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 piper 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

Cache Creek Watershed Forum Meeting

- 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 Costal 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.

- 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 stakeholers 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 WLRCD’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 WLRCD'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 CCWMG 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 CCWMG 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 Cow-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 move 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 form 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 MERCSA 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 fertigations 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.