; font-weight: bold;">Join the Calaveras River Watershed Stewardship Group</div> <p><b>Make a difference in your community— become a member of the CRWSG!</b></p> <p>If you would like to become a member of the CRWSG and receive notification of upcoming meetings and events, please sign up at the next CRWSG meeting or contact:</p> <p style="text-align: center;"><b>Jim Inman</b> Watershed Coordinator 636 Hedburg Way Oakdale, CA 95361 Phone: (209) 847-7786 Fax: (209) 847-8477 stewardship@calaverasriver.com</p> <div style="background-color: #808000; color: white; padding: 2px; text-align: center; font-size: small;">The next CRWSG meeting will be held Thursday, May 19, 2005 at 6:00 P.M. San Joaquin Resource Conservation District 3422 W. Hammer Lane, Suite A Stockton, California</div> <div style="text-align: center; margin-top: 10px;">  </div>	<div style="background-color: #808000; color: white; padding: 5px; text-align: center; font-weight: bold;">The Calaveras River Watershed Stewardship Group</div> <div style="text-align: center; margin-top: 10px;">  </div> <p style="text-align: center; font-size: small;"><i>Helping to Enhance the Calaveras River Watershed through Education, Collaboration, and Implementation</i></p> <div style="background-color: #808000; color: white; padding: 2px; text-align: center; font-size: small; margin-top: 10px;">www.CalaverasRiver.com</div>
--	---	---

*Calaveras River Watershed Stewardship Brochure created by the Watershed Coordinator*

**Ecosystem Restoration** – In support of Ecosystem Restoration Program goals the coordinator: continued developing the Calaveras River Watershed Implementation plan and, collaborated with University of the Pacific to conduct a Calaveras River temperature study.

**Science** – To support Science Program goals to coordinator conducted an evaluation of juvenile *Oncorhynchus mykiss* migration and life history expression in the Calaveras River using stream width passive integrated transponder technology and, monitored downstream Calaveras River juvenile salmonid migration at Shelton Road using a rotary screw trap.

## **Performance Measures**

**Goal:** Improve and protect the lower Calaveras River watershed resources through collaborative watershed management by multiple stakeholders.

**Objective 1:** Promote stakeholder participation in a watershed level management group.

**Performance Measure:** A functional watershed management group is established that provides effective watershed resource management as evidenced by obtaining funding for at least three watershed improvement or monitoring projects.

### **Progress:**

- Formed a functional watershed group, CRWSG, consisting of 11 organizations as well as watershed residents who meet quarterly.
- Helped CRWSG develop bylaws to establish the groups mission and operating procedures.
- Facilitated the development of a CRWSG “Watershed Project Goals and Implementation Table” to help the group prioritize projects.
- Working with CRWSG to draft the Lower Calaveras Watershed Implementation Plan.
- Submitted three grant proposals and continues to identify and pursue funding.
- Collaborated with other conservation groups in a community river clean-up day.
- Hosted a Calaveras River tour, which was attended by members of a variety of stakeholder groups.

**Objective 2:** Promote education and awareness among multiple interest groups regarding Calaveras River Watershed issues.

**Performance Measure:** Stakeholder awareness of watershed issue(s) and ongoing projects is increased by at least 10%, and stakeholders identify at least three potential watershed improvement or monitoring projects that need to be implemented for addressing watershed issue(s).

### **Progress:**

- Initiated a public outreach campaign to solicit more public involvement in stewardship efforts. The campaign included mailers, website postings, posting information on community calendars, public service radio announcements, newsletters, and displays at public events.
- Created and displayed an educational poster board at the 2006 Stockton Earth Day Festival.
- Developed and distributed a brochure which educates the reader while recruiting community members for stewardship activities.
- Distributed newly published study on New Zealand Mud Snails.
- Distribute regular email bulletins to over 70 stakeholders.
- Attended Calaveras River Fish Group meetings to collaborate on projects, obtain information about existing watershed projects, and promote CRWSG.

- Developed and maintained an educational website that consists of meeting information, presentations, new articles, and more.
- Conducted informative presentations for stakeholders at CRWSG meetings.
- Collaborated with stakeholders to help prevent the spread of New Zealand Mud Snails by posting informational signs at key locations along the Calaveras River.

**Objective 3:** Facilitate collaboration and coordination among multiple interest groups.

**Performance Measure:** CRFG members will identify and provide recommendations to stakeholders regarding the implementation of at least three potential watershed improvements or monitoring projects.

**Progress:**

- Coordinator is developing a research monitoring and watershed improvement project database to help with current and future watershed project planning.
- Identified and prioritized potential projects for the CRWSG to pursue.
- Collaborated with the University of the Pacific to complete a water temperature study.

**Objective 4:** Administer watershed coordination program.

**Performance Measure:** Identify and actively pursue at least four funding opportunities that will support watershed projects and the long-term continuation of the watershed coordinator position.

**Progress:**

- Submitted a \$194,823 concept proposal to DWR for a Calaveras River watershed management planning project that would result in a watershed implementation plan and habitat studies.
- Collaborated on a \$757,173 proposal that would fund an evaluation of juvenile *Oncorhynchus Mykiss* migration and life history expression in the Calaveras River using streamwidth passive integrated transponder technology.
- Contributed to a \$144,198 proposal for a Calaveras River Bellota fish ladder evaluation project.

# Tehama County RCD

## Sacramento-Lower Thames Watershed



**Amount Funded:** \$132,196

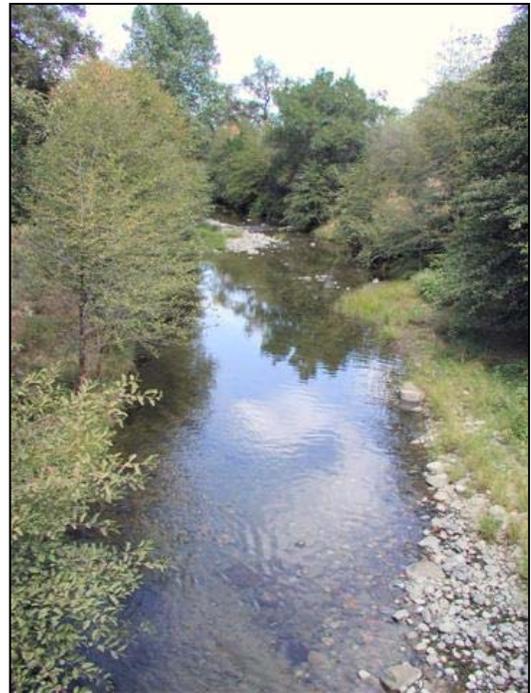
**Additional Funding Obtained to Date:** \$128,342

### **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**

- ◆ Initiated the Tehama East Fire Plan. The Watershed Coordinator worked with agency personnel, landowners, and other stakeholders to organize a series of community meetings to introduce the plan and educate the community about fire ecology, fire management, and fire protection issues.
- ◆ Worked with the Battle Creek Watershed Conservancy to begin preparing the Manton Community Fire Plan. The planning process will include addressing Battle Creek Watershed restoration needs arising from a fire last summer.
- ◆ Worked with a Technical Advisory committee to complete the Tehama West Watershed Assessment. The assessment will be incorporated into the Tehama West Watershed Management Plan, which is currently under development.
- ◆ Worked with Tehama County RCD directors to draft a grading ordinance for Tehama County to help reduce erosion, runoff, and subsequent water quality impacts on the Sacramento River.
- ◆ Submitted a \$539,000 grant proposal to the State Water Resources Control Board Consolidated Grant program for funding of sediment budgets to be developed for various significant tributaries to the Sacramento River originating within Tehama County.



*South Fork Elder Creek*

- ◆ Submitted a \$150,000 grant proposal to the U.S. Fish and Wildlife Service (USFWS) to conduct a riparian habitat and gravel mining inventory of Thomes Creek.
- ◆ Met with eastside stakeholders in Manton, Cottonwood, and Los Molinos to develop a list of resource concerns.
- ◆ Prepared and submitted a \$150,000 grant proposal to the USFWS for a watershed assessment of Paynes Creek and Antelope Creek Watershed.
- ◆ Helped landowners develop conservation easement proposals for California Wildlife Conservation Board funding.

### **Benefits to CALFED Program**

**Watershed Management** – In support of the CALFED Watershed Program goals the coordinator:

- Facilitated the completion of the Tehama West Watershed Assessment. The assessment includes information about the physical, biological, and human components of the watershed. This information will be used to protect and improve use of water resources in Tehama County.
- The information developed through the watershed assessment process is being incorporated into the Watershed Information Model database, which is available online, maintained by the Western Shasta Resource Conservation District.

**Ecosystem Restoration** – In support of many of the Ecosystem Restoration Program goals the coordinator:

- Facilitated the completion of the Tehama West Watershed Assessment, Tehama West Fire Plan, Tehama East Fire Plan, and help initiate the Tehama East Watershed Assessment and Management Plan. These plans describe and quantify various watershed resources, identify resource issues and problems, and propose mitigation strategies to improve the environmental conditions found within the watersheds.
- Began planning and sought funding for the Tehama County Sediment Budget project. The project will result in an improvement of in-stream water quality through the establishment of quantified sustainable gravel extraction rate targets within Tehama County Sacramento River tributaries.

### **Performance Measures**

**Goal:** To improve upper watershed and riparian health, water quality and water quantity within the Tehama County RCD.

**Objective # 1:** Continue collaborative project development with existing watershed groups, stakeholder groups, non-profit organizations and government agencies

**Performance Measure:** (a) One hundred tons of garbage removed from county watersheds to improve water quality and fish habitat. (b) One acre of elderberry mitigation designed to retain

habitat for endangered species. (c) 10 acres of noxious weeds removed from the Bend ACEC to improve riparian habitat.

**Progress:**

- Facilitated a clean up day along Brickyard Creek, an urban stream located within Red Bluff. Working with elementary, junior high and high school students, approximately 10 tons of garbage was removed from the stream channel.
- Developed a historical survey and maps under a grant from BLM. 90 copies of the document were reproduced.

**Objective # 2:** Encourage the formation of new watershed groups where there is no representation.

**Performance Measure:** Engage 2 landowners in watershed activities. The goal of landowner participation in watershed activities is to have them adopt Best Management Practices to increase watershed health.

**Progress:**

- Worked with an array of eastside stakeholders in developing support for the Tehama East Fire Plan proposal and project, the Tehama East Watershed Assessment and Management Plan proposal along with the proposal for the Tehama County Sediment Budgets.
- The Tehama East Watershed Assessment and Management Plan proposal is currently being reviewed for funding by the CALFED Watershed Program while the Tehama County Sediment Budgets proposal is under review by State Water Resources Control Board personnel.

**Objective # 3:** Seek funding for projects and studies of interest to stakeholders in unrepresented watersheds.

**Performance Measure:** Increase TCRCDD's funding for SL-T watershed studies by 10% (currently \$200,000) and for SL-T watershed improvement projects by 10% (currently \$600,000).

**Progress:**

- Prepared a grant proposal for the Tehama East Watershed Assessment and Management Plan project, which entails conducting a watershed assessment and developing a management strategy/planning document for those eastern Tehama County tributaries to the Sacramento River that are not under the purview of another watershed group or conservancy. The total dollar amount of this project is \$427,000.
- Submitted a \$539,000 proposal to State Water Resources Control Board Consolidated Grant Program for the development of sediment budgets on various eastside and westside tributaries of the Sacramento River.
- Work was completed on a number of work agreements established with the Bureau of Land Management in connection with the Bend ACEC area of Tehama County. Including the Bend Historical Survey along with Phase Elderberry surveys.

**Objective #4:** Promote and support activities that enhance soil health and quality and improve water quality and quantity by collecting, analyzing, and disseminating data.

**Performance Measure:** Increase number of citizens participating in rain monitoring by 50% (currently 25) with the ultimate goal of developing residents' interest in the health and functioning of their watersheds leading to a positive change in their land management practices.

**Progress:**

- Distributed rain gauges to residents in the Westside area.
- Trained volunteer "citizen monitors" record rainfall data.
- Prepared a rainfall map, which displayed the results of 2005 rainfall monitoring efforts.

**Objective #5:** Increase healthy plant communities within oak woodlands and in riparian corridors.

**Performance Measure:** One acre of oaks planted to lessen erosion and increase soil moisture retention, ½ mile of stream corridor treated.

**Progress:**

- The Tehama County Voluntary Oak Woodland Management Plan was completed and approved by the County Board of Supervisors. The document will allow landowners within the county to apply for grant funding through the California Wildlife Conservation Board.
- Worked with the Tehama County Agricultural Commission to develop a procedure that will allow Tehama County RCD to certify grant applications for WCB funding. This increased level of analysis is expected to result in selecting projects that have the greatest potential to improve the county's oak woodland landscapes.

**Objective # 6:** Identify stream form and function, ascertain problems, generate solutions and characterize natural flow regimes.

**Performance Measure:** 1,440 square miles of watershed studies completed to serve as the basis for a watershed management plan that will ultimately lead to implementation of watershed restoration projects.

**Progress:**

The Tehama West Watershed Assessment and the Tehama West Fire Plan were completed. The information provided in these documents will be incorporated into the current Tehama West Watershed Management Plan.

**Objective # 7:** Support development of a comprehensive County Fire Plan that addresses areas of heaviest fuel load and identifies potential projects to manage those areas.

**Performance Measure:** 1,440 square miles with a comprehensive fire plan, leading to 50 acres of high fuel load land treated to lessen the threat of wildfire that would increase erosion and siltation and decrease wildlife habitat in the watershed.

**Progress:**

- Worked with partners to complete the Tehama West Fire Plan. The planning process identified an array of potential solutions to the fire and fuels management problems in the County's Westside area. These problems are known to contribute to deterioration in water quality and overall watershed health. The planning effort is expected to result in a reduction in high intensity wildland fires.
- Received grant funding from the California Fire Safe Council, United States Bureau of Land Management, Tehama County RAC, and the United States Forest Service for the Tehama East Fire Plan. This effort will result in increased collaboration between fire and land management entities as well as landowners and conservation groups.

# Upper Putah Creek Stewardship

## Upper Putah Watershed



**Amount Funded:** \$153,400

**Additional Funding Obtained to Date:** \$39,300

### 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. In this watershed, 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. The watershed coordinator has been effective in bringing together stakeholders to address these critical issues and to begin the process of developing baseline data.

### Benefits to the Watershed

- ◆ Participated as a board member in the Sacramento River Watershed Program and was involved in a grant writing effort that would provide support to small watershed groups.
- ◆ Worked on a plan to create a Watershed Health Monitoring program, which would help establish meaningful benchmarks of watershed health.
- ◆ Arranged for two local teachers to attend a training session at Warm Springs Dam to become certified to run a “Steelhead in the Classroom” program at the local school. The program gives children first hand knowledge of how trout are born. Later the children release their fry back to the wild.
- ◆ Submitted a full proposal to the DWR/CALFED Watershed Program. The grant would fund watershed-wide management for the Upper Putah Creek watershed. This would provide for the sustainability of current efforts and create an overall watershed management plan.
- ◆ Helped plan a fundraising event to “Celebrate the Watershed”. The event will include school displays and materials from other watershed groups. The intent is to introduce current watershed management efforts to watershed stakeholders.



*Students get an up close view of water quality sampling techniques during an educational event.*

- ◆ Prepared and submitted an application for the 2005-2006 Consolidated Grants Program to fund the development of a local watershed plan for the Upper Putah Creek Watershed. The grant was not selected however; in preparing the proposal the coordinator was able to develop two new partnerships.
- ◆ Coordinated and participated in the 5<sup>th</sup> Annual meeting of the Upper Putah Creek Stewardship.
- ◆ Worked on a plan to implement a land-based learning program in the Middletown Unified School District. Funding for the effort was provided from Adopt-A-Watershed. The program will include hands-on training that is focused on the local watershed. Students will learn about fire, weather, erosion, and more.
- ◆ Collaborated with South Lake Fire Council to educate community residents about fire issues. This well-attended event raised more than \$18,000 to help with fire safety issues and contribute to the Upper Putah Creek Stewardship.
- ◆ Recruited a volunteer to help develop the Upper Putah Creek Stewardship website. The site will promote the organization and provide educational materials to the community.
- ◆ Arranged for the use of the Montesol Ranch youth camp for a three-day citizen training program.

### **Benefits to CALFED Program**

**Watershed Management** – In support of Watershed Management Program goals the coordinator:

- Participated, as a board member of SRWP, in formulating a plan to measure watershed health and assist small watershed groups in obtaining grant funding.
- Helped establish the “Steelhead in the Classroom” program in two classrooms. The program teaches students elements of watershed management.
- Submitted a grant proposal to the 2005-2006 Consolidated Grants Program for watershed management.
- Helped develop plans to train a team of Middletown High School teachers, three students, and a representative from the UPCS to implement the Adopt-A-Watershed Program.

**Ecosystem Restoration** – In support of Ecosystem Restoration program goals, the coordinator helped to start the restoration of the downtown Middletown portion of St. Helena Creek. Additionally, the coordinator worked with the Weed Management Area to facilitate the removal of invasive plants at two sites.

**Drinking Water Quality** – In support of the Drinking Water Quality program, the coordinator directed citizen monitors who conducted chemistry and bioassessment at seven sites.

### **Performance Measures**

**Goal 1:** Recruit and train citizen volunteers to conduct invasive weed eradication program.

**Objective 1:** Recruit and train citizen volunteers to conduct invasive weed program

**Performance Measure:** Identify and reduce number of invasive weeds.

**Progress:** Four volunteers have been trained to identify and remove invasive weeds. Volunteers have conducted removal efforts at two sites. The area is currently being analyzed to estimate the square footage of weeds removed. Made a photo record of the first effort of invasive weed removal on St Helena Creek. This was an effort supported by the Lake County Weed Management Area in conjunction with the UPCS. The work took place on the CalTrans right-of-way on the southern edge of Middletown. This is part of the greater effort of restoration of the urban section of St Helena Creek.

**Goal 2:** Recruit and provide training for citizen volunteers to conduct mercury and chemical sampling of surface waters.

**Objective 1:** Recruit and provide training for citizen volunteers to conduct mercury and chemical sampling of surface waters.

**Performance Measure:** Train a team of volunteers to take water samples.

**Progress:** The coordinator has trained seven volunteers to conduct water sampling and seven sites have been sampled. This performance measure is 90% complete.

**Goal 3:** Increase education and outreach program.

**Objective 1:** Increase education and outreach programs.

**Performance Measure:** Provide workshops on BMPs, watershed restoration, public input on Dead Horse Flats

**Progress:** Two workshops have been conducted for stakeholders on BMP implementation.

**Goal 4:** Install and maintain native plant nursery and its related programs.

**Objective 1:** Install and maintain native plant nursery and its related programs

**Performance Measure:** Produce native plants for restoration and “gathering sites.”

**Progress:** A greenhouse was built to produce native plants for restoration but then sustained storm damage. It is being rebuilt at this time.

**Goal 5:** Expand working relationship with partners.

**Objective 1:** Expand working relationship with partners.

**Performance Measure:** Attend and participate in meetings and workshops sponsored by partners.

**Progress:** The coordinator has attended a total of 85 meetings and has acquired three new partners.

**Goal 6:** Operate Watershed Center.

**Objective 1:** Operate Watershed Center.

**Performance Measure:** Make Watershed Center a viable operation.

**Progress:** The watershed center was open for a total of 617 hours/year.

**Goal 7:** Seek and apply for grants and endowments to insure continued growth of the UPCS.

**Objective 1:** Seek and apply for grants and endowments to insure continued growth of UPCS.

**Performance Measure:** Produce a long-range funding plan.

**Progress:** The coordinator has obtained funding totaling \$39,300 from three funding sources. In addition, the Watershed Coordinator wrote and submitted a grant application to the Department of Water Resources titled "Ensuring long term sustainability of the management of the watershed." This activity, if funded, would be a major addition to the Watershed Management function of CALFED.

# Upper Sacramento River Exchange

## Sacramento Headwaters



**Amount Funded:** \$163,944

**Additional Funding Obtained to Date:** \$308,885

### **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**

- ◆ Managed four large-scale restoration and enhancement projects in partnership with various state and federal agencies. The projects directly benefited water quality, riparian vegetation, wildlife habitat, visitor experiences and recreational opportunities in the watershed. Projects included: Repairing over 2,000 feet of trail and water course drainage on Mount Shasta, Restoring Squaw Meadow and planting over 200 native plants, restoring over 800 feet of trail and water drainages at Hedge Creek Falls, restoring and extending the Mount Shasta Hatchery trail, and repairing over 100 feet of streambank.
- ◆ Completed a community water quality awareness brochure and distributed it to all Dunsmuir water users.
- ◆ Coordinated an annual River Festival and River Cleanup for over 500 attendees. The volunteers removed over 25 cubic yards of trash from the watershed.
- ◆ Implemented a student storm drain identification project. Students and other volunteers labeled 24 storm drains in Dunsmuir. The labels let community members know that the storm drains discharge into to the river and can impact water quality.
- ◆ Hosted a watershed stakeholder meeting on the raising of Shasta Dam for over 55 community members, agency representatives, and other stakeholders.
- ◆ Coordinated school field trips that involved removing approximately ½ acre of invasive blackberry from Upper Soda Springs.



*Upper Sacramento River*

- ◆ Hosted a hazardous-spill response training for local agency emergency responders.

### **Benefits to CALFED Program**

**Ecosystem Restoration** – The coordinator completed several tasks that support the goals of the ecosystem restoration program. Specifically the coordinator managed the repair of over 5,000 feet of access trail and decommissioned approximately 250 feet of meadow trail at Squaw Meadows; coordinated community volunteers and restored over 3,000 square feet of meadow vegetation at Squaw Meadows; coordinated the repair of 8 water bars and numerous water courses at the Squaw Meadow trailhead; coordinated repairs on over 800 feet of access trail and repaired water drainages to Hedge Creek Falls; coordinated the repair of approximately 100 feet of degraded stream bank at the Mt. Shasta Fish Hatchery Trail; coordinated the removal of two acres of invasive blackberry at the Upper Soda Springs site utilizing student and community volunteers; hosted a hazardous spill response training with local agencies; removed two acres of scotchbroom from the Hatchery site; coordinated the removal of treated bridge timbers from the Upper Sacramento River; and, coordinated removal of over 25 cubic yards of debris from the Upper Sacramento River and tributaries during the annual River Cleanup. The coordinator also worked with partners to construct a fish ladder to enhance access and spawning in Sacramento river tributaries, worked with USFS to submit a Proposition 50 grant that will fund a stream and riparian vegetation restoration project on Trout Creek, and started working with USFS on a watershed assessment to evaluate potential issues and solutions in the Upper Sacramento River watershed.

**Watershed Management** – coordinated a student storm drain stencil program in Dunsmuir and conducted water quality (enviroscape presentations).

### **Performance Measures**

**Watershed Goal:** Promote and facilitate the restoration and enhancement of plant, fish and wildlife habitats in the Upper Sacramento River Watershed.

**Objective 1:** To reduce non-native invasive plants and repair degraded watercourses on three project sites in the Upper Sacramento River.

**Performance Measurement:** Monitoring of invasive plant removal on project sites during three-year period (90% eradication goal).



*Watershed roundtable meeting*

**Progress:**

- Monitored and re-applied removal of clover and blackberry on an additional acre at the Upper Soda Springs site.
- Conducted site monitoring and assessment for scotch broom at the Hatchery site
- Monitored and re-applied removal of blackberry in selected areas of the Upper Soda Springs site.
- Conducted site monitoring and treatment for scotch broom at the Hatchery site.
- Coordinated monitoring plan with the Forest Service for the newly planted Squaw Meadow on Mt. Shasta.
- Monitored and scheduled removal of blackberry at the Upper Soda Springs site.
- Conducted final site monitoring and treatment for scotch broom at the Hatchery site. All scotch broom has been removed.
- Established photo monitoring points and documented all restoration work for the newly planted Squaw Meadow on Mt. Shasta.

**Performance Measurement:** Production of water quality monitoring and stream assessment results during three-year period.

**Progress:**

- Produced and exhibited findings of our water quality testing at Critter Creek and Sacramento River at Tauhindauli Park. Data is available at the River Center and provided to the Regional Water Quality Board.
- Exhibited data results for the bio-assessment monitoring on the Upper Sacramento River.
- Continue to house and disseminate the water quality findings from the bio-monitoring project.
- Continue to house and disseminate the water quality findings from the bio-monitoring project.
- Scheduled spring bio-monitoring outings.
- House and exhibit monitoring results at the River Center.
- House all bio-monitoring samples at the River Center.
- Displayed Angler Survey report data at the River Center.

**Performance Measurement:** Documented participation for programs; record of meetings agendas; workshop evaluations; creation of a photographic display for public viewing at the River Exchange Center; tracking how participation and number of volunteers has increased since previous year.

**Progress:**

- Prepared notes from our Watershed Roundtable and distributed them to all attendees. Displayed watershed news on a community bulletin board, and organized file retention records and schedules for all activities (including agendas and printed materials).

- Completed a new photographic display of recent programs and volunteer projects.
- Displayed watershed news on a community bulletin board, and keep files for all activities (including agendas and printed materials).
- Completed a new photographic display of recent programs and volunteer projects.
- Collaborated with CalTrout for a watershed stakeholder meeting this November. Provided outreach and database names for invitees.
- Tracked all participants for the cleanup and expanded our volunteer database.
- Completed design for an interactive stewardship exhibit with a local artist.
- Displayed and updated regularly watershed news on a community bulletin board.
- Completed a new photographic display of recent programs and volunteer projects.
- Presented slide presentations on River Exchange program accomplishments
- Recorded participation and contact information for the roundtable and the hazardous spill response workshop.
- Tracked all participants for the cleanup and expanded our volunteer database.
- Completed visitor binder of all media clippings for River Exchange Programs.

# 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

- ◆ Conducted extensive sampling of Lobos Creek for nitrates and coliform bacteria. Sampling took place at eight in-channel sites and 12 creek-bank sites. During four sampling sessions, 80 nitrate and 160 coliform samples were taken. The sampling helped to identify a potential source area of high nitrate concentration. The sampling also revealed many additional sources of coliform contamination within the watershed. These results will result in recommendations and best management practices to improve the drinking water supply.
- ◆ Began contract negotiations to perform a macroinvertebrate survey of the newly daylighted creek channel to establish baseline conditions for future sampling.
- ◆ Trained 75 youth volunteers to conduct water quality sampling and testing.
- ◆ Trained a San Francisco State graduate student in all aspects of water quality testing including taking the samples and conducting laboratory analysis.
- ◆ Conducted invasive species removal activities that resulted in the removal of hundreds of non-native, invasive plants in the watershed.
- ◆ A significant contamination source, an overflow sewer pipe, was sealed resulting in a notable reduction in sewage to the drinking water source during periods of heavy rain.
- ◆ Implemented a water quality testing program for nursery runoff. Test results showed that nursery runoff should be directed away from the creek.
- ◆ Worked with partners to remove over 70,000 cubic yards of waste from the watershed. The waste removal will reduce impacts to water quality and wildlife.
- ◆ Gave a presentation about the vision, benefits and challenges of the watershed restoration project in an hour-long presentation to 50 San Francisco business leaders at a meeting of the San Francisco Planning and Urban Research Association (SPUR).

## **Benefits to CALFED Program**

**Watershed Management** – The coordinator trained 75 volunteers in water quality testing techniques and performed extensive training with a graduate student. This training provided the community with additional resources for watershed protection.

**Drinking Water Quality** – Through a new water quality monitoring program, the coordinator worked with partners to identify nitrate as a contaminant in the creek supplying drinking water to the Presidio of San Francisco. The monitoring results also helped the coordinator and partners identify a potential source location for the contaminant.

**Ecosystem Restoration** – The coordinator facilitated a creek daylighting project on a 150-yard stretch of creek. The creek ran through a pipe that was buried underneath a landfill. The coordinator worked with partners to remove the landfill and the creek was freed from the pipe. Several hundred non-native species were removed from the site. The 150-yard stretch of creek was restored using native plants suitable for use by birds, mammals and amphibians. After only five months the creek has been colonized by birds including Great Blue Heron, mallards, killdeer, and others. Water quality testing has begun at the newly daylighted creek to establish baseline conditions.

## **Performance Measure Progress**

**Goal:** Improve stormwater quality entering the San Francisco Bay.

**Objective 1:** Reduce pollution from coliform bacteria sources within three Presidio Creek systems that deliver water to the San Francisco Bay.

**Performance Measure:** Coliform bacteria reduced by 80%.

### **Progress:**

- Purchased and installed water quality testing equipment.
- Established a coliform monitoring program to expand baseline monitoring data in the Presidio.
- Detected a sewage overflow at a location in the watershed and reported the leak to authorities. The sewage leak was directly into a creek that provides drinking water for the Presidio. San Francisco authorities subsequently sealed the leak.
- Continued coliform monitoring in creek to identify additional contamination sources.
- Continued discussions with land managers and regulators regarding the status of the creek and the monitoring results.

**Objective 2:** Reduce pollution from other urban runoff sources into three Presidio Creek systems that deliver water to the San Francisco Bay.

**Performance Measure:** Chronic and acute pollution from other urban sources reduced by 50%

**Progress:**

- Initiated a testing program for nursery runoff. The results indicated that runoff from nurseries should be directed away from the creek.
- Water quality testing showed that nitrate contamination in Lobos Creek was a potential candidate for chronic and acute pollution.
- Identified potential sources of nitrate and began discussing potential reduction measures with land managers.

**Objective 3:** Maximize effectiveness of stormwater management plans from agencies with overlapping jurisdictions that affect the Presidio of San Francisco and related areas in the Golden Gate National Recreation Area.

**Performance Measure:** Pollution revealed by stormwater plan efficiencies and data gap analysis reduced by 50%

**Progress:**

Began discussion with agencies in an effort to develop stormwater management plan. A draft plan is currently being discussed by land managers.

## West Lake RCD Upper Cache Watershed



**Amount Funded:** \$148,414

**Additional Funding Obtained to Date:** \$353,775

### **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**

- ◆ Assisted with the formation of a new watershed group.
- ◆ Coordinated the annual "Kids-in-the-Creek" educational event.
- ◆ Coordinated and co-hosted the 2005 "Watershed Awareness Week in Lake County."
- ◆ Coordinated the annual display and information booth at the Lake County Fair
- ◆ Coordinated the annual participation in the Coastal Cleanup and Lake County's annual creek cleanup event.
- ◆ Participated in the implementation of a 16-acre restoration project.
- ◆ Coordinated and co-hosted training workshops for Citizen Water Quality Monitoring Teams.
- ◆ Assisted with the implementation of Lake County Weed Management Area projects.
- ◆ Presented numerous slideshow presentations highlighting watershed projects and activities.
- ◆ Participated in the Cache Creek Watershed Forum public meetings.
- ◆ Earned recognition from the Sacramento River Watershed River Program with the 2005 "Individual Watershed Excellence Award" for an individual outstanding in promoting watershed stewardship.
- ◆ Provided landowners with technical information at public meetings about the impending Total Maximum Daily Load (TMDL) requirements regarding nutrients in Clear Lake.



*Cache Creek Watershed Forum Meeting*

- ◆ Coordinated and participated in a two part series of public meetings with the Cache Creek Watershed Forum. The first meeting was held in Lake County and the second meeting was in Yolo County. The meetings were designed to address watershed issues and concerns raised in the 2003 public meeting. Six topics were presented, including wildlife in the watershed, vegetation management for weed control and wildlife habitat, water management and planning, water quality management and response to regulation, Tribal interests in the watershed, and recreation and management on public lands.
- ◆ Facilitated a meeting between the Bureau of Land Management (BLM) and a local goatherd provider to explore opportunities for vegetation management on the South Cow Mountain firebreak. The project would involve placing goats on the firebreak to remove one mile of vegetation.
- ◆ Submitted a concept paper to Department of Water Resources (DWR) requesting \$400,000 in funds to update and/or start three sub-watershed assessments, complete the Clear Lake Basin Management Plan, and provide local watershed groups technical support and capacity building. The proposal was selected to move on to the full proposal round. The coordinator submitted a full proposal requesting the original \$400,000 and successfully obtained an additional \$142,000 in matching funds.
- ◆ Approximately 100 Alder and 40 Cottonwood tree starts and several willow cuttings were planted in the riparian corridor of Middle Creek and Clover Creek by five landowners and volunteers.
- ◆ Met with concerned landowners to document debris jams along the lower reach of Scotts Creek, a Clear Lake tributary. New Year's flooding caused a build up of debris in several locations. Debris removal will require permits, planning, and funding.
- ◆ Participated in the monitoring program of the Clear Lake hitch, an endemic Clear Lake fish that has been listed as a "Species of Special Concern" by the California Department of Fish and Game. Starting in January the Chi Council met monthly to prepare for the annual Clear Lake hitch migratory run. The Chi Council received ten water temperature data loggers that are deployed to record water temperature during the beginning of the migratory run. The coordinator was successful in obtaining the loan of an additional ten Hobo Temps from the Forest Service for this monitoring program.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator supported the Watershed Program goals of providing financial and technical assistance for watershed activities that help achieve the mission and objective of CALFED, and to promote collaboration and integration among community based watershed efforts by completing the following activities:

- Successfully obtained funds from a combination of sources to implement watershed activities and projects. Funding obtained is a combination of cash and in-kind services from cooperative agreements, grants, donations, or volunteer participation.
- Worked closely with stakeholders to build collaborative relationships between stakeholders, watershed groups, local, state, federal, and regulatory agencies.
- Built upon existing relationships, both private and agency, to successfully obtain technical assistance to enhance watershed activities and projects.

- Continued to promote the CALFED mission and objectives through the District’s ongoing education and outreach programs. These activities involve working with K-12 students, watershed groups, and stakeholders to help them become familiar with their watersheds and watershed management.

**Ecosystem Restoration** – The coordinator supported the Ecosystem Restoration Program goals to recover at risk native species, maintain and enhance fish populations, protect and restore functional habitats, and reduce negative impacts of invasive species by completing the following activities:

- Worked directly with a watershed group, the Chi Council, created specifically to protect and enhance Clear Lake hitch, a California Department of Fish and Game’s “Species of Special Concern.” The Council is surveying and mapping migration runs, surveying and mapping in-channel obstructions, working to obtain funding to mitigate the obstructions, and entering migration data into a database to better understand the hitch population.



*New Years 2006 Scott’s Creek Flooding*

- Worked with local watershed groups and local, state, and federal agencies to implement ecosystem restoration projects to protect, restore, and enhance water quality in the UCCW. The coordinator participated in planning, design, and implementation of projects in the UCCW.
- Continued to actively participate in non-native invasive weed surveying, mapping, and eradication activities in the UCCW. As one of the founders of the Lake County Weed Management Area (LCWMA), the coordinator works closely with committee members to insure ongoing projects to eradicate *Arundo donax* and *Tamarix sp.* in the UCCW.
- Transferred information about the Clean Water Act and its impact on activities to stakeholders in the UCCW. The TMDL for Mercury in Clear Lake and the impending TMDL for Nutrients in Clear Lake are both tied to water quality and sediment loading from the upper watersheds. The coordinator’s education and outreach actions are having an effect on how people live, work, and recreate in the UCCW.

**Performance Measures**

**Goal:** Protect and improve watershed conditions in the Upper Cache Creek watershed.

**Objective 1:** Facilitate coordination, collaboration, and communication among governmental agencies, partners, citizens, and local watershed groups

**Performance Measure:** Facilitate resource stewardship through the development of (up to three) new local watershed and/or sub watershed groups; assist four existing active watershed groups survey, inventory, and assess watershed conditions.

**Progress:**

- Met with stakeholders to discuss the formation of watershed groups on a regular basis.
- Helped stakeholders identify concerns and prioritize issues.
- Helped the Nice Watershed Group and the Chi Council develop mission statements and goals.
- Assisted with the publication of two MOUs.
- Helped the Big Valley CRMP develop an assessment of the Kelsey Creek watershed.
- Worked with the Middle Creek CRMP to schedule a 5-mile survey on Middle Creek and provided them with survey forms.
- Worked with BLM staff to guide the development of plans for the Eight Mile Valley Meadow Restoration Project.
- Helped the Lower Lake Watershed Council write grant proposals for a habitat restoration project and helped write proposals to obtain funding for capacity building for all of the Upper Cache Creek Watershed groups.

**Objective 2:** Provide education and outreach activities that create an informed public on watershed concepts and issues

**Performance Measure:** Provide three middle school watershed educational field trips, present 12 or more watershed related displays for public viewing, coordinate the display and staffing of an annual CRMP booth display at the Lake County Fair over a three year period, develop and conduct (up to 20) presentations of watershed issues and/or activities before local service organizations and watershed groups, and coordinate and conduct watershed tours of ecosystem restoration, erosion control, and habitat enhancement.

**Progress:**

- Held two of the three “Kids-in-the-Creek Days” events. Attendance was well over the projected 100 students per event.
- Conducted a classroom presentation about the importance of natural resources for fifteen 11th grade Upper Lake High School students.
- Helped with the County of Lake’s Storm Water Management Program (SWMP) by attending meetings and supplying venues for distributing information to the community.
- Conducted 16 presentations for the Lake County Board of Supervisors, RCD Directors, watershed groups, stakeholders, and students.
- Utilized the WLRC’s modular display board to prepare and display RCD and watershed group project and activities, non-native invasive weed information, fire safety information,

and information about habitat restoration projects. The displays have been set up in numerous locations including: the County Courthouse, watershed meetings, workshops, and state conferences.

- Conducted three watershed tours, which included visits to invasive weed sites, restoration projects, firebreaks, and recreation opportunities.
- Coordinated the staffing of a watershed information booth at the Lake County Fair for the first two years of the grant. Over 60 volunteers staffed the exhibit during the four days of the fair.

**Objective # 3:** Coordinate natural resource protection and restoration activities on public and private lands.

**Performance Measure:** Develop (up to six) implementation projects; identify funding sources, (up to six) grant/contract applications submitted, and (up to four) public/private donations secured.

**Progress:**

- Worked with governmental agencies, watershed groups, and landowners to identify five projects. The coordinator assisted with project design, permitting, and funding opportunities.
- Worked cooperatively with BLM staff to design and implement restoration efforts in the motorized and equestrian recreation areas on public lands.
- Negotiated seven agreements with BLM to implement natural resource protection projects.
- Coordinated volunteer efforts to gather cuttings and plant riparian species along tributaries of the UCCW.
- Successfully obtained funding for cutting and planting 20,000 willows.
- Six donations were secured for CRMP/agency identified needs.

**Objective # 4:** Improve stream channel conditions in the Upper Cache Creek watershed.

**Performance Measure:** Hold three creek cleanup events and three county highway cleanup events, producing a quantifiable amount of waste and debris removed from the watershed's streams, flood plains, and roadsides preventing winter storms from introducing contaminants into Clear Lake and Cache Creek.

**Progress:**

- Attended and facilitated steering committee meetings for the annual roads and annual creek cleanup events.
- Assisted with recruiting volunteers for numerous cleanup activities held each year. The coordinator continues to work with local schools to provide community service opportunities for high school students helping with the cleanups.
- Worked with watershed group members to secure donations of food and refreshments for cleanup volunteers.
- Helped watershed groups and the road cleanup steering committee identify cleanup sites.

- Submitted news releases to the local newspaper to promote each clean up event.
- Coordinated with the lead volunteer for the cleanup events and distributed supplies for the events.
- Clean up events resulted in the removal of yards of trash, recyclables, appliances, and tires. To date 149 cubic yards of trash, 27 cubic yards of recyclables, 27 appliances, 20 cubic yards of green waste, and 61 tires have been removed from the UCCW.

**Objective # 5:** Provide Watershed Coordinator’s assistance to the Lake County Weed Management Area (LCWMA).

**Performance Measure:** Attend monthly meetings of the LCWMA, an additional 25% of the watershed surveyed for *Arundo donax* and *Tamarisk*, continued GIS inventory database management, and control measures applied on 50 to 75 sites.

**Progress:**

- Attended and participated in the regularly scheduled meetings of the Lake County Weed Management Area (LCWMA).
- Collected GPS positions of *Arundo donax* colonies for the LCWMA database.
- Mailed Right of Entry forms to landowners with identified *Arundo donax* sites requesting permission to eradicate the colonies.
- Monitored the effectiveness of eradication efforts through photo documentation.
- Conducted presentations about the LCWMA non-native invasive weed eradication efforts. Presentations were given for the Lake County Board of Supervisors, Lake County Fish and Wildlife Advisory Committee, local watershed groups, the Cache Creek Watershed Forum, and to individual landowners visiting the watershed booth at the Lake County Fair.
- The LCWMA has been successful in obtaining funding for non-native invasive weed eradication through Team *Arundo del Norte*.

**Objective # 6:** Provide coordination, training, and technical assistance to Citizen’s Water Quality Monitoring (CWQM) Team.

**Performance Measure:** Project(s) planning and development, funding sources identified, and grant/contract applications submitted.

**Progress:**

- Worked closely with WLRC’s Citizens’ Water Quality Monitoring Project Coordinator to develop site location and monitoring schedule.
- Coordinated the planning of two volunteer training sessions and helped conduct both three-day sessions.
- Purchased monitoring equipment for 1 monitoring team.
- Trained the Project Coordinator to use a GPS unit.

- Worked with the Project Coordinator to gather waypoints of monitoring sites. The coordinator then produced maps of the locations for team members.
- Helped the Project Coordinator with reporting requirements as needed.

**Objective # 7:** Coordinate watershed activities within and across watershed/county boundaries with neighboring and downstream watersheds.

**Performance Measure:** Attend quarterly meetings with neighboring Watershed Coordinators for information exchange, participate in scheduled meetings of the Cache Creek Watershed Forum, and attend Lake County Resource Management Committee meetings

**Progress:**

- Met quarterly with Yolo County RCD's Executive Director and staff and maintained regular communication via the telephone. The coordinator also met with the neighboring Upper Putah Creek Watershed Coordinator on a monthly basis.
- Participated in all Cache Creek Watershed Forum meetings, steering committee meetings, conference calls, and special meetings.
- Attended and participated in Lake County Resource Management Committee quarterly meetings. The meetings are a venue for local, state, and federal agencies, Tribes, watershed groups, and stakeholders to exchange information about activities and projects in Lake County.

## Western Shasta RCD

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



**Amount Funded:** \$190,765

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

### **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 exceeded 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 continues to bring together local residents, government entities, and concerned citizens to address the issues.

### **Benefits to the Watershed**

- ◆ Facilitated the construction of a tail water retention pond.
- ◆ Coordinated the construction of a fish screen on Little Cow Creek. A second fish screen will be installed on South Cow Creek after landowner agreements are received.
- ◆ Met with current and future project landowners about project implementation plans.
- ◆ Facilitated monthly meetings for the Cow and Bear Creek watersheds.
- ◆ Secured 120 signed landowner agreements for project implementation.
- ◆ Completed two community based monitoring activities in the Bear Creek watershed.
- ◆ Promoted watershed conservation, management, and education with a booth at the Shasta County Cattlemen's annual meeting.
- ◆ Promoted watershed conservation and the Western Shasta RCD's efforts for watershed management at the California Cattlemen's Legislative Breakfast.
- ◆ Submitted articles to multiple newspapers about watershed activities. Twenty-one articles were published in Bear and Cow Creeks.
- ◆ Held educational meetings to increase communications and knowledge with members of Cow and Bear Creek watershed groups.
- ◆ Worked with UC Cooperative Extension staff to assist with local projects and share data.
- ◆ Partnered with NRCS to submit multiple grant proposals and view existing EQIP projects.
- ◆ Provided watershed education to over 500 people through outreach, educational displays, and demonstrations.

- ◆ Maintained the SRWP created, Bear Creek Watershed Group webpage at <http://www.bearcreekwatershed.com>
- ◆ Worked with local watershed groups to collect data for the Bear Creek Watershed Assessment.
- ◆ Worked with local residents to complete the Fenders Ferry Road Fuel Break project. The project included cutting and chipping out about a ¾ mile of the 2.1-mile long fuel break.

### **Benefits to CALFED Program**

**Watershed Management** – In support of CALFED Watershed program goals the coordinator: Provided watershed education at the Shasta County Cattlemen’s annual meeting; Facilitated and coordinated the Cow Creek Watershed Management Group and Bear Creek Watershed group meetings; Participated in numerous outreach events where educational information was distributed; helped volunteers identify and document possible salmon spawning beds in Bear Creek; and, worked with partners to plan and coordinate fish screen construction projects.

**Water Use Efficiency** – In support of the Water Use Efficiency Program the coordinator assisted in the development of an implementation plan and check list for the recently concluded water quality monitoring in Cow Creek; and, continued educating and signing up landowners to participate in the Cow Creek demonstration projects and ditch piping feasibility studies.

**Ecosystem Restoration** – In support of the Ecosystem Restoration program the coordinator: Obtained temporary entry permits from landowners for the start of the Backbone road/Hidden valley fuelbreak; Obtained landowner agreements for the second fish screen and the remainder of the agreements for the ditch piping feasibility study; worked with a willing landowner to construct a fish screen on Little Cow Creek; concluded water quality monitoring for water temperature and e-coli at 22 locations within the Cow Creek Watershed; submitted permit applications for the William’s tail water pond and for the Woodman Ditch and Cook & Butcher Ditch.

**Drinking Water Quality** – In support of the Drinking Water Quality program the coordinator: conducted community education using a watershed model to demonstrate the effects of point and non-point source pollution. Participants were provided with educational handouts to reinforce the information provided in the demonstration.

### **Performance Measures**

**Goal:** The recovery of ecosystem health through reducing or eliminating factors that degrade habitat, impair ecological functions or reduce population size or health of species in the Upper and Lower Clear Creek watersheds

**Objective 1:** Identification of water quality improvement projects regarding fecal coliform contamination and elevated temperatures in the Cow Creek Watershed.

**Performance Measurement:** Identify 20 water quality improvement projects over three years. All landowners have been recognized for water quality improvement projects and will be identified in grant submittals.

**Progress:**

- Compiled minutes from 30 CCWVG meetings.
- Attended/held nine educational programs involving: Bear Creek Watershed Group, UC Cooperative Extension, Cow Creek Fish Study, among others.
- Signed landowner agreements for temporary access.
- Obtained permits for water quality projects.
- 15 water quality improvement projects have been identified including: ditch piping on five properties, tailwater retention pond near Old Cow Creek, tailwater retention pond near Oak run creek, tailwater retention pond near the main stem of Cow creek, main stem erosion control inventory, riparian fencing along desirable wildlife corridors throughout the Cow Creek Watershed, stream bank fencing to reduce animal impacts, off bank watering facilities, ditch piping improvement to fix cracked or broken lines, continued temperature data collection, and continued fecal coliform data collection.
- Held monthly CCWVG and BCWG meetings.
- Obtained 129 signed landowner agreements for temporary access to complete demonstration and fire break projects.
- Held regular Cow Creek and Bear Creek TAC meetings.

**Objective #2:** A strong education and public outreach program to encourage conservation and rehabilitation of natural resources in Cow Creek and Bear Creek watersheds.

**Performance Measurement:** Outreach to 25,000 people through educational displays and demonstrations.

**Progress:**

- Staffed information booth at six annual events.
- Began work on teacher reviews completed for four classroom presentations per year using the watershed /non-point source pollution model.
- Presented three reports to the Shasta County Board of Supervisors.
- Released four press releases to local media.
- Attended six educational programs including CALFED Science Conference in 2006.
- Hosted 11 educational booths, which provided watershed information to over 20,000 people.
- Completed 12 in class presentations about the watershed and non-point source pollution. Future presentations are planned for interested schools.
- Provided annual reports to the Shasta County Board of Supervisors.
- Submitted 21 press releases to the local media. Topics covered included: invitation to help manage the Bear Creek Watershed, announcements about upcoming presentations about the watershed, event announcements, watershed issues, the ditch-piping study, the Bear Creek Watershed Assessment, invasive species, and more.

- Attended 3 educational programs including the Invasive Plant Symposium, State of the Sacramento River Watershed Conference, and the California Cattlemen’s Association annual conference.

**Objective #3:** Coordinate the development of new partnerships to help fund implementation of projects that support CALFED goals.

**Performance Measurement:** Coordination and strengthening of partnerships with ten groups and seven media outlets.

**Progress:**

- Participated in 48 meetings per year of other watershed groups, organizations and agencies.
- Held two media press conferences.
- Participated in eight meetings to strengthen coalitions with Farm Bureau, Shasta College, Natural Resources Advisory Board, Shasta County Weed Management Area, Shasta-Tehama Bioregional Council.
- Attended nearly 100 meetings to discuss watershed issues and plan watershed projects. Meetings included: SRWP board of trustee meetings, Fire Safe Council meetings, Palo Cedro Chamber of Commerce, TAC meetings, Round Mountain Chipping Day, NRCS EQIP meeting with landowners, Shasta District Fair, DWR gravel count, CALFED Watershed Subcommittee, and more.
- Held press conferences about Watershed Awareness Day, Day in the District, Bear Creek Watershed Redd Survey, and Shasta County Board of Supervisors.
- Participated in 20 meetings to strengthen coalitions with Farm Bureau, Shasta College Natural Resources Advisory Board, Shasta County Weed Management Area, and Shasta-Tehama Bioregional Council.
- Participated in 14 meetings and tours with potential grant organizations to highlight funding needs.

## **Western Shasta RCD**

**Sacramento-Upper Clear / Sacramento-  
Lower Clear Watersheds**



**Amount Funded:** \$202,516

**Additional Funding Obtained to Date:** \$5,697,104

### **Background**

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

### **Benefits to the Watershed**

- ◆ Received the 2006 Governor's Environmental and Economic Leadership Award for Lower Clear Creek Floodway Rehabilitation Project. The Lower Clear Creek Floodway Rehabilitation Project revitalized and restored an environment ravaged by the effects of gold and aggregate mining. Through restoration, the project increased the return of the fall-run Chinook salmon from a 1967-1991 average of 1,689 to more than 16,000 in 2003.
- ◆ Established Fire Safe Councils in both the upper and lower watersheds.
- ◆ Worked with agencies, landowners, and other stakeholders to identify potential watershed management and education related projects, and assisted in locating possible funding sources, proposal development and submission.
- ◆ Continued educating the community on the watershed concept, and the specific characteristics and issues in the Clear Creek watersheds.
- ◆ Developed a website for the Clear Creek watershed which included individual sites for both the upper and lower watersheds.
- ◆ Collaborated with Redding Rancheria to develop and submit a proposal for a Lower Clear Creek youth service-learning project. The project is intended to build upon the existing Clear Creek education program and would develop an educational site at the lower end of the watershed.
- ◆ Established a Watershed Education Lending Library (WELL). The WELL is a resource for Shasta County schools and organizations involved in watershed research and education. WELL acts as a lending library database for water education equipment and curriculum. Groups can sign out materials for no charge and utilize for research, service learning projects, and field trips.
- ◆ Helped plan and participated in Northern CA Science Alliance Teacher Resource Fair.

- ◆ Developed, organized and participated in a Watershed Awareness Day at the Mount Shasta Mall in Redding.
- ◆ Facilitated public involvement in watershed stewardship and education activities through assisting with the Upper Clear Creek Student Restoration project. Student activities include studying water quality and macro invertebrates, monitoring wildlife tracks, invasive species eradication, and native species planting.
- ◆ Collaborated with the California Association of Resource Conservation Districts to develop a Lower Clear Creek case study for use as a concise, reader-friendly outreach document regarding the Lower Clear Creek Floodway Rehabilitation Project.
- ◆ Worked with the Shasta County Fire Safe Council to distribute information and materials to the public regarding fuel reduction, defensible space and fire safety.

### **Benefits to CALFED Program**

**Watershed Program** – In support of Watershed Program goals the coordinator:

- Identified the non-profit Horsetown Clear Creek Preserve’s need for a website to facilitate community outreach. The coordinator identified Anderson New Technology High School (ANTHS) as a possible source for developing the website. After the coordinator facilitated discussions between the high school and the preserve, the high school agreed to develop the website.
- Coordinated and facilitated monthly French Gulch - Upper Clear Creek Resource Management Group meetings. Topics addressed at the meetings included wildland fuel management, post-fire restoration, erosion control, land stewardship, environmental education, off-highway vehicle use, invasive species, illegal dumping, mining activities, and more.
- Coordinated and facilitated quarterly Lower Clear Creek Watershed/CRMP meetings Topics addressed at the meetings included the Floodway Rehabilitation project, wildland fuel management, invasive species, fish resources, recreation needs, and more.
- Managed and promoted the Watershed Education Lending Library, a resource for schools and others involved in watershed research and education.
- Contributed to the development and organization of the Adopt-A-Watershed Northern California Science Alliance Teachers Fair.
- Conducted outreach activities at Return of the Salmon Festival and at the State of the Sacramento River Conference. The coordinator provided many of the attendees with written materials regarding restoration efforts, invasive weed management, wildland fuel loading, and erosion prevention measures.
- Listened to citizen concerns at outreach events regarding raising Shasta Dam. The coordinator encouraged citizens to visit CALFED Shasta Lake Water Resources Investigation Program website to obtain more information and provide input.

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

- Met with landowners to discuss their concerns and desires for wildlife habitat improvements on private property.

- Researched and communicated options for private landowners including possible funding opportunities.
- Coordinated Lower Clear Creek Restoration Team meetings to aid in the development of weed inventory and native plant restoration projects in the watershed.
- Worked with partners on the Upper Clear Creek Restoration and Monitoring Community Collaborative project to identify areas devastated by fires and plan restoration activities.

**Science** - Coordinated and facilitated Lower Clear Creek Restoration Team meetings and focus meetings related to the implementation of Phase 3B and management of the Lower Clear Creek Greenway. Topics discussed in the meetings included Phase 3B implementation, wetland mapping, gravel augmentation, cumulative impacts, geomorphic monitoring, avian monitoring, Watershed/CRMP Group input, and more.

### **Performance Measures**

**Goal:** The recovery of ecosystem health through reducing or eliminating factors that degrade habitat, impair ecological functions or reduce population size or health of species in the Upper and Lower Clear Creek watersheds.

**Objective # 1:** Rehabilitate a degraded section of Lower Clear Creek detailed in the Lower Clear Creek Floodway Rehabilitation Project called Phase 3B.

**Performance Measure:** Completion of Phase 3B of the Lower Clear Creek Floodway Rehabilitation project.

### **Progress:**

- Coordinated and facilitated three Lower Clear Creek Watershed/CRMP Group meetings to inform the community.
- Coordinated and facilitated sixteen French Gulch - Upper Clear Creek Resource Management Group meetings.
- Coordinated and participated in nine Educational Programs which addressed such topics such as fire recovery, student restoration, watershed stewardship, Lower Clear Creek Floodway Rehabilitation, and invasive species.
- Contract pending for implementation of Phase 3B
- Coordinated and facilitated fifteen Lower Clear Creek Restoration Team meetings.

**Objective # 2:** Restoration and rehabilitation of those areas in the watershed that have unnatural rates of erosion and contribute significant volumes of sediment into the creek.

**Performance Measure:** Erosion control projects completed on two properties; white paper completed and distributed.

**Progress:**

Contacted landowners and obtained ninety-nine signed agreements to allow Bureau of Land Management and Western Shasta Resource Conservation District to perform Emergency Stabilization Treatment measures for areas affected by the French Fire.

**Objective # 3:** A strong education and public outreach program to encourage conservation and rehabilitation of natural resources in Upper and Lower Clear Creek.

**Performance Measure:** Outreach to 25,000 people through educational displays and demonstrations.

**Progress:**

- Set up booths and conducted outreach activities at thirteen community events. These events provided an opportunity to interact with many local residents and stakeholders, and distribute written materials regarding restoration projects, invasive weed management, wildland fuel loading, and erosion prevention measures. Events included Shasta County Watershed Awareness Day events, Return of the Salmon Festival, Honeybee Festival, Shasta District Fair, French Gulch Living History Day, CA Watershed Forum, Northern CA Science Alliance Teacher Resource Fair, WSRCD Day in the District, and the State of the Sac River Watershed Conference. A total of over 233,000 visitors attended these events.
- Developed and installed an informational display for the CA Department of Fish and Game regional office reception area which was on exhibit for three months.
- Performed twenty-eight classroom presentations and numerous demonstrations using the watershed/non-point source pollution model. Demonstrations include explaining what a watershed is, and how everyday activities have an effect on natural resources. Point/non point source pollution is included as a main focus area.
- Collaborated in the development and submittal of nine educational grant proposals.
- Submitted 12 media releases to local media to inform the community on activities in the watershed and solicit participation and input. News release topics included Fire Recovery, Upper Clear Creek Student Restoration Project notices, Cuckoo observed in Lower Clear Creek, Elderberry Monitoring, Watershed Awareness Day, Lower Clear Creek Watershed/CRMP Group notices, Fire Safety, and the Teacher Resource Fair.

**Objective # 4:** Coordinate the development of new partnerships to help fund implementation of projects that support CALFED goals.

**Performance Measure:** Coordination and strengthening of partnerships with ten groups and seven media outlets.

**Progress:**

- Participated in eighty-five watershed and agency meetings in an effort to coordinate the needs of CALFED with the needs of landowners in Lower and Upper Clear Creek.
- Participated in four press conferences to inform the community on activities in the watersheds. Topics discussed included Lower Clear Creek Floodway Rehabilitation Project,

Watershed Awareness Month, Upper Clear Creek Student Restoration Project and Lower Clear Creek Watershed/CRMP Group activities.

- Participated in eighteen meetings of resource management organizations.
- Participated in four meetings with potential grant funding organizations.

## Westside RCD Upper Los Gatos-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**

- ◆ Held a Watershed Summit to showcase the watershed. The summit included presentations about the watershed, comments from Mike Chrisman, exhibits, and a tour. Over 20 people attended the summit including landowners, agency representatives, and industry partners.
- ◆ Educated landowners about the need for permits for stream bank restoration projects.
- ◆ Worked with the Coalinga High School to open the school's seasonal Tree Bank.
- ◆ Submitted concept proposals for \$400,000 to remove tamarisk from 20 linear miles of stream bank.
- ◆ Worked with BLM to plan several pilot tamarisk removal projects. The projects will involve using a tamarisk chopper to remove tamarisk from stream banks.
- ◆ Held a Tamarisk removal workshop that included a tour of several sites with various levels of tamarisk intrusion. The workshop and tour provided landowners with information about how to remove tamarisk infestations.
- ◆ Worked with a landowner to develop a ranch plan for a 1200-acre ranch in the Domengine Watershed.
- ◆ Continued follow up with DWR and CALFED to keep the CRMP eligible for state funding. The CRMP is required to complete an Initial Study to maintain their funding.
- ◆ Educated landowners about permits that are needed for stream bank restoration projects. The coordinator provided landowners with information about how to obtain Lake and Stream Bed Alteration permits.
- ◆ Developed a database of Threatened and Endangered species in the watershed that will be used to assist landowners with project implementation and permitting.
- ◆ Worked with landowners and agencies throughout the watersheds to implement best management practices. The BMPs were designed to reduce flooding incidents, improve water quality and enhance environmental education.

## **Benefits to CALFED Program**

**Watershed Management** – In support of Watershed Program goals, the coordinator worked with landowners and agencies throughout the watersheds to implement best management practices to reduce flooding incidents, improve water quality, and enhance environmental education. The coordinators work benefits the communities of Huron and Coalinga. The coordinator also worked to promote existing conservation activities and recruit additional landowners for farm and ranch plans for the land throughout the watershed.

**Water Use Efficiency** – The coordinator worked with landowners to develop ranch plans and implement water use efficiency projects recommended in the plans.

**Drinking Water Quality** – In addition to preventing damage to the California Aqueduct by flooding in the watershed, the projects promoted in the Ranch Plans that the Watershed Coordinator promotes reduce damage to water treatment plants for the local communities of Huron and Coalinga. The coordinator is working to resolve issues with DWR so that grant funding for project implementation can be used by landowners to further prevent flooding and sedimentation from eroding stream banks.

**Ecosystem Restoration** – In support of Ecosystem Restoration Program goals, the coordinator submitted a concept proposal for \$250,000 in funding for Tamarisk removal along 25 linear miles of stream banks.

**Storage** – The coordinator helped landowners implement projects that improve water storage capabilities through the development of stock ponds, installation of wells in the upper watershed that can pump water to tanks on hilltops where water is stored then piped to troughs on various pastures.

## **Progress on Performance Measures**

**Watershed Goal:** To improve the water quality of the Arroyo Pasajero/Domengine and protect the California Aqueduct by reducing erosion, sedimentation, and flooding.

**Objective # 1:** Increase visibility of CRMP among landowners, agencies, and other organizations.

**Performance Measure:** Increased attendance and involvement in CRMP; New names added to mailing list.

**Accomplishments:** The coordinator increased the visibility of the CRMP by holding tours and informational workshops, writing quarterly articles about the CRMP for the Westside RCD newsletter, speaking with Resources Agency Secretary Mike Chrisman about the CRMP and its activities, and updating agency personnel about CRMP projects. The coordinator also increased landowner involvement in the CRMP through the development of a Domengine Watershed Management Plan and a ranch plan for the Erro Ranch.

**Objective # 2:** Improve watershed conditions in the Arroyo Pasajero by reducing erosion and flooding.

**Performance Measure:** Implementation and support of monitoring practices that result in the collection of data that indicates reduction in sediment, erosion and flooding in the Arroyo Pasajero.

**Accomplishments:** The coordinator downloaded rain gage data several times and created easy to understand reports analyzing the data. The annual monitoring reports were distributed to stakeholders throughout the watershed. The coordinator also helped agencies locate a site to place monitoring equipment and began developing a monitoring library. The library will include videos of monitoring activities that can be used to train volunteer monitors.

**Objective # 3:** To procure funding for CRMP landowner watershed improvement project implementation.

**Performance Measure:** Obtain funding to support the implementation of ranch plans and monitoring plans through 2009.

**Accomplishments:** The coordinator developed a partnership with BLM to obtain the resources necessary to complete permitting and monitoring activities in the watershed.

**Objective # 4:** To plan and hold education and outreach events.

**Performance Measure:** Increased awareness of the Stewards of the Arroyo Pasajero CRMP activities, greater attendance at meetings, workshops, and tours.

**Accomplishments:** The Watershed Awareness Summit showcased CRMP activities. The coordinator held meetings important partners to keep them updated about CRMP activities. The coordinator also maintained regular contact with landowners to keep them informed about the CRMP.

## Yolo County RCD Lower Cache Watershed



**Amount Funded:** \$229,662

**Additional Funding Obtained to Date:** \$727,219

### **Background**

Capay Valley is a subwatershed 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**

- ◆ Conducted a series of Cache Creek Watershed Stakeholders Group (CCWSG) meetings to review and update the workplan.
- ◆ Changed the structure of the CCWSG to include more subcommittees. As a result participation has increased and the group and the group has become more visible in the community.
- ◆ Worked with CCWSG to develop a demonstration garden.
- ◆ Wrote and published a regular monthly column in the local Capay Valley paper.
- ◆ Submitted several grant proposals and received \$628,130 in funding for Tamarisk and *Arundo* control along Cache Creek.
- ◆ Planned and obtained funding for a streambank bioengineering project and an associated workshop.
- ◆ Worked with CCWSG to set up educational booths at the Guinda Grange Hall and Rumsey Community Center for the annual Almond Festival. The booths described watershed group activities and sold wildflower posters and bird boxes to raise money for the native plant garden.
- ◆ Provided technical information to the NRCS Soil Conservationist to develop a Wildlife Habitat Incentive Program application for a Capay Valley landowner.
- ◆ Helped coordinate a Streambank Bioengineering Workshop in Capay Valley. In preparation for the workshop the coordinator, worked with a landowner to collect 750 willow cuttings, developed an informational flyer, and conducted outreach to promote the workshop.
- ◆ Completed a draft USFWS biological assessment for the permit coordination program. The program will simplify the permitting process for environmental projects initiated by stakeholders.

- ◆ Worked with other RCD staff to develop a full proposal for the CALFED Watershed Program grant solicitation. The coordinator's contributions included interviewing consultants, providing technical information, developing the budget, writing responses to grant questions, and delivering the proposal. The grant will fund a large-scale geomorphic assessment of Cache Creek to determine the underlying causes of channel instability, and to continue the coordination and development of the Cache Creek Watershed Forum to enhance regional watershed planning efforts.
- ◆ Involved landowners from the CCWSG in developing whole farm conservation plans with a conservation professional.
- ◆ Worked with students to develop different designs for the Will Baker Native Plant Garden. The designs are being used by the Garden Committee to develop the final design.
- ◆ Held a "Monitoring on Your Farm" workshop to teach landowners low-tech ways to assess soil, water, plants, and animals on their land.

### **Benefits to CALFED Program**

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

- Updated individuals, organizations, and agencies about the development of a streamlined permit process.
- Conducted research on protection measures for local threatened & endangered species as part of the permit process,
- Worked in conjunction with regulatory agencies to define conservation project types, extents, and protective measures for the streamlined permit process. Permits will be in place by July 2006.
- Coordinated a Cache Creek Watershed Forum public meeting.

In support of the Watershed Program goal of supporting education and outreach the coordinator:

- Participated in a plant ID hike coordinated by the Native Plant Garden Committee to educate local stakeholders on the diversity of plants in watershed tributaries.
- Created educational booths for the annual Almond Festival to inform the community about the watershed and about CCWSG activities.

**Ecosystem Restoration** – In support of CALFED Ecosystem Restoration program goals, the coordinator worked with agencies to plan and develop a streamlined permit program to simplify the permit process for environmental projects. The coordinator completed a draft USFWS biological Assessment to help develop the program. The coordinator also submitted several proposals to obtain funding for Tamarisk and *Arundo donax* removal efforts.

## **Performance Measures**

**Goal:** Implementation of the Capay Valley Watershed Stewardship Plan

**Objective 1:** Strategize with Cache Creek Watershed Stakeholders Group for task prioritization, timing, success criteria, and funding requirements.

**Performance Measure:** Stakeholder-approved, comprehensive 3-5 year work plan.

**Progress:**

A comprehensive 3-5 year work plan was completed in July 2005. This performance measure is complete.

**Objective 2:** Identify, pursue, coordinate, and obtain resources (financial and technical) for identified projects and studies.

**Performance Measure:** Necessary financial, physical and technical resources obtained for the first three years of work identified in the 3-5 year work plan.

**Progress:**

Resources have been obtained for 19 of the 32 tasks identified in the 3-5 year work plan.

**Objective 3:** Implement conservation projects and studies as prioritized in Work Plan and resources garnered.

**Performance Measure:** Successful implementation of one tributary invasive weed management program, on multi-neighbor Cache Creek bank protection and weed management project, and initiation of “top of the watershed” *Arundo* and Tamarisk removal along Cache Creek.

**Progress:**

- Funding has been obtained to begin *Arundo* and Tamarisk removal in the top of the watershed along Cache Creek. Some of this funding will also help control *Arundo* and Tamarisk in a Cache Creek tributary.
- Applied for funding to conduct a Cache Creek channel stability assessment. An initial assessment is required to design bank erosion control practices that will function and be sustainable along the very erodeable Cache Creek banks.

**Objective 4:** Project monitoring and Plan review to allow adaptive management.

**Performance Measure:** 3-year results analysis including recommended Plan modifications. Monitoring project implementation and results; analyzing results in light of success criteria established in Objective 1 and recommending changes to the Plan.

**Progress:**

- Monitoring has been conducted on all but one of the implemented projects. The monitoring includes working with landowners to train them to conduct vegetation survival assessment and photo monitoring.
- The plan will be updated in the spring.

**Goal 2:** Permit-related barriers to conservation work are reduced in the Capay Valley Watershed

**Objective 1:** Support landowners with individual permit applications as requested.

**Performance Measure:** Permits successfully obtained as requested and work initiated on the associated projects.

**Progress:**

- A Streambank Alteration permit has been obtained for a bioengineering project.
- A Streambank Alteration permit is being developed for a garbage clean-up project.

**Objective 2:** With the Watershed Plan, pursue a programmatic permit for weed management, vegetation, and bank protection work on one section of Cache Creek.

**Performance Measure:** Successful completion of the first stage of work (i.e., the first of several related projects) in the creek.

**Progress:**

Worked with partners to plan and develop the permit coordination program.

**Objective 3:** Develop a permit coordination program for Capay Valley and Yolo County.

**Performance Measure:** One new project implemented in response to each workshop held in the first two years (4 projects total).

**Progress:**

The program is underway. The biological assessments are completed in draft form and are expected to be finalized in July 2006.

**Goal 3:** Landowners within and outside of the watershed are knowledgeable, confident, and able to implement conservation projects on their properties.

**Objective 1:** Coordinate watershed education field meetings and presentations for watershed groups to demonstrate successful projects and techniques.

**Performance Measure:** One new project implemented in response to each workshop held in the first two years (4 projects total).

**Progress:**

- Planned and implemented two farm plan swales, pond development, and planting projects on County Road 45.
- Implemented a Cache Creek bank stabilization willow planting project.
- Planned and obtained funding for a bank stabilization project on Hamilton Creek.

**Objective 2:** Communicate success stories and results through District publications, media and professional presentations.

**Performance Measure:** Four articles and presentations per year and documentation of reader response.

**Progress:**

Four articles were written by a stakeholder in October and December 2005 and January and February 2006.

**Goal 4:** Sustain conservation work and partnerships in the watershed beyond the life of the grant.

**Objective 1:** Identify, pursue and obtain funding for continued watershed work and coordination for the Lower Cache Creek watershed in partnership with upper and lower watershed partners.

**Performance Measure:** \$200,000 in funding obtained to sustain the coordinator and on-the-ground projects beyond the grant period.

**Progress:**

Obtained \$500,000 for an on-the-ground vegetation management project.

**Objective 2:** Collaborate with other organizations/groups in the watershed such as Cache Creek Conservancy, Yolo County, Capay Valley Vision, Yolo County Flood Control and Water Conservation District, the Rumsey Indian Rancheria, and the Yolo County Farm Bureau both individually and through the Cache Creek Watershed Forum.

**Performance Measure:** At least three funded watershed implementation projects and submission of two proposals to support watershed coordination.

**Progress:**

Submitted a CALFED Watershed Program grant proposal that includes funding to implement Cache Creek Watershed Forum work.

## **Yolo County RCD**

### **Lower Sacramento Watershed**



**Amount Funded:** \$188,026

**Additional Funding Obtained to Date:** \$1,054,615.94

### **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**

- ◆ Facilitated the first meeting of the Lower Willow Slough sub-watershed group (LWS)
- ◆ Developed a list of Lower Willow Slough landowner resource issues and possible solutions.
- ◆ Conducted 5 landowner workshops. Attendance at each workshop ranged from 12 to 25. Workshop evaluations provided returned at each event indicated a very positive response. One workshop included a two-session intensive Conservation Planning Workshop. Three landowners from the LWS sub-watershed group participated. Each landowner received a poster and a narrative inventory of resources on their property and a prioritized plan for conservation practices to install that would address their resource concerns. The landowners were very pleased with the information they received.
- ◆ Initiated streambed alteration permit and clearance for State Historic and Cultural Resources for the Integrated Waste Management Board grant.
- ◆ Submitted a CALFED Ecosystem Restoration Program grant proposal for a Yolo-Solano Conservation Partnership. The grant will help continue work started under the Watershed Coordinator program once funding ends.
- ◆ Continued to develop a Biological Assessment within the Permit Coordination Program.
- ◆ Submitted a proposal to the Integrated Waste Management Board to clean up a historic dumpsite on Chickahominy Slough. The grant was selected to receive \$30,527.94.
- ◆ Assisted the YCFCWCD with their efforts to create a flood control district within the Water District. A flood control district would help several sub-watershed groups with their regional flood management efforts.
- ◆ Developed a draft “Species List” and “Protection Measures” for the Permit Coordination Program.
- ◆ Worked with California Department of Fish and Game to develop the 1602 template as part of the Permit Coordination program.
- ◆ Began working with two landowners with nearly adjacent properties on the edge of a slough. The landowners are interested in streambank benching projects. They are also interested in

involving their neighbors in similar projects in effort to work toward the long-term goal of corridor connectivity.

### **Benefits to CALFED Program**

**Watershed Management** – This quarter the coordinator actively worked to improve coordination and collaboration among agencies, organizations, and local watershed groups. The coordinator continued to collaborate with the County Public Works and acted as a liaison between the county and the landowner members of MERCESA and ECAC. The coordinator also held frequent meetings with representatives from the USDA NRCS, the Center for Land-Based Learning, and the Audubon Society.

**Water Use Efficiency** – The coordinator provided support to the Yolo RCD’s Mobile Water Lab. The lab helps landowner with water conservation efforts.

**Ecosystem Restoration** – This quarter the coordinator was involved with initiating a grant funded project, submitting a proposal for another project, and helping with the implementation of another. The coordinator worked to obtain permits for a farm clean up project on Chickahominy Slough. The coordinator also submitted a proposal to the CALFED Ecosystem Restoration program for a project that will integrate agriculture with ecosystem restoration. Finally, the coordinator helped with the implementation of a PRISM (Pesticide Research and Investigation into Source Mitigation) Grant that is funding the investigation of the use of vegetated agricultural drainage ditches as a viable management practice to improve the water quality of farm field runoff.

**Drinking Water Quality** – The coordinator worked with USGS and UC Davis to help implement a CALFED Drinking Water Quality Grant. The coordinator is acting as a liaison between landowners and the landscape. The project is investigating the landscape source of dissolved organic carbon.

### **Performance Measures**

**Goal:** Improved watershed-level natural resource management coordination within the Willow Slough watershed and un-served portions of southern Yolo County

**Objective 1:** Facilitate organization and action of at least two sub-watershed groups within Willow Slough and assist in preparing to implement group/coordinated projects

**Performance Measure:** At least two more groups within Willow Slough/Southern Yolo County have action plans and project proposals submitted for funding.

**Progress:**

Worked with the Lower Willow Slough sub-watershed Group (LWS) to hold several meetings and develop a list of local problems and issues. The coordinator also worked with the group to develop a list of potential short and long-term solutions for the highest priority problems; analyze and develop a map of localized water/storm flow patterns; identify key problem area; and began developing an action plan.

**Objective 2:** Coordinate work between Yolo County Flood Control and Water Conservation District (YCFCWCD) and landowners.

**Performance Measure:** At least three watershed improvement projects compatible with YCFCWCD needs.

**Progress:**

- Worked directly with the LWS watershed group and YCFCWCD to begin the process of developing a flood control district within the watershed.
- Actively participated in the IRWMP (Integrated Regional Water Management Plan) process that YCFCWCD is leading.
- Took the initial steps towards developing a three-part project to address local flooding concerns identified by LWS.

**Objective 3:** Coordinate resources to fill watershed support gaps in Southern Yolo County.

**Performance Measure:** At least one group with an action plan and project proposals.

**Progress:**

- Worked with partners to help the California Delta RC&D Council become a 501(c)(3) nonprofit organization. Funding for the formation process and initial work was provided by the USDA NRCS.
- CDRC&D had developed an ongoing action plan and is planning to add a web page to the Statewide RC&D website within the next few months. The RC&D has started developing a directory of resources related to the Council's focus areas of BioEnergy and Delta Dredging.

**Goal 2:** Landowners knowledgeable in conservation techniques and motivated and prepared to conduct coordinated conservation work in the Willow Slough Watershed and southern Yolo County.

**Objective 2:** Provide educational meetings for watershed groups and topical field demonstration workshops that link landowner and group needs with technical and financial resources.

**Performance Measure:** New landowner projects proposed and planned by meeting participants.

**Progress:**

- Five landowner education workshops were held. All were well attended. Workshop evaluations indicated information and demonstrations were valuable and well received.
- Three members of the LWS group participated in the Conservation Planning workshop, which directly links landowners with a Landscape Architecture student from UC Davis and a professional conservation planner. Landowners complete planning for their specific property, including their own personal goals. Projects are prioritized and linked with options for potential funding.
- The LWS group identified three projects that would alleviate much of their flooding concerns and identified possible funding sources. Initial steps toward project action are being taken.
- The LWS group also decided to provide input to the IRWMP (Integrated Regional Water Management Plan) process.
- One LWS project will be funded by members of the group, with coordination assistance from the coordinator, a second has likelihood of being funded through one-time funds generated through the project. The third will require coordination with the County

**Watershed Goal 3:** Reduced barriers to local conservation implementation.

**Objective 3.1:** Develop a permit coordination program for Yolo County.

Performance Measurement: One new project implemented under the program.

- The Permit Coordination Program Team has continued to meet with Sustainable Conservation staff approximately bi-weekly for coaching on continuing program development.
- Refined the Biological Assessment, which includes a Species List, (including T&E species), Practice List and Environmental Protection Measures.
- Continued to work on mapping and agreement requirements of the State Historical Preservation Office (SHPO) through the State office of the NRCS and the ACOE.
- Worked on development of the 1602 template for program agreements with CDFG.

**Watershed Goal 4:** Sustain watershed level conservation work and partnerships in Yolo County.

**Objective 1:** Develop a sufficient framework for cooperation that watershed groups can continue to move forward with minimal RCD support

**Performance measure:** selection of stakeholder group leaders.

- Meetings of the LWS group have been sponsored by different landowners. Rather than naming a specific leader, the group prefers alternating leadership responsibilities.
- Two potential hosts for the first meeting have been identified for the Lamb Valley Slough sub-watershed.
- The CDRC&D Council President is John Meek of the San Joaquin County RCD.

**Objective 2:** Maintain productive, dynamic and adaptive partnerships in Yolo County and the surrounding region to most effectively utilize resources.

**Performance measure:** at least five funded watershed implementation projects and submission of two proposals to support watershed coordination.

- Submitted a proposal to the CALFED Ecosystem Restoration Program.
- The coordinator also submitted proposals to obtain additional funding for the Yolo-Colusa Mobile Lab.
- A proposal to the Farm and Ranch Solid Waste Clean-up and Abatement Program to clean-up historic dumpsite on Chickahominy Slough
- And a proposal to the CALFED Ecosystem Restoration Program that would further the model of a bridge between patchwork and landscape-scale conservation.

This performance measure has been met.

## **Yuba County RCD**

### **Lower Feather / Lower Yuba / Lower Bear Watersheds**



**Amount Funded:** \$165,096

**Additional Funding Obtained to Date:** \$913,452

### **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**

- ◆ Worked with partners to complete the Yuba County Voluntary Individual Oak and Oak Woodland Management Plan. The plan was recently adopted by the Yuba County Board of Supervisors and will provide landowners with a tool to help them implement management practices that promote health, vitality, and regenerative quality of oak woodland habitats.
- ◆ Completed the Multi-Language Education and Outreach Program educational booklet. The booklet is currently being distributed to local agencies. This booklet will provide underserved communities with information about watershed health and best management practices.
- ◆ Partnered with Butte RCD, Sutter RCD, and the City of Yuba City, to submit a concept proposal for the Lower Feather River HUC/Honcut Creek Watershed Assessment Project to the CALFED Watershed Program.
- ◆ Facilitated the installation of an educational garden at the Dobbins Elementary School. The garden teaches students about water savings and demonstrates the water cycle showing how water flows throughout the watershed.
- ◆ Worked with regional partners to develop the American Basin Working Landscape Project. The project will include three restoration projects along Coon Creek. The project will include tours of the restoration sites that will demonstrate the benefits of riparian habitat restoration and its compatibility with production agriculture.
- ◆ Identified farm and ranch lands with illegal dump sites. The coordinator will submit a grant proposal to the California Integrated Waste Management Board's Farm and Ranch Solid Waste Cleanup and Abatement Grant Program to cleanup the illegal dump sites.
- ◆ Completed a website to provide stakeholders with information about the watershed coordinator's work towards improving Feather River water quality.
- ◆ Negotiated a contract with the SWRCB for the Agriculture Water Quality Grant Program for the "Implementation of the Feather River TMDL in Orchards" project. The project is well underway and will meet the established Feather River TMDL for diazinon.

- ◆ Worked with Sutter RCD, Placer County RCD, Ducks Unlimited, Placer and Sutter County Planning Departments, and The American Basin Working Group to submit a proposal to the CALFED ERP to integrate habitat restoration and enhancement for CALFED MSCS covered species in working landscapes. The project will help improve production on private agricultural lands while encouraging species abundance.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator organized and held the first and second meeting of the Lower Feather River Watershed Group. In support of the Watershed Program goals of building local capacity and encouraging collaboration between stakeholders, agencies, and others; the coordinator encouraged local landowners and producers to attend the watershed group meetings. Attendance at the meeting gave landowners the opportunity to obtain detailed information about watershed management, discuss future projects, and provide input to the group. The coordinator further encouraged collaboration by working with partners to develop a proposal for the American Basin Working Landscape Project. The project will protect agricultural land while integrating ecosystem restoration efforts.

Educational activities completed by the coordinator included creating a Multi-Language Education and Outreach Program booklet that introduces underserved populations to various agency programs for habitat restoration, erosion control, and proper pesticide application; and, the coordinator facilitated the installation of an educational garden at the Dobbins Elementary School. The garden will educate students on the functions of plant life, the water cycle and the role these processes play in the local watershed.

**Water Use Efficiency** – The coordinator obtained funding for the “Implementation of the Feather River TMDL in Orchards” project through CVRWQCB Agricultural Water Quality Grant Program. The project includes an Irrigation and Monitoring Specialist who encourages water savings by helping landowners with irrigation system calibration and promoting drip and solid set sprinkler irrigation systems as alternatives to flood irrigation.

**Ecosystem Restoration** – The coordinator worked with partners to plan and propose a Lower Feather River HUC/Honcut Creek Watershed Assessment project. The goal of the assessment is to improve and/or maintain water and sediment quality conditions that fully support a healthy and diverse aquatic ecosystem in the Feather River watershed and the downstream Sacramento River and Bay-Delta Estuary. A program priority is the enhancement of critical habitat for the at-risk Central Valley steelhead and spring-run Chinook salmon.

As a result of the coordinator efforts, the Yuba County supervisors adopted the Yuba County Voluntary Individual Oak and Oak Woodland Management Plan. The plan and the associated landowner Guidelines focus on the retention and regeneration of all oak species indigenous to Yuba County. The coordinator also worked with the American Basin Working Group to develop the Coon Creek Rehabilitation Demonstration Project. This project focuses on removing fish barriers within the waterway, removing invasive species and promoting native vegetation, re-creating horizontal and vertical variation within channel, installing bird boxes, and using biological engineering for bank stabilization.

**Drinking Water Quality** – The Lower Feather River HUC/Honcut Creek Watershed Assessment will address Drinking Water Quality program goals as well as Ecosystem Restoration Program goals. The assessment will advance understanding of how the Feather River water connects to both Yuba City and statewide drinking water supplies. The assessment will examine the impacts of Yuba City’s existing intake and planned second intake, both fed by the Feather River.

### **Performance Measures**

**Goal:** Improve water quality entering the Feather River from Sutter and Yuba County.

**Objective 1:** Expand local commitment and support for the Sutter-Yuba Watershed Coordinator.

**Performance Measure:** Funding for a watershed assessment gained through broad-based, community support.

#### **Progress:**

- The coordinator actively pursued collaboration between Butte Yuba and Sutter RCDs to develop a proposal for a watershed assessment of the lower Feather River Watershed.
- Submitted the Lower Feather River HUC/Honcut Creek Watershed Assessment Project concept proposal to the CALFED Watershed Program.
- Developed marketable packages for the Underserved Community Education and Outreach Project, the Oak Woodland Management Plan, and the Coon Creek Restoration Demonstration Project.
- Developed a list of 20 local potential businesses partners and collaborators.
- Shared project plans and concepts with neighboring agencies and organizations.

**Objective #2:** Strengthen public awareness and responsibility for watershed health.

**Performance Measurement:** Gain a 50% increase in the level of partnership support.

#### **Progress:**

- Worked with partners to install an educational garden for the students of Dobbins Elementary School. The focus of the garden is to educate grades K-5 on the functions of plant life, the water cycle and the role these processes play in the local watershed.
- Worked with the Butte County RCD to submit a proposal for a Lower Feather River HUC/Honcut Creek Watershed Assessment Project. The project includes the development of a “Stream Team” who will provide technical services within the Lower Feather River and Honcut Creek watersheds.
- Worked with Jim Johnson of YCRCD to develop a Farm Trail tour for Yuba County. The tour will help strengthen public awareness and garner new partnership support.

**Objective #3:** Reduce occurrence of illegal disposal of debris that may affect water quality.

**Performance Measurement:** Eight tons of debris removed from the landscape.

**Progress:**

- Worked with the American Basin Working Group (ABWG) to develop a Coon Creek Rehabilitation Demonstration Site. The project includes removing debris and fish barriers within the waterway.
- Worked with the ABWG to submit a CALFED ERP Program Working Landscape Project proposal.
- Contacted and recruited four landowners to participate in the Coon Creek Project. Participating landowners will conduct the majority of the continual maintenance for the project.

**Objective #4:** Water management techniques have been adopted to protect and improve water supplies.

**Performance Measurement:** Efficiency of water management increased by an average of 10% based on data obtained.

**Progress:**

- As part of the “Implementation of the Feather River TMDL in Orchards” grant, an irrigation and monitoring specialist will be hired to assist growers in calibrating their irrigation and fertigation systems to maximize efficiency and reduce pyrethroid, nutrient, and sediment loading into ground and surface water.
- Determined that there is a need to follow up with growers who received NRCS EQIP funding for irrigation system installation. The coordinator determined that the growers need assistance with system calibration to promote operation efficiency and to reduce chemical, nutrient and soil loading into the ground and surface water columns. Discussions were held with Yolo, Butte, Sutter, Nevada, Glenn and Colusa County RCDs. The group determined that an education and technical assistance program was necessary to achieve maximum water management benefits.
- Completed the Multi-Language Education and Outreach Program. This project promotes beneficial resource management practices, available through various agency programs, to those underserved communities within Yuba County who have yet to take full advantage of them.
- Planned 5 demonstration workshops that will be held to promote BMPs as effective means to limit surface water contamination and to meet the requirements of regulations implemented by the ag waiver program.

**Watershed Goal:** Improve water quality entering the Feather River from Sutter and Yuba Counties.

**Objective # 5:** Expand watershed coordination activities from the valley to the upper watershed in order to create a contiguous level of watershed restoration, conservation and enhancement.

**Performance Measurement:** Expansion of the Watershed Coordinator position to include at least one additional half-time position to adequately address resource issues in upland areas.

**Progress:**

- Held Lower Feather River Watershed Group meetings to identify stakeholder priorities, potential projects, and overlapping objectives for the Lower Feather River Watershed.
- Identified six priority stream crossing that need sediment and streambank stabilization.
- Submitted the American Basin Working Landscapes proposal to the CALFED ERP program. The project will integrate habitat restoration and enhancement in working landscapes to keep agricultural lands in production and promote species abundance.
- The Yuba County Board of Supervisors adopted the Yuba County Voluntary Individual Oak and Oak Woodland Management Plan. The plan addresses air, water, soil, and habitat issues throughout the oak woodland portions of the eastern watershed.