

CALFED Bay-Delta Program

Office Memorandum

Date: July 13, 2000
To: Steve Ritchie
From: Tom Gohring 
Subject: Request Management Group Review and Concurrence Of
Staff Recommendation for Water Use Efficiency Pilot Projects

The purpose of this memorandum is to request that Management Group review and concur with staff's recommendation on Water Use Efficiency pilot projects. This memo also describes the fair and open process used to develop the criteria and proposed selections for funding.

Staff recommends seven pilot projects (three urban and four agricultural) representing a CALFED investment of close to \$1 million. These seven projects promise to answer key implementation questions.

Introduction

The Water Use Efficiency element addresses four categories: urban, agricultural, managed wetlands and water recycling. During FY 00, CALFED intends to initiate pilot projects that can answer key implementation questions related to agricultural and urban water use efficiency. These questions are an important step toward designing CALFED Incentive Grant programs that can motivate local entities to address multiple benefits (such as water quality and flow/timing) in addition to water supply reliability through water use efficiency actions.

Selection Process

To increase administrative efficiency and reduce selection time, CALFED intends to award its FY 00 pilot projects through directed actions. This process has employed the following steps:

1. Obtained concurrence from Policy Group on overall approach & priorities (December, 1999).
2. Obtained concurrence from BDAC on overall approach & priorities (December, 1999).

3. Convened a meeting of CALFED Agency representatives to refine criteria for selection and gather initial information on potential pilots (February, 2000).
4. CALFED Agency staff collected additional information on potential projects. Since CALFED had an ample number of existing agricultural projects already identified, it was not necessary to seek other projects. To solicit urban projects, USBR staff announced the availability of funds to members of the California Urban Water Conservation Council (February through April, 2000).
5. CALFED staff evaluated potential pilots (based on criteria given below) and recommended three urban and four agricultural projects (May, 2000).
6. Obtained stakeholder comments from the Agricultural WUE Steering Committee¹ and Urban WUE Ad Hoc Committee² (June, 2000). The process for soliciting stakeholder comments included the following:
 - a. Oral comments were obtained at meetings of the respective agricultural and urban stakeholder groups,
 - b. Stakeholders were asked to comment orally on the selection criteria, and
 - c. Stakeholders were asked to comment orally on analysis of staff recommended projects.
 - d. Staff did not accept comments from Stakeholders who had potential financial interest in proposed pilot projects.
7. Obtained review and concurrence from CALFED Management (July, 2000).
8. Request review and concurrence from CALFED Management Group (purpose of this memorandum).

This process was crafted to ensure that staff considered the appropriate range of potential pilot projects while avoiding potential conflicts of interest and maintaining the objectivity and latitude necessary to award the pilot projects through directed action.

Selection Criteria

The pilot project selection criteria focused not on beginning CALFED implementation, but on answering key CALFED implementation questions. This approach is embodied in the following three criteria:

¹ Agricultural Water Use Efficiency Steering Committee members include: Laura King/San Luis Delta-Mendota Water Auth., Steve Ottomoeller/Madera ID, Van Tenney/Glenn-Colusa ID, Tom Hurlbutt/State Water Contractors, Gary Bobker/Bay Institute, Roberta Borgonovo/League of Women Voters, Betsy Reifsnider/Friends of the River, Ronnie Cohen/Natural Resources Defense Council, Roger Reynolds/Agricultural Water Management Council, Richard Roos-Collins/Agricultural Water Management Council, Susan Ramos/USBR, Tracy Slavin/USBR, Tom Hagler/EPA, Caroline Yale/EPA, Baryohay Davidoff/DWR, and Steve Shaffer/CDFA.

² Urban Water Use Efficiency Ad Hoc Committee members include: Mike Hollis/MWD, Joe Berg/MWDOC, Bill Jacoby/San Diego Co. Water Authority, Kim Knox/San Francisco, Tom Gackstetter/LADWP, Richard Harris/EBMUD, MaryLou Cotton/Kern County Water Authority, Byron Buck/CUWA, Roberta Borgonovo/League of Women Voters, Betsy Reifsnider/Friends of the River, Francis Spivey-Weber/Mono Lake Committee, Ronnie Cohen/NRDC, Dave Fullerton/NHI, MaryAnn Dickinson/California Urban Water Conservation Council, Marsha Prillwitz/USBR, Carolyn Yale/EPA, and Greg Smith/DWR.

- Potential project can be implemented rapidly (such as the extension of an existing project),
- Potential project has high probability of answering Level 1 Questions, and
- Potential project has at least medium probability of answering Level 2 Question.

Different questions were developed for selecting urban and agricultural projects to reflect the CALFED's different approaches to implementing these two different aspects of water use efficiency. These questions were developed by CALFED staff and agency representatives and encompass the most pressing information needed for effective water use efficiency implementation.

The following urban questions focus on ways to achieve multiple benefits and implement Best Management Practices beyond locally cost-effective levels:

Urban Level 1 Questions:

- Does the proposed project go beyond the CUWCC BMPs or achieve multiple benefits encompassed in the CALFED solution?
- Would the proposed project produce monitoring and reporting systems for establishing a conservation baseline or measuring conservation results?

Urban Level 2 Questions:

- Would the proposed project increase understanding of the feasibility of linking urban conservation programs to the Environmental Water Account?
- Would the proposed project demonstrate novel approaches to Best Management Practices implementation?

The following agricultural questions focus on methods for achieving CALFED Quantifiable Objectives through an incentive grant program:

Agricultural Level 1 Questions:

- What are Quantifiable Objective monitoring requirements & costs?
- How can we bring water suppliers and water resource managers (such as Resource Conservation Districts) together for collaborative projects that achieve Quantifiable Objectives?
- How do we monitor centralized impacts of diffuse activities?
- What technical and administrative abilities will be required of incentive grant recipients?
- How can we motivate growers to address Quantifiable Objectives?

Agricultural Level 2 Questions:

- How can water suppliers or resource managers greatly expand current activities within their existing region?
- How can water suppliers or resource managers replicate successful water use efficiency actions in other regions?
- What are administration costs of projects that address Quantifiable Objectives?

- What is a reasonable timeline for adoption of actions designed to meet Quantifiable Objectives?

Projects Considered

Proposed Urban Projects: A total of sixteen urban water use efficiency pilot projects were considered (Table 1). These ranged from toilet retrofit to turf landscaping projects. Three of these are recommended for funding because of their ability to meet the selection criteria and answer the questions posed. All of the remaining proposed projects were deemed to have a low ability to meet the Level 1 Questions and therefore were not considered appropriate for pilots. Some of these projects, however were recommended for funding through other programs.

For example, the City of Fresno projects and EBMUD's Lindsay Museum project may be funded through Reclamation's Field Services Program. Contra Costa's Website project will be funded through Reclamation's Mid-Pacific regional office. The Upper San Gabriel project will be considered for funding through Reclamation's Lower Colorado region. Contra Costa's Ultra Low Flush Toilet project, EBMUD's clothes washer project, and MWD's CII project could be considered for funding through the California Urban Water Conservation Council.

Proposed Agricultural Projects: Of eighteen proposed agricultural water use efficiency pilot projects considered, four are recommended for funding (Table 2). Two projects are not recommended for funding because they did not meet the criteria for rapid implementation.

The remaining proposed projects were deemed to have a low ability to answer the Level 1 Questions either because there was a small connection to agricultural water use efficiency or there was not an existing project or readily identifiable cooperator.

Recommended Urban Pilot Projects

Chino Basin Urban WUE Project (Inland Empire Utilities Agency): This comprehensive water efficiency-landscape planning process for the Chino Basin will demonstrate how water use efficiencies beyond the BMPs and multiple environmental/economic benefits can be achieved and quantified through innovative land use planning. This project was recommended for funding because it has the ability to partially answer all of the Urban Level 1 and Level 2 questions.

ET Controller, TMDL Study (Municipal Water District of Orange County): This project proposes expansion of an EPA grant to quantify non-point source pollution benefits resulting from more efficient residential irrigation scheduling and more environmentally sensitive landscape maintenance. CALFED funding would allow for monitoring of runoff from applied water, expand water sampling to include toxins and pathogens, expand education and outreach activities, and provide further statistical analyses of collected data. This project was recommended for funding because it has the

ability to answer both of the Urban Level 1 Questions and the Level 2 Question related to novel approaches to BMP implementation.

River Park Water Use Efficiency Project (City of Sacramento): This project would target the River Park neighborhood in the City of Sacramento for an intensive survey of customers, emphasizing a positive approach to meter installation and water conservation. The baseline survey would include questions regarding chemicals applied to landscapes and green waste management as well as water use practices. The City would offer incentives in order to accelerate progress in the retrofit process. This project was recommended for funding because it has the ability to answer both of the Urban Level 1 Questions and the Level 2 Question related to novel approaches to BMP implementation.

Recommended Agricultural Pilot Projects

Yolo Resource Management Monitoring & Extension (Yolo County RCD): CALFED funding would provide for additional monitoring of an existing water use efficiency program. The Yolo County RCD Total Resources Management Project has been recognized as successfully implementing actions, which integrate water conservation and water quality objectives. The proposed CALFED pilot project would involve adding monitoring and extension activities to answer Agricultural Level 1 and Level 2 Questions. Since this program, by design will meet CALFED's selection criteria, it is recommended for funding.

Irrigation District QO Rapid Assessment (Cal Poly ITRC): This project would develop a process to rapidly assess the potential for water supplier system renovation to meet CALFED's Quantifiable Objectives. This project promises to provide a tool that will assist potential agricultural cooperators to participate in CALFED's Incentive Grant program. The proposed QO Rapid Assessment would modify an existing assessment method to include CALFED's Quantifiable Objectives. This project recommended for funding because it has a high ability to answer Agricultural Level 1 and Level 2 Questions.

Rapid Canal Seepage Assessment (Center for Irrigation Technology): This project would test the ability of new technology to rapidly measure canal seepage rates. The proposed apparatus has been used successfully in other industries to measure water content and movement in porous media. This technology could vastly increase the capacity of water suppliers to determine their potential to address Quantifiable Objectives. This project recommended for funding because it has a high ability to answer Agricultural Level 1 and Level 2 Questions.

West Stanislaus Erosion Control Quantification (West Stanislaus RCD): This project would allow the RCD to work with growers to reduce on-farm erosion and to quantify regional effects of sediment reduction actions.

CALFED funding would provide for more complete quantification of a successful water use efficiency program. The West Stanislaus RCD Hydraulic Unit Area project has

successfully reduced water quality impairment of the San Joaquin River due to irrigation induced erosion. The proposed CALFED pilot project would involve a more robust quantification of the potential to address water quality issues through agricultural water use efficiency action. This proposed project would, by design answer Agricultural Level 1 and Level 2 Questions and is therefore recommended for funding.

Cost Estimates

The estimated costs of the recommended pilot projects range from \$35,000 to \$200,000 with a total recommended funding commitment of approximately \$1 million (Table 3). This funding commitment is within the Water Use Efficiency pilot project budget proposed earlier this year.