MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Water Planning, Quality and Resources Committee

November 18, 2003 Board Meeting

8-6

Subject

Approve Pilot High School Incentive Program to achieve residential landscape irrigation efficiency

Description

A new Pilot High School Residential Landscape Irrigation Efficiency Program is proposed for 2004. The Program would provide incentive payments to high schools if students encourage improved outdoor irrigation practices from local residents. The proposed action would provide high schools with up to $5,000 in incentives per school provided the school gets participants to log into a Metropolitan Web site, obtain irrigation information, and adjust their irrigation control setting for six months starting this spring. The school would receive over $3 for each participant that completes a full six months of irrigation monitoring and adjustment, up to a maximum of 1,500 participants. This proposed program is expected to provide firm water use efficiency savings during the six-month period, educate the public on effective watering practices, and potentially provide sustained conservation benefits into the future.

Process. Approximately 50 high schools will receive information cards to be distributed by students. Students would distribute these cards to single-family residences and managers of multi-family residential buildings, and ask participants to log into Metropolitan's water-use efficiency Web site at **www.bewaterwise.com** once a month for six months and adjust their sprinklers based on the published watering index values. Participants logging into the Web site would provide their e-mail and street addresses and a school code. On a monthly basis, Metropolitan would send participants an e-mail reminder to check their sprinkler control settings. Schools would receive a monthly statement tracking their program performance. The use of the Internet will reduce administrative program costs while obtaining, on a voluntary basis, information about participants during and after the program. Metropolitan would work with the schools to protect student and participant privacy. The program would seek at least one high school per member agency on a first come, first served basis. The program would begin in either the spring or next winter. Based on performance, up to 50 schools would be eligible to receive incentive payments of up to $5,000 in September.

Goal. The goal and benefit of this program is to save up to 1,600 acre-feet (AF) during the six-month period and help train over 50,000 Southern California residents to seasonally adjust their automatic sprinkler control systems. Estimated water savings from this education-based irrigation efficiency program would be compared to technology-based programs, such as weather-based irrigation control systems, to determine comparative cost-effectiveness and help guide future landscape efficiency program development.

Financial Justification. A full 1,500 participants at each school would save approximately 33 AF of water in six months by improving residential irrigation efficiency by 10 percent. The estimated value of water savings is consistent with the board-approved water conservation incentive amount of $154/AF. The total program cost is expected to be $300,000, of which $250,000 are allocated to direct water-savings payments to schools and paid from the existing conservation credits program budget. Administrative and marketing costs of the program would be about $50,000, split equally between Web site improvements and printing and marketing costs. **Attachment 1** provides a detailed analysis of the program goals and value.

Policy

By Minute Item 38290, dated June 12, 1990, the Board set the incentive amount at $154 /AF of water conserved to a maximum contribution of one-half the project cost.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other 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 CEQA determination is: Determine that the proposed action is not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determination and authorize the establishment of a new Pilot High School Incentive Program.

Fiscal Impact: $300,000

Option #2

Do not authorize the proposed action.

Fiscal Impact: None

Staff Recommendation

Option #1

Stephen N. Arakawa 10/24/2003
Stephen N. Arakawa *Date*
Manager, Water Resource Management

Ronald R. Gastelum 10/27/2003
Ronald R. Gastelum *Date*
Chief Executive Officer

Attachment 1 – High School Pilot Program Value and Goals

BLA #2572

High School Pilot Program Value and Goals

The value of water savings for the Pilot High School Incentive Program (Pilot Program) is based on manually emulating the results of two studies of increased landscape irrigation efficiency associated with weather-based irrigation controllers. These two studies co-sponsored by Irvine Ranch Water District, the Municipal Water District of Orange County, and Metropolitan, estimated the savings of a single weather-based controller to be between 37 and 41 gallons per day. The Pilot Program seeks to achieve the same results through manual adjustment of irrigation controllers over a six-month period. Using the mid-point of these two studies, a residence is expected to save 39 gallons per day or 0.022 acre-feet over six months. Because Metropolitan pays $154 per acre-foot for conservation through its programs, this Pilot Program is projected to result in water savings worth about $3.35 per participant who completes six months of adjustments. If a school achieves its goal of 1,500 participants, the total value of the school's efforts approximately equals $5,000 per school.

Below is a diagram of the water saving potential sought through the Pilot Program. The dark gray area is a reference index reflecting evapotranspiration or ET, which indicates the pattern of water need for cool season turf through the year. The light gray area is a diagram of typical over watering. The Pilot Program will begin in spring and continue through December, targeting the highest months of over watering.