

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

Proposal Number: 31

Applicant Organization: California Coastal Conservancy

Proposal Title: Napa-Sonoma Marsh Restoration Project

Recommendation: Fund With Conditions

Amount: \$4,511,400.00

Conditions of approval:

- 1. The applicants are expected to cooperate with researchers and others engaged in assessing the effects of wetland restoration on mercury in the estuary. This should include collaboration, to the extent practicable, with efforts to both experimentally assess these impacts and monitor the accumulation of mercury in fish using the restored areas.**

Provide a brief explanation of your rating:

The applicant was asked to revise the proposal to address the absence of a conceptual model and hypotheses, to answer concerns regarding restoration approach/design, and to incorporate information and guidance from COE's recent DEIS on restoration of the site. The revised proposal does provide a conceptual model (though it is not supported by citations), hypotheses, performance measures, reference cites, details on the monitoring approach, and a regional perspective. The Selection Panel recognizes that the restoration proposed here could lead to active mercury methylation. The applicants are expected to cooperate with researchers and others engaged in assessing the effects of wetland restoration on mercury in the estuary. This should include collaboration, to the extent practicable, with efforts to both experimentally assess these impacts and monitor the accumulation of mercury in fish using the restored areas. The one issue that remains outstanding is in regard to whether or not Pond 5, in contrast to Ponds 3 and 4, would be returned to a self-sustaining tidal marsh or become a managed wetland (i.e., as waterfowl habitat). The Selection Panel concurs with the technical review in the recommendation that the proposal be funded in full with the direction that Pond 5 be ultimately restored to a self-sustaining tidal marsh. This would be in keeping with CALFED's ecosystem restoration goals. It is expected that the primary project purpose and goal for pond 5 as evaluated under CEQA and NEPA will be self-sustaining tidal restoration. In addition, future funding for project implementation will be contingent upon the degree to which restoration of tidal action is adopted in project design.

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

IMPORTANT: Please read through the complete [Reviewer's Guidelines](#) including an explanation of the Conflict of Interest policy prior to reviewing any proposals. Remember to select the "Upload" button at the bottom of the form to save your answers. If you close the browser window without choosing to upload, your answers won't be saved.

Applicant Organization: California Coastal Conservancy
Proposal Title: Napa-Sonoma Marsh Restoration Project

Review:

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

Restoration of the Napa-Sonoma salt pond complex is a large, expensive and high profile project that is significant and somewhat urgent in terms of support for migratory birds, the coalition poised to begin implementation, and other projects in the area. The broad goal of the project is to restore and manage 9,500 acres of Baylands that had been converted to ponds and used for salt production by Cargill Salt Company. The proponents wish to: create a diversity of habitats for wildlife that are natural and self-sustaining (need minimal human intervention to maintain); develop the project in a regional context (with adjacent projects recognized); avoid and reduce unwanted and unintended consequences (berm and marsh erosion); and proceed using information gathered along the way (adaptive management). Specific objectives for the site include restoration of tidal habitats to support wildlife, especially tidal marsh in a band along the Napa River, and water level and salinity management of remaining areas (managed ponds) to support shorebirds and waterfowl.

The funding request covers Phase I of the project, which seeks to reestablish full tidal action in Pond 3 and Napa River water flow through Ponds 4 and 5 to reduce salinity to levels beneficial to wildlife. In all, the Phase I work would improve function of 3,000 acres. The original proposal reviewed in March 2002 indicated the goal for all three ponds was restoration to full tidal action, but the current proposal states: "(future of Pond 5 as either tidal marsh or managed pond habitat is dependent upon EIR/EIS analysis: . . .)". This departure is not explained anywhere, although it should have been addressed in the Uncertainties section (Section 2d). One of the reviewers of the original proposal indicated the historic predilection of one of the principal groups leading the engineering design (Ducks Unlimited) to create managed ponds for waterfowl. The approach to have managed ponds is a central component to the larger project. However, ponds managed for waterfowl are neither supported by historic habitat availability in the proposal, nor in keeping with the goal of natural self-sustaining systems (therefore internally inconsistent). Restoration of Pond 2a to full tidal action has resulted in a model and a conceptual framework (summarized in sentence 3, above) for this proposal, and documented support of shorebirds and waterfowl (Section 2c Demonstration Project). Therefore, the preferred long-term objective for Ponds 4 and 5 should be habitats open to full tidal action to remain internally consistent and consistent with CALFED ERP and CVPIA goals.

The revised proposal has developed hypotheses (Section 2b, Uncertainties and Hypotheses) that are thoughtful and comprehensive. Hypotheses are linked to performance measures and a well developed monitoring plan. Performance measures include both structural and functional indices that are well articulated and promise to provide the information needed to support adaptive management of the site as well as advance the science of inter-tidal restoration in the region.

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 project is well justified because of its size (9,500 acres), current condition, and location in the estuary. The system, acquired recently by the State, needs maintenance and new engineering to prevent large areas becoming toxic to wildlife. More importantly, a measured process of restoration toward passively managed tidal marshes and flats will be implemented in Phase I by funding this request (i.e., full-scale implementation is justified). The conceptual models presented for the two actions (full tidal restoration in Pond 3; water control and desalinization in Ponds 4 and 5) are logical and well founded considering the constraints and successes (Pond 2a) of the site. However, no basis for the models was put forward (no citations of the literature were included to support the conceptual models), and acceptance of this important component of the proposal depended upon the knowledge and experience of the reviewer. A list of relevant past studies was included in the revised proposal, but these studies may, or may not, have supported the models presented.

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 management approach follows a model often used by the applicants where most project activities are contracted out to others, including engineering, monitoring and construction management. The construction approach is based on preliminary engineering work and is presented clearly and effectively. The revised proposal includes important information on timelines and estimated endpoints for the system components in this complex project. This information supports the conceptual models and their approach. The revisions also include a comprehensive monitoring plan that promises to generate new and useful information for future resource and habitat management.

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 preliminary engineering work and coordination of resource managers to support the project lends confidence to the feasibility of the restoration construction/hydrological activities. The revised proposal shows ongoing design changes to improve project success (e.g., a siphon from Pond 4 to Pond 3 was deleted). New information supplied in the revision indicates good likelihood of success for specific desired endpoints. However, whether these endpoints are reached or not at every site, the information gathering planned for Phase I could provide invaluable information that transcends specific measures of success at specific sites. Budgets have been changed to reflect

forward motion on the permitting of this Phase of the project. Ownership is clear and mandates an active role in accomplishing the central engineering tasks in this high-profile project. The constraints are numerous and present significant challenges to the design and management team, but these appear to have been identified and incorporated into project solutions,.

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 revised proposal has included new detailed information on monitoring, but more importantly, proponents have provided the necessary context to interpret the results and advance our understanding of tidal restoration (hypotheses, performance measures, reference sites and a regional perspective). Application of monitoring data to performance measures will provide critical information to support adaptive management at the site and support or revise models for use in other salt ponds (South Bay) and tidal restoration in general.

5. **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?

Products include plans, permits and reports. The habitat enhancement, infrastructure and management knowledge are the important tangible products for this large complex project. However, the greatest value may accrue from the project monitoring effort led by USGS. Information will be useful for adaptive management at the site, and transfer of lessons and results will be valuable to inform similar projects in salt works. These results could potentially be valuable for many tidal restoration projects in the area.

6. **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?

The applicants from the California State Coastal Conservancy have led CALFED projects in the past. The team they have assembled or adopted to date is composed of well-respected firms and agencies: Phillip Williams and Associates, USGS, USACE.

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

The project is expensive, but the budget appears reasonable and adequate for the work proposed. Full tidal restoration of Pond 3 will begin a process to restore inter-tidal habitats to 1,300 acres. Water management for Ponds 4 and 5 will reduce toxic salinity and set the stage for full tidal restoration of 1,700 more acres. Comprehensive monitoring at this and reference sites will provide the information needed to assess performance and support adaptive management and advances in the science and engineering of restoration. The current and potential match brought by the partners is significant and a real contribution to this complex and expensive project.

Miscellaneous comments:

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

**Overall Evaluation
Summary Rating**

XX Excellent

Provide a brief explanation of your summary rating

The project appears to be well justified. The revised proposal to fund Phase I of the complex project would restore tides to one pond and set the stage to restore two more ponds to full tidal action. However, there is some question whether Pond 5 will remain a managed pond or be reunited with the Napa River and full tides. I recommend support of the project with a rating of Excellent, **PROVIDED** the goal remains full tidal restoration for all components supported by CALFED. This is in keeping with the goals of the project proponents (restoration to natural self-sustaining tidal systems) and CALFED. It is an extremely valuable project with very good management, partners and cost share.

- Good

- Poor

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

Proposal number: 31DA

Proposal title: *Napa-Sonoma Marsh Restoration*

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?

No

If no, please explain: *Consulting costs –which comprise most of the funds sought, are provided as lump sums, w/o detailed break downs. The Conservancy will obtain detailed breakdowns before subcontracts are let, in accordance with state contract law.*

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

Yes. The costs limited aren't true indirect rates, but rather a 3 percent administration fee to defer the Conservancy's grant administration expenses.

If no, please explain:

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?

No

If no, please explain: *Consulting costs—which comprise most of the funds sought, are provided as lump sums, w/o detailed break downs. The Conservancy will obtain detailed breakdowns before subcontracts are let, in accordance with state contract law.*

Are there other budget issues that warrant consideration?

No

If yes, please explain:

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