

M e m o r a n d u m

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To: BDAC Members

From: Lester A. Snow
Executive Director



Subject: Update and Issue Discussion -- Water Use Efficiency

This item provides a brief overview of the CALFED draft water use efficiency program, summarizes developments since the last BDAC briefing on this subject, and highlights some remaining issues related to water use efficiency.

Summary

Water use efficiency will be a significant component of any Bay-Delta solution, and a strong water use efficiency program has been included in each of the CALFED draft alternatives. The draft program was developed by the BDAC Water Use Efficiency Work Group, and was the subject of a public workshop in March 1997.

The draft program proposes actions related to urban water use efficiency, agricultural water use efficiency, water recycling, and effective use of environmental diversions. The program emphasizes incentive-based actions over regulatory ones, and is designed to preserve local flexibility. The draft program commits CALFED agencies to provide sharply increased levels of assistance to local agencies to facilitate the planning, funding, and implementation of efficiency programs. This is coupled with regulatory assurance mechanisms that can be used in the event that a water supplier fails to analyze efficiency measures or fails to implement measures that are feasible and cost-effective.

Program development and refinement has continued since March when the Water Use Efficiency Work Group finished its work and the public workshop was held. Activities include:

Urban Water Use Efficiency: Representatives of California Urban Water Agencies (CUWA), the Environmental Water Caucus (EWC), the California Urban Water Conservation Council (CUWCC) and CALFED staff have worked extensively on the development of a process for the CUWCC to

CALFED Agencies

California The Resources Agency
Department of Fish and Game
Department of Water Resources
California Environmental Protection Agency
State Water Resources Control Board

Federal Environmental Protection Agency
Department of the Interior
Fish and Wildlife Service
Bureau of Reclamation
U.S. Army Corps of Engineers

Department of Agriculture
Natural Resources Conservation Service
Department of Commerce
National Marine Fisheries Service

certify urban water suppliers' compliance with the terms of the urban MOU. Representatives of CUWA, the Department of Water Resources (DWR), and CALFED are working on a process for DWR to certify urban water suppliers' compliance with the terms of the State Urban Water Management Planning Act.

Agricultural Water Use Efficiency: CALFED staff members are working with representatives of the new Agricultural Water Management Council (AWMC) and with DWR to identify the support the AWMC may need to carry out its envisioned role of endorsing agricultural water management plans that meet criteria in the agricultural MOU.

Water Recycling: CUWA is working with DWR, CALFED, and others to develop an *Urban Water Recycling Feasibility Assessment Guidebook* that could help local and regional agencies with the planning, development, and implementation of water recycling programs. Such a guidebook could help urban water suppliers comply with the planning and analysis requirements in the State Urban Water Management Planning Act, and could provide a standard or method to determine when sufficient effort has been made in order to receive CALFED benefits.

Effective Use of Environmental Diversions: Three CALFED agencies--The U.S. Fish and Wildlife Service, the U.S. Bureau of Reclamation (USBR), and the California Department of Fish and Game--are engaged in an Interagency Coordinated Program (ICP) to develop Best Management Practices/Efficient Use Plans for wildlife refuges. CALFED has provided advice and documentation regarding similar processes that have yielded best management practices and planning processes for urban and agricultural water users. A public stakeholder meeting on the Refuge Water Supply ICP was held October 14, 1997. A draft guidebook and common methodology for refuge water management is expected early in 1998.

Program Implementation and Impact Assessment: Staff from CALFED and the CALFED agencies are working to develop long-term implementation plans and budgets for the water use efficiency program as well as projections of the potential water savings from implementation of a strong CALFED program. This work is very preliminary at this time.

Regarding implementation, it is anticipated that CALFED agencies would administer programs to provide technical assistance, planning assistance, assistance in securing local funding, and assurances of efficiency. Assistance programs could be carried out by CALFED agencies or other entities. Existing assistance programs of DWR and USBR can be used as a foundation for expanded assistance programs.

Estimates of the potential water savings from implementation of the water use efficiency program are being developed in order to assess impacts of the program. The table below presents preliminary data, subject to change, and is intended to provide a sense of the magnitude of the program. These figures reflect the upper limit of the range of savings from CALFED implementation, and are in addition to substantial water use efficiency projected to occur under the no-action alternative.

Preliminary Estimates--Upper Limit of Potential Savings from CALFED Efficiency Program

Element	Reduction in Applied Water	Real Water Savings (af/yr)
Urban Water Use Efficiency	1,100,000	750,000
Agricultural Water Use Efficiency	1,250,000	150,000
Refuge Management	not yet available	not yet available
Water Recycling	not yet available	not yet available

Remaining Issues

There is continuing concern over the adequacy of the CALFED approach to agricultural water use efficiency and lack of consensus on whether it is rigorous enough to ensure efficient water use by the agricultural sector. CALFED's proposed program relies on the Agricultural Water Management Council and the agricultural MOU. Specific concerns are that the approach to water measurement and conservation pricing in the MOU is too weak (the agricultural MOU and CVPIA take different approaches to these actions) and that CALFED's reliance on the agricultural MOU results in inadequate assurance of efficient agricultural water use.

The current draft CALFED approach to agricultural water use efficiency calls for CALFED to provide an opportunity for the voluntary AWMC to provide demonstration and assurance of efficient use. The draft approach further proposes that

“If an acceptable majority of agricultural water suppliers have not prepared, adopted, received Council endorsement, and begun implementation of their agricultural water management plans by January 1, 1999, then legislative and regulatory mechanisms will be triggered. An acceptable majority includes irrigation districts that serve water to at least two-thirds of the total acreage served by districts in the CALFED solution area, including the Imperial Valley. [This is approximately 5.5 million acres.] A period of two years from development of the CALFED water use efficiency approach was selected because it accommodates a two year planning cycle as described in the agricultural MOU, and it is short enough so that adequate assurance mechanisms can be put in place before Phase III of the CALFED Bay-Delta Program is initiated.”

The legislative and regulatory mechanisms would include

“...an Agricultural Water Management Planning Act patterned closely after the existing Urban Water Management Planning Act and policies of CALFED agencies, as well as additional assurance mechanisms patterned after those that are applied to urban agencies as part of the Bay-Delta Program. These assurance mechanisms will need to be enacted before any CALFED Phase III water supply activities can begin.”

In addition, CALFED has proposed conditions to receive program benefits:

“CALFED and the CALFED agencies will implement three general policies to provide assurance of efficient use. Demonstration that appropriate water management planning is being carried out and that cost-effective efficiency measures are being implemented will be necessary prerequisites for an agency to be eligible to:

- receive any “new” water made available by a Bay-Delta solution,
- participate in a water transfer that requires approval by any CALFED agency or use of facilities operated by any CALFED agency, and
- receive water through the DWR Drought Water Bank (this is already a policy of DWR).

Arguments for and against a CALFED approach that relies on the agricultural MOU include:

For

- The agricultural MOU is the result of seven years of painstaking negotiations. CALFED will not be able to develop greater consensus over any other approach.
- The agricultural MOU is already gaining good support: districts serving roughly 2.8 million acres in the CALFED solution area have signed the document.
- Reliance on the AWMC meets the objectives of preserving local flexibility and relying on locally-directed processes.
- An approach based on a voluntary process, even if it becomes the mandatory standard of reasonable and beneficial use, is the most acceptable to water users.
- The agricultural MOU provides a framework for good analysis of efficient water management practices, compels signatories to implement changes in measurement and pricing if the changes offer a net benefit, and provides an avenue for CALFED agencies to offer technical and planning assistance.

Against

- The agricultural MOU does not provide a truly balanced approach like the urban MOU: very few environmental organizations have signed the agricultural MOU.
- Support for the agricultural MOU is insufficient even among the agricultural community: at the rate that districts are signing the MOU, only a small fraction of the 9 million acre CALFED solution area will have agricultural water management plans by the time a final EIR/EIS for the program is released.
- The approach of the agricultural MOU is significantly weaker than the approach of the urban MOU, because it is based on a requirement for analysis rather than a requirement for implementation.
- The agricultural MOU provides insufficient assurance of efficient use because it is not backed up by a state law like the Urban Water Management Planning Act.

- Following the approach in the agricultural MOU results in the failure to implement many measures that are cost-effective from a statewide perspective.

Questions for BDAC Discussion

Should CALFED continue to base the approach to agricultural water use efficiency on the Agricultural Water Management Council? What other actions should be included, either in addition to or in place of the current approach?

Should CALFED consider strengthening the “conditions to receive program benefits,” including the transfers strategy, to address general concerns?