

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

Proposal number: 2001-E208

Short Proposal Title: Benicia Marsh, Phase II

1a) Are the objectives and hypotheses clearly stated?

Summary of Reviewers comments:

One reviewer considered these elements clearly and explicitly stated, and “well designed.” However one reviewer considered the objectives clearly stated but that the hypothesis was stated generally (the discussion was deficient in terms of exploring overall ecological merits of restoring urban shoreline fill).

Panel Summary:

Yes, however the proponent could have done a better job in addressing how this very small scale restoration effort would fit into the overall functionality of marshes (which are isolated and heavily influenced by past disturbance) along the Carquinez Straight.

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

Summary of Reviewers comments:

One reviewer concluded that the model was clearly stated, both in terms of explaining previous site degradation and identifying influences on vegetation patterns. The other reviewer concluded that the model did not sufficiently address restoration potential of site a limited by urban influences.

Panel Summary:

The model does clearly explain the basis for the proposed work but does not offer enough in terms of how this small effort in an urban setting on a site limited by urban influence would contribute to broader Bay-Delta ecological restoration goals. In addition it does not offer adequate information as to why this effort is so costly(500k for less than 8 acres of restoration/demonstration).

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

Summary of Reviewers comments:

Reviewers considered approach to be solid and “feasible” but were doubtful about compatibility with overall CALFED restoration goals. Reviewer noted controversial aspect of no wetland vegetation

planting. Other reviewer questioned the long-term sustainability of the restoration, given need for maintenance of shoreline armoring.

Panel Summary:

The approach is very well designed but, as stated above, doesn't seem commensurate with the cost of the proposal. The approach does offer a cautious and adaptive plan for project implementation. A better explanation as to why reintroduction of native vegetation is not being done, would have strengthened the approach. In addition, the proposal could have strengthened treatment of non-native invasive species.

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

Summary of Reviewers comments:

Reviewers considered the selection of implementation as appropriate since Phase I of the project included design/environmental documentation. Some concern, again, as to how this small project fits in to the overall restoration objectives of CALFED.

Panel Summary:

Yes, given that this phase (phase II)of the project is a follow up to a previously funded and completed plan (phase I).

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

Summary of Reviewers comments:

One reviewer thought the proposal would likely contribute good information relevant to future projects and decision making. Other did not review this component.

Panel Summary:

The usefulness of the information generated would be limited due to the project's smallness of scale. The project could offer useful information for restoration efforts where the restoration site is of similar size and setting. The high visibility of this restoration effort would contribute public education of marsh restoration.

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

Summary of Reviewers comments:

One reviewed considered the plans marginally adequate, the other reviewer thought the monitoring proposal was generic and not substantive enough to evaluate.

Panel Summary:

Yes. The proposal adequately outlines monitoring and information assessment strategies.

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:

Reviewers considered this element poorly stated and generally inadequate, with no mention of data management, QA/QC, archiving and how data would be analyzed.

Panel Summary:

No. The panel agrees with reviewers that explanation of data management is insufficient.

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

Summary of Reviewers comments:

Yes, but concern over presence of pockets of hydrocarbon deposits in marsh; also concern over long-term maintenance requirement and overall ecological functioning.

Panel Summary:

The proposed work is technically feasible but will require long-term maintenance, which was not really articulated in the proposal. The panel agrees with reviewers statement of removal of hydrocarbon deposits and potential clean-up needed.

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

Summary of Reviewers comments:

Yes. Reviewers considered team qualifications as adequate.

Panel Summary:

The team is adequately qualified.

5)Other comments

Summary of Reviewers comments:

One reviewer stated: The proposal implies that adaptive management will be unnecessary or inappropriate. This suggests that there will be no provision for modification or response to unanticipated changes in channel or marsh vegetation development. This is more than a bit arrogant and ignorant of the pervasive literature on experiences in tidal marsh restoration, which is hardly a resolved body of engineering and ecological knowledge.

Panel Summary:

The proposal's utility, in terms of overall CALFED goals, is somewhat overstated; the cost is very high for the benefits obtained. This project does not seem far-reaching enough to contribute to more comprehensive ecosystem restoration goals, and has more of an urban-architectural enhancement quality to it. In addition, the cleanup of hydrocarbons on the site makes this appear to be more of a remediation project versus a restoration project. Cost of cleanup is substantial in terms of overall project cost.

INDIVIDUAL REVIEWER OVERALL EVALUATION SUMMARY RATING AND COMMENTS:

FAIR. The project is professionally proposed and well-designed, but its basic ecological merits are minor, possibly trivial, relative both to ecosystem restoration objectives and to costs. It is essentially a waterfront "passive recreation" park or urban open space amenity, with very limited potential value for ecosystem function or sensitive species support. The proposal is more appropriate for alternative funding sources dedicated to open space or park enhancements.

GOOD. The proposal to implement (Phase II) of a designed marsh restoration along the Benicia shoreline promises development of 6.8 ac of brackish marsh that appears to be based on competent science and engineering. Appropriate emphasis is placed on tidal geomorphology, which could lend considerable new and valuable information to a better understanding of brackish marsh restoration approaches within CALFED. However, the proposal pays little attention or ignores the importance of data management and analysis or adaptive management in assessment and assurance of an optimally

functioning marsh ecosystem.

Overall Evaluation
PANEL SUMMARY COMMENTS.

Strength: Overall this proposal was substantive and well-presented; the approach is well-conceived and sophisticated. Weaknesses: Data management, analysis, and reporting plan. Concerns about feasibility: this project involves removal of contaminated soils that increase costs compared to other potential restoration projects.

PANEL EVALUATION SUMMARY RATING: GOOD