

- **Board of Directors**
Water Planning and Stewardship Committee

August 21, 2007 Board Meeting

REVISED 8-9

Subject

Authorize \$15 million for the Accelerated Public Sector Water Efficiency Partnership Demonstration Program

Description

Staff recommends the Board authorize \$15 million for a Public Sector Water Efficiency Partnership Demonstration Program (Program). Through the Program, Metropolitan would work with the member agencies to identify public agencies within Metropolitan's service area that have high potential to achieve accelerated conservation or water recycling use. Metropolitan would enter into agreements through the member agencies or directly with the partnering public agency to implement immediate water efficiency measures. Staff estimates that the cost of saved potable water in the Program will range from \$195 to \$500 per acre-foot and provide the added benefit of reinforcing the region's public message to conserve water this year.

Rationale for Program

Southern California is currently facing significant water supply challenges. The year 2007 is the driest year on record in Southern California and has brought minimal snow pack to the Sierras. In addition, there are uncertainties in State Water Project operations over the next three years. Deliveries from the Banks pumping plant, which serves two-thirds of the state, have recently been curtailed due to Delta Smelt protective actions. As a result of these immediate challenges, Metropolitan and other water agencies in the state are asking citizens to increase the conservation of water in their homes and businesses. Metropolitan staff believes that the public is willing to respond. However, the response may be reduced if the public senses that public agencies are not also enhancing their water use efficiency.

To ensure that the public remains committed to conservation and to achieve accelerated water savings, staff is recommending the Public Sector Water Efficiency Partnership Demonstration Program. Some of the incentives would be in excess of standard board policy for conservation and water recycling in order to achieve near term results. Staff is recommending this program for three reasons: (1) the public's perception of water efficiency by public agencies could impact the public's willingness to conserve; (2) a number of public agencies have participated in Metropolitan's conservation programs and others use recycled water for irrigation, but there is still a large potential for increased water savings at many public agency facilities; and (3) cash flow and budget constraints in public agencies may delay water efficiency improvements.

Staff recommends identifying public agencies that have the top potential to reduce potable water demand in the near term. Based on information provided by the member agencies, Metropolitan will send letters to these agencies encouraging them to take immediate actions to improve their water use efficiency and inform their staff and customers of the current water supply situation. Metropolitan and member agencies will also form partnerships with some of these public agencies, with an initial emphasis on agencies using 50 acre-feet of water per year or more, to fund accelerated water efficiency measures through four approaches:

1. Conservation audits to identify water efficiency improvements;
2. Enhanced device incentives, paid up front, to purchase proven water saving retrofit technologies;
3. Pay-for-Performance water use reduction incentives; and
4. Immediate hookup of potential recycled water use by public agency customers.

Partnering agencies will be expected to commit the necessary resources to fulfill their obligations in the partnership and demonstrate an agency-wide commitment to encouraging good water use efficiency and stewardship.

Program Details

Conservation Audits for Large Public Agency Water Users

Public agencies that need to use large amounts of water are often excellent candidates for water efficiency improvements. However, these agencies usually have competing needs for tight budget dollars. In addition, many large public sector water users have primary responsibilities that are quite distant from water stewardship and efficiency. As a result, many public agencies lack the funding and expertise to properly assess their water conservation potential.

To immediately support these agencies, staff recommends offering water efficiency audits to agencies that use appreciable amounts of water. The audits will assess if water use is already efficient and, if not, recommend practical solutions and improvements. The audit results will assist the partnering agencies in identifying potential water conservation opportunities that may fit within Metropolitan’s existing programs or the limited-duration program addressed in this letter. The Board granted authority for staff to conduct audits in July 2007.

Enhanced Device Incentives

Device incentives in the Public Sector Water Conservation Partnership Demonstration Program are designed to pay 100 percent of the cost of water-conserving devices for targeted public agencies. To overcome public agency cash flow and budgetary constraints, staff recommends that these incentives be paid up front to purchase devices rather than as rebates after purchase. When installations are performed in phases, Metropolitan’s payments would also be in stages. Preapproved partnering agencies would purchase the water-saving technologies with Metropolitan funding and install and maintain the technology as their contribution to the partnership. Partnering agencies would refund to Metropolitan any unspent funds within a specific time frame consistent with routine administration procedures. Staff estimates that Metropolitan’s full-purchase-price incentives would result in conserved water costs of \$200 to \$500 per acre-foot. A list of proposed technologies is provided below:

Device	Estimated Retail Price	Annual Estimated Water Savings	Lifetime Estimated Water Savings	Estimated Cost of Conserved Water¹
Weather Based Irrigation Controller ² and High Efficiency Nozzles	\$2,000 to \$3,000 per acre	1 to 2 AF per acre	10-20 AF per acre	\$200-\$300/AF
High Efficiency Urinals	\$400	Approx. 0.13 AF ³	Approx. 2.6 AF	\$154/AF
High Efficiency Toilets	\$200 to \$400	Approx. 0.04 AF	Approx. 0.82 AF	\$240-\$490/AF
Cooling Tower PH or Conductivity Controllers	Up to \$2,000	Approx. 2 AF	10 AF	Up to \$200/AF

Other devices or actions may also receive incentives not to exceed an estimated \$500 per acre-foot of conserved water, determined on a case-by-case basis.

Pay-for-Performance Water Use Reduction Incentives

In this very dry year, many public agencies may be willing to reduce water use through methods that may be unsustainable. This may include reduced or stress irrigation, deferred replanting of landscapes, or behavioral

¹ Incentives will be used to pay for device/technology costs only. All installation costs are to be paid by the partner.

² WBICs must include technology for automatic shutoff of broken heads, valves, or pipes.

³ Based on average of urinals using .25 gallons per flush or less.

changes that are not related to device installations. For this special kind of conservation, staff recommends a Pay-for-Performance Water Use Reduction Incentive for preapproved partnering public agencies. An incentive of \$195 per acre-foot would be paid on savings for up to two-year periods, if the agency achieves at least a ten percent reduction in water use per year on an agency-wide basis. The reduction would be measured against an appropriate base-year water use. Through this program, public agencies would have the option of creatively reducing their water use through operational actions without the need for extensive retrofits.

Immediate Hookup of Potential Recycled Water Use Customers

To immediately increase recycled water use, staff proposes up-front payments to preapproved high water using public agencies to hook up their irrigation systems to existing recycled water supplies. The cost of upgrading irrigation equipment to meet recycled water regulations is a significant barrier to recycled water use conversions, especially for public agencies with limited budgets. This program would provide incentives of \$250 per acre-foot, up to actual on-site retrofit costs, for the estimated ~~first-year use~~ two years of use. Payments would be made upon connection and demonstrated operation of a complete system. These incentives would help fund on-site retrofits and system upgrades on public property in order to use recycled water in the near-term. The incentive would only apply to new hookups. Systems already under construction would not be eligible.

As an example under this program, a partnering public agency that switches 100 acre-feet of potable irrigation demand to recycled water would be eligible for a one-time incentive payment of up to ~~\$25,000~~ \$50,000. They would receive the incentive upon hooking up to a recycled water supply and demonstrating that the system is functional. If the public agency hooks up to recycled water that is already receiving a Metropolitan incentive, this special payment would be in addition to the normal incentives Metropolitan provides for recycled water distribution system performance.

Savings and Cost

The total cost of the Program including audits, incentives and other professional services, would be limited to \$15 million. Staff would administer the program funds to pursue maximum reductions in water use. Total expenditures on audits would be about \$1.5 million. A small portion of the funds would be used for administration and program analysis. Staff estimates that the total water savings of the program would be about 40,000 acre-feet of water. Actual savings will depend on participation by partnering agencies and the actions pursued. Additional authorizations beyond the General Manager authority may be required for consulting services to conduct audits and administer aspects of the Program. Staff would make adjustments in the Program over time to improve the Program, within the authorized budget, as experience is gained through implementation.

Policy

By Minute Item 37324, dated September 1988, the Board established financial incentives for water conservation and authorized funding new and emerging technologies.

By Minute Item 45195, dated February 2003, the Board adopted water conservation principles supporting financial incentives, encouragement of new technologies, and collaboration with industry to improve their water using processes.

By Minute Item 46773 dated August 2006, the Board authorized a streamlined payment process for landscape surveys and irrigation equipment retrofit projects.

In July 2007, the Board authorized enhancement for Metropolitan's Water Conservation Program including conservation audits and measured water savings program.

California Environmental Quality Act (CEQA)

CEQA determination for Options #1 and #2:

The proposed action on the funding component associated with the Demonstration Program and incentives is not subject to CEQA because it involves government fiscal activities, which do not involve any commitment to any specific project, which may result in a potentially significant physical impact on the environment

(Section 15378(b)(4) of the State CEQA Guidelines). The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The overall activities involve the funding, design, minor alterations and replacement of public facilities with negligible or no expansion of use and no possibility of significantly impacting the physical environment. In addition, the proposed action consists of basic data collection and resource evaluation activities, which do not result in a serious or major disturbance to an environmental resource. This may be strictly for information gathering purposes, or as part of a study leading to an action, which a public agency has not yet approved, adopted or funded. Accordingly, the proposed action qualifies under Class 1, Class 2, and Class 6 Categorical Exemptions (Sections 15301, 15302, and 15306 of the State CEQA guidelines).

The CEQA determination is: Determine that the proposed action is exempt from CEQA pursuant to Sections 15301, 15302, 15306, and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #3:

None required

Board Options

Option #1

Adopt the CEQA determination and authorize the Public Sector Water Efficiency Partnership Demonstration Program, including audits for large public water users, enhanced device incentives program, the pay-for-performance water use reduction incentives, and immediate hookup of recycled water use customers.

Fiscal Impact: \$15 million

Business Analysis: The Public Sector Water Efficiency Partnership Demonstration Program will market and provide incentives for water use efficiency in the public sector and help set an example for the general public of the need to save water in this very dry year.

Option #2

Adopt the CEQA determination and authorize the Public Sector Water Efficiency Partnership Demonstration Program, with one or more of the following: audits for large public water users, enhanced device incentives program, the pay-for-performance water use reduction incentives and immediate hookup of recycled water use customers.

Fiscal Impact: Up to \$15 million

Business Analysis: The Public Sector Water Conservation Partnership Demonstration Program will market and provide incentives for water use efficiency in the public sector and help set an example for the general public of the need to save water in this very dry year. Authorizing less than all four proposed actions may decrease staff's ability to achieve maximum water savings in the program.

Option #3

Do not authorize the Public Sector Water Conservation Partnership Demonstration Program.

Fiscal Impact: No fiscal impact

Business Analysis: Metropolitan will miss an opportunity to partner with high, visible public agencies to conserve water and set an example for the general public of the need to save water in this very dry year.

Staff Recommendation


Option #1



Grace Chan
for Stephen N. Arakawa
Manager, Water Resource Management

8/20/2007

Date



Jeffrey Kightlinger
General Manager

8/20/2007

Date

BLA #5559