

## Stockton East Water District Lower Calaveras-Mormon Slough



**Amount Funded:** \$106,472

**Additional Funding Obtained to Date:**

### **Background**

Accelerated urban growth within the valley has increased the demand for water. As water use grows, so do the conflicts. Storm water runoff, agriculture, recreation, mining, unscreened diversion operations, and other land uses have impacted water quality and wildlife habitat. Stakeholders are concerned about aquatic habitats, fish populations, and the availability of water for both people and animals. It is imperative that stakeholders work together to identify and implement water improvement and monitoring projects that restore and protect resources within the watershed.

### **Benefits to the Watershed**

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

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

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

**Benefits to CALFED Program**

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

[Zoom Out](#)

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

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

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

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

## **Performance Measures**

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

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

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

### **Progress:**

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

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

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

### **Progress:**

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

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

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

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

**Progress:**

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

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

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

**Progress:**

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

# Tehama County RCD

## Sacramento-Lower Thames Watershed



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

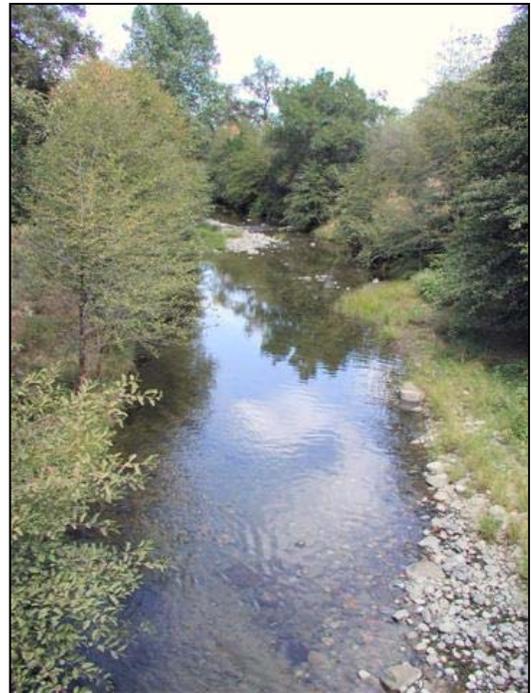
**Additional Funding Obtained to Date:** \$128,342

### **Background**

The Sacramento-Lower Thames Watershed lies in the heart of Tehama County and covers 1,055 square miles. The watershed comprises approximately 5% of the center of the CALFED Sacramento Valley Regional Area and includes a 24-mile stretch of the Sacramento River. Most small tributaries in the watershed have been used as dumps for all types of waste, and the loss of riparian vegetation in both the mainstem and tributaries has had damaging effects on salmonid populations. Other issues in the watershed include in-stream barriers, mining practices, non-native noxious species, wildfires and fuels management, and excessive sediment from wildland roads.

### **Benefits to the Watershed**

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



*South Fork Elder Creek*

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

### **Benefits to CALFED Program**

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

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

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

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

### **Performance Measures**

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

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

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

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

**Progress:**

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

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

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

**Progress:**

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

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

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

**Progress:**

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

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

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

**Progress:**

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

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

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

**Progress:**

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

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

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

**Progress:**

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

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

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

**Progress:**

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

# Upper Putah Creek Stewardship

## Upper Putah Watershed



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

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

### Background

Rapid urbanization has created tremendous pressure on the natural resources within the watershed. Many residences have been built along creeks causing erosion, reducing habitat, and increasing the potential for catastrophic flooding. *Arundo donax*, a non-native noxious weed, and other brooms have proliferated and adversely affected water quality. In this watershed, more than 40 sites have been identified where mercury was mined. It is imperative that stakeholders receive information to reduce polluted run-off, minimize habitat destruction, and curtail the spread of noxious weeds. The watershed coordinator has been effective in bringing together stakeholders to address these critical issues and to begin the process of developing baseline data.

### Benefits to the Watershed

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



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

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

### **Benefits to CALFED Program**

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

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

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

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

### **Performance Measures**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Goal 6:** Operate Watershed Center.

**Objective 1:** Operate Watershed Center.

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

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

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

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

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

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

# Upper Sacramento River Exchange

## Sacramento Headwaters



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

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

### **Background**

The Upper Sacramento River Watershed and surrounding Klamath-Siskiyou forests represent some of the most pristine, bio-diverse, and critical habitats in the western United States. This region faces a multitude of threats, such as hydroelectric development, resource extraction, transportation impacts, poor land use practices, human development and degraded waterways. This “headwater region” is critical to the down stream health of the Bay-Delta due to its bio-diversity richness, water abundance and ecological processes.

### **Benefits to the Watershed**

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



*Upper Sacramento River*

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

### **Benefits to CALFED Program**

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

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

### **Performance Measures**

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

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

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



*Watershed roundtable meeting*

**Progress:**

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

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

**Progress:**

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

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

**Progress:**

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

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