

# West Lake RCD

## Upper Cache Creek Watershed



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

**Additional Funding Obtained to Date:** \$156,125

### Background

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

### Benefits to the Watershed

- ◆ Assisted with the formation of three new watershed groups: Cache Creek Watershed Forum, Chi Council, and Nice Watershed Council.
- ◆ Coordinated the District's 5<sup>th</sup> and 6<sup>th</sup> annual education event developing the awareness of watershed health with over 400 middle school students during the "Kids in the Creek" events.
- ◆ Worked with watershed groups and governmental agencies to plan three restoration projects on public and private lands.
- ◆ Participated in the coordination of five cleanup events to be held in October of 2005 in the UCCW.
- ◆ Participated in the strategic planning meetings for the mapping and eradication of non-native invasive weeds in the UCCW. In 2005, 35 individual colonies of *Arundo donax* were eradicated, equaling 19,781 square feet.
- ◆ Assisted with the second 2-day training session of volunteer water quality monitors.
- ◆ Collaborated with the Middle Creek CRMP to develop a creek assessment/survey of Middle Creek.
- ◆ Coordinated the annual display booth at the Lake County Fair. The event was extremely well attended and resulted in over 40 new volunteers signing up to support the watershed.
- ◆ Facilitated the formalization of the Nice Watershed Group to address illegal dumping, illegal OHV use, and the eradication of non-native invasive weeds in the watershed.
- ◆ Coordinated a 4-acre demonstration site to exhibit the effectiveness of goats as a biological control on French Broom.



*Chi Council meeting.*

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

**Benefits to CALFED Program**

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



*Eight-Mile Valley meadow restoration project field meeting.*

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

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

## Western Shasta RCD

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



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

**Additional Funding Obtained to Date:**

### Background

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

### Benefits to the Watershed

- ◆ Conducted numerous outreach activities. Promoted watershed conservation, management and education including a booth at the Return of the Salmon Festival, Honey Bee Festival, Shasta District Fair and various outreach events.
- ◆ Improved communication throughout the region by attending various watershed stakeholder group meetings, interacting with governmental agencies while bringing various interest groups together to collaborate with each other.
- ◆ More than 130 landowners signed agreements authorizing access to their property for watershed related activities, such as water quality monitoring, fire rehabilitation, and continuing work on a local fuel break.
- ◆ Collaborated with a local web master to produce a web page for the Bear Creek Watershed Group.
- ◆ Submitted multiple articles to local newspapers highlighting issues and promoting activities within the area.



*Collecting water samples for World Water Monitoring Day.*

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

**Benefits to CALFED Program**

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



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

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

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

## Western Shasta RCD

Sacramento-Upper Clear / Sacramento-Lower Clear Watersheds



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

**Additional Funding Obtained to Date:** \$29,368

### **Background**

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

### **Benefits to the Watershed**

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

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

### **Benefits to CALFED Program**

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

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

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

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

## **Westside RCD**

### **Upper Los Gato-Avenal Watershed**



**Amount Funded:** \$106,614

**Additional Funding Obtained to Date:** \$58,500

### **Background**

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

### **Benefits to the Watershed**

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

### **Benefits to CALFED Program**

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

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

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

# Yolo County RCD Lower Cache Watershed



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

**Additional Funding Obtained to Date:** \$36,000

## Background

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

## Benefits to the Watershed

- ◆ Promoted local native plant propagation by educating landowners on native plant propagation techniques at the September Cache Creek Watershed Stakeholders Group meeting.
- ◆ Coordinated with local authorities to obtain permits for bank stabilization projects along Cache Creek.
- ◆ Increased the amount of land with conservation practices by facilitating compromises between a landowner and the farmer leasing the property.
- ◆ Increased awareness of safe pesticide application by supplying herbicide training materials to landowners conducting weed control in a conservation project area.
- ◆ Increased interest and awareness in tamarisk and *Arundo* control by recruiting landowners along Cache Creek to partner in a grant proposal to control tamarisk along the creek.
- ◆ Hosted a tour of weed infestation areas for representatives of a local funding agency in an effort to recruit funding.
- ◆ Supported local landowners to organize a new tributary group and helped them apply for funding.
- ◆ Fostered support for local ranch road maintenance by meeting with county officials to discuss options.



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

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

### **Benefits to CALFED Program**

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

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

# Yolo County RCD

## Lower Sacramento Watershed



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

**Additional Funding Obtained:** \$1,024,008

### Background

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

### Benefits to the Watershed

- ◆ Planned and conducted four landowner workshops with topics covering wildlife friendly water structures, long-term maintenance of restoration sites, and conservation planning (parts I and II). Total attendance was approximately 70 landowners.
- ◆ Identified project location and installed native planting along Little Lamb Valley Slough. Cooperated with the SLEWS program to complete the project. Native trees and shrubs were planted on one field day, and gully protection, deer-cage construction/installation and blue bird box mounting was conducted on the second field day. This project established a connection between two other separated plantings along the slough, and a fourth landowner has been contacted to extend the plantings even further.
- ◆ Initiated conservation planning with a landowner along Airport Slough (south central Yolo County) who is attempting to recruit two to three adjacent neighbors.
- ◆ Developed a positive working relationship with the district manager of the Yolo County Flood Control and Water Conservation District. Completed a vegetation pilot project on YCFCD's Chapman Reservoir with help from local partner Audubon California Landowner Stewardship Program.
- ◆ Partnered with the county to develop an Arc/GIS map of installed regional conservation practices to identify areas of need and promote resource sharing by partners. Also helped to develop a Yolo County sub-watershed delineation map.



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

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

### **Benefits to CALFED Program**

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

# Yuba County RCD

## Lower Feather / Lower Yuba / Lower Bear Watersheds



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

**Additional Funding Obtained to Date:** \$5,000

### Background

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

### Benefits to the Watershed

- ◆ Assisted with the formation of the Butte-Yuba-Sutter Sub-Watershed Coalition. The coalition is generating support for the Ag Waiver program and conducting monitoring on sites affecting the Lower Feather River Watershed.
- ◆ Taught four science classes at Sutter Union High School. The instruction focused on the importance of water quality and monitoring, and included in-class analysis of water samples taken from three local sources (Feather River, Wadsworth Canal, and school tap water). The analysis determined the samples' turbidity, dissolved oxygen, temperature and pH. A discussion on the health of the local watershed and its impact on the community's economy and culture followed the water analysis.
- ◆ Developing an Oak Woodland Management Plan for Yuba County that will promote the preservation of oak timberland through improved urban and rural management practices and future conservation easements.
- ◆ Obtaining funding to carry out an education and outreach program to bridge language, cultural and other barriers that hamper immigrant landowners' participation in various agency technical assistance and cost-share programs.
- ◆ Developing an education garden at Dobbins Elementary School. The garden will utilize native plants that are drought tolerant to help teachers, students and their parents understand the importance of water conservation. A signboard will display a poster that explains the water cycle using the local watershed as an example.



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

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

### **Benefits to CALFED Program**

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