# **Panel Scientific and Technical Review Form**

(Note: Review comments will be anonymous, but public.)

Proposal number: 2001-K218 Short Proposal Title: Butte Creek Big Chico...

# 1a) Are the objectives and hypotheses clearly stated?

# Summary of Reviewers comments:

Diverse reviewer responses. #1 Reasonably clear except for one. #2 Objectives consistent with purpose; the hypotheses are not well stated. #3 Objectives clearly stated, one hypothesis is given for Sutter Bypass #4 Yes.

## Panel Summary:

Hypotheses address only two of project purposes, steelhead timing and abundance was not addressed. Objectives are clear but only one good testable hypothesis. Could have left out much of writing; hypotheses are difficult to formulate for this type of monitoring project.

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

# Summary of Reviewers comments:

#1 Conceptual model clearly stated. #2 Conceptual model poorly stated, the connection between the author's statement, project objectives and hypotheses is not established; #3 Provides minimal conceptual model for spring run in Sutter Bypass tasks. #4 Great.

# Panel Summary:

We cannot find a conceptual model and don't believe any effort was made to provide one. Frustrating because it isn't that hard. We are tempted to do it ourselves.

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

### Summary of Reviewers comments:

#1 Part is well-designed and appropriate BUT relative abundance estimate is questionable, no efficiency tests are proposed even estimates of relative abundance will not be possible. Estimating migration time will be questionable without relative abundance estimates. Purpose and utility of capture of adult steelhead and Chinook at fish ladder is unclear. No scales or otoliths are proposed for collection so life history information will not be developed. Counts of fall run will be in question if spawning occurs downstream of the capture facility. Sampling for steelhead will likely be incomplete – as identified in the proposal. Study with paired releases is unclear: will the study be conducted under flood events? Will the study be coordinated with other studies on the Sacramento R and Yolo Bypass and the delta? Will scale or otoliths be collected; #2 & # 4 both say Yes.; #3 Approach for meeting objectives is appropriate for the spring-run tasks but the trapping of fall run adults requires more justification for such an intrusive sampling technique.

Concern about using fall-run hatchery fish to mimic spring-run behavior. Also questions evaluation based on CWT in ocean harvest, why not at other collection sites.

# Panel Summary:

Panel thinks relative abundance does appear to be possible but data quality is likely to be variable because of inability to operate trap during peak migration conditions. Proposal MUST comply with CAMP protocols to address concerns about trap efficiencies, without these protocols the study can't be compared with other studies and without the efficiency the data are very questionable. Sampling for adults will be incomplete because of downstream spawners and because of inability to operate trap during high flows, when adult steelhead are likely to be most migrating. Scale and otolith work would be nice but would need to be part of a larger proposal; not necessary for the objectives of this one.

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

### Summary of Reviewers comments:

Primarily research and monitoring.

# Panel Summary:

Concur

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

#### Summary of Reviewers comments:

#1 abundance estimates of spring run are critical to determine recovery. #2 Yes, but applications for management unclear, would like more definition beyond the reporting process described here. Unclear how this info will be used to evaluate restoration projects. #3 Potential to guide future restoration decisions, depending on how stringent the applicants are toward analyzing data #4 Extremely well.

### Panel Summary:

Past experience shows that data quality is poor for assessing juvenile abundance and therefore may be of limited utility for decision-making. Spring-run adult escapement estimates are essential and have a good track record, the value of the adult fall run data is questionable. Steelhead are very difficult to assess, particularly as this proposal suggests.

2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?
Summary of Reviewers comments: NA
Panel Summary: NA
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: #1 Well described, data analysis not discussed but data analyst included in budget. Data needs to be analyzed in the context of stated hypotheses. #2 Lack of clarity in analysis and reporting.#3 They over-rely on ocean harvest for Sutter Bypass study; all other CWT recovery efforts in the Central Valley should be included. #4 Great.
Panel Summary:  Their techniques need more rigor and clearer description, analytical process needs to be clarified.  The included report confirms fears that data analysis and interpretation will be lacking for this

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

# Summary of Reviewers comments:

Yes, within the limits of high flows and other factors.

# Panel Summary:

Concur

proposal.

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

Summary of Reviewers comments:

Yes.

# Panel Summary:

Concur

### 5)Other comments

Reviewers evaluations are #1 fair, #2 very good, #3 good, and #4 excellent. Tasks 1, 2, and 3, would have received a higher rating but the tasks 4 & 5 need additional information.

# Overall Evaluation PANEL SUMMARY COMMENTS

Needs more rigor and more thought all around. Some elements are unjustified based on the information provided. Sampling program limits ability to assess restoration based on downstream abundance of emigrating juveniles. Adult population estimates are a better tool.

What are the hypotheses? What are the analytical tools? What do the limitations of the sampling procedures imply about the conclusions one can draw?

Consider funding this project partially. #5 is probably worthwhile as a stand alone effort but a rigorous experimental design should be described. #1 should be done as described. #2 should be done if CAMP protocols are followed and the data should be examined to see if consistent juvenile abundance estimates are possible; identify what meaningful data can be expected.

## **Summary Rating**

Excellent Very Good Good Fair Poor

Your Rating: GOOD