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

Proposal Number: 158DA
Applicant Organization: Stillwater Sciences
Proposal Title: Merced River Corridor Restoration Plan Phase IV: Dredger Tailings Reach

Recommendation: Fund As Is

Amount: $2,192,515

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

Provide a brief explanation of your rating: This project builds on an ongoing commitment to restore extensive reaches of the Merced River. One reach that is a problem area is the 7 mile-long dredger tailings reach. This study will emphasize restoration of that reach. The thrust of this study is primarily planning and model development. It is well conceived, uses conceptual models, addresses adaptive management approaches, and has all the right parts starting with characterizing the geomorphology of the reach to planning appropriate sediment inputs and landscape modifications. It includes experiments in establishing riparian vegetation and emphasizes development of a restoration plan for the 60 acres of Merced River Ranch.

All in all, this project will develop extensive basic information and planning materials to aid in future restoration on many of the problem reaches where dredger tailings are an issue. This rewritten proposal has eliminated implementation of these plans as proposed initially, with the idea that fully developed plans and development of a long-term monitoring program will enhance future implementation.

The cost and the number of personnel assigned to the tasks raises a question relative to funding this effort. The budget justification explains who is involved and their salaries as well as costs for other items. It recognizes that this project is personnel heavy because it deals with planning and modeling. It seems personnel heavy. It would help if the time effort for each person were applied to the various tasks rather than lumping salaries.

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

Proposal Title: Merced River Corridor Phase IV

Review:

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

YES. SEE PRIOR REVIEW. CLEAR AND WELL STATED OBJECTIVES, NOW SCALED BACK TO PLANNING AND PILOT STUDIES

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. SEE PRIOR REVIEW. EXCELLENT MODEL FORMULATION

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. SEE PRIOR REVIEW. GOOD OPPORTUNITIES FOR ELARNING

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. SEE PRIOR REVIEW. STRONG TEAM. IMMEDIATE OUTCOMES ARE PLANS AND PILOT RESULTS

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. SEE PRIOR REVIEW. HOWEVER, NO ACTUAL IMPLEMENTATION IS TAKING PLACE SO THAT LESSENS OPPORTUNITY FOR PERFORMANCE MEASURES

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. SEE PRIOR REVIEW. THIS LARGELY AWAITS NEXT PHASE OF IMPLEMEWNTATION. THEIR PLANS ARE SOLID.

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. SEE PRIOR REVIEW. STRONG TEAM

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

YES. SEE PRIOR REVIEW. TO ME THE IMPLICATION IS THAT IMPLEMENTTATION WILL COST $6 MILLION, SINCE THEIR OROGONAL PROPOSAL WAS FOR $8 MILLION. SO DESIGN COSTS ARE 25%. I DON'T HAVE EXPERIENCE WITH THIS BUT IT SOUNDS REASONABLE.

Miscellaneous comments:

My prior review of this project is on record. I rated it as excellent and was supportive of a full implementation project. Apparently some reviewers felt otherwise, and the re-submitted proposal emphasizes planning and pilot studies, with expectations of an implementation proposal in the near future. I see the value of this two-stage approach, and continue to believe this project is strongly deserving of support.

I consulted my prior review and the prior proposal to evaluate the re-submittal. This proposal is far more detailed and explanatory. It clearly embraces the need for models, a conceptual framework, and an adaptive management approach. I am impressed by the quality of the presentation and the content. The four tasks are very well explained and justified. I believe this approach will provide a greater opportunity to be sure that implementation follows a thorough design phase, and that the experimental and learning elements are well considered.

I note again, as I did before, that the dams are staying put, and so this entire project appears to be oriented towards implementing a channel design that will have substrate that is mobile under flows that will be delivered by the regulated river. I don't know the politics of dam removal in this place, but obviously it would be undesirable to do all this restoration around regulated flows, and then decide to fiddle with the dam.

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 ***	an accomplished team, a well-designed project, very sound explanation and justification. the opportunities to learn from the experiment are strong.
- Good	
- Poor	

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

Proposal Title: Merced River Corridor Restoration Plan Phase IV: Dredger Tailings Reach

Review:

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

   Given the need or desire to create/restore/enhance Chinook salmon spawning, the goals, objectives and hypotheses are clear.

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?

   Justification of the project rests on previous work of the proposing organization. The proposal does not clearly link the goals and objectives to those of CALFED or to previous work, although the reports of previous planning studies are identified. For example, specific targets (e.g., locations, numbers or extent) of salmon spawning habitat are not cited. However, for this reviewer, the long-term justification for "fining the bed surface" or "adding sediment to the channel" was lacking. The proposed research can be conducted with sediment augmentation but what are the long-term implications? Giver the control of bed load movement by the upstream dams, will sediment need to be introduced on an annual basis? What are the long-term costs and benefits? Will a viable, reasonably sustainable fisheries result? Surely, the research team has given some thought to these questions. These thoughts should be incorporated in the proposal.

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 approach is methodical. The hydrological and geomorphologic processes are well considered but testing the related hypotheses should be coordinated with the upstream power authority. Accordingly, the timing and magnitude of flows can be more easily monitored. A better understanding of these processes and the creation of spawning habitat will likely result. Still, more attention needs to be given the effects of woody debris on meanders and shifts in bed material. The presence or absences of beaver should be considered.

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?

   The proposed experiments and planning efforts certainly are feasible.

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 performance measures are well formed and documented. Their summary in Table 2 is was most helpful. The proposed monitoring should be adequate for hypothesis testing and resolution of the critical issues.

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?

The products are clearly identified and appropriate to the proposed work. The majority consists of reports but the restoration of the experimental areas should offer a needed glimpse into the vision of creating and managing salmon spawning habitat. This is a product to closely watch.

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?

   This reviewer has no knowledge of the past performance of the project team or members of the team. However, the resumes of the staff indicate adequate academic and field training. The team seems well qualified. The project management team has considerable experience with field level experiments. The material and equipment requirements should be ordinary and the staff already should have what is necessary.

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

   This is the one aspect of the proposal that seems to unreasonable. The total cost, $2.2 million, results in a unit planning cost, for this planning phase and reach (6.8 miles) of the Merced River, of $322,000. With a budget of $730,000/year mostly for personnel, seven persons will be employed full time for three years—this, of course, includes subcontractors. The proposed work should not require this level of labor. In particular, the topographic and geomorphic surveys (1A) seem very high. With current satellite imagery and GPS, the costs should be much less. Tasks 1E and 2B seem high as well. As proposed, 1E would fund one person full time for the three years, and this just for baseline monitoring given the years of previous study. Again, the proposed cost of the Draft Environmental Statement, 4C, seems high given all the previous work.

Miscellaneous comments: The proposal is well organized and thoughtful. It reflects a keen interest in and commitment to environmental restoration.

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	For what it purports to accomplish, the proposal is excellent. However, it lacks the crucial long-term perspective and does not fully recognize or admit the role of woody debris in the fluvial process. The budget is excessive.
X- Good	
- Poor	

CALFED Bay-Delta Directed Action
Administrative Review
Budget Evaluation

Proposal number: *158*

Proposal title: *Merced River Corridor Restoration Plan Phase IV: Dredger Tailings Reach.*

1. Does the proposal include a detailed budget for each year of requested support?

Yes. The budget appears to be very detailed. Each year is broken into sub-categories and tasks. For example, year 1 is split into a total of four categories, each comprised of sub-task charges. Representative categories include, project management, field surveys, modeling, and research activities.

If no, please explain:

2. Does the proposal include a detailed budget for each task identified?

Yes. Each task is broken into smaller, measurable categories. For example, year 1 task 1 consists of topographic surveys, sediment transport and hydraulic modeling, dredger tailing volume estimation, baseline monitoring, and project management. Each of these categories is itemized and includes direct labor, salary, benefits, travel, supplies, equipment, direct costs, and indirect costs.

If no, please explain:

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

Yes. Page 12 of the required form indicates indirect costs to be office expenses such as rent, furniture, utilities, etc. Depreciation of office equipment and services are also included.

If no, please explain:

4. Are appropriate project management costs clearly identified?

Yes. Project management costs are identified on page 12 of the required budget form. Project management costs are broken into task numbers and consist of field activity

organization, project coordination, Merced River Technical Advisory Committee and stakeholder coordination, data management and project administration.

If no, please explain:

5. 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 tp be reimburse by cost share funds included in budget summary).

6. Does the budget justification adequately explain major expenses?

Yes. The budget justification describes all categories included in the budget summary table, such as direct labor, benefits, supplies and expendables, equipment, etc.

If no, please explain:

7. Are there other budget issues that warrant consideration?

No.

If yes, please explain:

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