

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF FINANCIAL ASSISTANCE
DECEMBER 4, 2007**

ITEM 7

SUBJECT

CONSIDERATION OF A RESOLUTION AUTHORIZING AN AGREEMENT WITH THE UNIVERSITY OF CALIFORNIA REGENTS TO FACILITATE A TASK FORCE, DEVELOP WATER RECYCLING ECONOMIC ANALYSIS GUIDANCE, AND CONDUCT A COST SHARE EVALUATION

DISCUSSION

The Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act or Proposition 13 (2000 Bond Law) included funding for water recycling research. The 2000 Bond Law provides that the State Water Resources Control Board (State Water Board) may use funds to undertake plans, surveys, research, development, and studies necessary or desirable to carry out water recycling, including the preparation of comprehensive statewide or area wide studies and reports on the collection, treatment, and disposal of waste and wastewater recycling. The purpose of this agenda item is to authorize agreements with the University of California Regents and their affiliates (Regents) including but not limited to the University of California at Davis (UCD) Extension, Center for Cooperative Solutions (Common Ground), UCD Department of Civil and Environmental Engineering, and the UCD Department of Agricultural and Resource Economics to facilitate an Economic Analysis Task Force, develop water recycling economic analysis guidance, and conduct an evaluation of cost share options for funding water recycling projects.

BACKGROUND

One key challenge for water recycling projects is that the financial analysis of such projects may often appear unfavorable, even though there may be total project benefits that outweigh the project's costs. A water recycling project might be economically justified when compared to development of new fresh water supplies, but financially infeasible because the local agency would find purchasing fresh water cheaper. This occurs when project benefits accrue beyond a project sponsor's boundaries, or the institutional framework of water supply development and distribution prevents local agencies from perceiving the true costs of alternative water developments. When evaluating a project, it is important to consider both the monetary and non-monetary costs and benefits of a project. An economic analysis can provide a suitable benefit-cost perspective for considering if a water recycling project is worth the expense to society as a whole. In addition, by defining all potential benefits of a project, identifying all project beneficiaries and allocating costs accordingly, there is opportunity for providing broader financial participation in projects, thus encouraging more water recycling.

In August 2000, Federal, State, and stakeholder representatives negotiated the CALFED Bay-Delta Programmatic Record of Decision (ROD). The CALFED Bay-Delta Program is a State and Federal cooperative effort that consists of eleven elements to ensure a healthy ecosystem, reliable water supplies, good water quality, and stable levees in California's Bay-Delta system. The Water Use Efficiency (WUE) Program, one of the eleven ROD elements, consists of four main components: 1) urban water conservation, 2) agricultural water conservation, 3) recycling, and 4) desalination. The goal of the WUE Program is to accelerate the implementation of cost effective water use efficiency measures to conserve, recycle, and desalinate water throughout the State. A primary CALFED program tool for encouraging investments in water use efficiency measures is to implement a State and Federal grant/loan program. The ROD recognizes that any investments in water use efficiency measures would need to consider that some projects might not be cost-effective when viewed solely from a local perspective, but might be cost-effective when viewed from a statewide perspective. In this case, a larger State and Federal share in the form of grants rather than loans could be justified. Consistent with the ROD, funding agencies, such as the State Water Board, would tailor specific grants or loans to reflect the distinction between local and statewide benefits, and adjust the required local cost share requirements accordingly.

In 2001, Governor Davis signed into law Assembly Bill 331. The Bill required the Department of Water Resources (DWR) to convene the 2002 Recycled Water Task Force (Recycled Water Task Force) to identify constraints, impediments, and opportunities for the increased use of recycled water. The Recycled Water Task Force Report, which was submitted to the Legislature in 2003, contained a number of recommendations to guide the Legislature, State government, public agencies, and other stakeholders in efforts to increase the safe use of recycled water. To address challenges in justifying water recycling projects from an economic perspective, the Recycled Water Task Force called for development of a uniform economic analysis framework and methodology across all funding agencies (recommendation 5.1.1). More specifically, the Recycled Water Task Force recommended development of a guidance document on economic analysis and a mechanism for distributing funding burden of projects between beneficiaries based on allocation of the project benefits and costs. An expert panel formed by DWR, State Water Board, and/or California Department of Public Health would carry out the Recycled Water Task Force recommendation. The State Water Board has taken the lead in forming the panel.

On January 18, 2007, the Division of Financial Assistance (Division) approved the "Strategic Plan, January 2007-December 2008, Water Recycling Funding Program" (Performance Plan). The Performance Plan identifies several key strategic projects that, if implemented, can support our efforts of increasing the State water supply by promoting and funding economically feasible water recycling projects. Specifically, the plan calls for the Water Recycling Funding Program (WRFP) to develop guidance to establish a framework and methodology for applicants to follow when conducting economic analysis of potential water recycling projects. In addition, the Performance Plan calls for the WRFP to develop a framework to allocate costs according to project beneficiaries, and a methodology to incorporate this concept into State cost share determination for the WRFP. Implementation of these strategic projects will be consistent with the ROD and the 2002 Recycled Water Task Force Recommendations. In developing this guidance document, there is an opportunity for the State Water Board to work with the U.S. Bureau of Reclamation (USBR) and the DWR.

SCOPE OF WORK

The Division proposes to negotiate and execute an agreement with the Regents to implement the aforementioned key strategic projects of the Performance Plan. There are two main purposes of the proposed agreement with the Regents. The first is to convene, manage, and provide strategic planning and facilitation services for an Economic Analysis Task Force (EATF). The EATF is expected to consist of approximately 15 members (technical experts, program managers, and economists) representing State and Federal agencies and academia. The primary goal of the EATF will be to recommend appropriate framework and methodology for conducting economic analysis of potential water recycling projects in support of the 2002 Recycled Water Task Force Recommendation 5.1.1. The EATF tasks will include, but are not limited to, recommending general principles of economic analyses, an appropriate interest rate (discount rate) for use in present worth analyses, procedures for calculation of unit costs of water, appropriate freshwater development alternative benchmarks for comparison with recycled water projects, other potential quantifiable benefits or avoided costs, and approaches for weighing non-monetary benefits and costs in relation to monetary benefits and costs. The framework and methodology will be the basis for developing guidance for use in funding programs of the State Water Board and, perhaps, DWR and U.S. Bureau of Reclamation, consistent with recommendation 5.1.1 of the Recycled Water Task Force. In addition, the EATF will identify and assess cost-sharing schemes according to beneficiaries, based on allocation of the benefits and costs in the economic analysis. Three stakeholder meetings will be conducted to obtain feedback from interested parties and share outcomes of the Task Force discussions and reports developed under the agreement.

The second main purpose for this agreement is to develop an Economic Analysis Guidance document (Guidance) and a Cost Share Evaluation of Options Report (Report). The Guidance could be used as a tool to assist funding agencies and applicants in conducting economic analysis of water recycling projects. The Report will identify, assess, and recommend appropriate methodologies, strategies, and approaches for allocating costs of water recycling projects amongst project beneficiaries.

FISCAL IMPACT

This Project will be fully funded by the Water Recycling Subaccount of the 2000 Bond Law. A total of up to three percent of the amount deposited in the Water Recycling Subaccount of the 2000 Bond Law may be used for the purposes of studies, research, and demonstration activities, as described above. Three percent of the initial Subaccount balance of approximately \$100 million was \$3 million. Three percent of Water Recycling Loan repayments deposited into the Subaccount have increased this amount. Commitments of these funds and the current balance are shown in the table below. Currently, new research funds derived from Loan repayments amount to about \$100,000 annually. They are allowed to accumulate until appropriate funding opportunities develop.

Initial 2000 Bond Law allocation from the Water Recycling Subaccount	\$3,000,000
Allocation from loan repayments and Surplus Money Index Fund interest	+ 1,086,036
WaterReuse Foundation research (2001)	- 1,000,000
2002 Recycled Water Task Force	- 29,430
San Diego County Water Authority Regional Planning Grant (April 2003)	- 508,891
WaterReuse Foundation research increase (2004)	- 1,000,000
Proposed WaterReuse Foundation research Agreement	- 650,000
Proposed agreement with the University of California Regents	-\$300,000
Balance:	\$597,715

REGIONAL BOARD IMPACT

None.

POLICY ISSUE

Should the State Water Board adopt a resolution authorizing the Executive Director, Chief Deputy Director, Deputy Director of the Division, or designee to negotiate, execute, and amend agreement with the University of California Regents to facilitate an Economic Analysis Task Force, develop an economic analysis guidance, and conduct a cost share evaluation for a total amount not to exceed \$300,000?

STAFF RECOMMENDATION

That the State Water Board adopt a resolution authorizing the Executive Director, Chief Deputy Director, Deputy Director of the Division, or designee to negotiate, execute, and amend an agreement with the University of California Regents to facilitate an Economic Analysis Task Force, develop an economic analysis guidance, and conduct a cost share evaluation for a total amount not to exceed \$300,000.

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STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2007-

AUTHORIZATION TO ENTER INTO AN AGREEMENT WITH THE UNIVERSITY OF CALIFORNIA REGENTS TO FACILITATE A TASK FORCE, DEVELOP WATER RECYCLING ECONOMIC ANALYSIS GUIDANCE, AND CONDUCT A COST SHARE EVALUATION

WHEREAS:

1. The Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act (2000 Bond Law) established the Water Recycling Subaccount, and authorizes the State Water Resources Control Board (State Water Board) to use a portion of it to fund water recycling research.
2. The University of California at Davis (UCD), an educational non-profit public benefit institution, is one of the preeminent research organizations. The UCD Extension, Center for Cooperative Solutions (Common Ground) is a demonstrated leader in facilitation services specializing in intergovernmental issues. The UCD Department of Civil and Environmental Engineering and the UCD Department of Agricultural and Resource Economics are both nationally recognized for their work in the integration of water resource management and environmental and natural resource economics.
3. One key challenge for water recycling projects is that the financial analysis of such projects may often appear unfavorable, even though there may be total project benefits that outweigh the project's costs. An economic analysis can provide a suitable benefit-cost perspective for considering if a water recycling project is worth the expense to society as a whole. Additionally, by defining all potential benefits of a project, identifying all project beneficiaries, and allocating costs accordingly, there is opportunity for providing broader financial participation in projects, thus encouraging more water recycling.
4. The CALFED Bay-Delta Programmatic Record of Decision (ROD) included a goal to accelerate the implementation of cost-effective water use efficiency measures. The ROD recognizes that significant investments in water use efficiency, including water recycling, will be necessary to address water supply demands. The ROD recognizes that any investments in water use efficiency measures would need to consider that some projects might not be cost-effective when viewed solely from a local perspective, but might be cost-effective when viewed from a statewide perspective.
5. The 2002 Recycled Water Task Force (Recycled Water Task Force) Report, which was submitted to the Legislature in 2003, contained a number of recommendations to guide the Legislature, State government, public agencies, and other stakeholders in efforts to increase the safe use of recycled water. To address challenges in justifying water recycling projects from an economic perspective, the Recycled Water Task Force recommended developing a uniform economic analysis framework and methodology across all funding agencies (recommendation 5.1.1). Specifically, the Recycled Water Task Force recommended developing a guidance document on economic analysis and developing a mechanism for distributing funding burden of projects between beneficiaries based on allocation of project benefits and costs.

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6. On January 18, 2007, the Division of Financial Assistance (Division) approved the Water Recycling Funding Program (WRFP) Performance Plan for calendar years 2007 and 2008 (Performance Plan). The Performance Plan identifies several key strategic projects that, if implemented, can support our efforts of increasing the State water supply by promoting and funding economically feasible water recycling projects. Specifically, the Performance Plan calls for the Water Recycling Funding Program (WRFP) to develop guidance to establish a framework and methodology for applicants to follow when conducting economic analysis of potential water recycling projects. In addition, the Performance Plan calls for the WRFP to develop a framework to allocate costs according to project beneficiaries, and a methodology to incorporate this concept into State cost share determination for the WRFP.

THEREFORE BE IT RESOLVED THAT:

1. The State Water Board authorizes the Executive Director, Chief Deputy Director, Deputy Director of the Division, or designee to negotiate, execute, and amend an agreement with the University of California Regents to facilitate an Economic Analysis Task Force, develop an economic analysis guidance, and conduct a cost share evaluation for a total amount not to exceed \$300,000.
2. The State Water Board authorizes the Executive Director, Chief Deputy Director, Deputy Director of the Division, or designee to perform all acts and to do all things necessary and convenient to implement such an agreement.

CERTIFICATION

The undersigned, Acting Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on December 4, 2007.

Jeanine Townsend
Acting Clerk to the Board