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### PSP Cover Sheet

Proposal Title: A Clear Creek Prescription  
 Applicant Name: Western Shasta Resource Conservation District (WSRCD)  
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Amount of Funding Requested: \$322,960 for two years.

Topic: Local Watershed Stewardship

Does the proposal address a specific Focused Action? No

County: Shasta

Geographic Area: Sacramento Tributary: Clear Creek

Primary Species: All chinook species  
 Native resident trout  
 Neotropical birds

ERP Object and Target: CALFED Vision from Vol II, pp 206-207 (2/99)

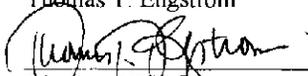
Type of Applicant: Local government/district

Type of Project: Implementation

By signing below, the applicant declares the following:

1. The truthfulness of all representations in their proposal;
2. The individual signing the form is entitled to submit the application on behalf of the applicant; and
3. The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

Thomas T. Engstrom



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 Director, WSRCD

990-110

# A Clear Creek Prescription (CCR<sub>x</sub>)

Submitted by:



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A Local Government District • Employer Id Number: 68-0285373

In Partnership With:

USDA – Natural Resources Conservation Service • USDA – Forest Service  
USDI – Bureau of Land Management • USDI – Bureau of Reclamation  
USDI – National Park Service • USDI – Fish and Wildlife Service  
US Environmental Protection Agency • Whiskeytown Environmental School  
California Department of Forestry and Fire Protection • Shasta College  
University of California – Cooperative Extension • Shasta-Tehama Bioregional Council  
Sierra Pacific Industries • Northwest Sacramento Provincial Advisory Committee



April 16, 1999

## Executive Summary

### **Project Title.** A Clear Creek Prescription (CCR<sub>x</sub>)

**Applicant.** Western Shasta Resource Conservation District (RCD).

**Background.** Clear Creek is a 154,820-acre watershed (62,653 ha) in the northwestern portion of the Upper Sacramento River Basin. It is the first major watercourse entering the Sacramento River downstream from fish-blocking Keswick and Shasta Dams. Annually, the watershed generates 270,000 acre-feet (af) of water and nearly 1 million more af pass through Clear Creek from the Trinity River to the Sacramento River. Tunnels link these drainages hydrologically, while dense stands of vegetation with heavy fuel loads link the drainages vegetatively. Heavy erosion following catastrophic fires originating in the Clear Creek drainage could adversely affect storage in any of the six reservoirs in the Shasta-Trinity CVP complex as well as the substantial CVP/CALFED fishery investments below the Whiskeytown Dam. Given the proximity of Clear Creek to the dams and the lowermost reaches of the reservoirs, much of the lost storage in the larger reservoirs following a fire/erosion event would be cold water storage in their deepest portions, disproportionately impacting temperature management regimes for anadromous fishes in the mainstem. Fire/erosion impacts on the storage of acid mine drainage in the small Spring Creek Reservoir (5870 af) could be relatively large, significantly impacting water quality management since high acid runoff tends to coincide with periods in which flood control needs limit releases of diluting waters from reservoirs. Recently written Watershed Analyses outline tasks to improve watershed processes. To implement these tasks this application seeks CALFED support. The affected area is the entire watershed.

**Objectives.** The purpose of the CCR<sub>x</sub> is to detail an ecosystem-based watershed management prescription on this diverse watershed that can also serve as a model for other watersheds in the state. The overall goal is to achieve CALFED's vision of restoring important fishery, wildlife, and plant communities to a healthy condition. Specific social, biological, and ecological objectives for this two-year project are:

- Involve the local community and stakeholders in a collaborative, non-regulatory forum for developing projects to address water quantity and quality issues, restore fish habitat, and protect natural processes.
- Enhance existing partnerships by facilitating watershed coordination under the umbrella of the RCD.
- Effectively use education and information to promote acceptance of watershed stewardship projects.
- Use "Eco-Morph" software allow land managers and stakeholders to visualize the watershed as an ecosystem and model how the vegetation in Clear Creek changes with their management inputs.
- Create and maintain habitats for fish, wildlife, neotropical migratory birds, and plant communities by implementing on-the-ground fuel/fire management and erosion/sediment control restoration projects.
- Assess the transportation system to rank rehabilitation of roads and trails that affect water and fish habitat.
- Base planning, implementation, and monitoring efforts and activities on strong science and data.
- Develop a monitoring strategy allowing adaptive response to additional data or changes in the watershed.

**Tasks to Achieve Objectives.** The RCD has taken a leadership role in conservation and restoration work in Clear Creek and will further this effort by completing the following tasks over the next two years:

- Coordinate conservation work and information in the Clear Creek watershed.
- Inform, educate, and build trust between stakeholders (including students and teachers) on the watershed's restoration issues.
- Use "Eco-Morph" 3-D computer visualization software to plan long-term watershed protection activities.
- Plan, conduct, and monitor on-the-ground restoration projects dealing with fuels and erosion/sediment that also benefit fish and wildlife habitats and plant communities.
- Evaluate the transportation system in a manner consistent with ecosystem management principles to reduce

erosion and sedimentation.

**Benefits.** The proposed activities focus on reducing primary environmental stressors in the watershed. These stressors include advanced erosion from past human activities, the accompanying transportation corridors and roads built within the watershed, and the threat of catastrophic fire from past fuels and fire management policies. Reducing the causes of stress in Clear Creek and the losses of habitat from these stressors will benefit CALFED priority species, specifically Chinook salmon, steelhead, resident native fish species, and migratory neotropical birds. The Bay-Delta will also receive cleaner water from a more biologically and hydrologically healthy watershed. Through our community meetings the RCD believes Clear Creek residents have a strong conservation ethic. This RCD will reinforce this ethic with a strong collaboration and education component.

**Costs.** The project has been divided into six general tasks. Task T1 is critical to the project.

Task	Timing	Funding
T1. Coordination and Management	FY 2000-2001	\$91,900
T2. Education and Information	FY 2000-2001	16,445
T3. "Eco-morph" Visualization Model for Long-term Planning	FY 2000	46,000
T4. Watershed Restoration: Fuels	FY 2000-2001	24,865
T5. Watershed Restoration: Erosion, Sediment, and Gravel	FY 2000-2001	123,050
T6. Transportation Evaluation	FY 2000	20,700
	CALFED Total	\$322,960

The RCD will also pursue the financial cooperation of the federal land management agencies in the watershed to complete conservation work on their respective lands. Over \$100,000 in private and federal funds enabled the RCD to complete Clear Creek watershed analyses and data collection. The RCD expects these partners to continue their support of projects in this proposal. The RCD anticipates any CALFED funding to compliment and not replace agency funding for projects in the watershed.

**Adverse and Third Party Impacts.** No adverse or third party impacts are anticipated. All projects will involve voluntary agreements with any affected parties.

**Applicant Qualifications.** This proposal will be carried out by the Western Shasta Resource Conservation District, an independent special district within Shasta County. The RCD has been implementing erosion control projects, fish and wildlife restoration projects, fuels planning and reduction projects, and educational projects since 1957. Since 1997, the RCD has performed numerous planning and restoration projects in Clear Creek and has a good-to-excellent working relationship with landowners and agencies in the watershed.

**Monitoring and Data Evaluation.** The CCR<sub>x</sub> will implement a monitoring program that focuses on specific indicators of ecosystem health. Monitoring results will be used to adapt and improve future restoration projects.

**Local Support/Coordination/Compatibility with CALFED.** This initiative builds on the efforts of community groups and the Northwest Sacramento Provincial Advisory Committee (PAC). It is compatible with CALFED's objective to build watershed stewardship initiatives that are community-based, locally-led partnerships representing a diverse range of interests. The partners for this project are: Western Shasta RCD; USDA-Forest Service; USDA-Natural Resources Conservation Service; USDI-Bureau of Land Management; USDI-Bureau of Reclamation; USDI-National Park Service, USDI-Fish and Wildlife Service; California Department of Forestry and Fire Protection; Lower Clear Creek CRMP; Shasta College; Whiskeytown Environmental School; University of California-Cooperative Extension, Sierra Pacific Industries; and other private landowners.

## Project Description

**Project description and approach.** The purpose of the Clear Creek Prescription (CCR<sub>x</sub>) is to detail an ecosystem-based watershed management prescription and implementation framework in the Clear Creek watershed. It can serve as a model for other watersheds, as it uses a “local watershed stewardship approach” described in the CALFED 1999 PSP.

**Project Tasks.** Task T1 is critical for the project’s success; other tasks are severable.

### *T1. Coordinate Conservation Work and Information. (CALFED \$91,900, Other sources \$25,000)*

- T1.1. Grant funds will support a part-time Watershed Coordinator to facilitate the development of the prescription framework, coordinate community support, and direct project work. This professional position will be filled by someone with a natural resources background, experience in collaboration and consensus building, and implementing multi-ecosystem projects. A portion of the coordinator's efforts will be spent on leveraging CALFED's participation with other funding sources. Timing and duration: from start of project for two years.
- T1.2. Facilitate community group meetings dealing with watershed stewardship issues. The Watershed Coordinator will convene and chair community group meetings. This group, comprised of private landowners, public land managers, and other interested stakeholders, will provide direction and recommendations to the Watershed Coordinator. Meetings will use a CRMP-type format and be open to the public. The RCD board will retain ultimate decision-making authority for undertaking projects, with the community group’s recommendations playing a large role in project scope, timing, and implementation. The grant will support meeting supplies and costs. Timing and duration: two months after project starts, convene meetings every two to three months for two years.
- T1.3. The Watershed Coordinator will convene and chair a partnership technical team composed of agency and industry land managers and members of other organizations (e.g., PAC) needed to provide the necessary technical and political support to implement recommendations. No CALFED costs. Timing and duration: as necessary through the two-year project life.
- T1.4. Manage the project and provide for proper accounting, reporting, and auditing. Grant will support bookkeeping, insurance, audits, and oversight. Timing and duration: Continuous for two-years.

### *T2. Inform and Educate Stakeholders. (CALFED \$16,445, Other Sources \$25,000)*

An existing network of educators within the watershed includes resource management specialists/experts and schools (e.g. BLM, USFS, National Park Service, and five elementary schools). Several partnerships are currently working on educational projects within the Clear Creek watershed including a joint National Park Service and Shasta College soils/erosion demonstration project that was just awarded the Environmental Conservation Award by the National Park Foundation. The CCR<sub>x</sub> will build upon and expand these existing partnerships to focus educational efforts on Clear Creek's resources, impacts of human activities, and the roles that students, teachers, watershed landowners, and the general public can play in creating and maintaining a healthy watershed.

- T2.1. Organize education committee of interested stakeholders. Identify educational needs of stakeholders including ones that interface with CCR<sub>x</sub> needs. Timing and duration: as necessary for two years.
- T2.2. Identify and implement K-14 educational projects that promote student learning by developing products (e.g., photo history of changing landscape) and collecting data. Timing and duration: two years.
- T2.3. Assemble and/or develop components of a Clear Creek curriculum matrix using existing state curricula (e.g.: Project WET, Adopt-a-Watershed, Project Learning Tree, etc.). Train teachers in the use of this curriculum. Timing: first year.
- T2.4. Provide assistance to teachers in implementing the Clear Creek Curriculum using consultation and resource professionals. Evaluate curriculum at local school sites. Timing and duration: second year.

**T3. "Eco-Morph" Model for Long-term Planning (CALFED \$46,000, Other Sources \$115,000)**

The RCD sees the visualization model as one of the most powerful tools for coordinating ecosystem management within this watershed and its applicability for use in all watersheds within CALFED's area of interest. Although there is ongoing discussion about the value of a watershed-scale approach to ensuring that watercourse and riparian zones are functioning properly, land managers have not had the opportunity to see how future actions on their own lands mesh with the other managers in the watershed. Each owner has a desired future condition, but the timing and spatial arrangements of vegetation types between owners have never been fully addressed. For example, succession to chaparral on non-forested sites may be decreasing manzanita stands currently used by neotropical migratory birds or pollinating insects. Or, land managers are all individually planning ground-disturbing activities during a particular decade when a different timing and coordination strategy would lessen the chances of disturbance to riparian zones. This is considered an important next step in the Watershed Analysis process – a "WA Plus," and it is strongly supported by the Northwest Sacramento PAC.

**T3.1.** Coordinator will convene the technical team (from T1.3) and use all reasonable information and resources to develop at least one long-term management scenario for the entire watershed. Using vegetation data, the program will graphically depict in three-dimensions how the watershed might look under this scenario in 10-year increments for the next 50 to 100 years. Growth, harvest, senescence, controlled and uncontrolled fires, mass soil movements, and other vegetation disturbances will be simulated. This information will be used to discuss management alternatives with the collaboration group. Incorporating feedback from the collaboration group, develop a set of long-term watershed activities. Timing: Fall 1999 and Winter 2000. Consultants familiar with visualization software will work on this task.

**T4. Restoration Projects: Reduce the Probability of Catastrophic Wildfire's Effects on Clear Creek's Ecosystem. (CALFED \$24,865, Other sources \$30,000)**

A USDA-NRCS study estimates a single large wildfire in this watershed followed by an average rainfall year will deliver a minimum of 20,000 tons of sediment above background into Clear Creek with significant negative impacts on stream and fish restoration and water storage capacity. Sediment problems will jeopardize chinook salmon, steelhead, and trout restoration efforts. Local residents rank this as a top concern in the watershed. Vegetation Management and fuels reduction projects of various types on public and private land can change or break up decadent vegetation types with high dead to live fuel ratios and over time change the landscape to a mosaic of varying types and ages. There are significant portions of the watershed that have not experienced fire for over 50 years, many on steep, rugged ground. The objective of this task is to minimize the potential for a large stand replacing fire in this watershed by a combination of reintroducing fire via prescription, mechanically reducing fuels, and compartmentalizing areas via roads and fuelbreaks. Projects initiated by agencies or private parties will be linked wherever feasible to provide the highest fire protection and/or plant community benefit.

**T4.1.** Inventory fuel loads in unsampled portions of the watershed. Timing: Fall 1999.

**T4.2.** Develop a "Wildfire Defense Plan" by analyzing topography, prevailing winds, key ridges, and other variables. Timing: Fall 1999.

**T4.3.** Develop a shaded fuelbreak plan and roadside hazard reduction strategy. Timing: Fall 1999

**T4.4.** Treat three sites in Clear Creek. Timing: Spring, Summer, and Fall 2000; Spring and Summer 2001.

**T4.5.** Monitor treatment effectiveness and feedback from stakeholders and the public. Monitoring will include: Photo documentation; estimating before/after fuel load; using the FarSite fire start model; and surveying before/after attitudes of landowners and stakeholders. Timing: Continuous.

**T5. Restoration Projects: Erosion, Sediment, and Gravel. (CALFED \$123,050, Other Sources \$50,000)**

Erosion and sediment are major concerns in this watershed with decomposed granite-based soils on steep slopes surrounding the middle of the watershed. Watershed Analyses identified over 440 sites which are delivering sediment to Clear Creek jeopardizing instream restoration efforts and over 1 million tons of sedi-

ment have been delivered to Whiskeytown Reservoir in the past 34 years reducing storage capacity. Erosion and sediment control work funded by this grant will continue to treat these sites based on a ranked list. In uninventoried portions of the watershed, the CCR<sub>x</sub> will address erosion issues using Watershed Analyses project recommendations. Since the dam is blocking the movement of spawning gravel to anadromous fish spawning habitat in the lower channel, the CCR<sub>x</sub> will explore the feasibility of a trans-dam gravel relocation project. Monitoring will be a component of the work.

T5.1. Planning Phase. (a) Inventory 43,000 acres in sub-watersheds classified with "severe," "very high," and "high" erosion hazard ratings. The technical team will rank priority areas for treatment. (b) As recommended in the watershed analyses, collect data to establish a sediment budget for Clear Creek. (c) Report on the feasibility of transporting gravel deposited behind Whiskeytown Dam to the lower channel. Timing: Continuous planning for two years.

T5.2. Restoration Phase. Perform on-the-ground treatments in the highest priority erosion areas within budget constraints. These areas are expected to be old roads in mining districts, forested areas, and riparian zones. Timing: Field Seasons in 2000 and 2001.

T5.3. Monitor the effectiveness of the treatments and devise a maintenance plan. For each treated site, estimate the tons of material stabilized or relocated and the volume of sediment prevented from entering watercourses. Total the number of sites treated. Timing: Summer 2000 to Summer 2001.

**T6. Evaluate the Transportation System in the Watershed. (CALFED \$20,700, Other Sources \$20,000)**

This project will develop methods to evaluate roads and trails for repair or retirement and identify sites that can benefit from state-of-the-art engineering and management practices. The Clear Creek watershed needs a comprehensive transportation plan to evaluate existing and needed road and trail systems and projects that could illustrate restored hydrologic functions. Many roads were built without the benefit of today's engineering standards and can cause serious erosion, sedimentation, and fugitive dust problems. In Whiskeytown NRA, for instance, old road removal is currently being tested by the National Park Service. This report will be completed by an engineering professional or a certified erosion control specialist and will consist of the items below. Timing for all sub-tasks: Winter 2000.

T6.1. Use existing inventories to classify roads and their impacts on ecological processes. Update the GIS roads database layer using a loaned GPS system. Obtain permissions to access roads in Clear Creek.

T6.2. Prescribe site-specific treatments necessary to reduce adverse impacts.

T6.3. Devise a plan for implementing and monitoring treatments.

**Location of the Project.** Clear Creek is in a sub-watershed of the Sacramento River system at the northern end of the Sacramento Valley. The rugged 154,820-acre area ranges in elevation from 550 feet to 6,200 feet. Sandwiched between watersheds containing the Trinity, Shasta, and Spring Creek Dams, Clear Creek is pivotal with respect to Central Valley Project (CVP) water imports, storage, and quality. Annually, the watershed generates 270,000 acre-feet (af) of water and nearly 1 million more af are passed through from the Trinity River to the Sacramento River. Tunnels link these drainages hydrologically, while dense stands of vegetation with heavy fuel loads link the drainages vegetatively. Heavy erosion following catastrophic fires originating in the Clear Creek drainage could adversely affect storage in any of the six reservoirs in the Shasta-Trinity CVP complex as well as the substantial CVP/CALFED fishery investments below the Whiskeytown Dam. Given the proximity of Clear Creek to the dams and the lowermost reaches of the reservoirs, much of the lost storage in the larger reservoirs following a fire/erosion event would be cold water storage in their deepest portions, disproportionately impacting temperature management regimes for anadromous fishes in the mainstem. Fire/erosion impacts on the storage of acid mine drainage in the small Spring Creek Reservoir (5870 af) could be relatively large, significantly impacting water quality management since high acid runoff tends to coincide with periods in which flood control needs limit releases of diluting waters from reservoirs.

## Ecological/Biological Benefits

The CCR<sub>x</sub> addresses three objectives in the CALFED 1999 Action Plan:

- Native species recovery and conservation.
- Rehabilitation and protection of natural processes.
- Restoring and protecting functional habitat types.

Tasks to accomplish these goals:

- **Establish a capacity for the CCR<sub>x</sub> to provide long-term coordination and community involvement.** Effective ecosystem management involves communities, but without a coordinating framework, communication, and education tools, no initiative will survive very long. Through its grant support, CALFED is making an investment in an important education process for this affected region. Participation in and support for the framework will extend well beyond the initial grant timeframe. The support of other public agencies, private organizations, and individual citizens for maintaining a coordinated planning process is impressive (e.g., existing Coordinated Planning Groups and the Shasta-Tehama Bioregional Council), but further financial support is necessary to realize the full potential of this emerging partnership.
- **Develop necessary tools for conducting ecosystem management across ownership boundaries.** Ecosystem management requires certain technical and visualization capabilities. Utilization of state-of-the-art Geographic Information Systems (GIS) and the Eco-Morph visualization model will allow the CCR<sub>x</sub> to make more accurate decisions regarding watershed resource and management options. The project will convene a committee of resource managers to model vegetation changes in the watershed over the next 50 years.
- **Develop and begin implementing comprehensive fuels and erosion/sediment management plans consistent with ecosystem management principles.** The most desirable future condition for the upper watersheds is one in which natural systems produce water consistently with minimal erosion and with vital healthy vegetation. Several other resources are directly or indirectly affected by the active management of vegetation in wildland areas of California, including anadromous fish, riparian species, and several wildlife species. Vegetation management followed by a monitoring and adaptation process in the Clear Creek watershed will help reverse the trend of accumulation of fuels, create containment compartments by use of shaded fuel breaks and firebreaks, and reduce erosion/sedimentation.
- **Develop a transportation analysis that is consistent with ecosystem management principles.** The Clear Creek watershed needs a comprehensive transportation analysis to evaluate existing and needed road and trail systems and identify projects that could illustrate restored hydrologic functions. Many roads were built without the benefit of today's engineering standards and cause serious erosion, sedimentation, and fugitive dust problems. This project will develop methods to evaluate roads and trails for decommissioning and identify sites that can demonstrate state-of-the-art engineering and management practices. In Whiskeytown NRA, for instance, old road removal is currently being tested by the National Park Service.

The proposed activities will reduce primary environmental stressors in the watershed. These stressors include advanced erosion from past human activities, the accompanying transportation corridors and roads built within the watershed, and the threat of catastrophic fire from past fuels and fire management policies. Reducing the causes of stress in Clear Creek, and the losses of habitat from these stressors, will benefit CALFED priority species. These species include Chinook salmon, steelhead, resident native fish species, and migratory neotropical birds. The Bay-Delta will also receive cleaner water from a biologically and hydrologically healthy watershed. Through our community meetings the RCD believes Clear Creek residents have a strong conservation ethic. This CCR<sub>x</sub> will reinforce this ethic with a strong collaboration and education component.

The partners in this project are aware that coordinated efforts are necessary to successfully manage and reha-

ibilitate the watershed to restore fish and maintain water quality. We are also aware of the need to maintain this investment. We need the support of CALFED to build the social infrastructure and public trust in this project and in turn the partners will share our experiences with other watershed groups. We do not propose to prove or disprove any hypotheses, rather we are responding to the need to engage the landowners and stakeholders in ways that will return our watersheds to healthy and functioning ecosystems.

At the end of this process the RCD expects to be able to answer the following questions:

- How have restoration projects improved overall watershed health?
- What are the most effective methods to coordinate federal, state, local, and private restoration programs?
- Do visualization tools help land managers conduct ecosystem management across ownership boundaries?
- What is the role of private landowners in restoring and protecting functional habitat?
- What effects do various road systems have on vital ecological functions in the watershed?

**Linkages.** This proposal continues to build on the work of many partners in Clear Creek. The watershed is the subject of two completed Watershed Analyses, Lower Clear Creek and Upper Clear Creek, which include recommendations for future actions. This grant will assist in the management and rehabilitation of ecosystem processes in Clear Creek by bringing the recommendations together in a framework for action. Funding to date has come from federal agencies in the Northwest Sacramento PAC and from Sierra Pacific Industries, a private land owner in Clear Creek. The PAC is a federally chartered committee formed to help implement the President's Northwest Forest Plan (addressing wildlife species such as the Northern Spotted Owl). Most of the federal partners in this proposal have members on the PAC which has executed interagency agreements to perform work in Clear Creek. The RCD expects the PAC will continue to support cooperative efforts in the watershed.

The project is also linked to the CALFED Ecosystem Restoration Program Plan. This proposal targets CALFED visions listed in Volume II on pages 206 and 207 (February 1999 draft).

None of the tasks in this proposal are known to be legally or agency mandated.

Other programs leveraging CALFED's support of this project are:

- Environmental Quality Incentives Program, USDA-Natural Resources Conservation Service
- Stewardship Incentive Program, USDA-Forest Service and CDF
- Recreational Trails and Conservation Team, USDI-National Park Service
- Support of Lower Clear Creek CRMP and Fish Temperature Screens, USDI-Bureau of Reclamation
- Jobs in the Woods, USDI-Fish and Wildlife Service
- Adopt-a-Watershed, Whiskeytown Environmental School and French Gulch Whiskeytown Elementary
- Road Restoration Projects, Shasta College and USDI-National Park Service
- Community Consensus Building, Shasta-Tehama Bioregional Council
- Clear Creek Cleanup Days, Shasta County
- President's Northwest Forest Plan, USDA-Forest Service and USDI-Bureau of Land Management

#### **System-Wide Ecosystem Benefits.**

A primary need within the North Sacramento Ecological Zone is an effective framework for coordinating public/private partnerships and linking agency actions. Currently coordination and public involvement are done on an ad hoc basis. The capacity of individual agencies and organizations for outreach and involvement is limited.

It is the objective of the partnership to establish a long-term framework for coordination among local communities and state and federal agencies within the region. Clear Creek is identified as an Ecological Unit within the North Sacramento Valley Ecological Zone. There are similar watersheds (e.g.: Cottonwood Creek) within CALFED's emphasis area, which will benefit from the experiences of implementing this proposal.

#### **Compatibility with Non-Ecosystem Objectives.**

The applicant has not determined specific benefits or conflicts with other CALFED objectives, other than to observe the proposal addresses CALFED's 1999 Action Plan goals. Third-party benefits have not been estimated.

#### **Technical Feasibility and Timing**

This proposal uses an ecosystem approach to address natural resource protection in a watershed-wide, integrated manner and FY1999 funds are especially timely. As grant reviewers are aware, with the completion of the WA's, a variety of resources and initiatives are focused on Clear Creek. Community-based groups such as the Shasta-Tehama Bioregional Council and the Northwest Sacramento Provincial Advisory Committee are urging land managers to unify their efforts to benefit the entire watershed, not just a particular ownership. The RCD has a good working relationship with agency professionals, land owners, and other stakeholders, and is confident of its ability to coordinate work in Clear Creek. FY1999 funding of this grant application will provide that focus.

A "no action alternative" is a possible solution for work in the watershed. However, the RCD believes the momentum behind the restoration of Clear Creek has public support and collaboration efforts targeting the watershed make CALFED's support of Clear Creek very timely.

For projects which may be undertaken on federal lands, the RCD will coordinate environmental compliance issues with the land managing agency's personnel who deal with National Environmental Policy Act matters. The RCD expects to focus its work on projects categorically exempt from NEPA analysis, covered by a tiered document, or require minimal analysis. For state or private land projects, the RCD will work with appropriate agencies to meet California Environmental Quality Act provisions. Major construction is not planned in this proposal. Any necessary permits will be obtained before the RCD begins work on every project over which it has direct control.

#### **Monitoring and Data Collection Methodology**

Monitoring will be conducted to ensure that the measures applied in the watershed were effective in their application and achieved their intended purpose, documenting what worked well and what did not. The results will be used to correct problems, trigger maintenance or upgrades, and document results for tasks of a similar nature in Clear Creek and other watersheds. Qualitative monitoring will establish photo points and tests for long-term visual evidence of project implementation and effectiveness. Results will be documented in reports to CALFED. Needed changes in management will be implemented when monitoring results are first obtained. Quantitative monitoring will be done to provide measures of effectiveness appropriate to the type of management treatment applied. The CCR<sub>x</sub> Steering Team will be consulted to determine a common set of indicators for the monitoring program. No monitoring will be undertaken before a comprehensive monitoring plan is developed, including the questions to be answered by monitoring, specific objectives, methods of data collection, specific data analysis methods, format for documenting results, and possible follow-up actions dependent on the results of the monitoring efforts.

(See table on next page.)

**Monitoring Strategy**

Biological/Ecological Objectives	Monitoring Parameters and Data Collection Approach	Data Evaluation Approach	Comments/Data Priority
T1.2 Community Meetings	Number of Meetings Attendance	Characterize the Community Tabulate	Total Hours to quantify in-kind contributions of services
T1.3 Technical Team	Number of Meetings Attendance	Identify roles and contributions of team members	Total Hours to quantify in-kind contributions of services
T1.4 Project Management	Proper Accounting for subtasks	Meet audit and contract standards	
T2.2 Education Projects	Number of Meetings Number of Projects	Evaluate participation of partners Evaluate expectations vs. results	Total Hours to quantify in-kind contributions of services
T2.3 Watershed Curriculum Matrix	Determine matrix components from education partners	Test matrix components at community meetings	
T2.4 Teacher Training	Number of training opportunities	Questionnaires from teachers on success of delivery system	
T3.1 Visualization Project	Participants determine the vegetation changes for the model	Test model results with community groups; get feedback	
T4.1 Inventory Fuel Loads T4.3 Develop fuelbreak plan T4.4 Treat Three sites in Clear Creek	Establish photo points Fuel Load Estimate Before/After  FARSITE Model Projections Survey Community Impacts	Select sites for photo points Use photo series to quantify residues Review model with fire personnel Number of landowners entering into agreements; number of independent projects started; members of community reached	
T4.2 Develop Wildfire Defense Plan	Convene technical team to determine parameters in Wildfire Defense Plan	Review suitability of fuel/firebreak routes and size of containment compartments	Use all existing roads and fuelbreaks.
T5.1 Erosion Inventory	Replicate method used in previous analysis (Lower CC Erosion Inventory) Obtain agreements to inventory	Collect data from critical sites; estimate unprotected area; rate and prioritize sites	
T5.2 Erosion Control Projects	Select Critical sites from inventory (T5.1) for treatment	List number of sites treated, estimate acres restored and sediment reduced. Install photo points	Determine landowners contribution to in-kind services; determine effectiveness of installed project
T6 Transportation Plan	Technical Team determines parameters for plan	Mileage of roads and trails impacted; Prioritize treatments	

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## Local Involvement

On April 1, 1999 the RCD notified the Chair of the Shasta County Board of Supervisors and the Planning Director of the Shasta County Planning Department of its intent to apply for this grant. Copies of the notification letters are attached.

The RCD has identified the following partners who are aware of and support this project:

- Western Shasta RCD
- USDA-Forest Service
- USDA-Natural Resources Conservation Service
- USDI-Bureau of Land Management
- USDI-Bureau of Reclamation
- USDI-National Park Service
- USDI-Fish and Wildlife Service
- California Department of Forestry and Fire Protection
- Lower Clear Creek CRMP
- Shasta College
- Whiskeytown Environmental School
- University of California-Cooperative Extension
- Sierra Pacific Industries (Landowner)
- Shasta-Tehama Bioregional Council
- Northwest Sacramento Provincial Advisory Committee
- Citizens in French Gulch through the French Gulch Water District Advisory Board
- Mr. Irwin Fust, Shasta County Supervisor, District 2

The RCD is not aware of any opposition to the application.

Public outreach is a component of this grant proposal. The RCD has made contact through mass mailings with stakeholders in the watershed. The Lower Clear Creek Coordinated Resource Management and Planning (CRMP) group has met for several years. The RCD has also convened three public information sessions in the town of French Gulch in the upper watershed and two information sessions in the city of Redding.

Clear Creek is also a high priority watershed of the Shasta-Tehama Bioregional Council. The Northwest Sacramento PAC has chosen the watershed as a test site for ecosystem landscape management.

Refer to task T1.2 for a description of public outreach efforts and the monitoring table for our plans to evaluate public participation in this watershed.

The RCD will obtain written permission and agreement with any private landowner before performing work on private lands.

The RCD is not aware of any potential third-party impacts.

**Total Budget Request from CALFED (2-year Project)**

Task	Direct Labor Hours	Direct Salary & Benefits \$	Service Contracts \$	Material & Acquisition Costs \$	Misc. & Other Direct Costs \$	Overhead & Indirect Costs \$	Total Cost \$
T1.1 Project Coordinator	2,600	\$67,600				\$10,140	\$77,740
T1.2 Community Meetings					\$900	135	1,035
T1.3 Technical Team							0
T1.4 Project Management	312	8,925	\$1,500		1,000	1,700	13,125
<b>T1 Coordination Subtotal</b>	<b>2,912</b>	<b>76,525</b>	<b>1,500</b>	<b>0</b>	<b>1,900</b>	<b>11,975</b>	<b>91,900</b>
T2.1 Education Coordination	48	1,250				189	1,439
T2.2 Education Projects	96	2,500		\$2,075	1,300	881	6,756
T2.3 Curriculum Guide	160	4,175		1,750		887	6,812
T2.4 Curriculum Training	48	1,250				188	1,438
<b>T2 Education Subtotal</b>	<b>352</b>	<b>9,175</b>	<b>0</b>	<b>3,825</b>	<b>1,300</b>	<b>2,145</b>	<b>16,445</b>
T3.1 Long-term Visualization			40,000			6,000	46,000
<b>T3 Visualization Subtotal</b>	<b>0</b>	<b>0</b>	<b>40,000</b>	<b>0</b>	<b>0</b>	<b>6,000</b>	<b>46,000</b>
T4.1 Fuel Load Inventory	264	2,900				435	3,335
T4.2 Wildfire Defense Plan	40	1,000			375	205	1,580
T4.3 Fuelbreak Location Plan	40	1,000			375	205	1,580
T4.4 Fuels Treatment			14,600			2,190	16,790
T4.5 Monitoring	40	1,000			375	205	1,580
<b>T4 Fuels Subtotal</b>	<b>384</b>	<b>5,900</b>	<b>14,600</b>	<b>0</b>	<b>1,125</b>	<b>3,240</b>	<b>24,865</b>
T5.1 Erosion/Gravel Plan	625	15,000	10,000	5,000	5,000	5,250	40,250
T5.2 Erosion Treatments	625	15,000	25,000	25,000	5,000	10,500	80,500
T5.3 Monitoring	40	1,000		500	500	300	2,300
<b>T5 Erosion Subtotal</b>	<b>1,290</b>	<b>31,000</b>	<b>35,000</b>	<b>30,500</b>	<b>10,500</b>	<b>16,050</b>	<b>123,050</b>
T6 Transportation Plan			18,000			2,700	20,700
<b>T6 Transportation Subtotal</b>	<b>0</b>	<b>0</b>	<b>18,000</b>	<b>0</b>	<b>0</b>	<b>2,700</b>	<b>20,700</b>
<b>Two-Year GRAND TOTAL</b>	<b>4,938</b>	<b>\$122,600</b>	<b>\$109,100</b>	<b>\$34,325</b>	<b>\$14,825</b>	<b>\$42,110</b>	<b>\$322,960</b>

**Quarterly Budget Request from CALFED 1Q-Jan-Mar; 2Q-Apr-Jun; 3Q-Jul-Sep; 4Q-Oct-Dec**

Task	4Q1999	1Q2000	2Q2000	3Q2000	4Q2000	1Q2001	2Q2001	3Q2001	TOTAL
T1 Coordination	\$11,487	\$11,488	\$11,487	\$11,488	\$11,487	\$11,488	\$11,487	\$11,488	\$91,900
T2 Education	1,841	1,840	1,840	1,839	2,273	2,271	2,271	2,270	16,445
T3 Visualization	23,000	23,000							46,000
T4 Fuels	6,495		4,198	4,197	790		4,197	4,988	24,865
T5 Erosion/Gravel	10,000	10,000	22,695	22,696	2,571	14,071	20,508	20,509	123,050
T6 Transportation	10,350	10,350							20,700
<b>TOTAL</b>	<b>\$63,173</b>	<b>\$56,678</b>	<b>\$40,220</b>	<b>\$40,220</b>	<b>\$17,121</b>	<b>\$27,830</b>	<b>\$38,463</b>	<b>\$39,255</b>	<b>\$322,960</b>

1-017429

1-017429

### Implementation Schedule

Task	Start	Conclude
<b>T1. Coordinate Conservation Work and Information.</b>		
T1.1 Project Coordinator	October, 1999	September, 2001
T1.2 Community Meetings	October, 1999	September, 2001
T1.3 Technical Team	October, 1999	September, 2001
T1.4 Project Management and Reporting	October, 1999	September, 2001
<b>T2. Inform and Educate Stakeholders</b>		
T2.1 Education Coordinator	October, 1999	September, 2001
T2.2 Education Projects	As necessary	
T2.3 Curriculum Guide	October, 1999	September, 2000
T2.4 Curriculum Training	October, 2000	September, 2001
<b>T3. Watershed Visualization Model for Long-Term Plan</b>		
T3.1 Long-term Visualizaton	October, 1999	March, 2000
<b>T4. Restoration Project: Fuels</b>		
T4.1 Fuel Load Inventory	October, 1999	December, 1999
T4.2 Wildfire Defense Plan	October, 1999	December, 1999
T4.3 Fuelbreak Location Plan	October, 1999	December, 1999
T4.4 Fuels Treatment	April, 2000	September, 2001
T4.5 Monitoring	September, 2000	September, 2001
<b>T5. Restoration Project: Erosion and Sedimentation</b>		
T5.1 Erosion/Gravel Plan and Inventory	October, 1999	September, 2001
T5.2 Erosion and Sediment Reduction Treatment	June, 2000	September, 2001
T5.3 Monitoring	June, 2000	September, 2001
<b>T6. Evaluate Transportation System in Watershed</b>		
T6.1 Transportation Plan	October, 1999	March, 2000

### Cost Sharing

The RCD has a current agreements with several federal agencies to perform conservation work in the entire Clear Creek watershed. Like this CALFED proposal, these other agreements have a no formal cost sharing requirement. In this application the RCD has listed dollars requested from CALFED and then estimated the amount of other funding (real or in-kind) which we believe may be available to leverage CALFED's investment in the watershed. These amounts are listed for the use of CALFED in gauging the degree of other governmental, landowner, and volunteer support. These "other sources" amounts are strictly estimates. The RCD does not have formal commitments of future funding from our current watershed partners and is not making this application with any assurances there will be any "other sources."

### Applicant Qualifications

**Western Shasta Resource Conservation District.** This proposal will be carried out by the Western Shasta Resource Conservation District, an independent special district within Shasta County. The RCD has been implementing erosion control projects, fish and wildlife restoration projects, fuels planning and reduction projects, and educational projects since 1957. Since 1997, the RCD has performed numerous planning and restoration projects in Clear Creek and believes it has a good to excellent working relationship with landowners and agencies in the watershed. The RCD has the organizational and field skills to successfully implement this project. Key Staff: Tom Engstrom, Director; Jeff Souza, Projects Manager; and Mary Schroeder, Administrative Manager.

**Key Partners:**

**Shasta-Tehama Bioregional Council.** A volunteer organization of community members organized to provide grass-roots support of efforts to find solutions to ending natural resource use conflicts. Key individuals: Melinda Brown, Chair; David Klasson, Natural Resources Committee Chair; and Carl Weidert, Member.

**Whiskeytown Environmental School.** Key staff: Heide Hatcher, Principal

**University of California-Cooperative Extension.** Key staff: Gary Nakamura, Area Forestry Specialist

**USDA-Natural Resources Conservation Service.** Key staff: Robert M. Bailey, District Conservationist

**Sierra Pacific Industries – Forestry Division.** Key Staff: Dan Tomascheski, Vice President – Resources.

**California Department of Forestry and Fire Protection.** Key Staff: David M. Soho, Deputy Chief - Resource Management, Shasta-Trinity Ranger Unit.

**USDA Forest Service – Shasta-Trinity National Forest.** Key Staff: Sharon Heywood, Forest Supervisor

**USDI National Park Service – Whiskeytown Unit, WST National Recreation Area.** Key Staff: David Pugh, Superintendent

**USDI Bureau of Land Management – Redding Field Office.** Key Staff: Charles Schultz, Manager

**USDI Fish and Wildlife Service -** Key Staff: Jim Smith, Project Leader, Red Bluff Field Office.

**US Environmental Protection Agency.** Key Staff: Laura Fujii, Federal Activities Office, Cross Media Div.

**Compliance with Standard Terms and Conditions**

The terms and conditions described in section 4.4 of CALFED's PSP are acceptable to the applicant. The applicant has successfully administered grant funds in the recent past and has an established record of compliance with the terms and conditions of federal agreements.

Reviewing Table D-1 in Attachment D, the RCD falls under the category, "Services, Consulting, Preconstruction, Research – Public." According to the table, certain forms will be submitted or compliance required before or at time of final contract. Accordingly, no forms from Appendices D or E of the PSP are submitted with this proposal.



99C-116

3179 Bechelli Lane, Suite #110, Redding, CA 96002-2041 - Phone: (530) 246-5299 Fax: (530) 246-5164

April 1, 1999

Mr. Glenn Hawes, Chair  
Shasta County Board of Supervisors  
1815 Yuba Street, Suite 1  
Redding, CA 96001

Re: Notification of Intent to Apply for a CALFED Grant in the Clear Creek Watershed

Dear Mr. Hawes:

The Western Shasta Resource Conservation District (RCD) intends to submit two proposals to CALFED. As part of the application process, the district is obligated to notify the Board of Supervisors and the County Planning Department of the RCD's intent to apply for CALFED grants.

The first proposal deals with stream channel restoration in Clear Creek below Saeltzer Dam. The RCD plans to complete Phases 3 and 4 of a 4 phase project to reverse stream channel degradation caused by historic gold and aggregate mining. Phase 1 was completed in 1998 with Central Valley Project Improvement Act funds from the USDI - Bureau of Reclamation. Phase 2 was funded by CALFED in 1998 and will be implemented in 1999 and 2000.

The second proposal deals with coordinating work within the watershed. The RCD proposes to hire a part-time watershed coordinator, arrange for public meetings, plan a fuels/fire strategy, inventory and remediate sources of erosion and sedimentation, and evaluate the transportation system in Clear Creek.

Public outreach is an important component of the proposal, and the RCD intends to cooperatively work with the public, willing private landowners, and government agencies to perform this conservation work in Clear Creek.

If you have any questions about the proposals, please contact our Projects Manager, Jeff Souza, at (530) 246-5299 ext. 104. Thank you.

Sincerely,

Tom Engstrom  
Vice President

cc: James Cook, Shasta County Planning Department



3179 Bechelli Lane, Suite #110, Redding, CA 96002-2041 - Phone: (530) 246-5299 Fax: (530) 246-5164

April 1, 1999

Mr. James Cook, Director  
Shasta County Planning Department  
1855 Placer Street, Suite 103  
Redding, CA 96001

Re: Notification of Intent to Apply for a CALFED Grant in the Clear Creek Watershed

Dear Mr. Cook:

The Western Shasta Resource Conservation District (RCD) intends to submit two proposals to CALFED. As part of the application process, the district is obligated to notify the Board of Supervisors and the County Planning Department of the RCD's intent to apply for CALFED grants.

The first proposal deals with stream channel restoration in Clear Creek below Saeltzer Dam. The RCD plans to complete Phases 3 and 4 of a 4 phase project to reverse stream channel degradation caused by historic gold and aggregate mining. Phase 1 was completed in 1998 with Central Valley Project Improvement Act funds from the USDI - Bureau of Reclamation. Phase 2 was funded by CALFED in 1998 and will be implemented in 1999 and 2000.

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If you have any questions about the proposals, please contact our Projects Manager, Jeff Souza, at (530) 246-5299 ext. 104. Thank you.

Sincerely,

Tom Engstrom  
Vice President

cc: Glenn Hawes, Shasta County Board of Supervisors



United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
Redding Resource Area  
355 Hemsted Drive  
Redding, California 96002-0910

APR 08 1999

In Reply, Refer to:  
1780  
CA 360

Mr. Lester Snow  
Calfed Bay Delta Program Office  
1416 9<sup>th</sup> Street, Suite 1155  
Sacramento, CA 95814

Dear Mr. Snow:

On behalf of the Bureau of Land Management, I would like to offer my support of the grant request for "A Clear Creek Prescription" submitted by the Western Shasta Resource Conservation District. This project represents a comprehensive watershed management strategy for the greater Clear Creek drainage. The importance of this watershed is reflected in the broad based support it has received from the numerous agencies, organizations and private industry. Our ability to work together to solve common problems has been demonstrated by our past work in the lower watershed. This same "can do" spirit can be expected by the many partners in the upper Clear Creek.

Thanks for your consideration and we look forward to a favorable review.

Sincerely,

For

Charles M. Schultz  
Field Office Manager



United States  
Department of  
Agriculture

Forest  
Service

Shasta-Trinity  
National Forest

2400 Washington Ave.  
Redding, CA 96001  
(530)244-2978  
(530)242-2237 - TDD  
<http://www.r5.fs.fed.us/shastatrinity>

File Code: 1580

Date: April 9, 1999

Mr. Lester Snow  
CALFED Bay-Delta Program Office  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

Dear Mr. Snow:

This is a letter of support for CALFED funding of the grant application entitled "A Clear Creek Prescription" from the Western Shasta Resource Conservation District. The Upper Clear Creek Watershed annually delivers 1.35 million acre-feet of water to the Sacramento River. Landownership is complex within the watershed--with approximately one third of the area in private ownership and the balance managed by three different Federal agencies.

Beginning as the site of the second major gold discovery in California in the 1850's, the watershed has undergone major changes due to mining, water diversion, fire suppression, and road construction. A majority of the riparian zones are vulnerable to catastrophic fire and flood events. That is the basis for the major collaborative effort, involving all the major land owners and managers in the watershed, to recently complete the Upper Clear Creek Watershed Analysis.

The Upper Clear Creek Watershed Analysis identifies a number of critical areas which need immediate attention--including erosion and sedimentation control, fuels reduction, and information/education of the myriad of landowners. Also needed is staff support to coordinate the wide variety of implementation projects identified in the Watershed Analysis.

Based on the critical need to address the resource management issues identified in the Watershed Analysis, I strongly recommend the "Clear Creek Prescription" grant proposal. It's important to emphasize that this proposal is a high priority of the participating partners who are committing to fund 46% of the cost of the proposal.

Sincerely,

J. SHARON HEYWOOD  
Forest Supervisor



Red Haired Original  
to Lester Snow



# United States Department of the Interior

NATIONAL PARK SERVICE

Pacific West Region  
600 Harrison Street, Suite 600  
San Francisco, California 94107-1372



IN REPLY REFER TO:

LS4 (WHIS)

April 12, 1999

Lester Snow, Executive Director  
CALFED, Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95614

Dear Mr. Snow:

We would like to express strong support for the CALFED proposal to be submitted to your office by the Western Shasta Resource Conservation District (WSRCD): A Clear Creek Prescription (CCRx).

Whiskeytown National Recreation Area (NRA) occupies about one quarter of the watershed. For a number of years the NRA has, essentially on its own, worked on issues and problems related to watershed health, such as hazard fuels management and landscape restoration. The WSRCD proposals offer an opportunity for truly watershed-wide resource management, an opportunity to test and prove the efficiency and value of coordinated management, and the opportunity to address the truly highest priority problems within the watershed.

For these reasons, we encourage your favorable consideration of the WSRCD's proposal.

Sincerely,

  
John J. Reynolds  
Regional Director



# Sierra Pacific Industries

Forestry Division • P.O. Box 496014 • Redding, California 96049-6014  
Phone (530) 378-8000 • FAX (530) 378-8139

April 15, 1999

Mr. Lester Snow  
CALFED Bay-Delta Program  
1416 Ninth Street, Room 1155  
Sacramento, CA 95814

Re: Clear Creek CALFED Grant Proposal

Dear Mr. Snow:

Sierra Pacific Industries is a private landowner in the Clear Creek Drainage of Shasta County. We manage our lands to produce high-quality forest products while giving consideration to the needs of watershed protection, fisheries and wildlife, and recreational opportunities.

One challenge we face is protection of the watershed. We find this very difficult given the checkerboard ownership patterns, the wide variety of management objectives, and the classic fire-adapted vegetation types which cross ownerships. What planning SPI carries out on its lands can be negated by a neighbor's activity or inactivity.

The resources in Clear Creek are best protected when owners work collaboratively. One way to foster this collaboration is to mathematically model then visually depict how vegetation in the watershed grows over time. We have been working with computer programs which allow us to picture these changes. Having the Clear Creek owners sit down and coordinate management activities which reasonably protect the watershed will ensure clean, predictable flows in the watershed.

As you are aware, the Western Shasta Resource Conservation District has submitted a grant proposal in CALFED's "Local Watershed Stewardship" grant category. The visualization process is an important component of the plan. Sierra Pacific Industries strongly supports this proposal and intends to remain an active participant in Clear Creek. We have already committed significant information and staff time to this effort. SPI looks forward to the participation of CALFED in this planning and education process.

Sincerely,

Dan Tomascheski  
Vice President - Lands and Resources

# COOPERATIVE EXTENSION UNIVERSITY OF CALIFORNIA

1851 Hartnell Avenue  
Redding, California 96002-2217  
Telephone (530) 224-4902  
Fax (530) 224-4904  
Internet: gmnakamura@ucdavis.edu

## EXTENSION FORESTRY

April 14, 1999

Mr. Lester Snow  
CALFED Bay-Delta Program Office  
1416 Ninth St, Suite 1155  
Sacramento, CA 95814

Dear Mr. Snow:

This letter is in support of the Western Shasta Resource Conservation District's CALFED proposal, "A Clear Creek Prescription (CCRx)". The Clear Creek Prescription (CCRx) project is an opportunity to determine the feasibility and value of watershed-wide resource management planning and implementation in a watershed that is important to CALFED goals and objectives and is comprised of multiple ownerships with diverse interests and management objectives. Clear Creek is a "working" watershed, in the sense that people live within it, recreate within it, harvest timber within it and in many other ways use and influence it. Though the water it produces and the fisheries and habitats it supports are of most direct interest to CALFED, these pale beside the other values and benefits the watershed provides. The Clear Creek Prescription (CCRx) project will help us determine how to effectively and efficiently maintain these values and benefits into the future.

Though Western Shasta Resource Conservation District (WSRCD) is the applicant for this project, the Clear Creek Prescription (CCRx) project is truly a coordinated and collaborative effort among the partners cited in the proposal. The WSRCD is a member of the voluntary Shasta-Tehama Bioregional Council (STBC) which serves as a forum and clearinghouse on natural resource issues in the northern Sacramento River watershed. Rather than establish and have to support yet another administrative structure, the STBC and its member organizations and individuals have supported the WSRCD in implementing on-the-ground projects. The WSRCD has already successfully completed a number of projects directly related to the Clear Creek watershed including the Upper Clear Creek Watershed Analysis.

The University of California Cooperative Extension Service Forestry Program has been involved with Clear Creek through participation in the STBC. We expect to contribute in-kind education and outreach support for the Clear Creek Prescription (CCRx) project, much as we have with previous STBC education projects in fuels management, watershed management, biomass harvesting and prescribed burning, and WSRCD education projects. We strongly recommend CALFED support for Western Shasta Resource Conservation District's proposal.

Sincerely,



Gary Nakamura, Area Forestry Specialist

C:\GARY\399\calfedwsredprop.wpd

U.S. Department of Agriculture and University of California cooperating