

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

Proposal number: 2001-C201

**Short Proposal Title: _Clear Ck. Floodway
Restoration**

1a) Are the objectives and hypotheses clearly stated?

Summary of Reviewers comments:

"...this is more of a case in which 'testing the hypotheses' consists mostly of conducting post treatment monitoring to assure that restoration goals are being met..."

Panel Summary:

The statement of hypotheses was adequate for a demonstration, and the proposal linked the objectives and hypotheses on page 4.

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

Summary of Reviewers comments:

"This is not so much a research contribution but a substantial restoration effort that seems to offer a reasonable probability for success."

Panel Summary:

This is more in the range of a demonstration to large-scale implementation of relatively well-proven methodology. There appears to be the potential for an alternative, more cost-effective, though slower approach to restoration. Such an approach would allow fluvial processes to mobilize gravel from upstream deposits to downstream restoration areas. The arguments for choosing the proposed approach are not well presented. Proper presentation of conceptual models might have led to selection of a more elegant and economical restoration package that would accomplish restoration goals requiring less intensive maintenance and gravel manipulation.

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

Summary of Reviewers comments:

"One of the drawbacks of the work, as written, is that it is not clear what will constitute success and on what timeframe." "...what level of recovery is necessary with fish, with vegetation, with birds and other wildlife, to justify the fairly expensive operation being planned? What is the desired end result for vegetation status and how will it be evaluated? Are current baseline data sufficient to document the extent of recovery of various ecosystem components?"

Panel Summary:

One panelist offered advice that the use of PHABSIM as a basis for channel design was not a good choice because factors not addressed by PHABSIM such as hyporheic flow were crucial to

designing suitable salmonid spawning habitat. Panelists are concerned with the hydrology/geomorphology background of project managers. If this project were funded, we would want to see a full-time, superintendent who was experienced with practice on large river engineering projects on-site throughout channel reconstruction.

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

Summary of Reviewers comments:

"Part of the work has been funded by CALFED, but these ecological data were not provided in this proposed Phase..."

Panel Summary:

Panel members were troubled that although the project's earlier stages had received funds from CALFED, the information gathered was not apparently informing or guiding the current implementation. The work already completed in an earlier phase was still identified as a justification for undertaking the proposed work. Missing and important information on the possible mobilization of mercury residues in the earthmoving phase ought to have been followed up before proposing implementation.

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

Summary of Reviewers comments:

"...a lot of thought has gone into how the engineering work will take place, and how biological and physical responses will be assessed, so it still seems to be a thoughtful and somewhat inspired program that is bound to improve the situation. It even has a quite substantial education/outreach component to the project, which increases the potential to provide illustrative input to other programs in the region.

Panel Summary:

The education and community outreach is a strong feature of the proposal

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

Summary of Reviewers comments:

"A lot of monitoring is proposed, but it is not clear how these data will be assessed and I believe that further evaluation of cost-effective and information rich monitoring should be further considered....

Panel Summary:

The monitoring approach is appropriate for community and student monitoring. It is not clear that level is appropriate for a site with such potential for informing dam removal and mined channel rehabilitation decisions in the CALFED work area.

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

Summary of Reviewers comments:

"...it would be helpful to have further assessment, possibly by additional, uninvolved parties from a research background. There should also be a clearer picture of what conditions exist over a substantial period prior to construction work, so that before/after comparisons are statistically valid and quantification can be reliable."

Panel Summary:

This waterway has unique potential for learning about restoration practice, with a controllable water supply from Whiskeytown Reservoir that can be manipulated experimentally, a dam removal opportunity, and a mining and aggregate removal impact to repair. This ought to get the best investigation CALFED can support. We think this proposal is not the best possible restoration investigation CALFED could support

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

Summary of Reviewers comments:

"The basic project seems reasonably feasible, with enough flexibility to take into account new information or unforeseen circumstances."

Panel Summary: This project and design absolutely depends on Saelzer Dam removal, and would be infeasible without it. We would recommend against proceeding with construction unless it is coordinated with dam removal.

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

Summary of Reviewers comments:

The team has adequate administrative and agency endorsement and support, but is lacking in researchers. It shows in the conceptual and scientific framing of the project and criteria for evaluating success.

Panel Summary:

This is a site with the potential to yield crucial information, and it would be a lost opportunity for CALFED if top-notch evaluation were not an integral part of the project.

5)Other comments

Panelists observed it is not necessarily wise to transport upstream gravel downstream when the river could do it, simply by intelligent degradation of Saelzer Dam. This reach has great potential to provide important information to CALFED to address other mined, dredged, dammed tributaries. Panelists encourage proponents to strengthen the experimental and adaptive management components of the proposal, as well as publish and disseminate results from work on site that has already been funded.

Overall Evaluation PANEL SUMMARY COMMENTS

This proposal has exemplary community outreach, and it may be difficult to build a comparable level of community support for a less aggressive but more elegant alternative path to Clear Creek restoration. The path proposed seems to have critical problems in regard to the volume of material that needs to be mechanically manipulated, and the long-term future maintenance of habitat suitability without regular supplemental manipulation.

Summary Rating

Excellent
Very Good
Good X
Fair X
Poor

Your Rating: FAIR To GOOD