

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

January 13, 2004 Board Meeting

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**10-2**

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## **Subject**

Protector del Agua landscape irrigation-efficiency education program

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## **Description**

This letter outlines an approach to upgrade Metropolitan's ten-year old Protector del Agua landscape education program. The program has taught thousands and demand continues to grow. To accommodate the increased demand, technological advances, and an evolving public message, upgrades to the program are planned for the upcoming year. This program benefits Metropolitan in achieving a water wise public.

## **Background**

When long-term conservation programs were being first developed in 1993, a large factor influencing outdoor water use was human behavior. While there are promising new technologies in development for irrigation water use efficiency, user education remains critical to achieving efficiency improvements identified in the Integrated Resources Plan Update. In 1993, the Board authorized the development of landscape education programs which led to the PDA professional class series. The professional series targets landscape contractors who manage numerous, large-area landscapes.

The Protector del Agua program currently includes a six-class series for professionals and four-class series for homeowners. The classes focus on how to design and install landscapes and irrigate them efficiently. There were more than 7,000 participants in fiscal year 2003. To date, Metropolitan has spent more than \$1.5 million offering the classes to our member agencies and their customers. Feedback from the participants has always been very positive.

The introduction of the residential class series in 1997 created a large increase in the demand for Protector del Agua classes. The residential series now utilizes three-quarters of all Protector del Agua program resources. In conjunction with member agency representatives and outside practitioners, staff has been evaluating the Protector del Agua program to create an adaptive future design. The proposed improvements would help advance Metropolitan's comprehensive approach to landscape water use efficiency, particularly irrigation, which represents a significant untapped opportunity for increased water savings.

## **Outline of Proposed Upgrades**

**Attachment 1** describes the Protector del Agua program. In consultation with its member agencies, Metropolitan is considering modifying the Protector del Agua program to include the following approach:

Professional class series. The professional class series will continue to be offered at no charge by Metropolitan with member agencies as hosts. In addition to the traditional targeted audience of large landscape maintenance professionals, a focused outreach component would be added to educate property managers and building owners on the long-term value of hiring landscape professionals who are knowledgeable of water-efficient management practices.

Residential class series. To sustain the success of our landscape education program and respond to the large increase in attendance, staff envisions the program proceeding on a dual track.

1. To support increasing interest in the program, a "Train-the-Trainer" approach would allow the Protector del Agua residential class series to be delivered by an extended array of entities. Metropolitan can accomplish this through collaboration with existing education outlets such as public

agencies, gardener certification programs, community colleges, and local lecture series. Potential new partners include garden centers, irrigation equipment manufacturers, environmental and community-based organizations, along with agencies responsible for mitigating landscape runoff as a non-point pollution source. A new group of instructors from member agencies and other collaborating organizations would be trained by Metropolitan to teach future Protector del Agua residential classes. Course curriculum would be consistent regardless of course sponsor, trainer, and location of classes. This approach will assist in effectively reaching the estimated 3.5 million single-family households in Metropolitan's service area.

2. In order to sustain member agency support, Metropolitan would continue offering an underlying core of residential classes, with an emphasis on larger class sizes to improve program efficiency and reduced administrative costs. Based on individual need, support may be available in other forms as well, including cost-sharing for locally led training in lieu of providing Metropolitan-funded classes.

Improvements common to both series. Staff envisions a more dynamic approach with annual updates to reflect technology advances. Consultants would be used to develop an updated curriculum and make improvements to create a more efficient and effective program including new demonstration hardware reflecting current, state-of-the-art technology. To reduce the cost of course materials, Metropolitan would provide materials in a digital or electronic format that could be downloaded and reproduced by member agencies and/or local entities offering the Protector del Agua classes. Staff would formalize an ongoing student evaluation process to assess and upgrade the classroom approach.

### **Program Implementation**

The existing Protector del Agua program will remain in place while new program elements are designed and implemented. Staff foresees a need to extend the present vendor beyond its September 2004 termination date to effect a smooth transition. Staff will continue to work with member agencies to develop the proposed program upgrades and incorporate processes for periodic program evaluation and improvement. We will return to the Board to obtain additional contracting authority as the program is fully designed.

### **Policy**

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By Minute Item 40121, dated March 9, 1993, the Board approved the Landscape Conservation Program including development of educational programs such as Protector del Agua.

By Minute Item 41969, dated July 9, 1996, the Board approved expansion of the Landscape Conservation Program, including Protector del Agua.

By Minute Item 43225, dated Oct. 13, 1998, the Board approved continuation and expansion of Metropolitan's Large Landscape and Landscape Conservation Education Program.

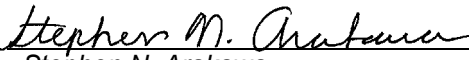
By Minute Item 45208, dated Feb. 11, 2003, the Board adopted water conservation policy principles that encourage collaborative landscape partnerships and public promotion of water efficient landscapes.

By Minute Item 45347, dated May 13, 2003, the Board authorized an increase in the Protector del Agua vendor's contract to \$1 million over three years.

**Fiscal Impact**

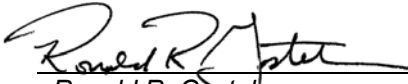
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None

  
Stephen N. Arakawa  
Manager, Water Resource Management

12/15/2003

Date

  
Ronald R. Gastelum  
Chief Executive Officer

12/22/2003

Date

**Attachment 1 – The Protector del Agua Program Existing and Proposed Upgrades**

BLA #2412

## **The Protector del Agua Program Existing and Proposed Upgrades**

The Protector del Agua trains the public in irrigation efficiency techniques that conserve water. It provides bilingual (English/Spanish) training of landscape maintenance professionals and English language classes for residential customers.

### **Professional Class Series**

Existing. The Protector del Agua program is an irrigation efficiency education course for landscape maintenance personnel. The course consists of six classes in landscape water management. Each class builds on principles presented in the preceding class. The class instructors are qualified consultants paid for by Metropolitan. Protector del Agua begins with basic irrigation principles of soil-plant-water relationships, and concludes with irrigation scheduling. A plant identification and water needs class are also available. Course curriculum includes:

- Basic Irrigation Principles
- Irrigation System Adjustment & Repair
- Irrigation System Troubleshooting
- Controller Programming
- Irrigation Scheduling
- Plants for Water Management

Through the process of coordination and discussion, some or all of the following elements may be incorporated as part of the final PDA proposal:

- Develop and offer a class in Basic Hydraulics and Water Pressure Management
- Incorporate training on the requirements for irrigating with recycled water
- Develop and offer a class in Water Management for Landscape Professionals
- Add a focused outreach component to educate property managers and building owners on the long-term value of hiring landscape professionals who know water-efficient management practices and how to establish performance standards within a landscape maintenance contract

### **Residential Class Series**

Existing. The residential series targets homeowners and provides a basic education (English only) in efficient landscape irrigation practices in four subject areas:

- Basic Landscape Design - basic landscape planning review
- Landscape Plants - native and low water use plant selection
- Sprinkler Systems - irrigation sprinkler design and maintenance principles review
- Watering & Fertilizing – irrigation scheduling and fertilizer use

Through the process of coordination and discussion, some or all of the following elements may be incorporated as part of the final PDA proposal:

- Update the current curriculum to include new technologies
- Develop instructor training curriculum and use it to “Train the Trainers”
- Partner with interested entities willing to provide the residential class series
- Make all class presentation and handout materials available in electronic format
- Distribute curriculum updates as needed
- Assist member agencies in utilizing the new program elements
- Offer interested member agencies a limited number of classes provided by Metropolitan

**Partnerships with Member Agencies and Others**

Existing. Member agencies do the marketing for PDA class offerings and host the sessions. Class locations may need access to an open area for setup of the demonstration equipment.

As details emerge in the program design discussions, it is expected that member agencies will retain the ability to host classes as before, and the method of delivering the course content is also expected to expand. Future work with potential partners such as community colleges, existing gardening forums, garden supply centers, irrigation equipment manufacturers and others would provide new and innovative means of providing the irrigation efficiency education of Metropolitan's PDA classes. Co-funding partnerships, contracting with independent trainers and other arrangements will be explored.