EXHIBIT A, ATTACHMENT 1
Charge Questions

Collaborative Science and Adaptive Management Program (CSAMP)/
Collaborative Adaptive Management Team (CAMT)

Proposal for Evaluation of Key Assumptions Underlying Analyses of Delta Smelt Survey Data

Preface

Several ongoing monitoring surveys are used to assess the relative abundance and spatial distribution of Delta Smelt in the Bay-Delta, including the Fall Midwater Trawl (FMWT), Spring Kodiak Trawl Survey (SKTS), and 20mm Survey. These surveys, which have been implemented annually for different periods of time, target various species and life stages, and deploy different gear and variations of fixed-station sampling methodologies. Data from the surveys are used to calculate indices of relative abundance and to document species trends over time, but the data have also been used in numerous other capacities including evaluations of habitat use, spatial distribution, and population estimation. Some members of the Collaborative Adaptive Management Team (CAMT) have expressed concern that the data from these surveys (and the indices derived from these data) may not accurately reflect the abundance or distribution of Delta Smelt due to variable catchability (and how this may be influenced by specific environmental conditions at the time the data are collected, e.g. time of day or stage in tidal cycle). Other CAMT participants have expressed concern that there are inherent limitations associated with how these survey data are collected (e.g. at the temporal and spatial scale) to address questions that go beyond relative abundance over time, and that these limitations affect how the data can and should be used. The ***Evaluation of Key Assumptions Underlying Analyses of Delta Smelt*** proposal was prepared to evaluate and attempt to correct for some of these concerns. The following charge questions were developed to guide the peer review of that proposal. The CAMT acknowledges that there are other ongoing special studies and analyses to address these concerns.

Charge Questions

1.	Are goals, objectives, hypotheses and questions clearly articulated and internally consistent?
2.	Will the proposed work contribute to our overall understanding of Delta Smelt abundance and distribution?
3.	Are the budget and the schedule reasonable and adequate for the work proposed?
4.	Does the proposed work take a feasible approach to addressing questions such as spatial autocorrelation in the data, correction factors for covariates affecting catchability and uncertainties concerning abundance indices? Are there other approaches that would be more appropriate for this analysis?
5.	Will the results from this proposal add value to other work that uses these survey data, and if so, how much confidence can be added from the analyses?
6.	Are the proposed analyses suited to constructively informing management actions such as those associated with the existing biological opinions?
7.	Does the proposal address the most important potential data limitations relevant to questions about Delta Smelt entrainment and the influence of Fall outflow?