

September 3, 1998

TO: Rick Woodard

RE: Questions for Expert Panel on CALFED Water Quality Issues

**Objective:** provide healthy drinking water while minimizing adverse effects on ecological resources.

Questions for the panel:

1. What is a systematic approach to meeting the above objective? We define the system as ranging from the Sierra Nevada to the taps in both northern and southern California?

We assume that variables to be incorporated and optimized include: a) options for reducing bromide AND OTHER ADVERSE CONSTITUENTS at the primary intake (isolated facility, freshwater releases, seasonal timing of intake); b) manipulation of storage and distribution system (reoperation of existing above- and below-ground storage in combination with seasonal timing of pumping, options for blending other water sources including stored water); c) options for managing DISINFECTION treatment processes and other treatment systems.

Perspective: Water entering the plant plus treatment equals drinking water quality. Drinking water quality does not equal delta water quality.

2. What can be done by CALFED and/or the utilities using Delta waters to meet the regulatory and public health objectives for drinking water to be implemented within the next decade? This question addresses both source water improvements and treatment alternatives in combination to meet these objectives. It assumes that any water quality improvements from the CALFED conveyance or storage alternatives would not be available.

3. Given the uncertainties in predicting future drinking water health effects from bromates (and other constituents of concern), possible treatment technologies, and regulatory requirements, what approaches are most cost-effective for CALFED and/or utilities to pursue in protecting public health 20 years from now? These approaches should not be limited solely to the consideration of existing Delta water quality, but must include improvements to Delta water quality, combinations of physical and chemical treatment alternatives, and options for re-operating existing water supply facilities.