

COMMENTS: COTTONWOOD CREEK RESERVOIR COMPLEX

The Service agrees that the special status plant and animal species mentioned in the Cottonwood Creek Reservoir Complex proposal warrant additional consideration before the project proceeds. Analysis of the potential effects of the project on each of these species is appropriate. Therefore, the Service recommends thorough and adequate biological surveys be conducted to determine the effects of the project on the species mentioned in the proposal as well as on the federally endangered vernal pool tadpole shrimp (*Lepidurus packardi*) and the federally threatened vernal pool fairy shrimp (*Branchinecta lynchi*) that have been found in the area of the project.

The Service agrees that plant surveys are critical to making a final determination on the effects of the proposed project on federal plant species of concern. Therefore, the Service recommends that botanical surveys for federal species of concern be conducted well before any project construction efforts are undertaken. Federal species of concern include all listed, proposed, and candidate species as well as species of concern that have been identified in species lists that have been generated by the Sacramento Field Office. Botanical surveys need to be conducted as per Service protocols which are attached. Timing of botanical surveys is crucial to ensure that species are present and qualified botanists are able to make determinations to species (or subspecies) level.

In reviewing the proposed projects that have been identified in the CALFED process, an adequate biological assessment of the impacts to any of the proposed projects needs to include an effects analysis. At a minimum, the effects analysis needs to include direct, indirect, and cumulative effects. Additionally, growth-inducing, interrelated and interdependent effects should be clearly and concisely described and analyzed in terms of what projects have been completed in the past, what other projects are proposed, and what the individual and collective effects of these projects are likely to be.

Attachment 4