

Panel Scientific and Technical Review Forum
(Note: Review comments will be anonymous, but public.)

Proposal number 2001-I204

Short Proposal Title: Watershed Education Project

1a) Are the objectives and hypotheses clearly stated?

Summary of Reviewer's Comments:

Objectives are stated as: continue the efforts of the education coordinator; establish positions in other districts; provide a set of Adopt-A-Watershed classroom kits; provide additional Project WET training; maintain and expand restoration areas and field study opportunities for students; enhance links to other educational programs; support an Americorp team to work in classrooms and field; project management.

Education objective: develop a sustainable program that is integrated throughout the k-12 curricula, that meets state standards, and will empower students and parents to take actions to protect, restore and enhance critical ecosystems.

Hypotheses: Students who visit a site on a daily or weekly basis over a period of years will have an understanding of long term trends if given a basic foundation in science concepts. Once awareness is achieved, the next level is action

Panel Summary:

The tasks outlined in the proposal are too broad and do not appropriately identify the action that would be taken. Because of such ambiguity, one must make assumptions about what the program may or may not do. While the project managers may address such questions when implementing the program, it is not apparent as it is written in the proposal.

1b1) Does the conceptual model clearly explain the underlying basis for the proposed work?

Summary of Reviewer's Comments:

Yes. Changing public attitudes is critical to the long term success of CALFED. This comprehensive k-12 public education program will increase public understanding and awareness of resource issues, change perceptions and fuel enthusiasm to restore and enhance natural resources. It will foster active participation in conservation programs, or encourage individuals to wisely use natural resources.

Science-based. Connected to Adopt-a-Watershed.

Panel Summary:

No, panel disagreed with reviewers on the following points. While this proposal generally discussed the benefits of raising educational awareness, it did not address the specifics as to why it was of particular importance to this project. Addressing how students benefit from having access to a nearby-stream or

the importance of that stream in the community, would have provided more compelling evidence than what is mentioned in the proposal. All of the right “catch words” and vocabulary were used, however it was difficult to conceptualize how the project would be implemented.

1b2) Is the approach well designed and appropriate for meeting the objectives of this project?

Summary of Reviewer’s Comments:

How the program differs from past programs not clear --

Panel Summary:

Given that the objectives and conceptual model were unclear, it was impossible to evaluate whether the approach was well designed or appropriate for meeting the goals of this project.

1c1) Has the applicant justified the selection of the research, pilot or demonstration project, or a full-scale implementation project?

Summary of Reviewer’s Comments:

Butte Creek had one of California’s largest spring runs of Chinook salmon. Urbanization, hydro modification, agricultural runoff, etc have severely impacted this and other species of concern. Schools in the region are within walking distance of streams which facilitates field study and restoration work.

Panel Summary:

While a demonstration project is identified which details many positive aspects, additional relevant information is not included. Descriptions of how linkages have impacted current projects, demographic information and feedback would prove to be a valuable resource. Further, it should be noted that while there is merit in funding a continuing program, it still must meet programmatic standards and not be considered a given.

1c2) Is the project likely to generate information that can be used to inform future decision making?

Summary of Reviewer’s Comments:

Students and parents will have a better understanding of “the little things we can all do to protect, restore, and enhance ecosystems.” Students who participate in this project from kindergarten to grade 12 will have a greater understanding of how watersheds and stream ecosystems function. As adults this is sure to influence decisions they make.

Panel Summary:

It seems that there is a wealth of information that could be shared with others, however, details on how that would occur are unclear.

2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?

Summary of Reviewer's Comments:

Project needs long term study of impact on participants. Students and parents may have a better understanding of “the little things we can all do to protect, restore, and enhance ecosystems,” but will they take action on this understanding. Will there be a permanent change in behavior - participants make lifestyle choices that have at least a neutral effect on watersheds?

Panel Summary:

Because of broadly defined terms and vague research strategies, it is difficult to determine how information would be collected and assessed.

2b) Are data collection, data management, data analysis, and reporting plans well-described, scientifically sound and adequate to meet the proposed objectives?

Summary of Reviewer's Comments:

Collection of biological/ecological data is well documented, and reports to be completed are outlined. These reports should be adequate.

Panel Summary:

Panel agrees with reviewer.

3) Is the proposed work likely to be technically feasible?

Summary of Reviewer's Comments:

This project has been in operation for two years. The proposal to increase the scope of the project is feasible based on the information provided.

Panel Summary:

Panel agrees with reviewer

4) Is the proposed project team qualified to efficiently implement the proposed project?

Summary of Reviewer's Comments:

Yes. The Director has a good background in education and natural resources. The Education Coordinator (EC) has an excellent background in education with experience is both formal and informal

education. The EC also has a good background in botany and is a trained Adopt-A-Watershed facilitator.

Panel Summary:

Assessments of the project team's qualification ranged from the insufficient information to well qualified.

5) Other comments

**Overall Evaluation
PANEL SUMMARY COMMENTS**

Panel thought comments provided by reviewer captured most of our concerns:

Positive Aspects:

- continues a successful science-based environmental education program adapted for the region.
- proposes to expand the program within the established network of trained teachers.
- provides for continued field study and restoration efforts

Negative Aspects:

- primary allocation of funds is for a coordinator and other staff.
- does not describe the scope of the positions to be established in other districts.
- does not describe the type of training to be offered by Adopt-a-Watershed and how this will be different than previously funded training...what would the funds pay for? stipends, materials, substitute pay???
- provides a large allocation for materials that should already be available or may be requested in another CAL-FED grant proposal calling for AAW training for the area.
- no indication how "outcomes" can be measured.

Although there is merit in funding continuing programs, this project should be reviewed by CAL-FED providers prior to extending additional funding. How many teachers are involved and how many are within the service area that want to be involved? This program has been in existence for some time, and has received funding from other sources. What are the linkages? How have these efforts made any impact? What is the scope of work provided by the coordinator and those funded by service contracts? The budget is not detailed enough to clearly understand what kind of training will take place and how the "action" projects will compliment classroom learning.

Panel Summary:

Overall Evaluation Summary Rating: Fair