

- **Semiannual Report on Metropolitan's Local Resources and Conservation Programs July through December 2006**

Summary

This report covers Metropolitan's activities on water recycling, groundwater recovery and conservation to achieve targets identified in the Integrated Water Resources Plan.

During the period July through December, Metropolitan provided nearly \$20 million of incentives to support water supply reliability through development of local projects and water-use efficiency improvements. Since inception of these programs, Metropolitan has provided about \$417 million for water supply and demand management production. Recent implementation highlights include:

Local Resources Program Achievements

- Collaborated with the member agencies through an organized task force to review the current Local Resources Program approach and to improve project implementation approaches.
- Participated on the Los Angeles County Recycled Water Task Force to develop a countywide policy for expanded use of recycled water.
- Provided information on Metropolitan's water use efficiency programs at the WaterReuse Association's national symposium.
- The Upper San Gabriel Valley Municipal Water District started its operation of its Whittier Narrows Recycled Water Project (2,300 acre-feet per year).
- South Coast Water District completed construction of the Capistrano Beach Desalter (1,300 acre-feet per year).

Conservation Program Achievements

- Executed 10 Enhanced Conservation Program agreements to pilot new creative ways to increase water conservation.
- Executed an agreement with Republic Master Chefs for an industrial improvement process to save 147 acre-feet of water per year.
- Completed \$1.8 million weather-based irrigation controller grant administered by the California Department of Water Resources. More than 4,000 units were retrofitted with new, state-of-art devices.
- Provided over \$630,000 in rebates for approximately 18,000 high-efficiency clothes washers using Prop. 50 state grant funding.
- Provided over \$500,000 in rebates for approximately 5,000 high-efficiency toilets using Prop. 50 state grant funding.



Laundry at Republic Master Chefs
(Sponsored by Long Beach)

Opportunities and Challenges

- The U.S. Department of Energy denied the California Energy Commission's petition to allow new California regulations limiting water use by new clothes washers to go into effect. Staff requested board action in March to sustain momentum given that state law will not go into effect in 2007.
- Public awareness of Metropolitan's residential and large landscape programs for smart controllers and rotating nozzles for pop-up spray heads remains limited; more effective marketing is being pursued.
- There is a concern that inconsistent interpretation of water recycling requirements among the Regional Water Quality Control Boards could delay implementation of recycled water projects. A comprehensive state board policy on water recycling would help implement 2003 task force recommendations.

Detailed Report

The following provides additional information regarding program administration and implementation progress during the first half of fiscal year 2006/07 for local resource and water conservation programs.

LOCAL RESOURCES PROGRAM

Metropolitan provides financial incentives for local development of water recycling and groundwater recovery projects that reduce demand on imported supplies. The following table summarizes program costs and accomplishments:

LOCAL RESOURCES PROGRAM SUMMARY			
	<i>Recovered Groundwater</i>	<i>Recycled Water</i>	<i>TOTAL</i>
Projects			
Active Contracts	24	62	86
Operating Projects	17	44	61
Contract Yield (AFY)	87,026	280,300	367,326
Deliveries (AF)*			
FY 2006/07 (thru Dec)	23,206	49,626	72,832
FY 2005/06	44,478	82,058	126,536
Since Inception	328,982	867,120	1,196,102
Payments (\$ millions)			
FY 2006/07 (thru Dec)	\$4.5	\$9.5	\$14.0
FY 2005/06	\$9.4	\$15.9	\$25.3
Since Inception	\$66.2	\$163.0	\$229.2

*Deliveries and payments are as reported through December 2006; however, not all information is complete and payments are estimated until actual costs are reconciled. Production total includes data for concluded contracts.

Local Resources Program Task Force Meetings

Metropolitan collaborated with its member agencies through a task-force approach to review the current Local Resources Program (LRP) implementation approach. In July 2006, Metropolitan initiated the first in a series of task force meetings that provided candid recommendations and alternative solutions. Member agencies and staff reviewed administrative processes and timing of future program solicitations. Staff recommendations will be presented to Metropolitan's Board of Directors for consideration.

Los Angeles County Recycled Water Task Force

Staff participated in the Los Angeles County Recycled Water task force. The task force was convened by the Los Angeles County Board of Supervisors to assess and make recommendations for a broad countywide policy for expanded use of recycled water for non-potable purposes in the County. Task Force findings and recommendations were published and supported by Metropolitan's General Manager, consistent with existing board policy. Staff continues to explore and identify opportunities and partnerships to advance recycled water use throughout Metropolitan's entire service area.

AB 371 – Water Recycling Act of 2006

AB 371, introduced by Assemblywoman Jackie Goldberg and sponsored by the WaterReuse Association, was signed into law on September 28, 2006. The Water Recycling Act of 2006 is a vehicle to enforce some of the recommendations of the State Recycled Water Task Force in 2004. The law requires that all state Department of Transportation and General Service's projects use recycled water if made available within 10 years of project construction. Under the new law, the California Department of Water Resources is to submit design standards to the California Building Standards Commission for plumbing buildings with recycled water systems. Through its membership in WaterReuse, Metropolitan helped shape the final bill's provisions.

WaterReuse Association Symposium

The General Manager helped kick-off the 21st annual WaterReuse Symposium held in Hollywood by making opening remarks that emphasized the importance of effective partnerships to achieve common objectives and goals. Also on the panel was Congresswoman Grace Napolitano, who expressed support for advancing water recycling and water management for Southern California. Director John Morris, who served on the symposium's organizing committee, led attendees on a tour of the Long Beach Desalination Pilot Plant. In addition, Metropolitan staff provided information on its water use-efficiency programs in an exhibit showcasing our public water resource stewardship in water recycling, desalination and conservation. Staff also volunteered to assist with conference logistics and operations.

Whittier Narrows Recycled Water Project

Upper San Gabriel Valley Municipal Water District celebrated commencement of the Whittier Narrows Recycled Water Project on October 26, 2006. The project will deliver about 2,300 acre-foot per year of tertiary treated recycled water from Los Angeles County Sanitation Districts' Whittier Narrows Water Reclamation Plant to customers in El Monte for landscape irrigation. Major users include a park, golf course and high school. The project will increase regional supply reliability by reducing dependency on imported water. Metropolitan committed to provide a fixed schedule of incentives that range from \$65–\$200 per acre-foot for 25 years under a LRP incentive contract.

Capistrano Beach Desalter

Construction of the Capistrano Beach Desalter Project was completed in December 2006. The project is owned and operated by South Coast Water District, a retail agency of the Municipal Water District of Orange County. The project is expected to begin operating in March 2007 and will produce about 1,300 acre-feet per year of treated groundwater for potable purposes. Metropolitan will provide sliding scale incentives up to \$250 per acre-foot for 20 years based on actual project costs under a Groundwater Recovery Program contract.



South Coast Water District, Capistrano Beach Desalter
(Sponsored by MWDOC)

CONSERVATION PROGRAM

Incentive-based conservation targets established in the Integrated Water Resources Plan are pursued in three basic water-use areas: Residential Indoor, Landscape, and Commercial.

The following table summarizes conservation program water savings and incentive payments:

CONSERVATION CREDITS PROGRAM PERFORMANCE SUMMARY				
	Residential	Landscape	Commercial	Total
Water Savings (AF)				
FY 2006/07 (thru Dec) *	1,352	677	687	2,716
FY 2005/06 *	3,241	1,567	1,482	6,290
Since Inception **	860,768	29,837	55,947	946,552
Payments (\$ millions)				
FY 2006/07 (thru Dec)	\$3.6	\$0.5	\$2.2	\$6.3
FY 2005/06	\$7.5	\$0.4	\$2.7	\$10.6
Since Inception	\$169.5	\$2.8	\$15.5	\$187.8

* New annual savings

** Includes passive conservation originated as active

Residential Indoor Activities

High-Efficiency Clothes Washer Program

Metropolitan provided over \$630,000 of its \$1.6 million Prop. 50 grant to member agencies to retrofit approximately 18,000 high-efficiency clothes washers (HECW). Since July 2006, Metropolitan has provided rebates for retrofits that use less water (water factor 6.0) with average savings of about 9,000 gallons per year.

Challenges: - The U.S. Department of Energy denied the California Energy Commission's request for waiver from federal standard to incorporate more stringent state standards for water efficiency in new HECWs. Staff will identify strategies to sustain momentum in retrofitting residential clothes washers with efficient models that conserve water.

Ultra-Low- Flush Toilet Program

The Ultra-Low-Flush Toilet Program has been successful since its inception in 1988. Since 2005, Metropolitan has observed a steady decrease in the number of rebates provided for ultra-low-flush toilet (ULFT) retrofits. This decline indicates reduced demand as a result of saturation and supports the phase-out of ULFT programs. As a result, many member agencies are in the process of transitioning toilet retrofit programs from ULFT to high-efficiency toilets, which use 20 percent less water.

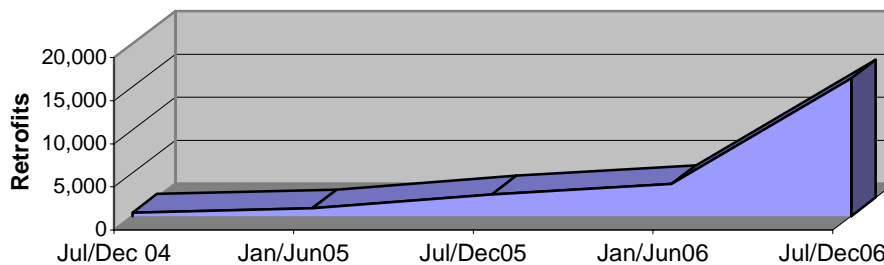


Dual-Flush Toilet Demonstration

High-Efficiency Toilet Program

Metropolitan provided \$500,000 in rebates for approximately 5,000 high-efficiency toilets, which use 1.28 gallons per flush or better, using Prop. 50 state grant funding.

High-Efficiency Toilets Cumulative Retrofits



Smart Irrigation Day for Employees

Conservation exhibits were displayed at various Metropolitan facilities to educate employees and visitors on various water-use efficiency devices for homes, schools and businesses. Vendors, manufacturers and staff participated in displaying a high-efficiency clothes washer, a dual flush toilet, and smart irrigation controllers. Employees also had a chance to talk to experts about native plants, fertilizing, and water-efficient landscaping design. The exhibits were displayed at several treatment facilities and Union Station.



Smart Irrigation Employee Demonstration

Model and New Home Pilot Programs

In August 2006, Metropolitan and the California Department of Water Resources executed a new grant agreement to expand the model home program to include multi-family applications. Metropolitan's \$423,150 Prop. 50 grant provides incentive funding for water-efficient landscapes, appliances and plumbing fixtures. Potential types of projects include high-rise condominiums, townhomes, and mixed use redevelopment projects. Eastern MWD proposed the first potential project for this new program

element. Copper Skye, a 30-acre development by Barratt American located in Menifee, California, would feature four model homes and approximately 75,000 square feet of California Friendly landscaped areas.

In November 2006, staff hosted an exhibit booth at the annual Building Industry Association Show in Anaheim. Staff shared program literature and participated in a joint seminar on green building incentives with representatives from Sempra Utilities.

Challenges: - Implementation schedule delays due to record rainfall in Fall/Winter 2005 and real estate market demand reduced the number of homebuilder implemented units.

Landscape Activities

Weather-Based Irrigation Controllers

In November 2006, the program reached a much-anticipated milestone when cumulative Prop. 13 financial incentives paid to member agencies topped the \$1.45 million mark, fulfilling the grant program's targets. Activity amounted to 1,012 commercial installations and 3,109 residential installations.

In August 2006, the Board approved a rebate of \$4 per unit for high efficiency rotating nozzles for pop-up spray heads. The rebate offer was added to all of Metropolitan's residential and commercial program agreements.

Smart irrigation control systems installed by the Pasadena Unified School District with program assistance through Pasadena Water Power will rely on real time weather data collected from the weather station installed onsite at John Muir High School.

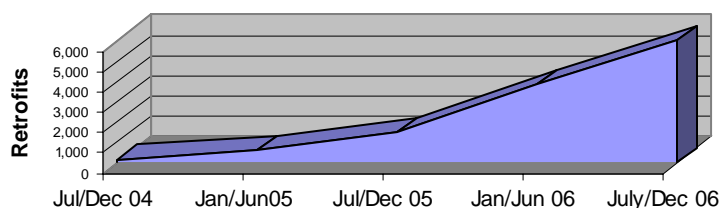


Smart Irrigation Demonstration



Smart Irrigation System
(Sponsored by Pasadena)

Weather-Based Irrigation Controllers Cumulative Retrofits



Challenges: - Public awareness of smart controllers and rotating nozzles for pop-up spray heads remains limited. More extensive marketing is needed. Staff is exploring new strategies to reach single-family homeowners.

Despite administrative improvements to Metropolitan's Large Landscape Program, there has been no interest leading to participation. Additional program enhancements are being identified as part of an annual review process with member agencies and recommendations by an advisory team made up of staff and member agencies are forthcoming.

Web-Based California Friendly Landscape Irrigation Training

CompUSA was selected through a competitive process to help develop online irrigation training modules using grant funding from the California Department of Water Resources and U.S. Bureau of Reclamation. Work is proceeding as scheduled for two residential modules and four professional modules.

California Friendly Landscape Classes

Approximately 2,500 individuals graduated from Metropolitan's residential and professional landscape irrigation efficiency classes during the first half of Fiscal Year 06/07. Under a new approach used to test a variety of distribution methods for WBICs, about 750 WBICs were provided to qualified homeowners at three separate training events.

Metropolitan also tested public response to landscape training and WBIC distribution by partnering with Cerritos College, located in Central Basin Municipal Water District's service area. Inland Empire Utilities Agency and San Diego County Water Authority also conducted landscape training and WBIC distribution events.



Landscape Class
(Sponsored by Inland Empire Utilities Agency)

Synthetic Turf Program

Metropolitan previously awarded 10 Synthetic Turf Program project grants of which six are completed and have submitted final reports. Incentive funding is provided after final reports are reviewed and accepted by Metropolitan. To date, a total of \$158,000 has been contributed by the U.S. Bureau of Reclamation and \$49,000 provided by Metropolitan. During this reporting period, Hemet Unified School District, a customer of Eastern Municipal Water District, completed the West Valley High School synthetic turf project. Preliminary results for this project indicate a water savings of 9.28 acre-foot per year or 30.2 million gallons annually.

Preliminary Program results show an average savings of 10.9 acre-feet on an average project site of 77,657 square-feet or 6.3 acre-feet per acre.



West Valley High School Football Field
(Sponsored by Eastern Municipal Water District)

Outdoor Conservation Outreach Program

During this reporting period, Metropolitan implemented an advertising and promotional campaign throughout the service area encouraging efficient watering and use of California Friendly plants. More than 60 independent garden retailers and 113 Home Depots throughout the service area participated in the outreach program using point-of-purchase displays, plant tags and educational materials. Advertisements ran on about 50 radio stations and 12 local news web sites including latimes.com and ocregister.com. Ads were also placed in Sunset magazine.



California Friendly Plant Banner
at Home Depot in Garden Grove

Commercial Devices Retrofitted

Metropolitan continued funding for commercial customers for retrofit of high-water using devices with more efficient models. Under Metropolitan's Region-Wide Commercial Program, "Save Water Save a Buck," a total of 9,200 devices were retrofitted resulting in water savings of about 10,000 acre-feet over 20 years. More than 100,000 devices have been retrofitted since inception of the program resulting in water savings of about 95,000 acre-feet.

Zero-water urinals and high efficiency toilets (1.28 gallons or less per flush) retrofits experienced the highest increase primarily due to participation by a large number of schools.

<u>CII Performance (6 months)</u>	
▪ Applications processed:	1,056
▪ Devices Retrofitted:	9,200
▪ Metropolitan Incentives:	\$2.1 M



Zero-Water Urinals Demonstration

Industrial Process Improvement Program

Metropolitan executed an agreement in November 2006 for a second project with American Textile Maintenance Company. American Textile (d.b.a. Republic Master Chefs Textile Rental Services) will save approximately 147 acre-feet of water annually at their Long Beach commercial laundry using wastewater filtration, heat recovery, and reuse systems. Their first IPI agreement was for a similar project in Los Angeles.



(Sponsored by Long Beach)

Enhanced Conservation Program

The Enhanced Conservation Program provides funding to pilot cost-effective water conservation projects offering new creative approaches to urban water conservation. A total of 22 proposals were received, of which 15 were selected for funding totaling \$1.2 million with an estimated water savings of 8,500 acre-feet per year. To date, 10 agreements have been executed and work will commence on these projects.

Partnerships

Proposed partnerships are under negotiation with both the Southern California Gas Company (Gas Company) and Southern California Edison to pilot programs that measure embedded energy savings in cold-water efficiency programs. The pilot programs should begin in early fiscal year 2007/08 and are funded by a \$10 million grant from the California Public Utilities Commission (CPUC). Approximately half of the funding would be utilized in Metropolitan's service area. Staff is currently working with both energy utilities and the CPUC on program design criteria.

Partnership with the Gas Company would help save water and energy. Metropolitan and the Gas Company have combined their water and energy rebates for commercial high efficiency clothes washers. Gas Company's funding is now provided through Metropolitan to allow customers a "one stop shop" rebate.

As the regional water provider, Metropolitan has taken a lead role in securing energy partnerships to benefit member agencies throughout the service area. The next step is to execute agreements that would lead to implementation programs including rebates and installation of retrofit devices.

California Urban Water Conservation Council

In December, Metropolitan filed its Best Management Practices reports for fiscal years 2004/05 and 2005/06 with the California Urban Water Conservation Council. In addition, Metropolitan was re-elected to the Council's Steering Committee, maintaining a presence on the Council since 1991. During 2006, eight water agencies in Metropolitan's service area joined the Council, including: Carlsbad Municipal Water District, City of Chino Hills, City of Orange, City of Perris, Lake Hemet Municipal Water District, Nuevo Water Company, City of Chino, and Park Water Company.

Challenges: - During the first part of 2007, the Council will be seeking a new Executive Director. After seven years of service, Ms. Mary Ann Dickenson, a Metropolitan employee on loan to the Council, has chosen to step down as of June 30, 2007. Mary Ann has taken the Council from a small-unknown entity to a pre-eminent authority on water conservation. Metropolitan will be involved in the selection and transition of the new Executive Director.

Water Use Efficiency Meetings

During this period, Metropolitan hosted five meetings with conservation coordinators from various member and retail agencies. These meetings provide a forum for participants to exchange information on conservation programs, field experiences, and implementation issues. In addition, Metropolitan invited the U.S. Bureau of Reclamation, the California Department of Water Resources, California Urban Water Conservation Council, Southern California Edison, Southern California Gas, and Los Angeles & San Gabriel Rivers Watershed Council to present information on grants and other implementation resources on conservation programs.