

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

Proposal number: 2001-E201

**Proposal Title: Hill Slough West Habitat
Restoration Demonstration Project, Phase II**

1a) Are the objectives and hypotheses clearly stated?

Summary of Reviewers comments:

Two reviewers. One reviewer surmised as broad and confusing, but remediable; the other also stated that these components lack specificity but that fundamental hypothesis was stated effectively. Neither reviewer considered these components strongly inadequate or exceptional. General conclusion: reviewers considered statements adequate.

Panel Summary:

Yes. Objectives/ hypothesis are clearly stated, but are somewhat generic in nature and would benefit from more specifics. For example, more elaboration and clarity is needed in proposing outcomes of restoring tidal actions in the slough. Predicting the response of species (i.e. colonization) should be articulated in more specific terms (i.e. restoration of tidal action will benefit splittail by increasing spawning habitat in areas currently restricted by artificial water control devices, etc...). Generally the hypothesis and objectives are well linked to ERP goals.

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

Summary of Reviewers comments:

One reviewer did not specifically critique the conceptual model, but in his general narrative alluded to weakness in the proposal's reliance on predictive modeling rather than "empirical" determination. The other reviewer concluded that the conceptual model was "clearly explained" but could have been strengthened by scientific and engineering references. Overall all conclusion was that the model explanation was adequate, but could have been stronger.

Panel Summary:

Yes. Good description of cascading effects of stressors on ecological attributes. Good design plan of predicted ecosystem responses to restoration actions. The model could be strengthened by more precise data/explanation on historical presence and responsiveness of species to restored tidal action. The model suffers from the absence of the restoration plan, surveys,

funded during phase I of this project. Incorporation of the results of the plan and surveys would help flesh out the model and give the reviewer more substantive feasibility data to evaluate.

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

Summary of Reviewers comments:

One reviewer concluded that project would benefit from feasibility study and that the project could be stuck in planning and modeling phases in its absence. Other reviewer considered approach “well-conceived” with each phase building on adaptive management principles. Overall conclusion: adequately designed but could have been strengthened with feasibility study.

Panel Summary:

Yes. The phased approach identified is sound. Given the information provided, it is difficult to ascertain whether the project is “well-designed” or not, though the approach does seem cautious and logical. Again, incorporation of completed phase I data and information would have strengthened the proposal. No actual design is included, only projected outcomes from levee breaching, etc... The basic project strategy (i.e. phasing of planning, environmental compliance, etc...) is sound, though it currently lacks specifics for actual evaluation of project design.

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

Summary of Reviewers comments:

One reviewer simply concluded that this is self-explanatory in the proposal, the other concluded that the project was “well justified from a variety of perspectives,” but would have been stronger with substantiation /examples from scientific literature. Overall conclusion is that the applicant’s selection of project type is not really contestable.

Panel Summary:

Yes. Once again, the phasing presented is logical and straight-forward, but the absence of surveys/plans (phase I), makes evaluation of this phase funding difficult. The presence of an actual restoration plan and accompanying surveys (or a synopsis of results) would have made evaluation of phase II easier. However, since the need for Environmental Doc/Permitting goes without saying with this sort of project, the review is limited to the merits of the project in general, which are sound and at least generally well-stated.

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

decision making?

Summary of Reviewers comments:

One reviewer did not offer comments here, but other stated that this project would not only “increase broader Suisun Marsh knowledge, but also provide information on data and approaches for similar approaches to restoration in other sites as well as other regions of the Bay-Delta.’

Panel Summary:

Yes. If all phases of the project are completed as outlined, monitoring data will contribute to planning decisions for other tidal marsh restoration projects. The project will also assist the agency in understanding fund acquisition and management for other phased projects.

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

Summary of Reviewers comments:

Both reviewers concluded that details of monitoring were appropriately not provided since this phase of the proposed project would not encompass this activity.

Panel Summary:

Yes, given that this proposal is only for funding of Environmental Doc, permitting. Though these plans are not spelled out in this proposal, the proposal does identify categories of monitoring, but since this will be done in phase IV, it does not elaborate.

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:

Both reviewers stated that these components were stated only vaguely, or were absent, in the proposal. Reviewers therefore consider treatment of these proposal components as insufficient (i.e. data collection methods for listed species is only briefly described, attributed to USFWS protocols but with no specific information. There are no indications of QA-QC procedures, archiving, or other data post-processing procedures.

Panel Summary:

Yes, but how these components are going to be utilized in the Environmental Doc could have been explained better. Since this proposal is only for environmental doc/permits, these components aren't explained, appropriately; these components will be indicated in more detail during phase IV funding proposal).

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

Summary of Reviewers comments:

Both reviewers concluded that the project was feasible, but one reviewer suggested that a feasibility study would have more explicitly addressed this issue.

Panel Summary:

Yes, but the proposal lacks specifics in order to do a detailed analysis of feasibility. Again, the absence of plans/surveys identified in phase I limits the depth of review in terms of feasibility. This absence, though, should not, in my opinion preclude project funding.

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

Summary of Reviewers comments:

Both reviewers considered the project team sufficiently qualified, but one reviewer suggested closer collaboration with more experienced hydrologist, engineers/geomorphologist who practice tidal marsh restoration.

Panel Summary:

Qualifications are adequate, but highlighting someone with experience in tidal marsh hydrology (i.e. predictability models related to tidal action, etc...) would have strengthened this aspect of the proposal.

5)Other comments

Summary of Reviewers comments:

One reviewer stated that development of a dynamic model of hydrologic and topographic conditions specific to Hill Slough West should provide an excellent tool for both assessment and adaptive management.

Panel Summary:

It's important to remember that this proposal is for phase II of the overall restoration project. This phase is limited to Environmental Documentation and permitting.

INDIVIDUAL REVIEWER OVERALL EVALUATION SUMMARY RATING AND COMMENTS:

VERY GOOD. This proposal would support Phase II of a four-phase project to restore tidal hydrology and associated marsh communities to a diked wetland. The site and plan suggests a potentially high probability of success due to it's linkages to adjacent, functioning wetlands and sloughs.

GOOD. Strengths: site selection and restoration potential. Weaknesses: explicitness and substance of conceptual restoration planning

**Overall Evaluation
PANEL SUMMARY COMMENTS**

Strengths: basic approach and foreseeable ecological benefits. Weaknesses: absence of phase I information (feasibility) to use as basis for evaluation.

OVERALL PANEL EVALUATION SUMMARY RATING: GOOD