

Draft Individual Review Form

Proposal number: 2001-F208-1

Short Proposal Title: Mercury Fate and Transport Models

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]

The hypotheses related to the modelling of mercury transport, transformation, and bioaccumulation are all adequately stated in the proposal.

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 Conceptual Model does clearly explain the rational or basis for the proposed work and its significance to CALFED management decisions.

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]

The approaches used for model development, calibration, and use are all well documented.

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]

The applicant has justified the selection of this research project and has adequately explained how CALFED might use this knowledge for managing wetlands.

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]

The project is likely to generate information that can be used in future decision making, especially with regard to potential source reduction strategies with respect to mercury, management of wetlands or wetland restoration in this portion of the Bay system.

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]

The monitoring and information assessment plans have been carefully considered and should be adequate for this project.

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]

The proposal does address data management and has considered how data collected from other CALFED projects will be managed in relation to this study.

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]

The models can be developed given the current and ongoing studies of mercury, sediment, and hydrodynamics studies currently underway.

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]

The project team has demonstrated experience with model development, and has demonstrated experience in the development of models for mercury chemistry and bioaccumulation.

Miscellaneous comments

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

The project will complement ongoing CALFED mercury contaminant research including the Directed Action (CALFED #99-B06) mercury study for Cache Creek and Delta. This project enhances and does not duplicate efforts. This study is a logical and necessary extension of the Directed Action study. As indicated by the author of this proposal, the CALFED scientific review committee strongly recommended that a numerical model, as described by Dr. Bale, be implemented for that study.

**Overall Evaluation
Summary Rating**

- X X Excellent
- Very Good
- Good
- Fair
- Poor

Provide a brief explanation of your summary rating

The proposal is a necessary extension to the CALFED Directed Action (CALFED #99-B06) and greatly enhances the successful utilization of the scientific data collected for that project. There are currently no other funding sources available for development of this model.
