



# Bay Area Regional Water Recycling Program

Developing a regional partnership to maximize Bay Area water recycling.

November 4, 1997

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Mr. Lester Snow  
 Executive Director  
 CALFED Bay Delta Program  
 1416 Ninth Street, Suite 1155  
 Sacramento, CA 95814

Re: Regional Water Recycling Opportunities- CALFED Environmental Impact Statement

Dear Mr. Snow:

Thank you for the opportunity to provide input to the development of the CALFED alternatives. We represent the Bay Area Regional Water Recycling Program, a consortium of seventeen agencies, whose mission is to "Develop a regional partnership to maximize Bay Area water recycling." This letter expresses our expectation that the CALFED program will develop Bay/Delta solutions which include water recycling as a viable water supply component and recognize that capturing water recycling's full potential requires the following:

- A regional approach to planning and implementation;
- Assistance in overcoming institutional hurdles; and
- Assistance in overcoming financial hurdles.

Water recycling offers significant potential for increasing the water supply for California. Currently there are two regional water recycling studies in progress--the Southern California Comprehensive Water Reclamation and Reuse Study and the Bay Area Regional Water Recycling Program. These studies are exploring the feasibility of regional approaches to maximize the cost-effective yield of recycled water. About 2.1 million acre-feet per year of treated wastewater is currently discharged by urban California into the Pacific Ocean and San Francisco Bay.

Development of the long-term Bay/Delta solutions requires that an integrated water resources viewpoint be taken which includes water recycling as a potentially significant water supply option which must be evaluated with other options to provide a complete CEQA/NEPA analysis. Failure to consider all options on an equal footing may leave CALFED's Environmental Impact Statement vulnerable to legal challenges.

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A cooperative effort funded by U.S. Bureau of Reclamation, California Department of Water Resources and Bay Area Water and Wastewater Agencies.

CALFED has established four primary objectives in developing Bay/Delta long-term solutions:

- Water Supply
- Water Quality
- Ecosystem Quality
- Vulnerability of Levees

Regional water recycling programs can help CALFED achieve three of these four objectives, as discussed in the paragraphs below.

## Recycling as a Water Supply

The State of California has provided ample evidence that recycled water is an accepted and viable water supply option for the state. A 1994 Statement of Support for Water Reclamation was signed by U.S. EPA, U.S. Bureau of Reclamation, Department of Water Resources, State Water Resources Control Board, and many local water agencies. The Statement of Support states in part, "Whereas, the Governor of California has made water reclamation an important element of California's water supply policy...the agencies will cooperate to develop specific policies and resource commitments that will enable the State of California to meet the Legislature's water reclamation goals and to help satisfy the State's overall water needs."

In addition, the State Constitution and State Water Code require that the water resources of the State be put to beneficial use to the fullest extent of which they are capable and that the waste or unreasonable use of water be prevented. Recognizing the importance of recycled water to the water supply picture of the United States, the U.S. Bureau of Reclamation's Title 16 program has helped fund recycled water projects throughout the western United States, including the two on-going regional studies.

In the medium to long term, there are large volumes of potentially recyclable water. Early attempts at estimating the total water available in the state focused on totaling the local projects being considered. For the Bay Area, this volume was 200,000 AF/year. However, this method may underestimate the amount of potential recycled water available when regional approaches to implementation of water recycling are taken. The total amount of treated wastewater projected to be generated by the Bay Area in 2020 is 650,000 AF/year, which represents an upper bound on the amount of water recycling that could be occurring at that time. Whatever the ultimate volume of recycled water, implementation of the regional programs could result in recycled water playing an important role in reducing the pressures for future increases in Delta diversions.

Regional water recycling would seem to offer unique water supply reliability opportunities. These recycling opportunities are not linked to the Delta. This water will therefore be free of constraints, such as timing of diversions, that some other alternative water supplies may have on moving water through the Delta.

Recycled water can be a cost-effective water supply option. Costs of recycled water can vary depending on the regional plan, the conveyance costs required, and how a new water

supply is incorporated into the existing water supply system. Initial results of the two regional studies have shown the unit costs of recycled water to be within the range of other water supply options being considered by CALFED.

The relatively short implementation time for many recycled water supply projects also offer scheduling opportunities. Major components of a recycled water system include pipelines and pump stations with relatively straight forward construction. Since recycled water projects are generally not land intensive, the permitting issues focus on short-term construction impacts such as dust control and traffic impacts, rather than long-term effects such as inundating large portions of a watershed. As a result, the permitting, design, construction, and overall implementation of recycled water projects can proceed much more quickly than that of other large water supply projects, notwithstanding the essential public education aspects of recycled water projects.

### **Recycling and Water Quality**

Recycling in the Bay Area will reduce the total mass of pollutants discharged into the San Francisco Bay and Delta as effluent flows are diverted. This may have a positive effect on the natural estuarine environment, depending upon the point of discharge.

### **Recycling and Ecosystem Quality**

Recycled water projects provide an opportunity for developing environmental enhancement projects. Some of the environmental enhancement projects being evaluated by the regional projects include streamflow augmentation, groundwater recharge, wetlands enhancement/creation, silvaculture, and irrigation of greenbelts.

### **Recycling and Vulnerability of Levees**

Recycled water is not dependent on the Delta's waterways as a conveyance system and, therefore, is not associated with the levee vulnerability problem.

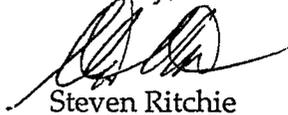
### **Conclusion**

The regional water recycling programs can help CALFED achieve its goals for the long-term Bay/Delta solution. A comprehensive and defensible EIR/EIS for the CALFED Bay/Delta solution must provide a balanced evaluation of all feasible alternatives. Although recycled water alone will not provide all the new water supply needed by the state, recycled water should be an essential component of a Bay/Delta solution. The two regional recycling studies will likely show large amounts of water are potentially recyclable at reasonable prices. In addition, recycling may have fewer environmental impacts than other large water supply projects and may offer some opportunity for implementing significant environmental enhancement projects.

Developing this potential water supply is critical to the long term needs of the state. However, as with other large, regional water supply projects, large regional recycling projects cannot be implemented effectively by local agencies acting individually. A regional implementation approach will need the institutional and financial leadership of an entity such as CALFED to fully implement recycled water programs in California and

achieve the significant state-wide benefits offered by regional water recycling. CALFED should consider integrating recycled water as one of the common water supply components of a Bay/Delta solution and provide the institutional and financial leadership needed to fully implement recycled water programs in California.

Sincerely,



Steven Ritchie  
Chair, Executive Management Board  
BARWRP  
San Francisco PUC



Melanie Tucker  
Chair, Program Management Committee  
BARWRP  
Santa Clara Valley Water District

cc: BARWRP Member Agencies  
EWC