Attachment H

Proposal # 2001- I202 (Office Use Only)

PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: Estuary Action Challenge Environmental Education Project
Applicant Name: Earth Island Institute/Estuary Action Challenge
Contact Name: Mandi Billinge
Mailing Address: 5534 Arlington Boulevard, Richmond, CA 94805
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Email: mandij4@aol.com

Amount of funding requested: $50,000

Some entities charge different costs dependent on the source of the funds. If it is different for state or federal funds list below.

State cost _____ Federal cost _____

Cost share partners? x **Yes** ___ **No**

Identify partners and amount contributed by each Sierra Club, $30,000
Goldman Fund, $20,000

Indicate the Topic for which you are applying (check only one box).

- ☐ Natural Flow Regimes
- ☐ Nonnative Invasive Species
- ☐ Channel Dynamics/Sediment Transport
- ☐ Flood Management
- ☐ Shallow Water Tidal/ Marsh Habitat
- ☐ Contaminants
- ☐ Beyond the Riparian Corridor
- ☐ Local Watershed Stewardship
- ☒ Environmental Education
- ☐ Special Status Species Surveys and Studies
- ☐ Fishery Monitoring, Assessment and Research
- ☐ Fish Screens

What county or counties is the project located in? Alameda and Contra Costa Counties, CA

What CALFED ecozone is the project located in? See attached list and indicate number. Be as specific as possible Ecozone Two -San Francisco Bay

Indicate the type of applicant (check only one box):

- ☐ State agency
- ☐ Public/Non-profit joint venture
- ☐ Local government/district
- ☐ University
- ☐ Other: _____
- ☐ Federal agency
- ☒ Non-profit
- ☐ Tribes
- ☐ Private party

Indicate the primary species which the proposal addresses (check all that apply):

- ☐ San Joaquin and East-side Delta tributaries fall-run chinook salmon
- ☐ Winter-run chinook salmon
- ☐ Spring-run chinook salmon
- ☐ Late-fall run chinook salmon
- ☐ Fall-run chinook salmon
- ☐ Delta smelt
- ☐ Longfin smelt
- ☐ Splittail
- ☒ Steelhead trout
- ☐ Green sturgeon
- ☐ Striped bass
- ☐ White Sturgeon
- ☐ All chinook species
- ☐ Waterfowl and Shorebirds
- ☐ All anadromous salmonids
- ☒ Migratory birds
- ☐ American shad
- ☐ Other listed T/E species: Native plants, tree frogs

Indicate the type of project (check only one box):

- ☐ Research/Monitoring
- ☐ Watershed Planning
- ☐ Pilot/Demo Project
- ☒ Education
- ☐ Full-scale Implementation

Is this a next-phase of an ongoing project? Yes x No____

Have you received funding from CALFED before? Yes x No____

If yes, list project title and CALFED number Estuary Action Challenge Environmental Education 00FC20014

Have you received funding from CVPIA before? Yes ____ No X

If yes, list CVPIA program providing funding, project title and CVPIA number (if applicable):

By signing below, the applicant declares the following:

- The truthfulness of all representations in their proposal;
- 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
- 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.

John A. Knox

Printed name of applicant

Signature of applicant

ESTUARY ACTION CHALLENGE

Estuary Action Challenge inspires children to connect with the world around them and help restore a healthier environment. We are committed to education through action and diversity.

B. Executive Summary

Estuary Action Challenge Environmental Education Project

$50,000 requested from CALFED Bay-Delta to expand environmental education programs.

Contact Information:
Mandi Billinge, Estuary Action Challenge, Executive Director
6534 Arlington Boulevard, Richmond, CA 94805, Phone/Fax: (510) 235-3785
E-mail: mandij4@aol.com, Web Site: www.earthisland.org/eac

Participants: 105 elementary school teachers and 2,500 elementary school students, 75% low-income, children of color.
Collaborators: West Contra Costa County School District, Berkeley Unified School District, Oakland Unified School District, East Bay Municipal Utility District (Restoration/Outreach Program), East Bay Regional Park District (Local Park Supervisors), Alameda County Clean Water, Contra Costa County Clean Water.

Summary Description: Estuary Action Challenge (EAC) is the environmental education project of Earth Island Institute, founded in 1992, focusing on the San Francisco Bay Estuary. EAC works with elementary school teachers and students to explore, clean-up and restore creek and bay habitats, reduce urban runoff pollution and address issues of water quality and safe bay food consumption. Students in EAC programs:

- plant trees and wildflowers along urban creeks,
- organize community creek and bay habitat clean-ups,
- raise tree frogs in classrooms to release back into creek homes,
- design and distribute creative outreach materials to inform school communities about reducing urban runoff pollution,
- express concerns about estuary pollution issues using letter writing campaigns, interviews with politicians and play performances,
- interview people fishing on bay piers about safe bay food consumption and distribute informational flyers in seven different languages,
- demonstrate safe bay fish cooking to families at school-community events and teach safety precautions that reduce health risks.

Programs will take place in Richmond, San Pablo, Oakland and Berkeley in the East San Francisco Bay Area, focusing on urban creek and bay habitats.

EAC provides long-term, in-depth support for teachers and the opportunity for teachers to learn alongside their students. EAC trains teachers to continue teaching programs by modeling lessons with each class, providing curriculum guides and equipment packages.

Hypothesis Being Tested: Effective environmental education leads directly to active involvement with estuary habitat conservation projects, increased appreciation for estuary resources and increased understanding of restoration activities.

Expected Outcome: The goal of EAC in environmental education, is to focus on education through action, including restoration, pollution reduction and community outreach. We work to empower students to become part of the solution to environmental problems. We are committed to diversity and environmental justice in our work.

Applicability To CALFED Environmental Education Goals: The EAC project will increase public awareness, knowledge, understanding and appreciation of natural resources and increase active participation in ecosystem restoration activities, pollution reduction and safe bay food consumption activities and issues.

C. Project Description

1. Statement of the problem

a. Problem

Problem 1. Degraded urban creeks, used as trash dumping sites, overgrown with invasive plants and lacking native plants and animals.
Objective: Adopt, clean-up and restore urban creek habitats.
Solutions: The local community becomes committed to protecting and restoring their local creek.

Problem 2. Non-point source pollution runoff from streets, farms and gardens and direct dumping into storm drains is a major source of pollution entering the estuary.
Objective: Increase public awareness of methods to reduce urban runoff pollution to the estuary.
Solutions: Citizens are educated to stop dumping into storm drains and to reduce pollutants leaching into ground water, to reduce this major source of pollution to the estuary.

Problem 3. Many families fishing from the San Francisco Bay depend on the food caught as a major part of their diet, but fish and shell fish in the S.F. Bay are contaminated with pollutants including: methylmercury, polychlorinated biphenyls, dioxins and pesticides. Consumption of these pollutants increases the risk of neurotoxicity and cancer, especially in children. Over 70% of people fishing from the San Francisco Bay and eating the food are people of color. For many, English is not their first spoken language and bay food health warning information, already limited in scope, is not easily accessible. Another source of contaminated fish is local fish markets which often sell fish caught in the bay. Student participants in the EAC Pollution Reduction/Safe Bay Food Consumption program are over 90% children of color, whose families fish from the bay and shop at local fish markets.
Objective: Increase the number of people aware of bay pollution issues and using safe bay food consumption practices to reduce intake of toxins and improve community health.
Solutions: Increased public awareness of pollution issues and safe bay food consumption practices.

Problem 4. Teacher training workshops in environmental education are difficult to implement in the classroom, 95% of elementary school teachers interviewed have told EAC staff.
Objective: Increase the number of teachers using local bay and creek habitats as key educational resources to empower students to help solve bay-delta estuary environmental problems.
Solutions: Teachers trained using the unique EAC model continue teaching programs year after year with each new class of students. They use knowledge of teaching strategies learned in their hands-on, site-based training, EAC curriculum guides, equipment provided, and connections with resource people made through EAC.

> "I have been in several workshops where educators train the teachers to then go teach our students without direct support. Somehow it never translates into the classroom experience. Working with Estuary Action Challenge has allowed me to teach with terrific teachers while learning along with my students. Therefore the experience is easy to repeat, extend and enrich."
> Sharon Strachan, Fifth Grade Teacher, Thousand Oaks School, Berkeley

b. Conceptual Model

Urban Creek Restoration Program
EAC partners with third grade teachers and students to adopt urban creeks within walking distance of targeted schools. In 8 two-hour EAC lessons and four planning meetings,

teachers learn to teach hands-on ecology lessons focusing on the plant and animal life of the local creek. Teachers and students work with EAC staff to plan and implement creek clean-up, pollution reduction and restoration projects for their local creeks, including:

- planting trees and wildflowers along creeks,
- organizing community creek clean-up projects,
- raising tree frogs in classrooms to release back into creek homes,
- designing and distributing creative outreach materials to inform peer classes and student's communities about reducing urban runoff pollution..

These projects are coordinated with local agencies managing urban creek habitats. These include: East Bay Regional Park District Supervisors, East Bay Municipal Utility District Ranger-Naturalists, City Clean Water Program Coordinators. EAC has ongoing relationships with these groups. Collaborating with these organizations ensures project success.

School-Wide Creek Restoration Program

EAC works with every class and grade level, in target schools, to implement a kindergarten through fifth grade creek curriculum. Students, teachers and parents work with EAC in a school-wide effort to study, clean-up and restore the adopted creek habitat. In 2001 we will expand this program at John Muir School, adopting Harwood Creek in Berkeley and begin a new program at Verde School, adopting Wildcat Creek in Richmond.

Pollution Reduction/Safe Bay Food Consumption Program

EAC partners with fourth grade teachers and students to study bay-delta issues that particularly affect communities of color in the San Francisco Bay Area. In seven two-hour EAC lessons and four planning meetings, teachers and students learn about the unique physical, biological and geographical features of the estuary. They study problems of urban runoff pollution, industrial pollution, pesticide runoff and how toxins accumulate in bay estuary food chains. In action projects, students:

- organize neighborhood storm drain clean-up projects,
- teach peer classes about reducing urban runoff pollution problems,
- express concerns about industrial pollution issues using letter writing campaigns, interviews with politicians and play performances,
- interview people fishing on bay piers about safe bay food consumption and distribute informational flyers in seven different languages,
- demonstrate safe bay fish cooking to families at school-community events and teach the safety precautions that reduce health risks.

Creek And Bay Field Trip Exploration Program

EAC partners with kindergarten - fifth grade classes to lead one day field trips at creek and bay habitats. Students and teachers study the physical and biological properties of the particular habitat and learn about conservation issues affecting the ecosystem. EAC provides a field trip preparation and follow-up activity package.

Bay Estuary Scientist Program

EAC partners with kindergarten -fifth grade classes to study the features of the bay estuary in three-hour classroom workshops. Students and teachers are engaged in hands-on science activities and learn about bay conservation issues. EAC provides a workshop preparation and follow-up activity package.

Community Creek Clean-Up Program

EAC partners with teachers, students, their families and the City Of San Pablo Clean Water Program, to organize a community clean-up for Wildcat Creek which flows through Davis Park in San Pablo.

c. Hypothesis Being Tested
Effective environmental education leads to active involvement with estuary habitat conservation projects, increased appreciation for estuary resources and increased understanding of restoration activities. The data needed to test this hypothesis is: the number of EAC participants and their level of active participation and verbal and written information from participants showing evidence of increased appreciation and understanding of estuary resources and restoration activities. The Estuary Action Challenge project addresses CALFED environmental education goals. The proposed work will improve knowledge of the efficacy of the education through action approach to environmental education, by demonstrating that a focus on problem solving, active participation in restoration and pollution reduction activities leads to a high level of community commitment to protect and restore local, estuary resources.

d. Adaptive Management
Estuary Action Challenge works to create effective, on-going environmental education programs in target schools. Our approach, perfected through eight years of experience, is to:

- promote active, hands-on restoration and stewardship of local habitats
- provide long-term, in-depth, experiential training for teachers
- partner with strong teams of teachers and the school principal
- involve parents
- collaborate with ongoing efforts of local agencies.

The EAC approach is education through action. The students learn about environmental issues and are given the tools and skills needed to problem solve and take action. They adopt local habitats, for example an urban creek near their school, and help to clean-up and restore them. They work on issues that impact their daily lives, for example pollution, environmental justice and safe bay food consumption. In EAC programs, students connect with the world around them and are empowered to help restore a healthier environment.

The EAC model of working directly with teachers and students works because it provides in-depth support and hands-on training for teachers. An EAC Leader works with each class throughout the school year, for eight two-hour sessions, modeling activities and developing projects. Sessions are spread out to allow teachers time for extensive follow-up activities with students. Teachers also have four planning meetings with the EAC Leader. Once trained in EAC, teachers continue programs year after year, using the activities they have learned, our curriculum guide, educational resources and equipment. In the year following their training, teachers meet with EAC staff to plan the implementation of the programs they have learned. EAC provides any additional resources needed and observes some lessons for each teacher, to give feedback and support. In April, past teachers come together for an EAC sharing of the work they have completed with their students.

EAC staff meet with school principals at target schools to discuss the level of commitment to the proposed program. When a principal is excited about having an EAC program become an on-going, important feature of the school curriculum, we identify ways in which she will support the participation of her teachers. EAC targets teams of teachers at schools with principal buy-in. Teachers in the teams created support one another and share resources.

Parent involvement and support helps ensure success of student's EAC action projects. The students invite their families to participate in special educational events about pollution reduction and safe bay food consumption, to come on field trip and to help with restoration projects. Parents become excited about EAC programs and help ensure that they continue.

EAC collaborates with local agencies, for example City Clean Water Programs, Regional Park Supervisors and Watershed Land Managers, to involve students in ongoing restoration efforts. This increases community involvement and helps to ensure project success.

e. Educational Objectives

EAC programs will increase understanding of CALFED goal 4. - to protect or restore functional habitat types throughout the watershed for public values, by actively involving communities in restoration activities. EAC programs will increase understanding of CALFED goal 6. - to improve and maintain water and sediment quality to eliminate toxic impacts on organisms in the system, including humans, by actively involving communities in pollution reduction and safe bay food consumption activities and issues.

From October 2000 - June 2001, EAC will work with 105 teachers and 2,500 students in the programs described. 75% of students are children of color from low-income, urban schools.

EAC programs primarily focus on hands-on activities in the classroom and the field, including scientific investigation, restoration and community outreach, all implemented by the students themselves. We also incorporate literature, videos and public events. Our curriculum guides have been developed over eight years of field testing with feed back from teachers, students and other experts. The EAC program model provides the unique opportunity for teachers to learn alongside their students.

Our students lead presentations for their families at special community events where students teach their families what they have learned in EAC programs. Student presentations are very creative! They demonstrate experiments, lead educational games, perform rap songs, dances and plays to teach the concepts that they have learned.

EAC evaluates what students have learned from portfolios of student's work, success of action projects implemented and quality and content of information presented at community outreach events. We evaluate the number of teachers to continue teaching EAC programs as a result of their hands-on training. EAC staff follow up with teachers for one year after their training, helping them to plan their program, observing and giving feedback on the lessons taught and bringing teachers together to share successes and problem solve.

2. Proposed Scope of Work

a. Location and/or Geographic Boundaries of the Project

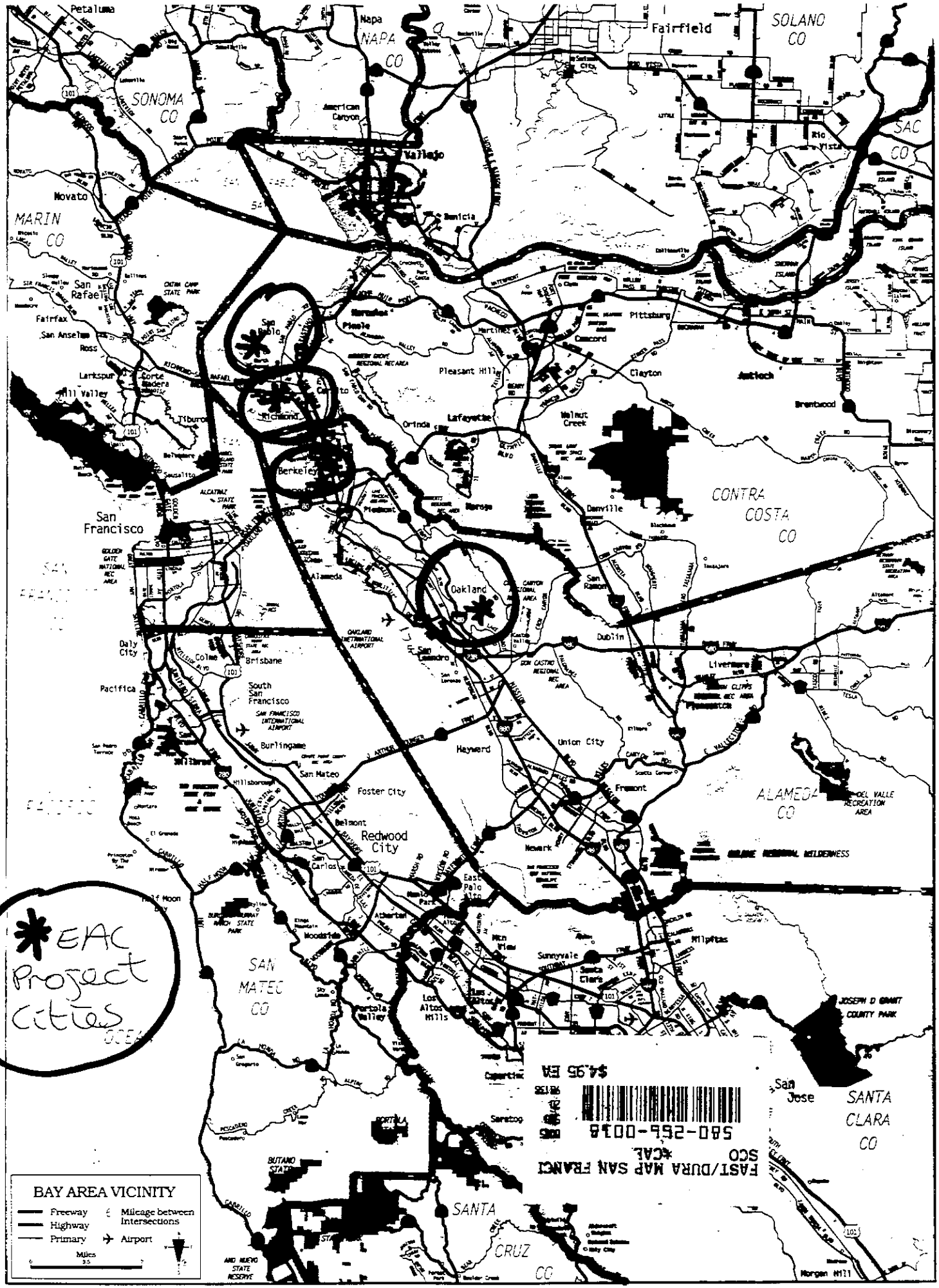
The project will take place in Ecozone Two, San Francisco Bay. EAC partner schools are located in Richmond and San Pablo in Contra Costa County and Oakland and Berkeley in Alameda County. Adopted creek habitats are Wildcat Creek in Richmond and San Pablo, Strawberry Creek and Harwood Creek in Berkeley and Sausal Creek in Oakland. Adopted bay habitats are Arrowhead Marsh in Oakland and Shorebird Park in Berkeley, near Berkeley Marina.

b. Approach

Objective: Increase the number of teachers using local bay and creek habitats as key educational resources to empower students to help solve bay-delta estuary environmental problems.

Methods: EAC works directly with teachers and students in the classroom and in the field, to implement programs. This approach provides the unique opportunity for teachers to learn alongside their students and ensures that teachers are fully trained to continue teaching programs.

Data Collection: Evaluate programs for each teacher and class of students participating using written evaluation forms and meetings to assess program quality and durability.



*EAC Project Cities

FAST/DURA MAP SAN FRANCI
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$4.95 EA

Survey teachers to evaluate the number of teachers participating in EAC programs continuing to teach programs as a result of the training they have received.

Objective: Adopt, clean-up and restore urban creek habitats.
Methods: EAC students work with local agencies and restoration efforts to grow native trees and wildflowers and plant them beside creeks, organize community creek clean-up projects and raise and release tree frogs into their native creek habitats.
Data Collection: Compare adopted creek habitats before and after projects.

Objective: Increase public awareness of methods to reduce urban runoff pollution to the estuary.
Methods: EAC students conduct school neighborhood surveys and record evidence of pollutants that can drain into creeks and the bay. Students learn about the effects of these urban runoff pollutants on the estuary ecosystem and its food chains. They plan creek and neighborhood clean-ups and educational projects to teach others about personal actions that reduce urban runoff pollution. These include: not dumping in storm drains, fixing leaks from cars immediately, reducing use of cars and using alternative transportation, properly disposing of garbage and recycling. Students plan projects by brainstorming possibilities, selecting practical projects and working in planning groups. Student projects include:

- school-wide assemblies including plays, slide shows and presentations,
- displaying educational posters,
- making T-Shirts with anti-pollution logos.

EAC also teaches about the sources and affects of pesticide runoff to the estuary. Students learn alternatives to using pesticides in their gardens and the benefits of buying organic and pesticide free produce from local farmer's markets.
Data Collection: Student's work portfolios. Responses to outreach efforts.

Objective: Increase the number of people aware of bay pollution issues and using safe bay food consumption practices to reduce intake of toxins and improve community health.
Methods: EAC teaches about the impact of industrial pollution on the bay ecosystem. Students interview local politicians about reducing bay pollution and write letters to factory/refinery owners and politicians expressing their concerns about bay pollution and environmental health. EAC teaches about the health risks associated with bay food and the safety precautions that reduce those risks. A safe bay fish cooking demonstration, games about biomagnification of pollutants in the food chain and informational flyers in seven different languages are some of the teaching tools used. Students invite their families to their classrooms and present safe bay fish cooking demonstrations, translating into the languages of the community. Students make informational flyers to distribute and interview people fishing on local bay piers about safe fishing and cooking practices using their bilingual skills to provide information.
Data Collection: Student's work portfolios. Responses to outreach efforts.

Equipment used includes: Educational materials: maps, posters, microscopes, dip nets, fish and crabs, steam cookers, videos, books, art supplies.
Restoration materials: plant pots, trowels, watering cans, shovels, seeds, garbage bags, gloves, aquariums.

Facilities: EAC programs will take place on site at partner schools, in creek and bay habitats and at the EAC offices.

Criteria used in hypothesis testing: The number of students, teachers and parents directly participating in habitat conservation programs. The increase in understanding of the estuary issues taught.

c. Monitoring and Assessment Plans
CALFED goal 4. - to protect or restore functional habitat types throughout the watershed for public values.
Evaluation: Assess the level of active participation in habitat restoration projects among our program participants.
CALFED goal 6. - to improve and maintain water and sediment quality to eliminate toxic impacts on organisms in the system, including humans.
Evaluation: Assess the level of active participation in pollution reduction and safe bay food consumption projects among program participants.
Overall Evaluation: Assess the increased understanding of CALFED goals 4. & 6. in program participants through verbal and written evaluations.

These goals and evaluations also tie in with our objectives and evaluations, described below.

Objective: Increase the number of teachers using local bay and creek habitats as educational resources to empower students to help solve estuary environmental problems.
Evaluation: Determine the percentage of teachers trained who continue teaching programs.

Objective: Adopt, clean-up and restore urban creek habitats.
Evaluation:
- amount of trash cleaned from an adopted creek
- number of trees and wildflowers planted
- number of native animals raised and released.

Objective: Increase public awareness of methods to reduce urban runoff pollution to the estuary.
Evaluation:
- quality and quantity of educational projects about reducing urban runoff pollution,
- amount of garbage removed in habitat and neighborhood clean up projects.

Objective: Increase the number of people aware of bay pollution issues and using safe bay food consumption practices to reduce intake of toxins and improve community health.
Evaluation:
- quality and quantity of letters and interviews about reducing pollution to factory and refinery owners and politicians.
- quality and quantity of flyers about safe cooking and fishing practices circulated to the school community (including families) and people fishing on local piers and responses,
- # family members attending safe cooking demonstrations and responses.

d. Data Handling and Storage
Evaluations will take place throughout the school year and programs will be continually improved using feedback. Final evaluations will take place at the completion of each program to make improvements for future implementation. Program reports will describe how objectives were met and the knowledge gained through the evaluation process. Highlights of programs will be communicated to all participants and constituents of EAC in our newsletter. The EAC Newsletter contains articles to describe work accomplished in our programs and articles written by student participants. It is circulated to approximately 1,000 teachers, environmentalists and collaborators. EAC also publishes project articles in Earth Island Journal, distributed to approximately 15,000 members.

e. Expected Products/Outcomes
One goal of EAC is to change the field of environmental education to focus on education through action, including restoration, pollution reduction and community outreach. We work

to empower students to become part of the solution to environmental problems. We are committed to diversity and environmental justice in our work. EAC will present at environmental education conferences and collaborative forums to educate other organizations about our effective, model programs. These will include: the Bay Area Environmental Education Resources Fair, the Talks In The Hallway series (focusing on creek education and restoration), county Watershed Forums, Independent Documentary Group Film showings, Earth Island Institute's Party For The Planet event and others.

f. Work Schedule: Please see Table One for tasks and time line.

A $50,000 CALFED Bay-Delta contract will fund:

- 6 classes in the Urban Creek Restoration Program
- 6 classes in the Pollution Reduction/Safe Bay Food Consumption Program
- 30% of the School-Wide Creek Programs
- 8 classes in the Bay Estuary Scientists Workshops Program
- 8 classes in the Creek and Bay Field Trip Exploration Program.

A $40,000 contract will fund:

- 5 classes in the Urban Creek Restoration Program
- 5 classes in the Pollution Reduction/Safe Bay Food Consumption Program
- 6 classes in the Bay Estuary Scientists Workshops Program
- 6 classes in the Creek and Bay Field Trip Exploration Program.

g. Feasibility

Evaluation Of Teacher Training Approaches

Over the past eight years, Estuary Action Challenge has worked with many teachers who have already participated in Teacher Training Workshops for environmental education, but have done nothing as a result. They felt workshops did not translate into their classroom experience. Only after participating in EAC programs, in which staff actually partner with teachers and students and work with them in their local environment, modeling activities that work with a class of 30 plus students, were teachers empowered to go on to teach the programs themselves.

> "I have been participating in environmental trainings for about four years. This is the first time that I will be able to actually teach concepts using meaningful lessons. I now have appropriate activities for my student's levels. I feel confident in creek environments because of the Estuary Action Challenge Program."
> Diane Brown, Teacher, Riverside School, San Pablo.

In the urban schools we work in, there is a very limited budget for equipment and resources needed to teach effective environmental education. The EAC model of partnering with a class for the whole school year, modeling activities, providing equipment and resources and the curriculum guide, provides the level of support that elementary school teachers need.

> "The Estuary Action Challenge model has huge value in breaking down barriers and getting teachers to try hands-on science. It provides the stepping stone needed to get teachers using the resources available."
> Craig Strung, Associate Director, Lawrence Hall Of Science.

Timing: EAC has eight years of experience implementing the programs described in the time line defined.

Permits/Access To Private Property Required: The EAC project will collaborate with local agencies for all restoration activities. These agencies have ongoing restoration projects and have taken care of all permits and access issues required. Therefore EAC does not require any permits. All educational activities take place on public lands. There are no other contingencies, requirements or outstanding implementation issues.

ESTUARY ACTION CHALLENGE WORK SCHEDULE
Table One

Task	Start Date	To Be Completed By
Program Implementation		
1. Purchase Education & Restoration Supplies	October 1, 2000	March 15, 2001
2. 2 School-Wide Creek Restoration Programs	October 1, 2000	June 15, 2001
3. 1 Community Creek Clean-Up Program	October 1, 2000	October 31, 2000
4. 10 Urban Creek Restoration Programs	October 15, 2000	April 30, 2001
5. 20 Bay Estuary Scientist Workshops	November 1, 2000	March 31, 2001
6. 10 Pollution Reduction/Safe Bay Food Programs	December 1, 2000	May 31, 2001
7. 20 Bay & Creek Field Trip Explorations	April 15, 2001	June 10, 2001
Project Management		
1. Recruit Teacher Participants	October 1, 2000	October 31, 2000
2. Prepare Curriculum Guides	October 1, 2000	October 31, 2000
3. Plan Projects With Collaborators	October 15, 2000	November 30, 2000
4. Planning Meetings With Teachers	October 15, 2000	December 31, 2000
5. Winter Newsletter Circulation	October 15, 2000	December 31, 2000
6. Teacher Evaluation Meetings	May 1, 2001	June 10, 2001
7. Program Evaluations	June 10, 2001	July 31, 2001
8. Summer Newsletter Circulation	May 15, 2001	August 31, 2001
9. Final Reports	August 1, 2001	September 30, 2001

D. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA Priorities

1. ERP Goals and CVPIA Priorities

This proposal addresses ERP goals to:

- restore, protect and manage riparian habitat
- reduce concentration and loading of sediments in the aquatic environment and bioaccumulation by aquatic species. This objective encompasses affects on human health.

The primary species targeted are:

- migratory birds • steelhead trout • tree frogs • native, creek-side plants.

The EAC project will make progress toward the sated goals by cleaning up creek habitats, planting creek-side trees and shrubs and raising and releasing tree frogs, cleaning up neighborhoods around storm drains, educating the public about ways to reduce urban runoff pollution and educating the public, factory owners and politicians about reducing industrial and pesticide pollution to the bay-estuary ecosystem. EAC will provide crucial outreach and information on safety procedures to follow when eating fish from the bay to those most affected. While CALFED is working to reduce loading of contaminants, bay food chains remain polluted. It is crucial that action is taken to inform citizens about health risks resulting from consuming bay fish in the interim period.

2. Relationship to Other Ecosystem Restoration Projects

Last year, Estuary Action Challenge received a $50,000 grant from CALFED to implement and expand our environmental education programs described in this proposal. This funding helped us to partner with 90 teachers and 2,000 students in five programs and start a new school-wide creek program. With continued funding from CALFED we will continue to expand the number of teachers and students we partner with, become more established in our target schools with grade level teams and school-wide programs and continue to work on our adopted habitats.

Thirty classes (900 students and 30 teachers) each year, participating in the EAC project watch the movie, Kids By The Bay, which features EAC students in our programs, cleaning up and restoring habitats of the San Francisco Bay. Kids By The Bay was produced by Independent Documentary Group (IDG) Films and released in 1997 as an educational tool. IDG Films received CALFED funding in 1998 and 1999 to show an Environmental Film Festival in the nine counties of the San Francisco Bay Area and in the Delta. Kids By The Bay was part of this film festival and Estuary Action Challenge staff spoke at these events.

3. Requests for Next-Phase Funding

Relationship To Previously Funded Phases Of The Project

This proposal requests funding to continue with the Estuary Action Challenge programs funded by CALFED for October 99 - September 2000. With continued CALFED funding, EAC will increase the impact of all programs in our target schools. We will also expand these programs into new schools. Our unique model of providing long term support and hands-on training for teachers as they learn alongside their students, helps teachers to continue teaching our programs year after year. By working with grade level teams and encouraging buy-in from the school principal, we become established in schools which continue to use the curricula and equipment introduced in our professional development packages. There are teachers at our targeted schools on a waiting list to become part of the EAC school teams and new schools that are ready to begin working with us. A grant from CALFED will help us to partner with these schools and teachers and continue to focus on our adopted bay and creek habitats.

Continued funding from CALFED will help EAC to expand our new School-Wide Creek Education program. Several of our schools are committed to creating school-wide programs focusing on the local creek as part of the school reform agenda. EAC has developed a kindergarten through fifth grade urban creek curriculum that focuses on investigating the local creek, reducing pollution and restoration activities. We plan to teach this at two schools, including 25 teachers and 600 students, in 2000 -2001.

Current Status Of Project

The Estuary Action Challenge Environmental Education project, funded by CALFED and private foundations, is meeting set goals and objectives, progressing on schedule and all programs will be completed according to the set time line.

Progress And Accomplishments

We have exceeded our goals, in terms of numbers of teachers and students participating in our programs. In October 1999 - June 2000 we are partnering with:

- fourteen classes in five schools in the Urban Creek Restoration program
- ten classes in four schools in the Pollution Reduction/Safe Bay Food Consumption program
- twenty four classes in the Bay Estuary Scientists program
- twenty five classes in the Creek and Bay Field Trip program
- seventeen classes in the Community Creek Clean-Up program

Please see summary of existing project status, attached.

4. Previous Recipients of CALFED or CVPIA funding

Estuary Action Challenge/Earth Island Institute received CALFED funding in 1999 - 2000 for the Estuary Action Challenge Environmental Education Project.
The project number is 00FC20014.

Current Status Of Project & Progress And Accomplishments

- 2000 elementary school students, 90 teachers and approximately 400 parents actively participated in habitat restoration, pollution reduction and safe bay food consumption activities
- 90 teachers trained to continue teaching EAC estuary education programs
- 25 community creek clean-up projects completed
- over 200 riparian plants planted along creeks by EAC students
- approximately 500 Pacific tree frogs raised in classrooms and released into pond and creek habitats
- approximately 500 student designed posters, brochures and T-shirts about reducing urban runoff pollution displayed and distributed to school communities
- 200 student letters about reducing pollution to the bay sent out to politicians
- 10 classes of 30 students interviewed people fishing on bay piers and passed out informational flyers on safe bay food consumption in seven different languages
- 10 creative student presentations to families about reducing pollution to the bay and taking precautions in fishing for, cooking and eating bay fish, attended by an average of twenty parents for each presentation

5. System-Wide Ecosystem Benefits

Estuary Action Challenge works with Sandy Neumann, Education Director for the Center For Ecoliteracy, Laurette Rogers, Education Director for the Bay Institute and BC Capps from the Aquatic Outreach Institute to bring together environmental education leaders from organizations throughout the San Francisco Bay Area working on watershed issues. This provides opportunities for sharing successful strategies, group problem solving and collaboration on key watershed education issues.

E. Qualifications

Brief Biosketches
EAC Executive Director, Mandi Billinge, founded Estuary Action Challenge and has directed program development and organization expansion for the past eight years. Mandi has a B.S. Honors Degree in Biology from England, specializing in freshwater and estuarine ecology, a Teaching Credential from Leeds University, England and the Development Director's Certificate from the University Of San Francisco.

EAC Education Director, Jocelyn Manuel, holds a B.A. Honors Degrees in Education and a Teaching Credential. She has taught science and environmental education in elementary schools for three years and EAC programs for the past year, with excellent feedback from principals, teachers, students and collaborators.

> "This program, without a doubt, is the best I have ever seen! The instructor Jocelyn Manuel, materials, experiments - everything was superb!"
> Kathy Moran, Fourth Grade Teacher, John Swett School, Oakland

EAC Community Relations Director, Maryam Diaab, has taught environmental education in elementary schools for five years. She has taught EAC programs for the past year, with excellent feedback from principals, teachers, students and collaborators.

> "Maryam is an excellent instructor. She has wonderful rapport with the children. Her enthusiasm is appreciated. Maryam's management skills are exceptional."
> Marion Wallach, Third Grade Teacher, Redwood Heights School, Oakland.

Part of the EAC mission is equal access, but there are very few people of color working in environmental education. EAC staff are from diverse ethnic and cultural backgrounds. We recruit through partnerships with our schools and Diversity Network. In October 2000 - September 2001 we will expand our Multicultural Environmental Leadership positions.

Planned Organization Of Staff
The EAC Executive Director, Education Director and Community Relations Director will implement the EAC project. The E.D. will work with school principals, teachers, students and family members to develop programs, supervise Directors, coordinate with collaborators, oversee the evaluation process and publish the EAC Newsletter. The Program Directors will work with teachers, students, family members and collaborators to implement programs. They will also be responsible for managing equipment and resources.

Previous Accomplishments
Estuary Action Challenge is the environmental education project of Earth Island Institute, focusing on the San Francisco Bay Estuary. Earth Island is a nonprofit organization supporting a network of environmental projects. EAC was created in 1992 and in the past eight years 400 teachers and 10,000 students have participated in our programs. EAC curricula, restoration, pollution reduction and community outreach programs have been developed with high input from teacher and student participants and collaborators.

Each year, for the past eight years, EAC students have:

- planted trees and wildflowers along urban creeks,
- organized community creek and bay habitat clean-ups,
- raised tree frogs in classrooms to release back into creek homes,
- designed and distributed creative outreach materials to inform school communities about reducing urban runoff pollution,
- expressed concerns about estuary pollution issues using letter writing campaigns, interviews with politicians and play performances,
- interviewed people fishing on bay piers about safe bay food consumption

and distributed informational flyers in seven different languages,
- demonstrated safe bay fish cooking to families at school-community events and taught safety precautions that reduce health risks.

In 1996, EAC received the Future Of The Bay Award from Save San Francisco Bay Association for innovative environmental education and restoration projects, presented by Mayor Willie Brown. Student participants in EAC are featured in the Kids By The Bay movie by Independent Documentary Group Films, released in 1997 as an educational tool.

Comments From EAC Partners

Jackie McCort, Sierra Club Foundation Project Coordinator, April 2000
"We are proud to fund Estuary Action Challenge. This is an outstanding organization with absolutely wonderful, stellar programs. Please come to our press release party - we would love for everyone to hear the story of your work!"

Kathy Maloney, Principal, Sequoia School, Oakland, March 2000
"This is a wonderful program and very well organized. The creek curriculum is excellent and ties in well with our school curriculum. The students are really engaged. I am excited to see them getting out into the local creek environment and doing community action projects. The teachers are really benefiting from their work with you. They are happy, so I am happy! I would like to see this EAC program continue and more classes become involved."

Krista Easton, Fourth Grade Teacher, Melrose School, Oakland, April 2000
"Good ideas that you see in a book rarely make it to the classroom because you don't have the supplies or you aren't sure how to do it. The EAC program is great because we can rely on your subject expertise while you train us and we know exactly how to teach it next year."

Ms. Martin, Fourth Grade Teacher, Lincoln School, Richmond, April 2000
"The EAC Pollution Reduction/Safe Bay Food Consumption program is excellent. The children are learning and having fun. I am really benefiting from seeing your teaching techniques. I love the layout of the curriculum guide. It makes the lessons easy to follow and the binder helps me to keep on top of the program."

Collaborators
EAC collaborates with local agencies to implement restoration activities. These include the East Bay Municipal Utility District, East Bay Regional Park District, Friends Of Sausal Creek, Friends Of Five Creeks and city Clean Water Programs. Each year our student participants plant over one hundred native trees and hundreds of wildflowers on the public property managed by these agencies in collaborative restoration projects. City Clean Water Programs work with EAC to advertise community creek clean-up projects and promote public involvement.

F. Cost

1. Budget
Please see budget, Table Two, and Summary Budget, Table Three, attached.

Salary/Benefits
EAC provides services at a fee of $50.00 per hour. This includes staff time as needed for each task. EAC staff benefit costs will not be applied to this particular grant. The rate of pay for the Executive Director is an annual compensation of $52,000 and for the Education and Community Relations Directors $32,000 each. 35% of each position will be spent on the portion of programs funded by CALFED.

Supplies Include
educational materials; maps, posters, microscopes, dip nets, fish and crabs, steam cookers, videos, books, art supplies.
restoration materials; plant pots, trowels, watering cans, shovels, seeds, garbage bags, gloves, aquariums.

Service Contracts
This does not apply to this project.

Overhead Costs
Overhead costs include general office space, office supplies, copying and printing, rent, phones, computers, faxes, internet access. This is calculated at 25% of direct salary.

Project Management
This includes recruiting and selecting schools and principals, teacher participants, planning and evaluation meetings with teachers, planning projects with collaborators, program evaluations and reports. For costs associated with management tasks, please see budget.

Schedule
The project will begin October 1, 2000 and end September 30,2001. Please see Project Schedule, attached, Table 1.

2. Cost Sharing

EAC will provide $5,000 of in-kind equipment and resources for this project, including educational and restoration materials.

Collaborators work with EAC as an in-kind contribution to the project. Four collaborators will donate 20 - 40 hours of work at $50.00 per hour. This is a total of at least $4,000.

Other Funding Commitments
EAC raises funds each year from private foundations.

For 2000 - 2001, funds include:
Grants Awarded
Sierra Club Foundation, $30,000
Goldman Fund, $20,000 (continued funding)

Grants Pending
Center For Ecoliteracy, $30,000 (continued funding)
San Francisco Foundation, $15,000 (continued funding)
Haas Fund, $10,000, (continued funding)
Rose Foundation, $10,000, (continued funding)

ESTUARY ACTION CHALLENGE BUDGET FOR TASKS FUNDED BY CALFED
Table Two

Task	Labor Hours	Salary	Supplies	Overhead	Total
Program Implementation					
1. Purchase Education & Restoration Supplies	30	1500	2500	375	4375
2. Winter/Spring Newsletter Circulation	30	1500		375	1875
3. 30% School Wide Creek Restoration Program	60	3000		750	3750
4. Eight Bay Estuary Scientist Workshops	60	3000		750	3750
5. Six Urban Creek Restoration Programs	140	7000		1750	8750
6. Six Pollution Reduction/Safe Bay Food Programs	140	7000		1750	8750
7. Summer/Fall Newsletter Circulation	30	1500		375	1875
8. Eight Bay & Creek Field Trip Explorations	55	2750		687.5	3437.5
Project Management					
1. Recruit Participants	80	4000		1000	5000
2. Prepare Curriculum Guides	20	1000		250	1250
3. Plan Projects With Collaborators	25	1250		312.5	1562.5
4. Planning Meetings With Teachers/Principals	25	1250		312.5	1562.5
5. Teacher Evaluation Meetings	25	1250		312.5	1562.5
6. Program Evaluations	25	1250		312.5	1562.5
7. Final Reports	15	750		187.5	937.5
TOTAL		**38000**	**2500**	**9500**	**50000**

ESTUARY ACTION CHALLENGE PROJECT SUMMARY BUDGET, Table Three

Task	Oct. - Dec.	Jan. - March	May - June	July - Sept.	Total
Program Implementation					
1. Purchase Education & Restoration Equipment	4375				
2. Winter/Spring Newsletter Circulation	1875				
3. 30% School-Wide Creek Restoration Program			3750		
4. Eight Bay Estuary Scientist Workshops		3750			
5. Six Urban Creek Restoration Programs			8750		
6. Six Pollution Reduction/Safe Bay Food Programs			8750		
7. Summer/Fall Newsletter Circulation			1875		
8. Eight Bay & Creek Field Trip Explorations			3437.5		
Project Management					
1. Recruit Teacher Participants	5000				
2. Prepare Curriculum Guides	1250				
3. Plan Projects With Collaborators	1562.5				
4. Planning Meetings With Teachers	1562.5				
5. Teacher Evaluation Meetings			1562.5		
6. Program Evaluations				1562.5	
7. Final Reports				937.5	
TOTAL	**15625**	**3750**	**28125**	**2500**	**50000**

G. Local Involvement

Notification To Alameda And Contra Costa Counties
Wilma Chan, President of the Alameda County Board of Supervisors and Donna Gerber, Chairman of the Contra Costa County Board of Supervisors have been notified of this project. Please see the notification letters, attached. EAC has also notified Donald Freitas, Manager of the Contra Costa County Clean Water Program and Lesley Estes, Board President of the Alameda County Clean Water Program of the project. The Bay Conservation and Development Commission has also been notified. All these agencies have received copies of the EAC proposal.

Local Groups Supporting Project
EAC was created in 1992 and in the past eight years 400 teachers and 10,000 students have participated in our programs. 75% of our students are children of color from low-income, urban schools in West Contra Costa County, Berkeley Unified and Oakland Unified School Districts. EAC has an excellent reputation for delivering high quality, effective programs. There is a great deal of support in local schools for EAC programs and a waiting list of teachers hoping to work with us.

From October 2000 - June 2001, with funding from CALFED and private foundations, EAC will partner with 105 teachers, 2,500 students, approximately 200 parents and 20 school principals in our estuary education programs.

EAC collaborates with local agencies to implement restoration activities. These include the East Bay Municipal Utility District, East Bay Regional Park District, Friends Of Sausal Creek, Friends Of Five Creeks and city Clean Water Programs. Each year our student participants plant over one hundred native trees and hundreds of wildflowers on the public property managed by these agencies in collaborative restoration projects. City Clean Water Programs work with EAC to advertise community creek clean-up projects and promote public involvement. Collaborators have been informed of the submission of this CALFED Bay-Delta proposal.

Plan For Public Outreach
EAC publicizes programs at target schools by posting flyers, distributing brochures and letters and making phone calls. Interested principals and teachers contact EAC staff for informational meetings. Teachers complete application forms, demonstrating their commitment to integrating the EAC program into the ongoing school curriculum. EAC selects teams of teacher participants from target schools based on informational interviews and application forms.

One goal of EAC is to change the field of environmental education to focus on education through action, including restoration, pollution reduction and community outreach. We work to empower students to become part of the solution to environmental problems. We are committed to diversity and environmental justice in our work. EAC will present at environmental education conferences and collaborative forums to educate other organizations about our effective, model programs. These will include: the Bay Area Environmental Education Resources Fair, the Talks In The Hallway series, county Watershed Forums, Independent Documentary Group Film showings, Earth Island Institute's Party For The Planet event and others.

Third Party Impacts
Student's parents and other family members will benefit from involvement with the EAC project. Students will recruit their family members to participate in restoration, pollution reduction and safe bay food consumption projects and field trips.

H. Compliance with Standard Terms and Conditions (see forms)

Estuary Action Challenge and Earth Island Institute will comply with the state and federal standard terms. Please see attachments.

I. Literature Cited

None cited.

J. Threshold Requirements

Please see attachments:

- Summary of Current Project (2 pages)
- Letters of Notification
- Environmental Compliance Checklist
- Land Use Checklist
- State and Federal Forms

Estuary Action Challenge Environmental Education Project

Summary Of Existing Project Status

Project Description
The Estuary Action Challenge (EAC) environmental education project focuses on the San Francisco Bay Estuary. EAC works with elementary school teachers and students to explore, clean-up and restore creek and bay habitats, reduce urban runoff pollution and address issues of water quality and safe bay food consumption. CALFED awarded $50,000 to expand EAC programs in October 99 to September 2000.

Summary Of Scientific Merrit
Hypothesis
Effective environmental education leads directly to active participation in conservation programs.

Conceptual Model
EAC programs address the following environmental needs:

- Many of our East Bay Area urban creeks are trashed, smothered with weeds and lack indigenous plant and animal species.
- Toxins from factories, refineries, pesticide runoff and dumping in storm drains are polluting the bay-delta estuary ecosystem.
- Many people fish from the San Francisco Bay. The food caught is contaminated with pollutants that cause cancer and brain damage.

Each year EAC students:

- plant trees and wildflowers along urban creeks,
- organize community creek and bay habitat clean-ups,
- raise tree frogs in classrooms to release back into creek homes,
- design and distribute creative outreach materials to inform school communities about reducing urban runoff pollution,
- express concerns about estuary pollution issues using letter writing campaigns, interviews with politicians and play performances,
- interview people fishing on bay piers about safe bay food consumption and distribute informational flyers in seven different languages,
- demonstrate safe bay fish cooking to families at school-community events and teach safety precautions that reduce health risks.

Adaptive Management Framework
Estuary Action Challenge works to create effective, on-going environmental education programs in target schools. Our approach, perfected through eight years of experience, is to:

- promote active, hands-on restoration and stewardship of local habitats
- provide long-term, in-depth, experiential training for teachers
- partner with strong teams of teachers and the school principal
- involve parents
- collaborate with ongoing efforts of local agencies.

Current status of project
The project is meeting set goals and objectives, progressing on schedule and all programs will be completed according to the set time line. All programs were fully funded for 10/1999 - 9/2000. There are no outstanding regulatory or implementation issues.

We have exceeded our goals, in terms of numbers of teachers and students participating in our programs. In October 1999 - June 2000 we are partnering with:

- fourteen classes in five schools in the Urban Creek Restoration program
- ten classes in four schools in the Pollution Reduction/Safe Bay Food Consumption program
- twenty four classes in the Bay Estuary Scientists program
- twenty five classes in the Creek and Bay Field Trip program
- seventeen classes in the Community Creek Clean-Up program

Accomplishments To Date

- 2000 elementary school students, 90 teachers and approximately 400 parents actively participated in EAC habitat restoration, pollution reduction and safe bay food consumption activities
- 90 teachers trained to continue teaching EAC estuary education programs
- 25 community creek clean-up projects completed
- over 200 riparian plants planted along creeks by EAC students
- approximately 500 Pacific tree frogs raised in classrooms and released into pond and creek habitats
- approximately 500 student designed posters, brochures and T-shirts about reducing urban runoff pollution displayed and distributed to school communities
- 200 student letters about reducing pollution to the bay sent out to politicians
- 10 classes of 30 students interviewed people fishing on bay piers and passed out informational flyers on safe bay food consumption in seven different languages
- 10 creative student presentations to families about reducing pollution to the bay and taking precautions in fishing for, cooking and eating bay fish, attended by an average of twenty parents for each presentation

Summary of the existing data collection and monitoring program, EAC evaluates:

- the number of teachers, students and family members actively participating in EAC conservation programs
- the number of teachers trained who continue teaching programs
- number of creek clean-up projects
- number of trees and wildflowers planted
- number of native animals raised and released
- quality and quantity of educational projects about reducing urban runoff pollution,
- quality and quantity of letters and interviews about reducing pollution to factory and refinery owners and politicians.
- quality and quantity of flyers about safe cooking and fishing practices circulated to the school community (including families) and people fishing on local piers and responses,
- # family members attending safe cooking demonstrations and responses.

Each item evaluated relates to an accomplishment described above.

Information Generated

- teacher evaluation meetings and written forms
- meetings with principals
- comments from parents attending events
- portfolios of students' work
- photographs of projects

This year, EAC staff interviewed teachers, principals and parents to find out how we can most effectively ensure ongoing programs in our target schools. The information generated helped us to design the Adaptive Management Plan described above and included in the current proposal.

STATE OF CALIFORNIA

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPANY NAME

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
John A. Knox

DATE EXECUTED
4/28/2000

EXECUTED IN THE COUNTY OF
San Francisco

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE
Executive Director

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME
Earth Island Institute

APPLICATION FOR FEDERAL ASSISTANCE

OMB Approval No. 0348-0043

2. DATE SUBMITTED		Applicant Identifier
3. DATE RECEIVED BY STATE		State Application Identifier
4. DATE RECEIVED BY FEDERAL AGENCY		Federal Identifier

1. TYPE OF SUBMISSION:

Application: ☐ Construction ☒ Non-Construction

Preapplication: ☐ Construction ☐ Non-Construction

5. APPLICANT INFORMATION

Legal Name: Earth Island Institute

Organizational Unit: Estuary Action Challenge

Address *(give city, county, State, and zip code)*: 6534 Arlington Boulevard, Richmond, CA 94805

Name and telephone number of person to be contacted on matters involving this application *(give area code)*: Mandi Billinge (510) 235-3785

6. EMPLOYER IDENTIFICATION NUMBER *(EIN)*: 94-2989684

7. TYPE OF APPLICANT: *(enter appropriate letter in box)* N

A. State
B. County
C. Municipal
D. Township
E. Interstate
F. Intermunicipal
G. Special District
H. Independent School Dist.
I. State Controlled Institution of Higher Learning
J. Private University
K. Indian Tribe
L. Individual
M. Profit Organization
N. Other (Specify) Nonprofit

8. TYPE OF APPLICATION:

☐ New ☒ Continuation ☐ Revision

If Revision, enter appropriate letter(s) in box(es) ☐ ☐

A. Increase Award B. Decrease Award C. Increase Duration
D. Decrease Duration Other*(specify)*:

9. NAME OF FEDERAL AGENCY: CALFED Bay-Delta

10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: XX-XXX

TITLE:

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Estuary Action Challenge Environmental Education Project

12. AREAS AFFECTED BY PROJECT *(Cities, Counties, States, etc.)*: Alameda and Contra Costa Counties, CA

13. PROPOSED PROJECT

Start Date: 10/1/2000 Ending Date: 9/30/2001

14. CONGRESSIONAL DISTRICTS OF:

a. Applicant: seven, eight

b. Project: seven, nine

15. ESTIMATED FUNDING:

a. Federal	$ 50,000 .00
b. Applicant	$ .00
c. State	$ .00
d. Local	$ .00
e. Other	$ 50,000 .00
f. Program Income	$ .00
g. TOTAL	$ 100,000 .00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON:

DATE _____

b. No. ☐ PROGRAM IS NOT COVERED BY E. O. 12372
☐ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?

☐ Yes If "Yes," attach an explanation. ☒ No

18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

a. Type Name of Authorized Representative: John A. Knox	b. Title: Executive Director	c. Telephone Number: (415) 788-3666
d. Signature of Authorized Representative: John A. Knox		e. Date Signed: 4/28/2000

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 0348-0044

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. CAL FED Bay-Delta		$	$	$ 50000	$ 50000	$ 100000
2.						
3.						
4.						
5. Totals		$	$	$	$	$

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total
	(1)	(2)	(3)	(4)	(5)
a. Personnel	$ 76000	$	$	$	$ 76000
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies	5000				5000
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges *(sum of 6a-6h)*	81000				81000
j. Indirect Charges	19000				19000
k. TOTALS *(sum of 6i and 6j)*	$ 100000	$	$	$	$ 100000
7. Program Income	$	$	$	$	$

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources Foundations	(e) TOTALS
8. CALFED Bay-Delta	$	$	$ 50000	$ 50000
9.				
10.				
11.				
12. TOTAL *(sum of lines 8-11)*	$	$	$ 50000	$ 50000

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 50000	$ 15625	$ 3750	$ 28125	$ 2500
14. Non-Federal	50000	15625	3750	28125	2500
15. TOTAL *(sum of lines 13 and 14)*	$ 100000	$ 31250	$ 7500	$ 56250	$ 5000

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.	$ 100000	$	$	$
17.				
18.				
19.				
20. TOTAL *(sum of lines 16-19)*	$ 100000	$	$	$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:	22. Indirect Charges:

23. Remarks:

U.S. Department of the Interior

Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - **The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.** See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (DI-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12.)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

CHECK __ IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.

(1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

CHECK __ IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

DI-2010
March 1995
(This form consolidates DI-1953, DI-1954, DI-1955, DI-1956 and DI-1963)

PART C: Certification Regarding Drug-Free Workplace Requirements

CHECK X IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.

Alternate I. (Grantees Other Than Individuals)

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an ongoing drug-free awareness program to inform employees about--
(1) The dangers of drug abuse in the workplace;
(2) The grantee's policy of maintaining a drug-free workplace;
(3) Any available drug counseling, rehabilitation, and employee assistance programs; and
(4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
(1) Abide by the terms of the statement; and
(2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;

(e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;

(f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
(1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
(2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

Earth Island Institute, 300 Broadway, Suite 28, San Francisco, CA
Estuary Action Challenge, 6534 Arlington Boulevard, Richmond, CA

Check __ if there are workplaces on file that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK __ IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.

Alternate II. (Grantees Who Are Individuals)

(a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;

(b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK __ IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS $100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT, SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK __ IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF $150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING $100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL John A. Knox

TYPED NAME AND TITLE John A. Knox, Executive Director

DATE 4/28/2000

OMB Approval No. 0348-0040

ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.

2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.

3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.

5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).

6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
John A Kuo	Executive Director
APPLICANT ORGANIZATION	DATE SUBMITTED
Earth Island Institute/Estuary Action Challenge	4/24/2000

Environmental Compliance Checklist

All applicants must fill out this Environmental Compliance Checklist. Applications must contain answers to the following questions to be responsive and to be considered for funding. *Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.*

1. **Do any of the actions included in the proposal require compliance with either the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), or both?**

   _____ **YES** X **NO**

2. **If you answered yes to # 1, identify the lead governmental agency for CEQA/NEPA compliance.**

   _____
   Lead Agency

3. **If you answered no to # 1, explain why CEQA/NEPA compliance is not required for the actions in the proposal.**

   There are no endangered species present.
   There is no significant strucutral work involved - only planting of native, riparian plants along creeks.

4. **If CEQA/NEPA compliance is required, describe how the project will comply with either or both of these laws. Describe where the project is in the compliance process and the expected date of completion.**

5. **Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal?**

   _____ **YES** X **NO**

   If yes, the applicant must attach written permission for access from the relevant property owner(s). Failure to include written permission for access may result in disqualification of the proposal during the review process. Research and monitoring field projects for which specific field locations have not been identified will be required to provide access needs and permission for access with 30 days of notification of approval.

6. **Please indicate what permits or other approvals may be required for the activities contained in your proposal. Check all boxes that apply.**

LOCAL		
Conditional use permit	___	
Variance	___	
Subdivision Map Act approval	___	
Grading permit	___	
General plan amendment	___	
Specific plan approval	___	
Rezone		___
Williamson Act Contract cancellation	___	
Other _____ (please specify)		
None required	X	
STATE		
CESA Compliance	___	**(CDFG)**
Streambed alteration permit	___	**(CDFG)**
CWA § 401 certification	___	**(RWQCB)**
Coastal development permit	___	**(Coastal Commission/BCDC)**
Reclamation Board approval	___	
Notification	___	**(DPC, BCDC)**
Other _____ (please specify)		
None required	X	
FEDERAL		
ESA Consultation	___	**(USFWS)**
Rivers & Harbors Act permit	___	**(ACOE)**
CWA § 404 permit	___	**(ACOE)**
Other _____ (please specify)		
None required	X	

DPC = Delta Protection Commission
CWA = Clean Water Act
CESA = California Endangered Species Act
USFWS = U.S. Fish and Wildlife Service
ACOE = U.S. Army Corps of Engineers

ESA = Endangered Species Act
CDFG = California Department of Fish and Game
RWQCB = Regional Water Quality Control Board
BCDC= Bay Conservation and Development Comm.

Land Use Checklist

All applicants must fill out this Land Use Checklist for their proposal. Applications must contain answers to the following questions to be responsive and to be considered for funding. *Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.*

1. **Do the actions in the proposal involve physical changes to the land(i.e. grading, planting vegetation, or breeching levees) or restrictions in land use (i.e. conservation easement or placement of land in a wildlife refuge)?**

   X **YES** _____ **NO**

2. **If NO to # 1, explain what type of actions are involved in the proposal (i.e., research only, planning only).**

3. **If YES to # 1, what is the proposed land use change or restriction under the proposal?**

   Planting native, riparian plants along creeks, including trees and wildflowers, for environmental education - restoration programs.

4. **If YES to # 1, is the land currently under a Williamson Act contract?**

   _____ **YES** X **NO**

5. **If YES to # 1, answer the following:**

   Current land use reservior watershed & public parks
   Current zoning none
   Current general plan designation habitat conservation plan (internal)

6. **If YES to #1, is the land classified as Prime Farmland, Farmland of Statewide Importance or Unique Farmland on the Department of Conservation Important Farmland Maps?**

   _____ **YES** X **NO** _____ **DON'T KNOW**

7. **If YES to # 1, how many acres of land will be subject to physical change or land use restrictions under the proposal?**
   two acres

8. **If YES to # 1, is the property currently being commercially farmed or grazed?**

   _____ **YES** X **NO**

9. **If YES to #8, what are** **the number of employees/acre**_____
   the total number of employees _____

10. Will the applicant acquire any interest in land under the proposal (fee title or a conservation easement)?

_____ YES

X NO

11. What entity/organization will hold the interest? _____

East Bay Municipal Utility District (EBMUD)
East Bay Regional Park Distirct (EBRPD)

12. If YES to # 10, answer the following:

Total number of acres to be acquired under proposal _____
Number of acres to be acquired in fee _____
Number of acres to be subject to conservation easement _____

13. For all proposals involving physical changes to the land or restriction in land use, describe what entity or organization will:

manage the property	EBMUD and EBRPD
provide operations and maintenance services	EBMUD and EBRPD
conduct monitoring	EBMUD and EBRPD

14. For land acquisitions (fee title or easements), will existing water rights also be acquired?

_____ YES

X NO

15. Does the applicant propose any modifications to the water right or change in the delivery of the water?

_____ YES

X NO

16. If YES to # 15, describe _____

ESTUARY ACTION CHALLENGE

A Project of
Earth Island Institute
6534 Arlington Boulevard, Richmond, CA 94805 • Tel/Fax: (510) 235-3785 • Email: crubill@aol.com

Mandi Billinge, Director

April 25, 2000

Will Travis
Executive Director
Bay Conservation and Development Commission
50 California Street, 26th Floor
San Francisco, CA 94111

Dear Mr. Travis,

I am writing to inform you that Estuary Action Challenge has applied for continued funding from the CALFED Bay-Delta program to enable us to continue to expand our programs. Last year we received a grant of $50,000, which we have requested again.

Estuary Action Challenge (EAC) is an environmental education organization which provides professional development for teachers and academic enrichment for students. Teachers learn to use the local environment as a rich educational resource and to empower students to become environmental stewards.

EAC was created in 1992 and in the past eight years 400 teachers and 10,000 students have participated in our programs. Over 75% of our students are children of color from low-income, urban schools.

The project will take place in CALFED Ecozone Two, the San Francisco Bay. EAC partner schools are located in Richmond and San Pablo in Contra Costa County and Oakland and Berkeley in Alameda County. Adopted creek habitats are Wildcat Creek in Richmond and San Pablo, Strawberry Creek and Harwood Creek in Berkeley and Sausal Creek in Oakland. Adopted bay habitats are Arrowhead Marsh in Oakland and Shorebird Park in Berkeley, near Berkeley Marina.

Our programs address the following community environmental health problems:

- Many of our East Bay Area urban creeks are trashed, smothered with weeds and lack indigenous plant and animal species.
- Toxins from factories, refineries, pesticide runoff and dumping in storm drains is polluting the air we breathe and the food we eat.
- Many people fish from the San Francisco Bay. The food caught is contaminated with pollutants that cause cancer and brain damage.

Each year Estuary Action Challenge students:

- plant hundreds of trees and wildflowers along urban creeks,
- organize community creek and bay habitat clean-ups,

- raise tree frogs in their classrooms to release back into creek homes,
- design and distribute creative outreach materials to inform their communities about reducing urban runoff pollution,
- express their concerns about pollution issues using letter writing campaigns, interviews with politicians and play performances,
- interview people fishing on bay piers about safe bay food consumption and distribute informational flyers in seven different languages,
- demonstrate safe bay fish cooking to their families at school-community events and teach the safety precautions that reduce health risks.

The EAC professional development package trains teachers to continue teaching programs with each new class of students.

> "Our Estuary Action Challenge program was outstanding. My students learned so much about their local environment and were given many opportunities to act as leaders in their communities. I plan to use the entire curriculum next year with my new students."
> Sonja Ebel, Fourth Grade Teacher, Hawthorne School, Oakland.

I have enclosed a copy of our proposal and a copy of our latest newsletter. I will be happy to answer any questions about our work.

Sincerely,

Mandi J. Billinge

Mandi Billinge
Director

ESTUARY ACTION CHALLENGE

A Project of

Earth Island Institute

6534 Arlington Boulevard, Richmond, CA 94805 • Tel/Fax: (510) 235-3785 • Email: crubill@aol.com

Mandi Billinge, Director

April 25, 2000

Lesley Estes
Board President
Alameda County Clean Water Program
250 Frank H. O'Gawa Plaza
Suite 5301
Oakland, CA 94612

Dear Lesley,

I hope you are doing well.

I am writing to let you know that Estuary Action Challenge has applied for continued funding from the CALFED Bay-Delta program to enable us to continue to expand our programs. Last year we received a grant of $50,000, which we have requested again.

We began work on Sausal Creek in Dimond Park this year with two classes from Sequoia School. We plan to expand this program with continued funding, to include more teachers from Sequoia and Glenview Schools. Teachers, students and parents are extremeley enthusiastic about our creek program. The principal, Kathy Maloney, Principal of Sequoia said:

> "This is a wonderful program and very well organized. The creek curriculum is excellent and ties in well with our school curriculum. The students are really engaged. I am excited to see them getting out into the local environment and doing community action projects. The teachers are really benefiting from their work with you. They are happy, so I am happy! I would like to see the program continue and more classes become involved."

With funding from CALFED we will partner with 105 teachers and 2,500 students next year. Our programs will address the following community environmental health problems:

- Many of our East Bay Area urban creeks are trashed, smothered with weeds and lack indigenous plant and animal species.
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- demonstrate safe bay fish cooking to their families at school-community events and teach the safety precautions that reduce health risks.

As you know, the EAC professional development package trains teachers to continue teaching programs with each new class of students.

> "Our Estuary Action Challenge program was outstanding. My students learned so much about their local environment and were given many opportunities to act as leaders in their communities. I plan to use the entire curriculum next year with my new students."
> Sonja Ebel, Fourth Grade Teacher, Hawthorne School, Oakland.

I have enclosed a copy of our proposal and a copy of our latest newsletter. I will be happy to answer any questions about our work.

Best wishes,

Mandi J. Billinge

Mandi Billinge
Director

ESTUARY ACTION CHALLENGE

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6534 Arlington Boulevard, Richmond, CA 94805 • Tel/Fax: (510) 235-3785 • Email: crubill@aol.com

Mandi Billinge, Director

April 25, 2000

Donald Freitas
Manager
Contra Costa County Clean Water Program
255 Glacier Drive
Martinez, CA 94553

Dear Mr. Freitas,

I am writing to inform you that Estuary Action Challenge has applied for continued funding from the CALFED Bay-Delta program to enable us to continue to expand our programs. Last year we received a grant of $50,000, which we have requested again.

Estuary Action Challenge (EAC) is an environmental education organization which provides professional development for teachers and academic enrichment for students. Teachers learn to use the local environment as a rich educational resource and to empower students to become environmental stewards.

EAC was created in 1992 and in the past eight years 400 teachers and 10,000 students have participated in our programs. We work in elementary schools in Richmond and San Pablo in Contra Costa County and in Oakland and Berkeley in Alameda County. Over 75% of our students are children of color from low-income, urban schools.

Our programs address the following community environmental health problems:

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The EAC professional development package trains teachers to continue teaching programs with each new class of students.

> "Our Estuary Action Challenge program was outstanding. My students learned so much about their local environment and were given many opportunities to act as leaders in their communities. I plan to use the entire curriculum next year with my new students."
> Sonja Ebel, Fourth Grade Teacher, Hawthorne School, Oakland.

I have enclosed a copy of our proposal and a copy of our latest newsletter. I will be happy to answer any questions about our work.

Sincerely,

Mandi D. Billinge

Mandi Billinge
Director

ESTUARY ACTION CHALLENGE

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Earth Island Institute

6534 Arlington Boulevard, Richmond, CA 94805 • Tel/Fax: (510) 235-3785 • Email: crubill@aol.com

Mandi Billinge, Director

April 25, 2000

Wilma Chan
President
Alameda County Board Of Supervisors
1221 Oak Street
Oakland, CA 94612

Dear Ms. Chan,

I am writing to inform you that Estuary Action Challenge has applied for continued funding from the CALFED Bay-Delta program to enable us to continue to expand our programs. Last year we received a grant of $50,000, which we have requested again.

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Sincerely,

Mandi J. Billinge

Mandi Billinge
Director

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Mandi Billinge, Director

April 25, 2000

Donna Gerber
Chair
Contra Costa County Board Of Supervisors
309 Diablo Road
Danville, CA 94526

Dear Ms. Gerber,

I am writing to inform you that Estuary Action Challenge has applied for continued funding from the CALFED Bay-Delta program to enable us to continue to expand our programs. Last year we received a grant of $50,000, which we have requested again.

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Mandi Billinge
Director