

Draft Individual Review Form

Proposal number: 2001-K202-2 Short Proposal Title: Use of the Delta for rearing Salmon
by Central Valley Chinook

1a) Are the objectives and hypotheses clearly stated?

Provide detailed comments in support of your conclusion –

I found the objectives to be very clearly stated and important to understanding chinook life history and the potential effects of delta restoration activities and management actions to protect chinook. The hypotheses, although clearly stated, are anticipated to lead to alternate hypotheses based on the results of the early work.

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

Provide detailed comments in support of your conclusion

The conceptual model clearly explains the underlying basis for the proposed work. Previous work by these investigators and others suggests that this may be a viable method of answering some very difficult questions about fry rearing and life history strategies of the various races of chinook. However, I am still uncertain, as maybe are the authors of the proposal, whether the sensitivity of the technique is enough to distinguish less than “gross differences” in temperature and food availability which may be needed to confidently establish natal stream vs. in-delta rearing.

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

Provide detailed comments in support of your conclusion

The approach is well designed, and should meet the objectives, given the technique itself proves sensitive enough to clearly distinguish the location and time of rearing. It should be noted that the success of the project relies largely on the cooperation of many other entities for collecting the needed samples as part of their existing monitoring efforts. This may require modification of collecting permits in some cases to do so.

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

Provide detailed comments in support of your conclusion

The applicant(s) have justified this project as research, as appropriate. There is a high level of uncertainty regarding the important questions being asked, which must be clarified in order to determine the needs for delta restoration or the effects of management actions in the delta.

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

Provide detailed comments in support of your conclusion

If the proposed methods are able to answer the question objectives, then the project will indeed generate information important for making management decisions to help protect Sacramento Valley chinook. One question I have is that the targeted adult sample size of 150 fish for each adult spawner population may be the minimum needed to determine the best life history strategy,

and it may be difficult that even this target will be reached for all populations, especially for the less abundant races of chinook.

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

Provide detailed comments in support of your conclusion

The proposal provides no applicable monitoring or assessment plans.

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

Provide detailed comments in support of your conclusion

Data collection methods will be largely reliant on other existing programs to cooperate and provide samples of both juveniles and adults. The proposal cites the use of dBase software for data storage, but I may suggest that a relational program such as ACCESS may provide a superior way to cross reference the otolith data set to those of the scale samples and the coded wire tag data sets, as well as to the physical data that is to be collected along with the otolith samples. ACCESS is also the software program that the IEP has adopted as its relational database standard. The reporting plan seems very sufficient.

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

Provide detailed comments in support of your conclusion

The proposal sounds feasible and likely to produce answers to the objective questions to at least some extent. I think it is a worthwhile attempt to get at some very difficult questions. Again my one concern is that it may not be possible to obtain the required number of samples from all spawner populations, which may impact the ability to draw conclusions about the life history strategies of some of the less abundant races such as winter or spring run.

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

Provide detailed comments in support of your conclusion

My impression is that Mr. Bill Snider and Dr. Rob Titus seem fully qualified to conduct the proposed work, based on recent work referenced in the proposal.

Miscellaneous comments

[Note: in the electronic version, this will be an expandable field]

**Overall Evaluation
Summary Rating**

Very Good –

Provide a brief explanation of your summary rating

I found this to be a well written proposal by researchers with direct experience with the proposed technique. The questions to be addressed are extremely relevant and important to being able to manage the Sacramento River and Delta system in a manner which would provide increased protection to Central Valley chinook. The theory seems sound and if enough samples can be obtained and the technique is sensitive enough it should provide new information with which to answer the objective questions.