

Draft Individual Review Form

Proposal number:2001-K218-4

Short Proposal Title: Butte Creek..Evaluation

1a) Are the objectives and hypotheses clearly stated?

The proposal clearly states the objectives and identifies the data to be collected for each component. One hypothesis is given for the Sutter Bypass task but none are given for the additional tasks. The applicant stated that monitoring projects don't require hypotheses. Given that the project has at least four years of monitoring completed further evaluation of the data could have given rise to detailed hypotheses, especially concerning the Spring-run chinook salmon objectives. Detailed hypotheses could have helped drive the continuing research.

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

A narrative conceptual model minimally outlines the basis for the Spring-run chinook salmon (SRCS) and the Sutter Bypass tasks. The applicant states the need for continuing the monitoring of the SRCS as a way to follow population trends and to evaluate continuing restorations activities that are occurring on the creeks. The applicant also states the need for a better understanding of how Sutter Bypass affects the survival of juvenile salmon and steelhead. The proposal is clearly lacking the underlying basis for the steelhead and Fall-run chinook salmon (FRCS) task (Task 4).

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

The approach for meeting the objectives is appropriate for the SRCS tasks (Tasks 1, 2 and 3) of the proposal. The applicant will use standard methods for evaluating escapement and emigration including trapping, snorkeling surveys and coded wire tag releases.

Task 4, which includes steelhead and FRCS monitoring, is difficult to analyze for approach due to a lack of understanding of why this task is needed. The trapping of adults, as proposed in this task, is an intrusive sampling technique which would require sound reasoning before being used. The mention of trapping FRCS to exclude them from spawning areas is left unexplained.

The Sutter Bypass task uses an appropriate approach of using coded wire tag releases, although the applicant states that results of the coded wire tagging will be evaluated using only ocean returns. It seems that additional evaluation tools are needed to ensure the cost effectiveness of such a release. Some basic evaluations of habitat and physical parameters (temperature) of the two routes might provide further analysis. A final comment is that the use of FRCS as a surrogate for SRCS in emigration studies, although widely used throughout the Delta, has never been fully analyzed. It is possible that FRCS may behave differently in rearing conditions and therefore may not provide accurate comparisons.

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

By noting that much of the proposed work is a continuation of an existing monitoring program that examines a priority species, the applicant clearly shows justification of the proposal as a research

project. As many demonstration projects and full scale restoration activities have all ready occurred in the study area, the applicant states that this monitoring proposal would insure continuing evaluation of the projects all ready completed and for those in the planning stages.

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

This is the type of project that has the ability to guide future decisions regarding restoration. Whether this is true depends upon how stringent the applicants are towards analysis of the data including what correlations are developed between restoration and conservation activities in the creeks and the trends in the data. This type of monitoring is especially useful if restoration activities have been active in the study areas. If the river is in a static condition and life histories are mostly known then a smaller commitment to monitoring may be more cost effective.

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

Some greater analysis of the trends may lead to additional hypotheses that could steer research in the future. For instance, the report covering 1995-98 (submitted as an appendix) cites no causes for the vastly different escapement and emigration results. Were these caused by restoration activities, weather or other reasons? This type of analysis is critical to long term monitoring programs and important in keeping stakeholders apprised of progress.

Task 5, the Sutter Bypass evaluation, needs more analysis than the comparison of ocean harvest rates.

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

Being that the proposed project is mostly a continuation of an existing project the structure for data collection and analysis should all ready be in place. The structure and timelines set up for reporting is thorough and should be adequate in keeping stakeholders well informed. These factors in combination will help meet the objectives of the project.

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

Again, as a mostly continuing project all phases should be technically feasible. Potential problems as mentioned by the applicant include unpredictable winter flows that can hinder sampling and difficulty trapping adult fish (task 4).

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

The senior biologist has 11 years experience including five on this specific project. The lead field biologist also has 5 years experience on this project. The rest of the positions, mostly seasonal, will be hired at the start of the field season. Having 2 DFG biologists continue in their current roles will clearly help in the implementation of the project.

Miscellaneous comments

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

**Overall Evaluation
Summary Rating**

- Excellent
- Very Good
- x Good
- Fair
- Poor

Provide a brief explanation of your summary rating

Overall, this reviewer rated the proposal as good. The continued monitoring of SRCS, a high priority species, seems important to continue, especially given the amount of restoration activities that are occurring in the study areas. These tasks (Task 1, 2 and 3) alone would have received a higher rating. The proposal does not clearly state the goals and objectives of monitoring for FRCS and Steelhead (task 4) and therefore is difficult to evaluate. The Sutter Bypass task (task 5) seems important but clearly more analysis of the data would be needed than the simple comparison of ocean harvest rates of the two groups (as stated in the proposal) for it to be cost effective.