

PSP Cover Sheet

Proposal Title: Sacramento River Discovery Center CALFED Proposal, 1999

Applicant Name: Sacramento River Discovery Center

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Amount of funding requested: \$174,150 for two years

Indicate the topic for which you are applying. Environmental Education

Does the proposal address a specified Focused Action? Yes

What county or counties is the project located in? Tehama, Butte, Placer, Glenn, Shasta, Trinity, Siskiyou

Indicate the geographic area of your proposal: Sacramento River Mainstream

Indicate the primary species which the proposal addresses:

- San Joaquin and East-side Delta Tributaries fall-run chinook salmon
- Winter-run chinook salmon
- Late-fall run chinook salmon
- Delta smelt
- Splittail
- Green sturgeon
- Migratory birds
- All anadromous salmonids
- Other: Education addresses all species through habitat and management issues
- Spring-run chinook salmon
- Fall-run chinook salmon
- Longfin smelt
- Steelhead trout
- Striped bass
- All chinook species

Specify the ERP strategic objective and target (s) that the project addresses. Include page numbers from January, 1999, version of ERP Volume I and II: This project specifically addresses the Watershed Program Plan, Element C, Education and Outreach, listed on pages II-9 to II-13.

Indicate the type of applicant:
Non-profit

Indicate the type of project:
Education

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 (if the applicant is an entity or organization; 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.

Cathy Klinesteker
Printed name of applicant

Cathy Klinesteker
Signature of applicant

TITLE PAGE

**SACRAMENTO RIVER DISCOVERY CENTER
CALFED PROPOSAL, 1999**

Primary Contact:

**Cathy Klinesteker, P.O. Box 1298, Red Bluff, CA 96080
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Email: cklinest@tehama.k12.ca.us**

Participants and collaborators:

Adopt-A-Watershed, Butte Creek Education Project, Placer County Resource Conservation District, Tehama County Department of Education, Butte County Department of Education, Evergreen Union School District, Red Bluff Union High School District, U.C. Davis Bodega Marine Laboratory, Point Reyes Bird Observatory, Mendocino National Forest, Lassen Volcanic National Park, Wildlife Conservation Board, U.S. Fish and Wildlife Service, California Department of Water Resources, The Nature Conservancy, California Native Plant Society, Audubon Society, Sale Family Orchards, Los Robles Native Plants, and 32 Schools in Northern California

The Sacramento River Discovery Center is a Private Non-Profit Educational Corporation

Tax Identification Number: 68-0374064

Sacramento River Discovery Center
CALFED PROPOSAL, April, 1999
EXECUTIVE SUMMARY

This project will provide a model for connecting students to their watershed through meaningful experiences that include content curriculum, extensive on-site activities, and community connections. The Discovery Center is located in Red Bluff and works with schools from Mt Shasta to Sacramento. By developing a populace that understands and appreciates the complexities of river systems, this program will positively impact all biological/ecological components of the river.

The curriculum/content component of the program will be assured by utilizing **Adopt-A-Watershed** as the core curriculum with added strands from other materials, such as groundwater lessons from the Water Education Foundation, Forestry Issues from Project Learning Tree, and water conservation lessons from agencies and the agricultural community. Adopt-A-Watershed (AAW) is an innovative method of teaching science that uses a school's local watershed as a living laboratory for hands-on activities to make science directly relevant to students' lives. It provides educators with the tools to implement an integrated, sequential K-12 program focused on the local environment and emphasizing student service in partnership with the community. The curriculum will be tied to state and county standards in all subject areas assuring that schools are able to continue using a watershed focus to help students reach academic goals.

Adopt-A-Watershed has in-depth integrated processes that will assure on-going assessment of success and modifications as necessary. Additionally, The California Department of Education and the State Education and Environment Roundtable has invited the Sacramento River Discovery Center (SRDC) to participate in a long-term California Student Assessment Project that will determine the effects of environment-based programs on academic achievement. It's critical during this time that we establish the strongest possible base of programs to coincide with this research to best show the value of on-the-ground activities tied to an academic base to best serve the educational needs of our communities. Support from CALFED will build a foundation for establishing a funding base for these kinds of programs within the structure of educational funding. Programmatic funding will assure longevity and the beginning of systematic natural resources education tied to student's regular course of study assuring that future generations have an understanding of and connection to their watersheds.

The on-site component of the program will build a connection to the land and a sense of stewardship for the land and the water as students develop an understanding of the connectedness of systems in nature and people's place in those systems. A **Field Site Coordinator** will assure quality on-site programs and strong community connections. A major role of the Field Site Coordinator will be to implement a site support program to insure an available population to

serve as docents for interpretive programs on site. This could be accomplished through a high school natural resources academy program, a college intern or community service program, or a well-organized community volunteer program. In practice, a combination of programs would provide the most stable, year-round assurance of quality educational activities on site.

Local connections will be assured by the **broad-based local advisory councils** for each partnership. This group will be organized and facilitated by the site coordinator in partnership with local schools, landowners, and communities, and will be specific to each site.

The CALFED proposal being submitted by Adopt-A-Watershed (AAW) will support the Leadership team and site training for this project. The five teams of schools/districts supported by the Sacramento River Discovery Center Proposal will receive training in AAW materials, leadership skills, and field activities to support their schools as they become AAW schools. AAW will modify their follow-up support to include a full staff training for participating schools. This will build wide knowledge of and commitment to the program and use of the materials. It will also assure schoolwide articulation around curriculum standards mandated by the State Department of Education and local counties.

Private landowner partnerships will be facilitated by the site coordinator. Existing partnerships include work with Lindauer River Ranch, Long's Orchards, and Shasta View Farms. Additionally, programs supported in part by CALFED previous funding have allowed the development of partnerships with the Nature Conservancy, Point Reyes Bird Observatory, and Los Robles Native Plants. This proposal will support, in part, the continuation and expansion of these program elements including native grass restoration and monitoring, bird studies in revegetation sites, and work on Nature Conservancy property to insure watershed-wide program consistency.

We are working closely with two additional partners seeking CALFED funding. The Butte Creek Education program works with us to assure consistency and sharing of educational programs and resources in schools from Redding to Chico. The Placer County Resource Conservation District Program will partner with us to introduce their educational partners to our programs and places and allow us to utilize their training programs to enrich our work and strengthen ties throughout the watershed.

PROJECT DESCRIPTION

This proposal includes three distinct components, connected programmatically, but described separately in the budget and with the ability to stand alone.

COMPONENT 1; EDUCATIONAL PROGRAMS TO CHANGE THE WAY PEOPLE VIEW THEIR WATERSHED. In-depth, on-site, integrated educational programs to develop a model for replication throughout the watershed. This component is being developed in partnership with Adopt-A-Watershed and the Butte Creek Education Project. Adopt-A-Watershed will support leadership team training and full staff training for five school teams from SRDC and five school teams from the Butte Creek Education Project over two years. This component of our proposal is our top priority and would cost \$55,100 per year for two years for a total of \$110,200. This cost is augmented significantly by cost share.

COMPONENT 2; MODEL PROGRAMS. Continuation of programs funded by CALFED to assure that they mature to become quality models for replication elsewhere. These include bird studies in partnership with Point Reyes Bird Observatory; Native Grass studies and revegetation in partnership with Los Robles Native Plants; and Discovery Garden as a model for developing sites using native and drought tolerant plants with emphasis on educational programs and habitat development. Cost for this component is \$32,000 for one year. After one year's funding, other sources of support should be in place.

COMPONENT 3; WATERSHED NETWORK. Networking with other educational programs throughout the watershed. This component is being initiated with the Placer County Resource Conservation District in an effort to develop collaborations that assure sharing of resources, sites, programs, and planning efforts. This is an investment in people working together to accomplish great tasks. This proposal will support the first networking meeting with stakeholders from throughout the watershed and would cost a total of \$2925 for the Discovery Center portion of the program and a comparable amount for the Placer County RCD contribution to the event.

COMPONENT 1; EDUCATIONAL PROGRAMS TO CHANGE THE WAY PEOPLE VIEW THEIR WATERSHED is the heart of this proposal. It is based on years of research and experience in how people learn, how they develop connections to places and resources, and how they modify behavior in response to what they learn. It is submitted in partnership with Adopt-A-Watershed and the Butte Creek Education Project. Leadership development, teacher training, and curriculum materials are described in detail in the Adopt-A-Watershed CALFED proposal. These three parts of this whole project provide the structure and foundation to assure long term integration of this program into the regular educational programs of schools throughout the watershed. The Sacramento River Discovery Center proposal provides AAW with the local connections to assure a network of schools with which to work. We also provide places and

people in the local communities to assure quality experiences in the field. This proposal will provide a site coordinator with a virtual army of volunteers, including high school and college students and adults from local communities, to assure well-organized field experiences. While the curriculum and training provided by Adopt-A-Watershed provides the cognitive part of this program, this proposal supporting field experiences provides the heart of watershed education. When a student plants a tree, or studies nesting birds, or raises native grasses, the seeds of stewardship are planted, nourished, and brought to fruition.

Briefly, this component includes: leadership team training in an 8 day summer institute, implementation of AAW program by leadership team, full-staff training in AAW by leadership team and AAW staff, and implementation of AAW schoolwide. For the site coordinator role within the project, implementation includes selecting a site to adopt for repeated visits throughout a student's education. It means engaging students in studies, restoration, and sharing with the community at large. It means recruiting, training, and coordinating volunteers to serve as docents for students on site and in the classroom. It means working with local landowners and communities to develop site and business partners to help support the program into perpetuity. It means overseeing high school academies that engage high school interns in curriculum studies using core resources such as the *Sacramento River Conservation Area Handbook*, the Adopt-A-Stream Foundation *Streamkeeper's Field Guide*, and of course, Adopt-A-Watershed high school units. It means facilitating high school intern studies of riparian habitat revegetation projects, birds in the watershed, fisheries, and effective people practices, to name a few. It means maintaining websites and GIS systems for student education and use. It means engaging in activities that promote long-term support. It means changing the world, one person at a time, by changing the way people understand and interact with their watersheds.

Phase One (January 2000 ñ September 2001)

Task: Project Management and Administration

Deliverables: Provide all technical and administrative services as needed for contract completion. Supervise and review all work performed including budgeting, scheduling, contract and sub-contract administration to ensure that the contract is completed within budget, on schedule, and in accordance with approved procedures, applicable laws, and regulations.

Deliverables: Ensure that contract requirements are met through completion of quarterly progress reports. The progress reports shall describe the amount invoiced to the contracting agency, records of cost share partners, activities performed during the quarter, the deliverables produced, problems encountered, and a description of any amendments or modifications to the contract.

Phase Two (January ñ June 2000)

Task: Project Planning and Recruitment

Deliverables: Recruit site coordinator and assistant. With AAW, plan the Bay-Delta Leadership Institute. Recruit teams to attend the Bay-Delta Leadership Institute. Begin community contacts to lay a foundation for partnerships.

Phase Three (July 2000)

Task: Summer Leadership Institute Implementation

Deliverables: 15 teachers from 5 SRDC teams, 5 community partners, and the site coordinator who will coordinate all five teams will receive intensive leadership training through the Summer Institute. Participants will develop the skills and knowledge to successfully lead the implementation of the AAW program

Phase Four (August 2000 ñ September 2001)

Task: Curriculum Workshop Implementation

Deliverables: 600 additional teachers from SRDC schools will be trained in the AAW program through on-site Curriculum workshops.

Phase Five (April 2001)

Task: Spring Retreat Implementation

Deliverables: 15 teachers, 5 community members, and the site coordinator will receive intensive leadership training through the Spring Retreat. Participants will develop the skills and knowledge to evaluate the success and development of their AAW program. They will demonstrate an understanding of; assessment tools, fund raising principles, and AAW's internet data exchange project.

Phase Six (July 2000 ñ September 2001)

Task: AAW Program Implementation and Coordination

Deliverables: 15,250 students from a diversity of backgrounds will study with these teachers. Students will plan, design, and participate in field projects that are related to the curriculum and have a direct and positive impact on local watersheds. Students will understand science concepts and ecological principles appropriate to their developmental level. They will apply thinking processes such as critical thinking, creative thinking, and higher level thinking, in the context of the core curriculum and local environment. They will exhibit scientific literacy, civic responsibility, and stewardship toward the environment and community. Lastly, students will understand how learning relates to the real world.

Deliverables: Each of the 5 communities, involved in the Leadership Institute, will establish 1 Advisory Committee. Advisory Committees will be made-up of a wide range of individuals and groups such as students, teachers, natural resource professionals, landowners, government agencies, businesses, and industries. They will provide direct support to students and teachers by identifying community needs, building local partnerships, linking schools to their communities, and developing a viable plan to sustain the AAW program over the long-term.

COMPONENTS 2 and 3; MODEL PROGRAMS and WATERSHED NETWORK are critical to building replicable, on-the-ground models of community actions and a network for sharing those models. Both will be completed within one year.

ECOLOGICAL/BIOLOGICAL BENEFITS

Our educational programs teach, through cognitive and field experiences, about the complexities of watersheds including habitats, river corridors, meander zones, birds, fish, macro-invertebrates, ground water, invasive plants and animals, revegetation, and the need to build partnerships with all watershed stakeholders to best manage resources for the health of the system.

Specific species being studied are:

Carex barbarae and *Leymus triticoides*. Study, revegetation, and propagation of these two species will be continued as a result of CALFED support through this proposal. This will ensure that a model is in place for others to replicate to include grasses as an understory of mixed riparian revegetation. Previous funding allowed the initiation of three projects, birds, grasses, and native/drought tolerant plant garden.

For the bird project, identification and study techniques have been introduced to student interns and adult volunteers. Next steps involve studies of specific species and development of action plans to effect positive change in habitats. These might include, in addition to those listed below, an analysis of the list of suggestions to enhance bird habitat for landowners produced in 1999 by Point Reyes Bird Observatory ornithologists with establishment of test plots to evaluate the effectiveness of these suggestions. An example is to leave brush piles on the ground until after the nesting season to provide habitat for sparrows and other songbirds.

For the grass project, the first small study plots were established in the winter of 1999. Continued monitoring and maintenance will be required to encourage vigorous stands that will withstand plug harvesting so the test plots can be used as foundation stock for nearby restoration sites.

The garden project resulted in the planting of two new sections, mostly in a variety of native grasses, and of the first seed and cutting propagation of plants. Education programs highlighting the garden continue to grow, encouraging people to consider landscaping with natives and drought-tolerant plants to provide habitat and conserve water. Interpretive materials need to be completed, as well as expansion and revision of the propagation project.

Western bluebirds. Loss of cavities for nesting because of decline of old growth riparian forests is of concern. This component of this project will establish ongoing observation of plots in different habitat sites, placement and monitoring of bluebird nest boxes, and inclusion of the story of western bluebird decline in teacher training and student field bird experiences.

Wood ducks. Lack of appropriate cavities for wood duck nests has resulted in the decline of wood ducks. This component of the project will establish wood duck nest box placement and monitoring.

An example of a study proposed for possible inclusion for high school interns is an assessment of European starlings as an invasive species using cavities for nesting. Native species in the same habitat include acorn woodpeckers and yellow-billed cuckoos. Gathering data on this pervasive non-native may provide information that helps maintain and increase the success of native species.

Invasive plant species being studied include *Ailanthus*, Tree of Heaven, Tamarisk, pampas grass, and *Arundo donax*, giant bamboo. Proposed projects on these invasives might include baseline data gathering, research on removal options, and proposal of removal plans to local and state governing bodies.

In terms of system-wide ecosystem benefits, this project is the way to connect this entire watershed. This funding will begin the reaching out, one center to another, sharing ways to improve stewardship, and habitat, and communities throughout the watershed. Education is our best hope for a healthy future on this planet. CALFED, with this project and its partner efforts, will take the lead in assuring wise watershed management and a population that will understand and support the tough decisions necessary to assure system-wide ecosystem health.

TECHNICAL FEASIBILITY AND TIMING

This structure for educational programs has grown out of over 20 years of experience working on research in education and field programs with students and teachers. In research in recreational experiences conducted in 1980 at U.C. Davis that asked when was the most effective time to input information about an upcoming experience, it was learned that information input prior to a field experience was over 80% more likely to be retained than information input on site. This led to programs with field experiences with students that emphasized in-depth curriculum content input prior to field experiences. Field experiences became the motivation and, after the trip, the reinforcement for concepts learned prior to the field experience. This led to early work with Tom Murdoch with the Adopt-A-Stream Foundation to incorporate salmon and stream studies into the curriculum of elementary and middle school students. The field part of this project included stream studies, raising salmon in the classroom, and releasing them into the study streams.

In 1985, with the opening of the Monterey Bay Aquarium, salmon studies were expanded for middle school students to include the ocean connection in a project funded under the educational initiatives program called "Salmon, from Eggs to Ocean." In this project, the salmon were used as an in-class focus for studying the fresh water portion of the watershed in the fall and early winter, with salmon

released to the adopted stream in November, the refrigerated classroom aquarium converted to a salt water, tidepool habitat, and the ocean connection to the local watershed explored. These studies ended with a 5 day field trip to Monterey to study shoreline habitats, tidepools, the open ocean, and human history connections.

This program evolved into a teacher training conference that expanded the program to other schools in the region. Salmon stamp funding provided 10 refrigerated aquaria systems to schools throughout Northern California. At about this same time, colleagues from U.C. Berkeley were studying developmental stages of learning and what materials and activities were most appropriate for what age students. The nationally recognized Full Option Science System (FOSS) curriculum for K-8 science grew out of this effort. Because of our previous work on outdoor education with field connections, the nine Northeastern counties of California were chosen to help pilot and participate in the development of these materials. Kim Stokely, Director of Adopt-A-Watershed, was part of that group. Three years of state funding supported this effort and seven years of National Science Foundation funding. This ten year project which incorporated 21 days per year of teacher training including a bus field trip for teachers from Shasta Dam to the ocean to follow and learn about the Sacramento River watershed, provided fertile ground for the development of the Adopt-A-Watershed program.

The AAW materials, developed in the format of, and closely tied to, the FOSS curriculum, are developmentally appropriate, correlated to grade level and state standards, cover broad concepts which give a balanced view of the complexity of watersheds, and, though appropriate anywhere, are rooted in the rivers and streams of Northern California. For a complete overview of the curriculum, see the Adopt-A-Watershed Curriculum Unit Matrix in the appendix. The writers of this proposal have a long history with this watershed. They have literally worked with over 600 teachers representing almost 300 schools. They have worked closely with agencies, both state and federal, and with private organizations. Their experience includes development of state curricula standards for assessment. They have restored habitats, coordinated revegetation, organized field experiences for students and teachers, and spent their careers in preparation for the project envisioned by this proposal. At this pivotal time in the history of this watershed, this project is well prepared to build an educational component that accomplishes the goals of CALFED in the areas of local watershed stewardship and environmental education. We will use existing quality curricula as well as original materials developed specifically for the Sacramento River watershed, such as the Water Education Foundation ground water model. We are uniquely prepared, by experience and geographic location (almost exactly in the middle of the Sacramento River) to build a model place and programs to support the long-term goals of CALFED.

MONITORING AND DATA COLLECTION METHODOLOGY

Component 1; Educational Programs:

Three distinct actions of this component will be monitored: 1. Leadership training; 2. teacher training; and 3. Adopt-A-Watershed program implementation. For all three, numbers of participants will be logged. For the first two, satisfaction surveys will be administered and synopsized as part of the program evaluation. Also for the first two, data will be collected at the end of the project on percent of teachers implementing the program and number and type of field experiences. This data will be included in the final project report. For #3, Adopt-A-Watershed program implementation, student journals, student products, and student participation in field activities will be logged and summarized.

Component 2; Model Programs:

Three model programs will be monitored in the following ways;

Birds, site and nest surveys will be conducted with data on standard Point Reyes Bird Observatory data collection forms and entered on a computer data base with results being included as part of the quarterly and final reports. Additionally, student field journals will be maintained to log in-depth data about behavior, habitat, and interactions with other species. Representative field journal notes with sketches will be included in quarterly and final reports.

Native Grasses, photo and visual monitoring will occur monthly to assess percent of plant survival, total area covered (as grasses spread), and percent of weeds. This data will be reported quarterly and used to implement maintenance procedures.

Native/drought tolerant garden, overall plant propagation success by number of plants propagated and percent of survival. Community participation will be assessed by logging the number of participants at the annual plant sale which is being initiated with the 1998 CALFED funds.

Component 3, Watershed Network; will be assessed by a log of the number and composition (job type) of participants, a satisfaction survey of participants, and a synopsis of notes of the proceedings; to be included in the quarterly report following the networking conference in March, 2000.

LOCAL INVOLVEMENT

Letters from local organizations showing support of this proposal, in particular, and of the Discovery Center programs, in general are included in the appendix. We currently have 247 members. In the past two years we logged over 33,000

volunteer hours. The Red Bluff Recreation area where the Discovery Center is located, is a 488 acre site managed by Mendocino National Forest. The Forest Service supports the Center with staffing, maintenance, and a variety of funding partnerships that allows each of us to leverage additional dollars for site improvements and programs. These include a group campground that is used extensively as an outdoor education camp, 5 miles of trails, and over 65 acres of riparian revegetation on site. We received over \$100,000 of equipment time from a local heavy equipment operator to dig a pond to enhance a 7 acre mixed riparian expansion of the old growth riparian on the property where the Discovery Center is located. The planting of this area was funded by the Wildlife Conservation Board for \$50,000 and was planted in one day by 540 school children. P.G.&E. allocated \$250,000 to plant a 40 acre oak woodland. Over 1000 school children and adult volunteers helped. Discovery Garden has been adopted by a local church whose members regularly maintain the garden, trails, and watering system. Red Bluff High School has assigned a teacher to the Discovery Center 1/3 time to assist with the High School Academy. They also provide technology support, no charge for network hook-up and maintenance, and general maintenance of our building and garden (see attached letter in the appendix detailing Red Bluff Union High School support of the Discovery Center.

County Offices of Education and schools from throughout the region work with the Discovery Center by including information in mailings, participating in programs, and developing displays for the visitor's center. All displays were developed by school and community groups or agencies. Over 30 local, state, and federal public and private groups will participate in our annual watershed celebration in May, 1999. It is co-sponsored by the Discovery Center, the Water Education Foundation, Placer County RCD, U.S. Fish and Wildlife Service, and Mendocino National Forest. A list of participants is included in the appendix.

Our interpretive raft program for students took over 400 students on river trips last year. Partners who allow us to visit their land and highlight stewardship, water conservation practices, and river corridor revegetation are Lindauer River Ranch, Long's Orchards, and Shasta View Farms. The Nature Conservancy (TNC) partnered with us this year to have our staff and students facilitate a 40 acre mixed riparian revegetation on TNC property.

With visitors, including general public and school groups, our facilities are bursting at the seams. A volunteer architect is currently drawing plans for a larger permanent building which we plan to build with community support as a "local barn raising." The plans and the process will be carefully documented so other locations can replicate this process of bringing the community together to actually build their Discovery Center. This effort is a logical outgrowth of the planning committee convened in 1994 representing 46 public agencies and private organizations that developed the vision and plan for the Discovery Center. We are simply proceeding with the plan.

COST

The attached budget shows the funds requested for each of the three task components from CALFED. For Task 1, Educational Programs to Change the Way People View Their Watershed, all funds requested are for a site coordinator and assistant. The Discovery Center will provide office space, program materials, and other miscellaneous support for these employees. Additionally, volunteers for task 1 will be recruited through the existing Discovery Center structure. This will assure success and immediate start-up, since the system is in place and has been shown to be very effective at recruiting and utilizing volunteers.

For Task 2, Model Programs, continued commitment of volunteers, bird, grass, and plant specialists, and donations of materials are expected.

For Task 3, the CALFED proposal is expected to cover all costs.

Project Management, over and above indirect costs, will be assumed by the Discovery Center in the following ways:

- program administration will be managed by the SRDC Director
- book-keeping will be covered by SRDC staff
- the annual audit, covered by a service contract or other arrangement with a Certified Public Accountant, will be the responsibility of SRDC.

Sacramento River Discovery Center CALFED 1999 Budget							
Task	Direct Labor Hours	Direct Salary and Benefits	Service Contracts	Material and Acquisition Costs	Miscellaneous and other Direct Costs	Overhead and Indirect Costs	Total Cost
Task 1, per yr.	0	55,100	0	0	0	11,020	66120
Task 2	0	15,000	15,000	0	2,000	6,400	38400
Task 3	0	1,000	0	1,450	475	585	3510
Project Management Task	0	0	0	0	0		0
Total	0	71100	15000	1450	2475	18005	108030
Sacramento River Discovery Center CALFED 1999 Cost Share							
Task 1	22,000	0	0	10,000	0	0	32000
Task 2	40,000	0	5,000	5,000	0	0	50000
Task 3	0	0	0	0	0	0	0
Project Management Task	0	12,000	1,500	0	0	0	13500
Total	62,000	12,000	6,500	15,000	7,000	0	95500

Task 1 is proposed for two years of funding. Total cost for task 1 is \$132,240 for two years.

Quarterly budget for the project includes a single column for the second year of task 1 funding. The quarterly budget for this task for year 2 would approximate the quarterly budget for year 1 for task 1.

Task	Quarterly Budget Oct-Dec,99	Quarterly Budget Jan-Mar 00	Quarterly Budget Apr-Jun 00	Quarterly Budget Jul-Sep 00	Quarterly Budget Oct-Dec 00	Year 2 Budget Jan-Dec 01	Total Cost
Task 1	6,120	15,000	15,000	15,000	15,000	66,120	132240
Task 2	9,600	0	9,600	9,600	9,600	0	38400
Task 3	0	3,510	0	0	0	0	3510
Project Mgmt Task	0	0	0	0	0		0
Total	15720	18510	24600	24600	24600	66120	174150

COST SHARE

Cost share for this project is delineated in the cost share section of the Sacramento River Discovery Center CALFED 1999 budget and described under COST. Additionally, although funding will be complete prior to the allocation of CALFED funding, National Fish and Wildlife Foundation provided \$30,000 in 1999 for initiation of the native grass project and expansion of the bird project to include more training and support from the staff at Point Reyes Bird Observatory and the initiation of the paid student intern summer program.

APPLICANT QUALIFICATION

This project will be administered by Cathy Klinesteker, Sacramento River Discovery Center Executive Director and support staff. Tasks 2 and 3 will be implemented with existing staff at SRDC. This includes one full-time director and two full-time program assistants. Task 1 will be administered by existing staff who will recruit and hire a site coordinator and assistant to implement the task specifics.

Cathy Klinesteker's qualifications are described completely in a Professional Vita in the appendix. She will be responsible for program administration. Jeanne Hensley and Rich Cole are the program assistants.

Jeanne Hensley has worked for the Discovery Center for three years, one year as an AmeriCorp community coordinator and two years as an SRDC program assistant. She has attended the Adopt-A-Watershed leadership training, Project Wet facilitator training, and been trained in plant identification, effectiveness skills, and biological monitoring. She will coordinate the garden project and provide assistance in the organization of the networking conference.

Rich Cole has worked for the Discovery Center for two years as a program assistant. Prior to that he was an AmeriCorp community coordinator for 2 years working with schools in the region on watershed projects. He has worked with the bird and grass project specialist volunteers and implemented aspects of these projects with students. Rich will coordinate the bird and grass components of task 2 for the SRDC CALFED 1999 project.

APPENDIX



**Sacramento
River Discovery Center**
April 12, 1999

P.O. Box 1298
Red Bluff, CA 96080

Phone: (530) 527-1196

Fax: (530) 527-1312

E-Mail: cklinest@tehama.k12.ca.us

Web Page: <http://www.srdc.tehama.k12.ca.us>

Tehama County Board Of Supervisors
332 Pine Street
Red Bluff, CA 96080

Dear Supervisors:

This letter is to inform you that the Sacramento River Discovery Center is applying for a 1999 CALFED educational grant. The Proposal Cover Sheet, Title Sheet, and Executive Summary are enclosed with this letter.

As you can see by the list of collaborators on the title sheet, the Discovery Center is working with a broad segment of the local and regional community to provide quality experiences for individuals about the Sacramento River Watershed. We've been in the Red Bluff paper three times in the last month for our raft trips (90 5th graders from Chico who visited Lindauer River Ranch, Long's Orchards, and Shasta View Farms), evening programs (seismicity) and our upcoming Watershed Celebration on May 8.

I'd like to personally invite you to attend the Watershed Celebration. Nearly 40 groups from the Bay Area to Redding will participate with programs and displays. The Children's art and poetry fair has generated a lot of interest. And our first annual Discovery Garden plant sale promises to add color to the day. Our local American Legion baseball team will host a tantalizing barbeque stand so come prepared to enjoy a wonderful day of sharing about this great river system of ours.

Sincerely,



Cathy Klinesteker



**Sacramento
River Discovery Center**
April 12, 1999

P.O. Box 1298
Red Bluff, CA 96080

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Tehama County Planning Commission
332 Pine Street
Red Bluff, CA 96080

Dear Commissioners:

This letter is to inform you that the Sacramento River Discovery Center is applying for a 1999 CALFED educational grant. The Proposal Cover Sheet, Title Sheet, and Executive Summary are enclosed with this letter.

As you can see by the list of collaborators on the title sheet, the Discovery Center is working with a broad segment of the local and regional community to provide quality experiences for individuals about the Sacramento River Watershed. We've been in the Red Bluff paper three times in the last month for our raft trips (90 5th graders from Chico who visited Lindauer River Ranch, Long's Orchards, and Shasta View Farms), evening programs (seismicity) and our upcoming Watershed Celebration on May 8.

I'd like to personally invite you to attend the Watershed Celebration. Nearly 40 groups from the Bay Area to Redding will participate with programs and displays. The Children's art and poetry fair has generated a lot of interest. And our first annual Discovery Garden plant sale promises to add color to the day. Our local American Legion baseball team will host a tantalizing barbeque stand so come prepared to enjoy a wonderful day of sharing about this great river system of ours.

Sincerely,



Cathy Klinesteker

**STANDARD CLAUSES --
SMALL BUSINESS PREFERENCE AND CONTRACTOR IDENTIFICATION NUMBER**

NOTICE TO ALL BIDDERS:

Section 14835, et. seq. of the California Government Code requires that a five percent preference be given to bidders who qualify as a small business. The rules and regulations of this law, including the definition of a small business for the delivery of service, are contained in Title 2, California Code of Regulations, Section 1896, et. seq. A copy of the regulations is available upon request. Questions regarding the preference approval process should be directed to the Office of Small and Minority Business at (916) 322-5060. To claim the small business preference, you must submit a copy of your certification approval letter with your bid.

Are you claiming preference as a small business?

_____ Yes* X No

*Attach a copy of your certification approval letter.

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 18 (REV. 3-95) FMC

COMPANY NAME

Sacramento River Discovery Center

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME

Cathy Klinesteker

DATE EXECUTED

4-15-99

EXECUTED IN THE COUNTY OF

Tehama

PROSPECTIVE CONTRACTOR'S SIGNATURE

Cathy Klinesteker

PROSPECTIVE CONTRACTOR'S TITLE

Executive Director

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Sacramento River Discovery Center,

Adopt-A-Watershed™ Curriculum Unit Matrix

Bold units have been completed.

Suggested Grade	Unit Title	Concept	Long-Term Field Study	Action Project	Community Education
K	What is a Watershed?	The earth contains objects which are observably different and that change.	Tree height and diameter/succession study.	Tree planting.	Field trip booklet for family and community. Children explain to family what a watershed is.
	Creature Features	Living and non-living things have observable characteristics.	Butterflies of watershed.	Plant native flower seeds butterflies use such as milkweed.	Building a butterfly garden on the school grounds.
1	An Apartment in the Woods	There is great diversity in living things and their habitats.	Mass production study.	Acorn planting or habitat enhancement.	Mural or puppet show depicting living things that depend on trees.
	Significance of Soil	Different forces reshape the earth.	Soil erosion study.	Erosion control.	<i>Significance of Soil</i> brochure.
2	Trees	Living things have characteristics and structures enabling them to live and interact in different environments.	Tree height and diameter/succession study and/or trees changing color and budding out.	Growing and planting willows.	"Build a Tree" mural displayed for community at open house, science fair, or watershed fair.
	Animals	Same as for Trees unit with an emphasis on animals.	Deer and/or butterfly population study.	Wildlife enhancement project.	"Animals of Our Watershed" mural display for open house, science fair, or watershed fair.
3	The Streamside Community	Living things interact with each other and their environment in many ways forming interdependent systems.	Amphibian study.	Riparian ecosystem restoration.	Display of leaves and seeds from indicator plant species found in a riparian ecosystem.
4	Landforms and Geology	Natural forces are at work causing the earth to change.	Soil erosion study.	Erosion control.	Share watershed relief map and aerial photos at open house, science fair, or watershed fair.
	Wade into Watersheds	Organisms successfully adapted to their environment are more likely to live and pass on their traits. Matter has specific properties and can be changed.	Water quality monitoring including aquatic insect population study stream temperature, photo station and stream flow.	Student/Community generated action project to help restore water quality.	Media day or open house to share action projects.

Adopt-A-Watershed™ Curriculum Unit Matrix

Bold units have been completed.

Suggested Grade	Unit Title	Concept	Long-Term Field Study	Action Project	Community Education
5	Plants Solve Problems of Survival	Through their structures and functions, organisms solve problems of survival (emphasis on plants).	Hula hoop plant survey.	Growing and planting native plants.	Wild flower awareness day and native plant sale.
	Birds: Adaptations and Variations	Same as for Plants unit with an emphasis on birds.	Bird census, amphibian, deer, and butterfly population studies.	Student/Community generated wildlife enhancement project.	Endangered species poster.
6	Forest Ecosystem	Living things interact with their environment forming interdependent systems which transmit energy through different networks.	Tree height and diameter/succession study.	Student/Community generated Forest Ecosystem action project.	Plan a tree celebration day in conjunction with Arbor Day and completion of a forest mural.
	Sustainable Society: What Is It? What Was It?	Same as Forest Ecosystem unit with an emphasis on human interaction with the environment throughout history.	Diversity index and changes in resource use over time. Testing sustainable indicators.	Students research and implement projects which make their watershed more sustainable, such as recycling projects.	Students display research and implement projects which make their watershed more sustainable.
7	Watershed Geologic History	The earth is dynamic and constantly changing.	Soil erosion study and stream channel profile.	Student/Community generated geology/soils action project.	Work with 1st grade on <i>Significance of Soil</i> brochure and display of action project.
	Wildlife	Natural selection favors those organisms best adapted to their environment and leads organisms to evolve over time.	Bird census, amphibian, deer, and butterfly population studies.	Student/Community generated wildlife enhancement project.	Board game produced on endangered species.

Adopt-A-Watershed™ Curriculum Unit Matrix

Bold units have been completed.

Suggested Grade	Unit Title	Concept	Long-Term Field Study	Action Project	Community Education
8	Ecosystems and the Physical Environment	The physical environment affects living things.	Tree height/diameter and succession study, pH study on rain, soils, streams, and/or comparative ecosystem study.	Restore an ecosystem where a physical change is impacting the success of that ecosystem, such as providing shade for a stream channel that has lost its canopy cover.	Play production on acid rain.
	Water Cycle	The water cycle is a dynamic system which interacts with the land causing change.	Stream flow.	Help irrigators conserve water.	Attend public meetings on water use and/or help 4th grade complete brochure on water quantity problems and solutions.
	Aquatic Ecosystems	Species are maintained and changed through cellular structures and processes. A population's survival depends upon its adaptations to the environment.	Stream survey & water quality monitoring photo station.	Student/Community generated action project to help restore water quality.	Watershed art show.
High School	Matter and Energy	Matter and energy cycles through ecological systems.	Productivity studies. Tree height and diameter/succession study.	Restoration to increase productivity of an impacted system.	Research and presentation to community on best management practices for a specific ecosystem
	Water Quality	Water Quality: Chemistry, Biology, Language Arts, Math, Geography, and Earth Science.	Water quality monitoring.	Student/Community generated action project to help restore water quality.	Watershed congress for community and public officials with "State of the Watershed: Problems and Solutions" as subject.

Adopt-A-Watershed™ Curriculum Unit Matrix

Bold units have been completed.

Suggested Grade	Unit Title	Concept	Long-Term Field Study	Action Project	Community Education
High School	Watershed Physics	Force and energy interact with matter to produce change.	Individual projects in watershed geomorphology. Completion of soil erosion study.	Variable, dependent on long-term studies.	Watershed congress for community and public officials with "State of the Watershed: Problems and Solutions" as subject.
High School Ag. Science	Watershed Agriculture	Natural resource management and agriculture.	Stream channel profile.	Work with ranchers to find solutions to agricultural impacts and restore area impacted by agriculture; e.g., fencing a stream bank, placing fish screens on irrigation ditches, etc.	Work with ranchers to find solutions to agricultural impacts to watershed and produce slideshow on problems and solutions to present at watershed congress.
	Watershed Vegetation Management	The culture and management of vegetation with an emphasis on forestry and native plants.	Complete tree height/diameter and succession study Complete soil erosion study.	Help kindergarten students plant trees and begin succession study.	Learn about and participate in environmental assessment process including best management practices.
	Watershed Wildlife	Wildlife management.	Complete wildlife studies (amphibian study, bird survey and deer population study).	Students help children at younger grade levels complete their wildlife enhancement projects.	Students choose a wildlife management subject relevant to their watershed, research the subject, and develop a presentation on the subject to give to younger grade levels, at the watershed congress and campfire programs.



RED BLUFF JOINT UNION HIGH SCHOOL DISTRICT

P.O. BOX 1507 • 1525 DOUGLASS STREET • RED BLUFF, CALIFORNIA 96080-1507 • (530) 529-8700 • FAX (530) 529-8709

SUPERINTENDENT
Kathleen A. Wheeler

ASSISTANT SUPERINTENDENT
Wesley G. Combes

December 9, 1998

Kathy Klinestecker
Sacramento River Discovery Center
P. O. Box 1298
Red Bluff, CA 96080

Dear Kathy:

We wish to continue the ongoing partnership between Sacramento River Discovery Center and Red Bluff Joint Union High School District. You provide a valuable resource for our students, and we provide you with the following:

Cash for your discretionary use	\$ 3,000.00
Two periods of teacher time (Ben Hughes)	25,468.40
Technology support (estimate)	7,500.00
School supplies for classes	1,500.00
Total value	\$37,468.40

Please let me know if there is anything else (within reason) that we can do. Your check is being processed today.

Sincerely,

Wesley G. Combes
Assistant Superintendent

BOARD OF TRUSTEES

Vicky P. Dawley

Robert C. Grace

Daniel M. King, M.D.

Steven M. Mahoney

David R. Nichols

An Affirmative Action Employer Committed to Equal Treatment and Opportunity for All Employees and Students
(Title VI, Title IX, and Section 504 Vocational Rehabilitation)

Participants in the SRDC 1999

Watershed Celebration
as of 4-15-99

Name/Agency
Adopt-A-water.
Arrowhead Chipper
Amer. River WS
BOR
CDF
CDFG
Chico State Ag.
Coop. Ext.
CVPIA
Deer Creek WS
DWR
Fiddlers & Drum.
Fish Rite Marina
Food-Amer. Legion
Girl Scouts
Info. Team Enviro.
Lassen USFS
Lindauer Ranch
Nature Conserv.
PRBO
Red Bluff Emblem
Sac. River Trust
Sac. Wldlf. Refuge
Scotty's Charter
Search & Rescue
Shasta College NR
Shasta Dam
Shasta Miners
Shasta Native Pls.
Sierra Pacific Ind.
SRDC
TC Cattle women
Tehama Fly Fishers
Tehama Co. Sheriff
Mendecino USFS
USFWS
Water Ed. Found.
Monthly Total

California State University, Chico
Chico, California 95929-0425
Department of Geography and Planning
Watershed Projects
530-898-4083
Fax: 530-898-5781



Post-It® Fax Note	7871	Date	4/5/99
To	Cathy Kinesteker	From	Phil Stephens
No. Dept.		Co.	
Phone #	627-1312	Phone #	898-4051
Fax #		Fax #	

April 14, 1999

To Whom It May Concern,



The Butte Creek Watershed Education Project is pleased to offer its support for the CALFED proposal submitted by the Sacramento River Discovery Center. Our two organizations have collaborated to develop an implementation plan for an integrated, articulated K-12 education program for our region.

This sort of collaboration between education programs and watershed projects is essential. Public education is necessary for the long-term sustainability of CALFED goals and can only be accomplished by working together with watershed groups and state agencies.

The Sacramento River Discovery Center is an important hub for watershed studies in the North State. Teachers involved in the The Butte Creek Watershed Education Project have participated in the Adopt-A-Watershed trainings and student programs offered by the Center. When students visit the SRDC they are able to go beyond their own watershed to develop an understanding of the entire Sacramento River/Bay-Delta System. With support from CALFED the Sacramento River Discovery Center will be able to provide additional leadership opportunities for teams of teachers in the region. This type of leadership is essential to those of us in the smaller watersheds of the Sacramento River.

We strongly encourage your support of collaborative projects such as this one.

Sincerely,

Allen Harthorn
Project Manager
Butte Creek Watershed Education Project

Terrallen Island Station
In Cooperation with
U.S. Fish and Wildlife Service



Palomarin Field Station
Point Reyes Bird Observatory

April 13, 1999

To Whom It May Concern,

This a letter to express support of the Sacramento River Discovery Center's 1999 CalFed proposal. Through in-class and field training for both public school students and the general public, SRDC is working to build a strong base of community support for watershed restoration and conservation. Their programs cross age, economic, and cultural boundaries and interface with private, non-profit, and government agencies throughout the region. Working with SRDC, we at the Point Reyes Bird Observatory have become aware of the profoundly positive impact SRDC has on the community at all levels.

At the Discovery Center, students learn state-of-the art technical skills, scientific concepts, positive land ethics, and communication skills. Above all, they develop into empowered community members who will soon become tomorrow's land stewards. One visit to the high-energy atmosphere of the Discovery Center facility will convince anyone that conservation does indeed have a positive future. It is our hope that SRDC will thrive into the next millenium.

Sincerely,

Stacy Small
PRBO Staff Biologist

BUTTE COUNTY

OFFICE OF
EDUCATION

JERRY McGUIRE
SUPERINTENDENT

Program & Resource
Development

Educational Support
Services
1859 Bird Street
Oroville, CA 95965
Phone: (530) 538-7678
Fax: (530) 538-6739

Jerry Allred, PhD.
Director

Susan St. Germaine-Morger
Coordinator
Program & Grant
Development

Susan J. Thompson
Grants Manager

Yolanda Medina
Senior Secretary

Board of Education

*Bessie Hironimus
Barbara M. Johnson
Dr. Charles Larsen
Brenda J. McLaughlin
Robert W. Purvis
Pat Matthews Spear
Betty Vassar*

*An Equal Opportunity
Employer*

April 12, 1999

To Whom It May Concern:

The Butte County Office of Education is most pleased to support and endorse efforts by the Sacramento River Discovery Center to establish public information and education programs to promote the health of the Sacramento River Watershed.

This office knows well the essential quality and services provided by the Discovery Center. More than a treasure trove of information that supports the curriculum and instruction of K-12 students in Butte County and throughout the region, the Discovery Center has provided outstanding professional inservice sessions for our educators in many aspects of environmental education.

Water is proving to be California's richest natural resource. Public information and education about its wise use, its future, its primary role in life processes and economic and environmental health are essential elements that the Discovery Center helps provide. This service must be expanded for the well being of all aspects of life along the Sacramento River Watershed.

Butte County Office of Education will commit personnel and the capacity of its Program and Resource Development Division to participation in the planning and support processes for proposals the Discovery Center and its director, Cathy Klinesteker, may make.

We applaud this important effort and look forward to being full partners in their development and provisions of services.

Sincerely,



Jerry Allred, Ph.D.
Director, Program and Resource Development

\\Edison\public\Educational Support Services\Resource Development\Director\98-99\Letters\Discover Center support ltr.doc

"WHERE CHILDREN ARE OUR MOST VALUABLE RESOURCE"



United States
Department of
Agriculture

Forest
Service

Mendocino N.F.
Supervisor's Office

825 N. Humboldt Ave.
Willows, CA 95988
(530) 934-3316
(TTY) 530-934-7724

File Code: 1560

Date: April 12, 1999

To Whom It May Concern:

The Mendocino National Forest would like to express our support of Sacramento River Discovery Center's (SRDC) proposal for CALFED grant funding.

The Mendocino National Forest is responsible for the management of 488 acres of land adjacent to the Sacramento River and Lake Red Bluff. Management objectives for the area focus on enhancing and restoring riparian and oak woodland wildlife habitat that will maintain and improve species diversity and provide a forum for natural resource education and interpretive opportunities.

We are familiar with the SRDC's dedication to providing quality education programs and wildlife habitat restoration along the Sacramento River. Our mutual interest in the Lake Red Bluff area has resulted in several successful partnerships with SRDC which have provided natural resource conservation education programs for students as well as adults and contributed to increased public awareness of the balance between the river, its watershed and the community.

We look forward to future partnerships with the SRDC and a favorable response to your CALFED grant application.

Sincerely,



DANIEL K. CHISHOLM
Forest Supervisor



Caring for the Land and Serving People

Printed on Recycled Paper



I - 0 1 5 7 7 1

I-015771

DEPARTMENT OF FISH AND GAME

WILDLIFE CONSERVATION BOARD

1807 13TH STREET, SUITE 103
SACRAMENTO, CALIFORNIA 95814
(916) 445-8448
FAX (916) 323-0280



April 13, 1999

Mr. Lester Snow, Executive Director
CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, California 95814

Dear Mr. Snow:

Adopt-A-Watershed and Sacramento River Discovery Center CALFED Proposal

The Wildlife Conservation Board (WCB) has worked with the Sacramento River Discovery Center (Discovery Center) to develop a pond and over 13 acres of associated riparian and wetland habitat areas adjacent to the Sacramento River at the US Forest Service's Lake Red Bluff Recreation Area near Red Bluff. These activities are coordinated with educational programs about the varied habitats in a watershed. The Discovery Center initiated and coordinated the habitat planting in which 540 children planted 2,700 plants in one day and participated in a variety of watershed educational programs about plants and habitat. This event was indicative of the kinds of programs that have demonstrated the effectiveness of the Discovery Center to involve the community in education and restoration efforts.

The subject CALFED proposal is the logical next step in developing a model for watershed restoration, education, and long-term connection to the land and the river for educational groups and the general public. The Discovery Center has demonstrated its ability to pull together diverse groups of people to best achieve this kind of effort. It has the foundation of the programs in place and is poised to provide a model for replication throughout the watershed.

The WCB supports the efforts and goals of the Discovery Center to develop an educated populace that understands, appreciates, and wisely manages watersheds, and I encourage your support of this proposal.

Sincerely,

COPY ORIGINAL SIGNED BY

W. John Schmidt
Executive Director

✓ cc: Cathy Klinesteker, Sacramento River Discovery Center, P.O. Box 1298, Red Bluff, CA 96080



Sacramento River Project
1074 East Avenue, Suite F
Cairo, California 95926

International Headquarters
Arlington, Virginia

TEL 530.897-6370
FAX 530.342-0257

April 14, 1999

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

Dear Mr. Snow,

This is a letter of support of the Sacramento River Discovery Center 1999 CALFED proposal. This project is a critical component to developing a broader understanding of natural resource conservation issues throughout the Sacramento River Watershed.

The SRDC proposal encourages active participation in conservation activities directly related to the goals of CALFED. The Nature Conservancy has worked with the SRDC to promote education and outreach of the Sacramento River Project. I am impressed with the amount of hands-on experience and community involvement SRDC provides in their K-12 conservation activities.

The work of the Sacramento Discovery Center complements the work of other organizations, institutions and agencies working on land protection and conservation in the Sacramento Valley. The SRDC's proven ability to raise environmental awareness in the Sacramento Valley at the individual and the community level enhances TNC's and others' organizational effectiveness.

I urge you to support this proposal to increase public awareness and appreciation of the resources of the Sacramento River. Thank you for your time and consideration.

Sincerely,

Sam Lawson
Sacramento River Project Director

.....

105 Darlington Ave
Auburn, CA 95603
530-895-1537 (H)
hthickman@placer-pubshd.k12.ca.us
Pointing at the moon is not the moon

American River Watershed Institute

April 14, 1999

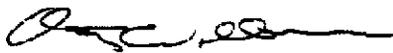
To CALFED Category 3 Selections Committee:

The American River Watershed Institute (ARWI) is a new, educational nonprofit created by the American River Watershed Group, a successful collaboration of agencies, companies, nonprofits and citizens focused on healthy forests, quality water, sustainable economics and education. The mission of the ARWI includes creating the "Learning Watershed" with inclusion of stakeholders of all ages belonging to all institutions in the larger community. The Learning Watershed knits together existing research-based educational programs and fills voids between them.

ARWI recognizes existing programs; the Sacramento River Discovery Center (SRDC) located in Red Bluff is exemplary in every regard. Cathy Klinesteker and her team have created a wonderful confluence of tributary organizations and programs on the main stem of the Sacramento River. The SRDC is a lighthouse organization to our efforts.

ARWI is proposing in our grant application to replicate the collaborative nature of the SRDC by linking within the American River watershed and extending this linkage to the Main Stem Sacramento River at a major confluence in Red Bluff. We encourage your support of the SRDC proposal to look beyond their reach of the river to their linkages, and ultimately outward with ours. It is the combined vision of the ARWI and the SRDC to view our natural, physical and human resources as seamless and interconnected.

Sincerely



Otis Wollan
President
American River Watershed Institute





RED BLUFF JOINT UNION HIGH SCHOOL DISTRICT

P.O. BOX 1507 • 1525 DOUGLASS STREET • RED BLUFF, CALIFORNIA 96080-1507 • (530) 529-8700 • FAX (530) 529-8709

SUPERINTENDENT
Kathleen A. Wheeler

ASSISTANT SUPERINTENDENT
Wesley G. Combes

April 9, 1999

To Whom It May Concern:

Red Bluff Joint Union High School District has a long-standing relationship with the Sacramento River Discovery Center. Our students participate in programs there and form the majority of students for the Discovery Center Natural Resource Academy. We support the goals and programs of the Discovery Center.

The current proposal to CALFED provides a good opportunity to develop this fledgling program into a local and regional model to support watershed education. The curriculum, materials, and methodologies support current emphasis in education for all students to reach measurable standards of competency by participation in meaningful, integrated, real-world experiences. Additionally, using the watershed as a focus for learning about systems in nature and engaging in community service is critical to the development of effective adults. The Discovery Center is providing this kind of experience for students and we encourage your support of this proposal.

Sincerely,

Wesley G. Combes
Assistant Superintendent

WGC:lb

BOARD OF TRUSTEES

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Steven M. Mahoney

Jack Hansen

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(Title VI, Title IX, and Section 504 Vocational Rehabilitation)

1 - 0 1 5 7 7 5

I-015775



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Northern Central Valley Fish and Wildlife Office
10950 Tyler Road
Red Bluff, California 96080
Office (530) 527-3043 Fax (530) 529-0292

April 7, 1999

CALFED Bay-Delta Program Office

To Whom It May Concern:

The Northern Central Valley Fish and Wildlife Office supports the work of the Sacramento River Discovery Center and encourages you to provide funding for this project. The Fish and Wildlife Service has been actively involved with the Discovery Center and feels that the Discovery Center serves as a vital interconnecting point between the natural habitats and people activities along the Sacramento River. The Discovery Center is a place where people can learn about how their role and the role of the environment is critical to maintaining a balanced Sacramento River watershed system. Because its connection to a unique blend of diverse interests groups and people, the Discovery Center will continue to be a leader in developing partnerships for understanding and the balanced management of the river and its resources.

Your support of this proposal is encouraged.

Sincerely,

James G. Smith
Project Leader

Harley North
Superintendent

Mark Klinesteker
K-4 Principal

Mike Leonard
5-8 Principal



19415 Hooker Creek Road
Cottonwood, CA 96022-9649
530-347-3428
530-527-1814
Fax: 530-347-4639

April 5, 1999

To Whom It May Concern:

This is a letter of support for the Sacramento River Discovery Center's proposal to Cal-Fed. The Evergreen Union School District has worked very closely with the Sacramento River Discovery Center and Cathy Klinesteker since its inception. We are in full agreement and support of the proposed program.

The possibility of using science and other subject matter standards and transferring those into the outdoors and the real life world of a watershed is not only attractive but also an extremely educationally sound proposition.

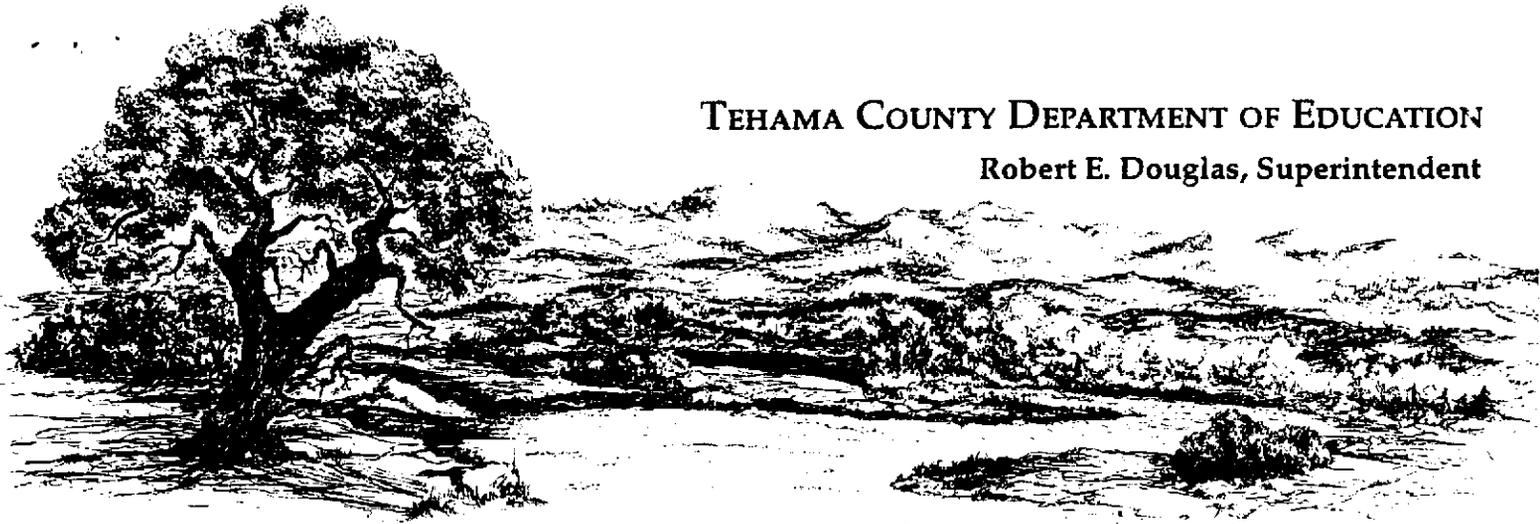
Sincerely,

Harley J. North
Superintendent

HJN:ml

TEHAMA COUNTY DEPARTMENT OF EDUCATION

Robert E. Douglas, Superintendent



1135 Lincoln Street • P.O. Box 689 • Red Bluff, CA 96080 • (530) 527-5811 • FAX (530) 529-4120

April 12, 1999

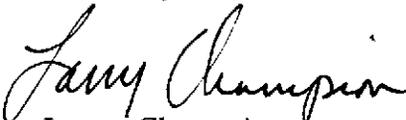
Re: Sacramento River Discovery Center
CALFED Proposal

To Whom It May Concern:

The Tehama County Department of Education has long been involved with the Sacramento Discovery Center. We have worked closely with the Discovery Center, through many avenues, and have received enriching experience, training, and service to the students of our County.

We feel this CALFED project will be another tool by which our students will be able to connect with their watershed through extensive activities and a broad-based curriculum. We, therefore, support this proposal.

Sincerely,


Larry Champion
Associate Superintendent

LC:cr

UNIVERSITY OF CALIFORNIA, DAVIS

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SANTA BARBARA • SANTA CRUZ

(707) 875-2211
FAX: (707) 875-2086
INTERNET: UCDBML@UCDAVIS.EDU

BODEGA MARINE LABORATORY
P.O. BOX 247
BODEGA BAY, CALIFORNIA 94623

12 April 1999

To Whom It may Concern:

The University of California Bodega Marine Laboratory (BML) supports the development of the Sacramento River Discovery Center. The SRDC program and goals support community and agency interests in restoring river habitat and educating society on the values of biodiversity. SRDC, through its public education mission, does an excellent job in addressing the role of salmon in ecosystem function. The Discovery Center has an impressive track record in presenting the complicated issues that reduce the tension between agriculture and fisheries. This is an enormously important public service.

BML, together with the California Academy of Sciences, conducts research and public education projects that are complementary to SRDC activities. Our work focuses on the linkage between inland and ocean resources. The SRDC provides a critical component in educating the Central Valley community about salmon and sustainable resource issues. We have collaborated with the SRDC in developing lectures and workshop materials and will continue to do so in the future.

We are familiar with the current SRDC CALFED proposal and recognize the need for the in-depth, well-articulated program to better inform the community on natural resource issues. We encourage your support of this proposal.

Please do not hesitate to contact me if I can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul Siri".

Paul Siri

pasiri@ucdavis.edu

Associate Director



United States Department of the Interior

NATIONAL PARK SERVICE
Lassen Volcanic National Park
Post Office Box 100
Mineral, California 96063-0100

IN REPLY REFER TO:

K1815 (LAVO)

April 8, 1999

To Whom It May Concern:

The Sacramento River Discovery Center (SRDC) has been a wonderful education resource for the people of the northern Sacramento Valley. The Discovery Center's programs and initiatives have contributed greatly to the education of the public regarding water resources. Lassen Volcanic National Park's education programs are closely linked with the SRDC.

Lassen Volcanic National Park and the Discovery Center work together as partners in educational initiatives that further the public's awareness and understanding of the natural resources of the North State. Lassen's educational partnership with the SRDC involves working with schools throughout Tehama County in grades kindergarten through 12. The park is an important headwaters for major watersheds feeding the Sacramento River; many of the schools that visit the SRDC visit Lassen. The interconnection of our two education programs provide a natural link in the educational goals of both Lassen Volcanic National Park and the Sacramento River Discovery Center.

The SRDC Natural Resource Academy Program with high school students is another example of our close working relationship. Many of the park's Interpretive Interns also work with the Discovery Center and many are students from Tehama County high schools. SRDC's Cathy Klinestecker and Lassen's Education Specialist Steve Zachary have worked together to develop a model program for high school students interested in Natural Resource education.

The Sacramento River Discovery Center is an important educational resource and a valued partner in accomplishing the goals of watershed education and conservation. We look forward to continuing our work together in the interest of all.

Sincerely,

Karen J. Haner
Chief of Interpretation and Cultural Resources Management



April 13, 1999

To Whom It may Concern:

This letter is written in support of The Sacramento River Discovery Center CALFED proposal to support watershed education in their region. Adopt-A-Watershed has worked closely with the Sacramento River Discovery Center for many years. The partnership has made it possible to provide a comprehensive watershed education curriculum in combination with a coordinated, focused, and in-depth field experience at the Sacramento River Discovery Center site.

The project proposed by the Discovery Center compliments and strengthens the proposal submitted by Adopt-A-Watershed and provides a strong educational model for replication elsewhere.

I have been impressed over the years at how the Sacramento River Discovery Center has grown and thrived, providing high quality and diverse programs focused on the needs of the Sacramento River watershed for K-12 students. Sacramento River Discovery Center makes it possible for children to take an active role in protecting and restoring the Bay Delta watershed. Support of this proposal will have a ripple effect by educating children whose responsibility it will be to care for Bay Delta system for generations to come.

We strongly encourage your support of this proposal.

Sincerely,

A handwritten signature in black ink, appearing to read "Kim Stokely". The signature is fluid and cursive, written over the printed name.

Kim Stokely
Executive Director

P.O. BOX 1850, 78 CLINIC AVE., SUITE B, HAYFORK, CA 96041
(530) 628-6334 FAX: (530) 628-4212 e-mail: aaw@Adopt-A-Watershed.org www.Adopt-A-Watershed.org

DEPARTMENT OF WATER RESOURCES

NORTHERN DISTRICT
2440 MAIN STREET
RED BLUFF, CA 96080-2398



April 15, 1999

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

Dear Mr. Snow:

I wish to submit this letter in support of the grant application being submitted by the Sacramento River Discovery Center during the current round of the CALFED Proposal Solicitation process.

This grant will provide funding to connect students to the watersheds, using actual in-the field-experiences and existing school board approved curriculum from Adopt-a-Watershed and the Water Education Foundation, as examples. There will be active participation from state and Federal agencies, the agricultural community, local watershed groups, and other community partners. Staff from this office are involved with the Center as technical advisors and as volunteers.

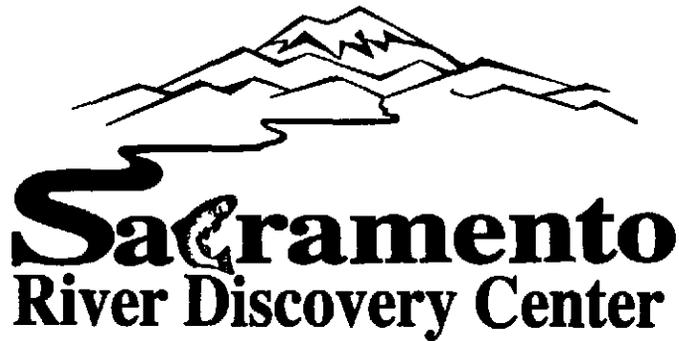
The Discovery Center provides an invaluable resource in this community by providing watershed stewardship educational opportunities to thousands of young people on an annual basis. The Center staff are a group of dedicated educators, well respected in both the local and regional communities and are coordinating with several other groups to share resources throughout the Sacramento Valley.

I support the Discovery Center's proposal to provide the resources to move forward in educating our youth. If you have any questions, please call me at (530) 529-7342.

Sincerely,

A handwritten signature in black ink that reads "Naser Bateni".

Naser J. Bateni, Chief
Northern District



Cathy Klinesteker
Executive Director

P.O. Box 1298
Red Bluff, CA 96080

Phone: (530) 527-1196

Fax: (530) 527-1312

E-Mail: cklinest@tehama.k12.ca.us

Web Page: <http://www.srdc.tehama.k12.ca.us>

CATHY KLINESTEKER

Professional Vita

EDUCATION

California State University, Sacramento, MA, Curriculum Development,
1991; Educational Administration Credential, 1989
Biology and General Science Single Subject Credential, 1986
University of California, Davis; Multiple Subject Credential, 1977; B.S.,
Environmental Communication, 1976.

CURRENT PROFESSIONAL COMMITMENTS

Executive Director, Sacramento River Discovery Center

Franklin/Covey 7 Habits facilitator

Project WET facilitator

Project Learning Tree facilitator

Educational Consultant

PREVIOUS PROFESSIONAL COMMITMENTS

Consultant, National Parks as Classrooms

Regional Staff Development in Science, Math, Interdisciplinary Curricula,
Cognitive Coaching, Grant Writing, and Site Level Planning in K-12
Schools in the nine counties of Northeastern California.

Special Projects Director, Red Bluff Union High School.

Principle Investigator, Science In Rural California, regional staff development project for teachers including training in effective teaching strategies and management and implementation of hands-on science.

Project Director, Science In Rural California, 10 years working with this National Science Foundation project; responsible for all aspects of administration.

Adopt A Stream Project Director. Included grant writing, project planning and implementation, and establishing partnerships with local government agencies and citizen's groups to introduce the study of watersheds into the curricula of local schools.

California Science Teacher's Association, regional conference steering committee.

Teacher, Evergreen and Los Molinos Elementary Schools and Red Bluff High School.

AWARDS AND CREATIVE ACTIVITIES

Founder's Award, Sacramento River Preservation Trust, for extraordinary efforts in helping to preserve the natural values of the Sacramento River

Project Wild & Project Wild Aquatic training

California Department of Education State Finalist for Outstanding Leadership in Science Supervision

Outdoor Biology Instructional Strategies staff developer

NASA/Learning Magazine Curriculum Development Award

Charter Member, Tehama County AWARE Project. County teachers and administrators working on *Natural Resource training and materials*.

Kids in Careers, Educational Initiatives Grant. Established partnerships with *community professionals in which they hosted teams of students who completed classroom assignments to prepare them to serve as trained interns in the field for a week*.

Salmon, From Eggs to Ocean. Salmon Stamp grant supported purchase of a refrigerated aquarium to study, raise salmon, release them into the local watershed, and then set up a tide pool environment in the aquarium the last half of the year while students studied the local watershed/ocean connection. This study culminated with a four day trip to Monterey.

Adopt A Stream project with 12 schools. Salmon Stamp funding supported the dissemination of the Salmon rearing project into 12 additional schools in the region.

Teacher Training Conference, Monterey Field Trip. Field training for teachers to duplicate the Monterey Field Trip with their students. Materials developed for this training have been incorporated into the Monterey Bay Aquarium Educational Packet for teachers, the Asilomar State Beach tide pool activities packet, and the Point Lobos State Reserve teacher's preparation guide.

Pacific Bell Support for regional electronic bulletin board for teachers.

California Science Teacher's Association journal article on the SIRC Project.

Adopt A Stream article in *The Flyfisher*, the national magazine of the Federation of Fly Fishers.

Christa McAuliffe Fellowship for working with students to restore a native wetland/pond adjacent to Evergreen School.

Association for Supervision and Curriculum Development, presenter at the National Conference on assessment of higher level cognitive activities in students in the SIRC Project as a result of their work in hands-on science.

National Science Foundation grant to support the SIRC project for three years in Northeastern California.

Consultant, California Department of Education, California Learning Assessment System writing open ended science assessment items and development of embedded assessment model activities.