

Draft Individual Review Form

Proposal number: 2001-K211-4

Short Proposal Title: Health and Physiological Effects of Elevated Water Temperature...

1a) Are the objectives and hypotheses clearly stated?

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Satisfactory. The hypotheses of the proposed research can be discerned from reviewing the proposal, but are not stated explicitly. The researcher discusses under Ecological and Biological Objectives both temperature and contaminants, and leaves a question as to the role of contaminants in the project. Since contaminants will not be evaluated in this work a clarification statement should be included.

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

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

The Executive Summary and the Ecological and Biological Objectives explain the need and basis for the proposed research.

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

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

There does not appear to be a control group for the proposed study. The study will test two temperature treatments, but no control to those treatments is identified. I feel that a control group would add strength to the study by accounting for the “laboratory” effects, and allow for stronger evaluation of differences between the treatments.

The proposed approach will meet the objectives of water temperature effects on health and physiology, but could be made stronger with appropriate controls.

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

Unclear. It is not stated within the proposal the selection of the type of project. It is clear from the review of the proposal that the work is targeted research.

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

Yes. It is likely that information gained from this research will assist fish managers in decision making on release timing of hatchery fish. The information may also give strength to requests for system water management changes to better regulate temperature for salmonid resources. Additionally, the researcher states that the data will complement the efforts of the IEP program.

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

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Yes. The identified evaluation assays will adequately evaluate the effects of the treatments. Additionally, the treatment system monitoring parameters identified are sufficient for ensuring proper system operation. However, frequency of monitoring should be detailed. The proposal states “throughout the experiment” this does not provided enough information.

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

Data collection, management and analysis protocols are not fully described. Detail is provided as to what data will be collected for most assays. The pathogen challenge to determine disease resistance is not detailed as to how this will be evaluated, and are there control fish to the challenge? Data quality controls, handling and storage procedures are not addressed.

Data reporting plans are presented in sufficient detail, with quarterly, final and oral reports being proposed.

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

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Yes. The proposed research work is typical of wet lab challenge work and should be able to be completed.

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

Provide detailed comments in support of your conclusion [Note: in the electronic version, this will be an expandable field]

Yes. The applicant has excellent qualifications and experience to conduct this work.

Miscellaneous comments

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

The proposed research/monitoring work would be beneficial to the fisheries resources and fish managers of the Merced River. Benefits from the research would likely extend to a broader region. Information lacking in the proposed scope should be obtained from the proponent and consideration for funding of the research maintained.

**Overall Evaluation
Summary Rating**

- Excellent
- Very Good
- XGood**

- Fair
- Poor

Provide a brief explanation of your summary rating

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

The proposal appears to be focused on addressing the identified problem, but is lacking in providing a more detailed scope of work.
