

Individual Review Form

Proposal number: 2001-D203-2

Short Proposal Title: Yolo Bypass Management Strategy, Phase II

1a) Are the objectives and hypotheses clearly stated?

The proposal clearly states its objective is to continue technical research, planning, and stakeholder development efforts to ensure the necessary data, assurances, and support are available for implementation of habitat enhancement projects in the Bypass.

The overall hypothesis is stated in the Executive Summary. It is that private landowners can maintain their livelihoods and lifestyles while participating in ecological enhancement activities on their land. That overall hypothesis, however, is not articulated in the main body of the proposal. Instead, seven “key” hypotheses, several of which are related to the overall hypothesis, are described on pages 3 and 4. Several of these hypotheses, in my view, do not clearly explain the underlying basis for the proposal. Two, in particular, are the third hypothesis related to providing information on the typical benefits and costs associated with implementing ecological enhancements in the Bypass and the sixth hypothesis which includes the identification and assessment of the relative costs and benefits of potential ecological enhancements in the Bypass. The relevance of these to the overall hypothesis is not clear. In addition, the fourth hypothesis describes “additive” hydrology and hydraulic modeling efforts. On page 6, however, the stated hypothesis is that a one-dimensional flow model can be calibrated to match the results of a two-dimensional model sufficiently to meet the information needs of the flood management agencies. Lastly, most of the seven hypotheses are not presented as hypotheses that are testable. Instead they appear to be formatted primarily as descriptions of tasks.

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

This proposal includes a conceptual model that is primarily a process model. It simply states that landowner and flood management agency willingness and participation is necessary to ensure the success of future ecological enhancement projects in the Bypass. The model does not explain the underlying scientific basis for the proposed work. No references are provided to describe the causal interconnections among key ecosystem components of their project. The model demonstrates how physical and biotic system components will likely respond when ecological enhancement projects are implemented. The conceptual model, while neither descriptive of the underlying ecological basis of the proposal nor supported by extensive scientific literature citations, does illustrate the likely process needed to ensure successful implementation of ERPP actions in the Bypass. The conceptual model does form the basis for most of the tasks needed to successfully engage key stakeholders and gain their support.

Recognition of adaptive management is not integrated into the proposal.

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

The approach described is generally adequately designed for this stage of the proposal. Two hypotheses and related tasks, however, do not appear to be critical to meeting the stated objectives. The third and sixth hypotheses and Task 5 are the most problematic. Task 3 describes the hydrology and hydraulic modeling efforts. The scope of this effort may be problematic given

potential concerns of flood management agencies. The level of effort and associated funding requested do not appear to be adequate to accomplish this element of the proposal.

With the exception of tasks 3 and 5, the proposal presents a sound strategy that ensures a high probability of success in meeting its objectives.

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

The proposal has the general characteristics of a research project that will help form the foundation for future demonstration projects. The applicant does not, however, articulate a selection in the proposal. The scope of the project is realistic given the need to work collaboratively with stakeholders in this area and throughout the north Delta and to integrate future phases with a more comprehensive restoration strategy for the entire Delta that addresses multiple species needs. This ecosystem restoration project will inform future acquisition, restoration, and management actions. The proposal provides little reference to related research and demonstration projects.

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

There is a high probability that the proposal will inform future decisions from at least three perspectives. One, experience gained from the acquisition, in-fee or easement, of agricultural lands needed to implement the ERPP. Two, efforts to provide adequate assurances to affected landowners will pave the way to increasing landowner cooperation. Three, demonstrating to farmers that they can sustain a viable agricultural operation will guide future efforts to obtain landowner participation in ecosystem restoration activities.

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

The proposal does not clearly describe a monitoring component and how the monitoring results will be used to assess the outcome of the project. The section that does address monitoring focuses instead on processes to poll participants in the process about their views on the success of the process. At this stage, very little detail is offered about monitoring of elements such as bypass flows and comparing those measurements with output from the newly developed models. As it is now, I could not conclude that monitoring would be adequate to allow determination of the success of the project in relation to its objectives.

2b) Are data collection, data management, data analysis, and reporting plans well described, scientifically sound and adequate to meet the proposed objectives?

Consistent with my observations listed above, the data collection, data management, data analysis, and reporting plans are not well described.

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

The proposal outlines an approach that is generally feasible and appropriate. Furthermore, based on the scope of the effort outlined, the probability is very high that most of the tasks described can be completed in the time allotted. One exception is obtaining concurrence on the one-dimensional modeling effort. Allowance should be made to address likely delays in completing that task.

The other exception is the effort associated with doing benefit cost analyses on ecological enhancement opportunities related to ecological benefits of expanded wetlands and increased viability of special status species populations and increased abundance of commercially important fish species. In my view, these data may not be needed given the Programmatic EIR/EIS and the ERPP.

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

The project team, particularly the Jones and Stokes staff, has the training and experience to conduct the proposed work. I was unable to assess the qualifications of the technical team representatives tasked with farm appraising or waterfowl habitat management since they were not identified in the proposal.

Miscellaneous comments

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
<input type="checkbox"/> Excellent <input type="checkbox"/> Very Good <input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	The proposal overall is well done. The deficiencies are generally minor. The proposal is one that can provide critical information to inform acquisition and restoration efforts in other areas of the Delta.