



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

JUL - 9 1996

Dawn Chin
for EXECUTIVE SECRETARY

REVISED

7-5

June 25, 1996

To: Board of Directors (Finance and Insurance Committee--Action)
(Water Planning and Resources Committee--Action)
(Executive Committee--Action)

From: General Manager *[Signature]*

Submitted by: S.E. Vazquez *[Signature]*
Acting Director of Public Affairs and Conservation

Subject: Landscape Conservation Program for Fiscal Year 1996-97

RECOMMENDATION(S)

It is recommended that: 1) your Board approve the Landscape Conservation Program as described herein; and 2) the General Manager be authorized to enter into agreements with member agencies in excess of \$250,000 to participate in Metropolitan's Landscape Conservation Program during Fiscal Year 1996-97.

EXECUTIVE SUMMARY

Metropolitan's Landscape Conservation Program has been developing over the past three years. The Landscape Conservation Program for Fiscal Year 1996-97 was designed by choosing various components from pilot projects that exhibited the highest water savings potential. Your Board approved a budget for the Landscape Conservation Program at \$1,490,700 as part of the Conservation Branch budget. Staff proposes the following components be offered to all member agencies for Fiscal Year 1996-97:

- Landscape water audits with irrigation retrofits
 - Moisture Sensor Program
 - Central Irrigation Computer Control System Program
- "Protector del Agua" Landscape Education Program
- Pilot landscape area assessment studies
- Research in low-water use plants and irrigation scheduling
- Research new landscape conservation technologies for future programs
- Evaluation of landscape conservation programs
- Circuit Rider

DETAILED REPORT

The following is a description of each of the components of the proposed Landscape Conservation Program for Fiscal Year (FY) 1996-97.

Landscape Water Audits with Irrigation Retrofits

Metropolitan will participate in the retrofit of moisture sensors and central irrigation computer control systems. The participating member agency and Metropolitan will agree on a minimum guaranteed amount of water savings for the project. Funding will be under the Conservation Credits Program criteria of \$154 per acre-foot up to 50 percent of the project cost. Payments will be bimonthly based on member agency submittal of reports and invoices for the project. A reconciliation will be done at the end of the project to insure the guaranteed minimum water savings amount. Each project will include three phases:

Phase I: Presurvey

Member agencies will presurvey sites to select only those sites that show potential water savings.

Phase II: Landscape Water Audits

Sites selected by presurvey will be audited. Results from water audits will be included in a report and will identify sites where the retrofitting of irrigation equipment shows a five-year payback or less based on estimated water savings.

Phase III: Retrofitting

Sites identified as having a five-year payback or less for suggested retrofits of moisture sensors and central irrigation computer control systems must perform those retrofits as part of the agreement.

Note: If member agencies have audit reports from previously performed audits, upon approval by Metropolitan, an agreement could be entered into for Phase III .

Protector del Agua Program

The "Protector del Agua" Program (PDA) is an education program targeting landscape maintenance workers which is fully funded by Metropolitan. During FY 1996-97, Metropolitan will make the following changes and/or expansions to PDA:

- Full-time Bilingual PDA Program Manager
- Additional Instructors
- Additional Field Equipment
- Additional Spanish-Speaking Classes
- Class Scheduling Flexibility

- Research Results will be Incorporated into PDA

PDA has received awards from the United States Bureau of Reclamation under the category of innovative partnerships in conservation, and the California Municipal Utilities Association for outstanding leadership in water efficiency. PDA complements the Landscape Retrofit Program well by educating the users of the hardware on how to achieve and maintain water savings over time.

Pilot Landscape Area Assessment Studies

Metropolitan will participate with a small number of member agencies in landscape area assessment studies to identify large landscape sites in their service area. By combining aerial photography and digital parcel maps in computer compatible format, the following information can be determined:

- Landscape area (square footage)
- Amount of turf and other plant categories
- Weather-based site specific landscape water budgets

Using this information, member agencies will be able to identify what types of sites in their service areas have large landscapes. This will enable Metropolitan and its member agencies to target certain types of sites in future programs.

Research in Low-Water Use Plants and Irrigation Scheduling

Metropolitan will continue research on:

- Determining water use rates for warm-season turfgrasses
- Water use and adaptability of nonindigenous tree species
- Development of crop coefficients for mixed landscapes

Portions of this research will be completed during FY 1996-97 and Metropolitan will be developing informational brochures to share research results with member agencies. All three research programs are yielding information useful to the landscape industry, including more efficient irrigation scheduling techniques and new varieties of drought resistant plant materials.

Researching New Landscape Conservation Technologies for Future Programs

During FY 1996-97, Metropolitan will be investigating and researching new landscape conservation technologies for use in future programs. This will be done by staff and through suggestions from member agency conservation staff. Promising new technologies may be pilot tested on a small scale during this FY.

Water Savings Evaluation

Metropolitan is currently conducting two evaluation programs which will be completed during FY 1996-97. One evaluation is being done to determine the effects of water conservation pricing, landscape water budget allocations, and education on the success of landscape water conservation programs. The other evaluation is of the San Diego County Water Authority's large turf water audit program.

Circuit Rider

The "Circuit Rider" Program assists cities in the implementation of the State Landscape Ordinance AB325, or their local landscape ordinance. Metropolitan will begin a small-scale evaluation of Circuit Rider during FY 1996-97 and will continue funding those agencies who have been participating. Results of the evaluation will determine whether Metropolitan will continue funding Circuit Rider after this FY.