

CALFED Bay-Delta 2002 ERP Directed Actions -- Selection Panel Review

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Proposal Number: 53DA

Applicant Organization: Deer Creek Watershed Conservancy

Proposal Title: Lower Deer Creek Restoration and Flood Management: Feasibility Study and Conceptual Design

Recommendation: Fund As Is

Amount: \$1,519,200

Conditions, if any, of approval (if there are no conditions, please put "None"): None

Provide a brief explanation of your rating:

The Selection Panel believes the revised proposal addresses the issues identified in the initial review. In particular, the addition of a technical advisory committee and commitments from the Tehama County Flood Control and Water Conservation District, State Reclamation Board, California Department of Water Resources, and the US Army Corps of Engineers to participate are critical to the success of this study and the next planned phase – environmental documentation for a State/federal authorized feasibility study for implementation of a project that would provide flood management and ecosystem benefits to lower Deer Creek. A 3-D model for use in the project is already available.

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**Research and Restoration External Scientific Review Form
CALFED Bay-Delta 2002 ERP Directed Actions**

Proposal Number:53DA

Applicant Organization: Deer Creek Watershed Conservancy

Proposal Title: Lower Deer Creek Restoration and Flood Management: Feasibility Study and Conceptual Design

1. Goals. Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

The goals are clearly stated and reasonable. Their statement “The idea of using floodplains to accommodate flood flows is not new, but to do so to restore habitat conditions in the channel is innovative” is grossly misinformed and indicates that the applicants have a narrow knowledge of the practice of restoration. This project should not be framed as so much as a research project, as it should describe the design of a restoration project.

2. Justification. Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

The concept of restoring the floodplain is justified. The proposal still does not quantify the aerial extent of its project design . My best guess is that it entails 10 miles of the lower river. The project plan boundaries should be described by street or bridge locations or some other well known landmarks so the public as well as project reviewers know the scope of the plan.

3. Approach. Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The iterative, collaborative planning approach with the Deer Creek Watershed Council as the lead is excellent. The technical advisory team should contain landowners and not just outside scientists and consultants because of the local knowledge base of infrastructure, environmental and social conditions and needs. The use of a 3-d model is overkill for a project such as this. A one dimensional model would probably be adequate. A two-dimensional model might have some value if a complicated problem area surfaces out of the HEC-RAS model runs.

4. Feasibility. Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

It is feasible to produce a conceptual floodplain restoration plan and later monitor the results of a project.

5. Project-Specific Performance Measures Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

The measurements of stakeholder involvement and participation in the plan implementation are creative and useful. Their measurement of the performance of Phase II is described as “the demonstration of the production of a coherent conceptual design”. If CALFED really wants to sink \$143,000 or more (number taken from budget) into a 3-d model, it should be purchasing with that money, actual construction drawings for an implementable project.

The applicants mention the unusual advantage of having very good pre-channelization , historic conditions and that this will be valuable for measuring post project conditions. It appears that a wealth of fisheries data is available for current conditions. I agree therefore that good scientific information can be gained by designing and implementing such a project.

6. Products. Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

This is the weakest component of the proposal. I seems like this is a research project to test the development and use of a 3-d model involving a great deal of data collection and storage. It would be in the greater interest of the public good to make this a straight forward restoration design project in which the products are:

- Basic water surface elevations for different landscape alterations. The priorities for modifications would include the removal of hydraulic constrictions from roads, utilities, bridges, culverts, etc.
- The identification of the most important parcels or reaches for the removal of hydraulic constrictions for flood damage reduction benefits and the most important reaches given land use constraints, for restoration of the structure, functions, and dynamics of the river system.
- The outputs should include: a restoration channel sinuosity and floodplain meander belt and a projection of the restored channel length and slopes, a projected restoration riparian corridor, estimates of post project shear stresses acting on the bankfull channel boundaries, key flood easement parcels needed for acquisition.

This budget should produce a restoration plan necessary for the next step production of construction drawings so that project implementation is in sight. My fear is that we

will end up with a research project rather than the necessary products we need to significantly advance a restoration project.

7. Capabilities. What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

As long as local experts are included on the technical teams, the consultants certainly seem to be highly qualified . Add someone with floodplain and channel restoration design experience to the team to anchor the data collection to reality .It's possible to have a lot of information without having the right kind of information to produce a project design.

8. Cost/ Benefit Comments. Is the budget reasonable and adequate for the work proposed?

If the products and outputs are changed to reflect the above recommendations the \$1.5 million price tag would be justified for a ten mile long project area.

Please provide an overall evaluation summary rating: Good: quality but some deficiencies

Brief Explanation of Summary Rating: This proposal advocates the design of a floodplain restoration project which is supported by local land owners. Floodplain restoration projects are projects with little risks of not realizing substantial environmental benefits . The removal of levees and or hydraulic constrictions and increase of inundated areas does not require a very complicated , expensive 3-d model . The budget involved (\$ 1.5 million) should produce a conceptual plan and detailed restoration design for an implementable project.

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Research and Restoration External Review Form
CALFED Ecosystem Restoration Program 2002 Proposal Solicitation Package

Proposal Number: 53DA

Applicant Organization: Deer Creek Watershed Conservancy

Proposal Title: Lower Deer Creek Restoration and Flood Management

Review:

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important? YES
2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified? YES
3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers? YES
4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives? YES
5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed? YES
6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project? YES
7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project? YES
8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed? CAN'T SAY

Miscellaneous comments:

This is a well-designed project based on the concept of using the floodplain to store floodwaters and simultaneously to restore habitat. I didn't find many specifics on the latter point, and infer that the project proposers anticipate natural habitat recovery following reconnection of the river with its floodplain (see also figure 2 which implies recovery of instream habitat). Chinook and steelhead are expected to benefit through improved passage, spawning and rearing conditions. This proposal is for phase I feasibility and phase II conceptual design.

The overall proposal is first-rate in its conceptual framework and coverage of all the key components one wishes to see included. The study team, including DCWC, CH2HILL, subconsultants and the technical advisory committee look very strong. Likewise, stakeholder involvement is well considered here. The response to prior reviews looks well done, although I was unable to access prior reviews and so

could not compare these point by point. I do not have sufficient experience with the budgeting of such projects and so do not feel I can provide a definite answer on the appropriateness of the budget.

My only concerns involve aspects of the project that will be left to a follow-on proposal, and so they may be premature. I felt that appendix C listed a number of potential biological benefits that are quite specific and will be hard to verify. I am uncertain exactly how the quantification of in-channel habitat recovery would be done. However, these questions presumably will be addressed in a future proposal for implementation of the design.

Please provide an overall evaluation summary rating: Excellent: outstanding in all respects; Good: quality but some deficiencies; Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
- Excellent	As stated above – this proposal hits all the important issues, and well. I like the over-arching hypothesis and specific sub-hypotheses. I like the treatment of biological and geomorphological monitoring.
- Good	
- Poor	

*CALFED Bay-Delta Directed Action
Administrative Review
Budget Evaluation*

Proposal number: 53DA

Applicant Organization: Deer Creek Watershed Conservancy

Proposal title: Lower Deer Creek Restoration and Flood Management Feasibility Study and Conceptual Design

Does the proposal include a detailed budget for each year of requested support? **Yes**

If no, please explain:

Does the proposal include a detailed budget for each task identified? **Yes**

If no, please explain:

Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs? **Yes.**

If no, please explain: Since the work is to be done by consultants, there is no indirect or overhead costs shown, just a listing of Project Management costs!

Are appropriate project management costs clearly identified? **Yes**

If no, please explain:

Do the total funds requested (Form I, Question 17A) equal the combined total annual costs in the budget summary? **Yes**

If no, please explain (for example, are costs to be reimbursed by cost share funds included in budget summary).

Does the budget justification adequately explain major expenses? **Yes**

If no, please explain:

Are there other budget issues that warrant consideration? **Yes**

If yes, please explain: The entire project is to be completed by a consulting firm and subcontractors. There is the potential that base costs could rise for the firms over the 3 year period and this could result in a request for additional funding. I simply can't tell if they built in any normal inflation costs for the term of the contract?

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