

July 11, 1997

CALFED
Mr. Lester Snow
Executive Director
1416 9th Street, Suite 1155
Sacramento, CA 95814

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Dear Mr. Snow:

**Agricultural and Urban Water Caucuses Policy Group
Comments on CALFED's Water Quality Program Programmatic Actions**

Enclosed please find comments from the Ag/Urban Policy Group on the Water Quality Program Programmatic Actions, described in the Phase II Alternative Descriptions report and Appendix B to that report. The CALFED Water Quality Program includes actions to reduce loadings of key pollutants from mine drainage, agricultural drainage, urban and industrial runoff, and municipal and industrial wastewater treatment facilities to improve source water quality in the Bay-Delta system. The Program calls for relocation of water supply intakes and more advanced water treatment to improve drinking water quality, water management actions to improve source water quality and identification of the chemicals responsible for the toxicity in the system. The Ag/Urban Policy Group has reviewed the Water Quality Program and offers the following general comments. These general comments are followed by more specific comments on each of the actions.

1. Comprehensive Monitoring, Assessment, and Research Program - We believe that a comprehensive monitoring, assessment, and research program, designed to address real water quality problems, is an essential component of the Water Quality Program. Despite years of study, many water quality problems are not yet properly understood and the relationship between in-stream biological effects and water quality standards exceedences or toxicity test results using standard bioassays is poorly understood, at best. We understand it is difficult and may not be cost effective to take action prior to understanding the water quality problems of the Delta and its watersheds; however, CALFED needs to find the proper balance between monitoring and taking action. We believe there is sufficient justification to proceed with control measures for some Water Quality Program actions (e.g. mine abatement, control of dormant spray pesticides); however, many of the Water Quality Program actions need to be monitored and adjusted based on monitoring program results (e.g. unknown toxicity, biological effects of selenium). For adaptive management to be successful, clear objectives and measurable criteria for

assessing the effectiveness of actions need to be identified. We understand that Rick Woodard is in the process of developing an outline of the monitoring, assessment, and research program and we look forward to reviewing it and providing our technical assistance to Rick.

2. State of the Watershed - For each major pollutant source (e.g. mine drainage, agricultural drainage, etc.,) CALFED should provide a description of the problem, including the chemical or physical parameters of concern and the effects on water quality and aquatic organisms - a state of the watershed report. We also recommend that CALFED provide information on how well understood the problem is. Without this more detailed descriptive information, it is difficult to evaluate the need for the actions and to determine if the "performance measures" and "indicators of success" are appropriate. We are hopeful that the detailed information will be presented in the CALFED Component Report which, we understand, will be available for public review within a month.

3. Biological Response - Each action contains a "performance measure" and an "indicator of success". These performance measures and indicators of success are often qualitative rather than quantitative and in cases where they are quantitative, they are often based on chemical concentrations in ambient waters rather than biological responses. Although water quality objectives and criteria are used by regulatory agencies to define the health of aquatic ecosystems, many scientists question the ecological validity of chemical concentrations as indicators of ecosystem health. We recognize the difficulties in determining appropriate quantitative responses and in measuring success biologically, but we urge CALFED to quantify the performance measures and indicators of success where possible and to base them on biological responses in the system, where appropriate. It is appropriate to base performance measures and indicators of success on chemical or physical characteristics of the water for drinking water improvement actions. In our more detailed comments that follow, we provide specific recommendations for biological and chemical indicators of success.

4. CALFED Interaction with Other Agencies - Many of the Programmatic Actions contain implementation methods that require action by other state and federal agencies that are not under CALFED's jurisdiction. We assume that CALFED will make recommendations to those agencies to implement the CALFED Water Quality Program and that the individual agencies will then engage in their normal processes for establishing regulations or programs. Many of the actions contain a statement under the "Methods" heading that existing regulations should be enforced. We believe strongly that existing regulations should be enforced. If there are indications that existing regulations are not being enforced, CALFED should provide a description of the problem and make specific recommendations to the regulatory body(ies) on areas where better enforcement would help improve the Bay-Delta ecosystem. The Water Quality Program should then contain actions that would supplement existing regulations with voluntary incentive-based methods.

5. Improvement of Drinking Water Quality - The Water Quality Program addresses drinking water quality issues with incentives for upgrading drinking water treatment plants to more advanced treatment, and with relocation of drinking water intakes to areas that are not influenced by discharges of drinking water contaminants. Reliance on treatment alone to address drinking water quality issues is not sufficiently protective of public health and is at odds with EPA's source water protection programs. Although many of the source control actions in the Water Quality Program will protect and improve drinking water supplies to some extent, some of the key parameters of concern to urban water supply agencies have not been adequately addressed (e.g. total organic carbon and bromide). To protect the drinking water beneficial use, the CALFED Water Quality Program needs to include additional source control actions that address drinking water quality parameters and that incorporate targets for improved source water quality for drinking water supplies. Specific recommendations are included in the technical comments.

CALFED should determine if adequate drinking water quality can be provided by source control actions or if it will be necessary to relocate drinking water intakes to provide raw water quality that can be treated to meet drinking water standards. Relocation of water supply intakes should be included in the CALFED storage and conveyance alternatives and the water quality impacts (both to drinking water supplies and the ecosystem) should be evaluated in the programmatic EIR/EIS.

6. San Joaquin Salinity and Selenium Issues - The CALFED Water Quality Program includes agricultural drainage actions to reduce selenium, salinity, pesticides, and ammonia. The biological significance of selenium has not been clearly established. A study of the biological effects of selenium should be included in the comprehensive monitoring, assessment, and research program. An active land management program that includes planting crops, such as safflower, that use water from the high water table should be evaluated. Active land management may result in improved water quality compared to land retirement. We concur with CALFED that landowner participation should be voluntary and that compensation should be provided for land that is retired. Treatment of drainage water for removal of salts and selenium should be evaluated along with land management in the CALFED program. Although at the current time there are concerns to be overcome, such as cost, brine disposal, and technical feasibility, the drainage water could be a valuable resource if cost effective treatment can be identified. Treatment methods to be evaluated should include reverse osmosis and low pressure membranes, constructed wetlands, and continued research in other treatment techniques.

We would like to host a one or two day workshop to discuss the San Joaquin salinity and selenium issues with CALFED staff and consultants. Our technical team will contact you to set up this workshop.

7. Mine Clean-up Liability - In recent years, the Regional Boards have been reluctant to commit public funds on mine abatement projects due to the concern that the State would become liable for clean up costs. The California Water Code has been amended to allow "good Samaritans" to become involved in mine abatement and to avoid liability. The federal Clean Water Act has not been revised and should be amended to allow state agencies and others to pursue mine abatement while avoiding liability associated with doing so. We recommend that CALFED take the lead in pursuing this revision to the federal Clean Water Act. Ag/Urban technical staff will be pleased to meet with your staff to discuss the content of the state legislation and our recommendations for federal legislation.

8. Other Pollutant Sources - The CALFED Water Quality Program does not contain any source control actions for timber harvesting, railway/highway/road construction, or wildfire prevention and remediation. These activities contribute tremendous sediment loads to the Sacramento and San Joaquin watersheds each year and should be included in the CALFED program. The Central Valley Regional Board has identified the Feather River watershed as being adversely affected by these activities. Controlling these problems offers benefits to timing and amounts of flow to the Delta.

Implementation of the many actions contained in the Water Quality Program will be costly so CALFED needs to proceed with actions that will provide the most significant benefits to the ecosystem and improve urban and agricultural water quality. Performing monitoring, assessment, and research in conjunction with those actions will assist in prioritizing and/or modifying the remaining actions.

We appreciate the opportunity to comment on the Water Quality Program and look forward to continuing to work with CALFED staff on this important aspect of the program.

Very truly yours,



Dan Nelson



Byron Buck

Enclosure