Draft Individual Review Form

Proposal number: 2001-K221-2 **Short Proposal Title: Food Resources for Zooplankton**

1a) Are the objectives and hypotheses clearly stated?

Yes, both the general objectives and the specific hypotheses (p. 4) are clearly stated.

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

Yes, the conceptual model is clearly presented, although it is overly simplified to the extent that Fig. 1 does not include predation and Fig. 2 does not include interaction with the benthos.

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

Yes, the approach, which combines field collections, laboratory culturing and feeding experiments, and intensive data analyses, is well designed and appropriate. More details than the page and half provided (pp. 8-9) would have been preferred, but I understand that this is not the norm for CALFED proposals.

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

Yes, this is clearly a targeted research project.

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

Yes. As the PIs correctly point out, a better understanding of trophic linkages between primary producers and fishes, (i.e., copepods, the proposed study organisms) will be essential to evaluating decisions regarding habitat restoration and protection.

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

N/A (see p.9)

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

Yes, although I would have liked to see more said about the long-term storage and disposition of the data .

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

Yes, the PIs have undertaken very similar experiments on cladocerans, although the taxonomic issues for the copepods will certainly make for greater challenges (help from Orsi's group – see letter – may prove critical in this regard).

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

Yes, largely. Goldman should be able to give good advice when needed, and Jassby is top-notch in terms of data analysis/interpretation. Mueller-Solger, on whom the success of the overall project will rest, should be fine, although she will be challenged by the taxonomy (see above) and perhaps also timely publication of results (see below).

Miscellaneous comments

I have two additional concenns, although these are hard to judge because of the limited information provided in the proposal. (I would strongly encourage CALFED to adopt the approach of NSF, EPA STAR, and other agencies in requiring that CVs and current and pending support statements be appended to each proposal.) My first concern is with the productivity of the primary person responsible for the success of this project, Dr. Mueller-Solger. Although her dissertation from 1998 is listed in the references, not a single peer-reviewed publication by her is listed. Without a CV this is difficult to judge, but this implies that she has done limited (or no) peer-reviewed research that is relevant to the proposal. The preliminary results shown in Figs. 4 and 5 looks good, and her IEP presentation earlier this year was solid, but the (potential) lack of productivity in the peer-reviewed literature is a concern. On a related point, were this proposal to be funded 5 , years of full-time post-doctoral employment (1998-2003) is an awfully long time, especially at the same institution. Is her position as "manager and director of the UCD Castle Lake limnological field station" (p. 12) completely unpaid, such that she needs full-time support as a post-doc? Perhaps it is time for UCD to consider promoting Mueller-Solger, or for her to be looking elsewhere for work.

A second concern is the potential overlap with the PIs' currently funded CALFED work on cladocerans in the delta. Although the proposed work on copepods would clearly complement that being done on cladocerans, if there is overlap in the field and laboratory work one would expect some savings in the costs, but these do not appear to be reflected in the budget. But again, this is difficult to judge without access to current and pending support statements.

Finally, let me suggest to both the PIs and CALFED that the unusually large number of supporting letters (10) is not helpful. In a few cases these letters are frorm investigators or collaborators who will be contributing something useful or even essential to the success of the project (e.g., Orsi, Hymanson). But in many other cases the letters amount to little more than mutual congratulations on the importance of their shared research topics (e.g., Brett). The letters waste paper and time, and distract from the more compelling parts of the proposal.

Overall Evaluation Summary Rating	**Provide a brief explanation of your summary rating**
☐ Excellent XXX **Very Good** ☐ Good ☐ Fair ☐ Poor	Overall, this is a very good proposal to undertake important research that is highly relevant to CALFED goals and objectives.