

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

July 10, 2007 Board Meeting

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**9-5**

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**Subject**

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Proposed Public Sector Water Conservation Partnership Demonstration Program

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**Description**

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Staff is developing a Public Sector Water Conservation 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 conservation. Metropolitan would partner with those public agencies to implement immediate water efficiency measures. Staff estimates that the cost of conserved water in the Program will range from \$195 to \$500 per acre-foot, with a total cost not to exceed \$15 million, and provide the added benefit of reinforcing the region's public message to conserve water this year. Board authorization for the Program will be requested in August.

**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 levels in the Sierras. In addition, there are uncertainties on the State Water Project operations over the next three years as deliveries from the Banks Pumping Plant serving 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 conserve water in their homes and businesses. Metropolitan staff believes that the public is willing to respond. However, the public's response may be reduced if they sense that water is not being used wisely by public agencies.

To ensure that the public remains committed to conservation and to achieve direct water savings, staff is developing a Public Sector Water Conservation Partnership Demonstration Program with incentives in excess of standard Board policy for conservation funding. Staff is developing this program for three reasons: (1) the perception of inefficient water use by public agencies could undermine the public's commitment to conservation; (2) while some public agencies have participated in Metropolitan's conservation programs and others use recycled water for irrigation, there is still a large potential for water savings at many public agency facilities; and (3) cash flow and budget constraints for local governments may place water efficiency at a low priority. As a result, staff recommends identifying at least five public agencies per county that have the top potential to conserve water. In addition, staff recommends partnerships with the California Department of Transportation and major public school districts and universities. The Program would fund conservation through three approaches:

- 1) Identify water efficiency improvements for large public agency water users by providing conservation audits;
- 2) Device incentives, paid up front, to purchase proven water saving technologies; and
- 3) Pay-for-Performance water use reduction incentives.

**Program Details***Conservation Audits for Large Public Agency Water Users*

Large-water-using public agencies 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 focusing the water efficiency audits, brought for Board consideration in this month's Water Conservation Improvements Board letter, on agencies that use at least 100 acre-feet of water per year. The audits will assist the partnering agencies in identifying potential water conservation opportunities.

#### *Device Incentives Program*

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. Partnering agencies would be required to purchase the water saving technologies with Metropolitan funding and install and maintain the technology as their contribution to the partnership. 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 are provided below:

Device	Estimated Retail Price	Annual Estimated Water Savings	Lifetime Estimated Water Savings	Estimated Cost of Conserved Water <sup>1</sup>
Weather Based Irrigation Controller <sup>2</sup> 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 <sup>3</sup>	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 watering, deferred replanting of landscapes, or behavioral 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 targeted 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 10 percent reduction in water use. The reduction would be measured against a five-year history of use. Through this program, agencies would have the option of creatively reducing water use without the need for extensive retrofit.

#### **Savings and Cost**

The total cost of the program, including audits, incentives and other professional services, would be limited to \$15 million, financed with unspent money residing in the Water Stewardship fund. \$7.5 million of out-of-budget funds would be requested in FY 2007/08. Funding, not to exceed five percent of the program shall be used for tracking and analysis. Staff estimates that the total water savings of the program would be about 40,000 AF of water. Actual savings will depend on participation in the program and the mix of devices installed. Participating

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

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

<sup>3</sup> Based on average of urinals using .25 gallons per flush or less.

