THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Date: November 27, 2013

To: Board of Directors

From: Jeffrey Kightlinger, General Manager

Subject: Transmittal of Draft Report *Regional Progress Report – An Annual Report to the California State Legislature on Achievements in Conservation, Recycling and Groundwater Recharge, February 2014*

Attached for your review is the draft Metropolitan report, *Regional Progress Report – An Annual Report to the California State Legislature on Achievements in Conservation, Recycling and Groundwater Recharge*. Section 130.5 of the MWD Act requires Metropolitan to prepare and submit, on or before February 1 of each year, an annual report to the California State Legislature on our progress in achieving the goals of increased emphasis on cost-effective conservation, recycling, and groundwater recharge. This will be Metropolitan's fourteenth annual progress report. This draft report presents the achievements in conservation, recycling, groundwater recovery, and recharge during the fiscal year 2012/13.

In conjunction with this draft report and in accordance with Section 130.5, Metropolitan will hold a public hearing on this report at its regularly scheduled Water Planning and Stewardship Committee Meeting on December 9, 2013 at 10:00 a.m. to review the achievements in promoting cost-effective conservation, recycling, and groundwater recharge. Also in accordance with Section 130.5, Metropolitan has invited knowledgeable persons from the fields of water conservation and sustainability to comment at the hearing. The public hearing will commence with a staff report reviewing the achievements during the fiscal year 2012/13. Next, invited experts will be requested to make comments on the report. Thereafter, the public will be invited to comment on the report. Excerpts from oral and written comments received at the public hearing will be summarized in the final report.

A copy of the final report will be distributed prior to the February Board and Committee meetings. Metropolitan will be submitting the final report to the California State Legislature by February 1, 2014.

Jeffrey Kightlinger

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Attachment

cc: Member Agencies

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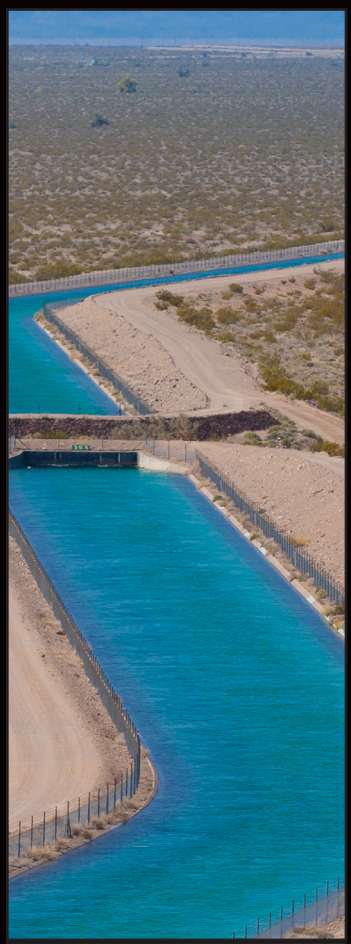
Regional Progress Report

An Annual Report to the California State Legislature on Achievements in Conservation, Recycling and Groundwater Recharge



IMPLEMENTING THE DIVERSIFIED RESOURCE PORTFOLIO

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

February 2014

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About Metropolitan

ABOUT METROPOLITAN AND THIS REPORT

The Metropolitan Water District of Southern California (Metropolitan) was established in 1928 under an act of the state Legislature to provide supplemental water supplies to its member agencies in Southern California.

Metropolitan is a public agency and a regional water wholesaler. It is governed by a 37-member board of directors representing 26 member agencies that purchase some or all of their water from Metropolitan and serve about 19 million people across six Southern California counties.

The mission of Metropolitan is to provide its 5,200-square-mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan draws supplies from the Colorado River through the Colorado River Aqueduct, which it owns and operates; from Northern California via the State Water Project; and from local programs and transfer arrangements. An increasing percentage of Southern California's water supply comes from conservation, water recycling and recovered groundwater, which are further described in this report.

Achievements in conservation, recycling and groundwater recharge have been chronicled in this report since the enactment of California Senate Bill 60 (SB60) in 1999. SB60 added Section 130.5 to the Metropolitan Water District Act (MWD Act) which states, "The Legislature finds and declares... The Metropolitan Water District of Southern California shall place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." According to the MWD Act, Metropolitan is to prepare and submit to the legislature by February 1 of each year a report on Metropolitan's progress in achieving these goals. To coincide with the preparation of the report, the MWD Act requires Metropolitan to "hold an annual public hearing... during which the district shall review its urban water management plan... for adequacy in achieving an increased emphasis on cost-effective conservation, recycling, and groundwater recharge." While the Regional Urban Water Management Plan is prepared and updated every five years according to state requirements (with the next update due in 2015), Metropolitan hosts an annual December hearing to share progress on fiscal year plan objectives, and to receive public comments.

Cover Images:

Metropolitan engineered the Colorado River Aqueduct in the 1930s to bring water to a growing Southern California, providing residents with a reliable supply of water (photo far left). Imports from the Colorado River were supplemented in the 1960s with water drawn from Northern California through the State Water Project's California Aqueduct (photo second from left). That conveyance system is being stabilized through the Bay Delta Conservation Plan which addresses supply reliability and environmental restoration. To extend the use of imported water and diversify the supply mix, Metropolitan and its member public agencies have focused on developing regional reuse projects that include recycling and groundwater replenishment projects (photo strip third from left). A robust regional conservation program reduces dependence on imported supplies and increases water use efficiency through training and education and promoting water-saving devices (photo strip right).

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For more information about this report contact Kathy Cole, Metropolitan's Executive Legislative Representative, at (916) 650-2642 or kcole@mwdh2o.com.

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Overview

Metropolitan was created more than 80 years ago with a single objective – to build the Colorado River Aqueduct to supply water to a growing Southern California population. Metropolitan has expanded its legacy of engineering solutions to include water resource management, with a focus on supporting local resource development. Investments in conservation, recycling, groundwater treatment, storage and water transfers have brought diversity and stability to Metropolitan's water supply portfolio. This has helped Metropolitan manage risk and ensure a reliable water supply for Southern California.

> Investments in conservation, recycling, groundwater treatment, storage and water transfers have brought diversity and stability to Metropolitan's water supply portfolio.

Metropolitan prepares this report to the state legislature to provide an update on achievements in water conservation, recycling and groundwater recharge. It details Metropolitan's progress in advancing these supply strategies and broadening the district's supply mix.

IMPORTED WATER

Metropolitan's base supply is its imported water. After the construction of the Colorado system in the 1930s, Metropolitan began importing water from Northern California via the State Water Project in the 1970s. But the drought of 1987 – 1992 and first-ever water shortages for the region motived water providers across Southern California to examine supply alternatives that could better withstand dry cycles. Metropolitan responded with a long-term plan to bring greater balance between locally developed resources and imported supplies.

Metropolitan's Integrated Water Resources Plan (IRP), adopted in 1996, has been amended several times

Implementing The Diversified Resource Portfolio

Metropolitan developed its first Integrated Water Resources Plan in 1996 to address the complexity of developing, maintaining, and delivering a reliable supply of water to its member agencies. The IRP established targets for a diversified portfolio of investments in water supply that have provided the foundation for continued water supply reliability during periods of prolonged drought and regulatory limitations.

One of the fundamental innovations of the IRP was the understanding that regional water supply reliability could be achieved through the implementation of a diverse portfolio of resource investments and conservation measures. The IRP strategy is a balance between demand management and supply augmentation, as well as a balance between the use of local resources and imported supplies.

Long-term water planning in Southern California has shifted from a reliance on imported supplies to increased regional self-reliance in order to meet future needs. Today, Metropolitan's strategy for ensuring regional reliability is embodied in the latest update to the IRP, adopted in October 2010.

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to respond to changing conditions and promote new solutions to the region's growing supply needs. In this plan, Metropolitan pioneered a "resource portfolio" concept as a means of improving the diversity and reliability of Southern California's water supplies in a cost-effective manner. Today, this approach is helping Metropolitan advance more innovative and sustainable water supplies.

The initial IRP called for imported supplies to comprise 60 percent of the Southland's overall water supply. But that has dramatically changed over time. The updated 2010 IRP has reduced reliance on the imported Colorado and State Water Project deliveries to 36 percent of the overall supply mix. Achieving these targets is made possible because of Metropolitan's increasing emphasis on local solutions.

STORAGE

To reduce reliance on Northern California supplies in dry years, Metropolitan has increased by more than 13-fold its storage network since the 1990s with new reservoirs like Diamond Valley Lake in southwest Riverside County, local groundwater basins and in banking programs in Lake Mead and the San Joaquin Valley between 2009 and 2013. Metropolitan currently has nine groundwater storage projects within its service area created to supplement dry-year supplies. As of July 2013, Metropolitan had more than 67,400 acre-feet in these storage accounts (known as conjunctive use in reference to the practice of storing imported water in local groundwater basins when there is a surplus of supply). Today, Metropolitan can store more than 5 million acre-feet of water throughout its storage network.

CONSERVATION

A growing piece of Metropolitan's reliability pie is water conservation. Over the past two decades, Metropolitan has invested more than $333 million for incentive programs to reduce residential and commercial water use, resulting in about 1.9 million acre-feet of cumulative savings.

Metropolitan's region-wide residential conservation program, operated under the umbrella of SoCal Water$mart, provided 31,000 rebates for water-effi-

The IRP seeks to stabilize Metropolitan's traditional imported water supplies and meet needs for the region's growth through an adaptive management approach with emphasis on conservation and local supply development.

Imported Resources

About half of Southern California's water needs are met with imported water supplied by Metropolitan. The District has been responsible for obtaining imported water for the region through its operation of the Colorado River Aqueduct and its contract with the state for State Water Project (SWP) supplies. Metropolitan receives water from the SWP through the California Aqueduct.

Conservation

Water-use efficiency is encouraged with financial incentives such as rebates and tiered pricing structure, outreach and education programs, and support for new plumbing and compliance codes that facilitate water savings.

Local Resources

In addition to traditional groundwater and surface water production, water recycling, groundwater recovery and groundwater storage are also important elements in the region's diverse local resource portfolio and help bring greater water supply reliability to Southern California.

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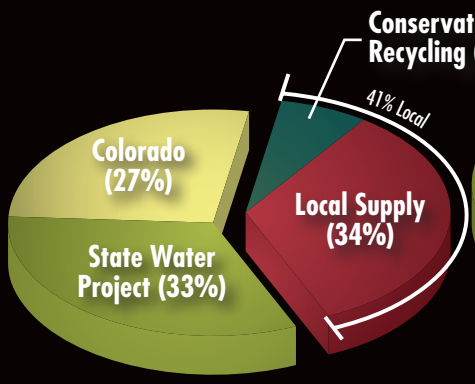
cient products in fiscal year 2012/13. The estimated water savings is about 1,300 acre-feet for the fiscal year. An additional water savings of 2,800 acre-feet was achieved through locally-administered water conservation programs that received funding from Metropolitan. Popular rebates included those for turf removal, high-efficiency clothes washers and toilets, multi-stream rotating nozzles for sprinklers and weather-based irrigation controllers. This fiscal year also saw the launch of a California Friendly landscape class for residential customers with a focus on managing irrigation.

Commercial conservation programs accounted for a projected water savings of about 4,500 acre-feet in fiscal year 2012/13 credited to the SoCal Water$mart program, Water Savings Incentive Program and member agency commercial programs. Introduced this fiscal year was a new service offering a landscape irrigation survey for qualifying non-residential properties within Metropolitan's service area to identify water-saving potential. Eligible landscapes include commercial and industrial sites, homeowner association common areas, and institutional sites like schools, parks and government facilities.

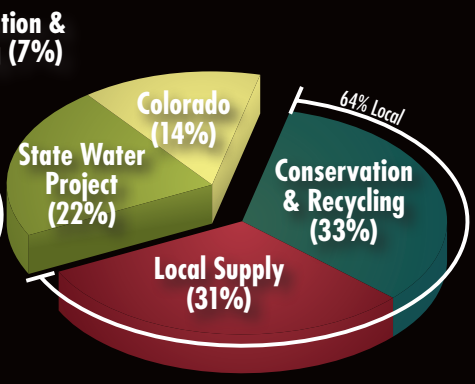
Together with member agencies that also implemented similar programs, a total of 8,600 acre-feet were saved through regional conservation incentives. Combined with "code-based" conservation through plumbing codes and ordinances, and from reduced consumption resulting from changes in water pricing, the region saved about 906,000 acre-feet in fiscal year 2012/13.

To encourage innovation, Metropolitan supports research and development of creative ways to conserve water though the Innovative Conservation Program. The competitive grant program, funded in partnership with the federal Bureau of Reclamation, Southern Nevada Water Authority, and Central Arizona Project, evaluates potential water savings of new devices, technologies and strategies. Metropolitan also received a grant from the federal Bureau of Reclamation for a conservation market study to identify water savings potential in commercial markets, such as fitness centers and landscape markets where

1990 Supply Mix



Planned 2035 Supply Mix



Water Supply Strategy

In 1990, about 41 percent of water demands were met with local resources. By 2035, about two-thirds will be met by local resources. Metropolitan's goal is to maintain, but not increase, traditional levels of imported supplies. The long-term portfolio approach looks to local solutions to sustain the region's continued growth. Over the long-term trend, the regional portfolio flips the balance of local versus imported supplies.

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there could be future opportunities to expand water use efficiency.

Conservation education and outreach are supported by Metropolitan through the bewaterwise.com website, which is a repository of conservation-related tips and multi-media resources. This website attracted nearly 500,000 visitors in fiscal year 2012/13. Education programs, which include a college/university grant program called the Southern California World Water Forum; a newly redesigned website for kindergarten to 12th grade; Solar Cup (a solar boat building and race competition for high school students), and the Diamond Valley Lake Education Program, underline Metropolitan's support of water education at all levels.

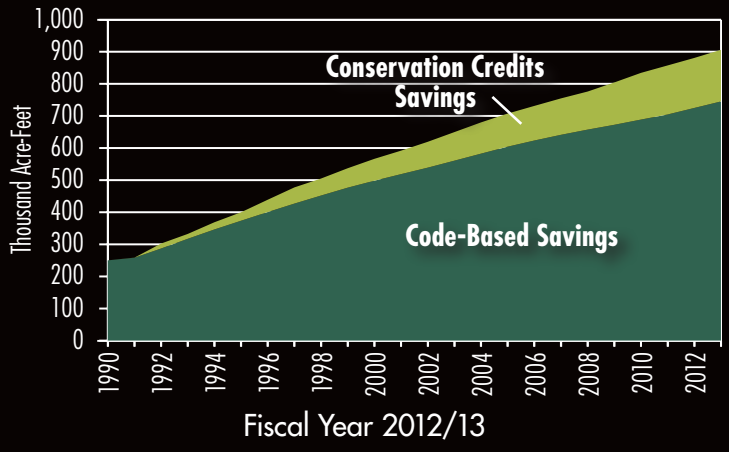
LOCAL RESOURCES

Since 1982, Metropolitan's Local Resources Program (LRP) has seen an investment of more than $331 million for recycled water projects and $118 million in groundwater recovery projects. This investment has resulted in the production of more than 2 million acre-feet of water. Metropolitan has partnered with member agencies on 73 recycling projects and 23 groundwater recovery projects.

In 2013, Metropolitan issued a request for proposals to its member agencies for technical studies and pilot projects that reduce barriers to future production of recycled water, stormwater capture, seawater desalination and groundwater resources. This "Foundational Actions Funding Program" is an outgrowth of Metropolitan's IRP, which called for low-risk actions to ensure the region's readiness to implement new water supply projects, if and when there is a need. In September, 2013, Metropolitan's board authorized up to $3.3 million in matching funds for 16 exploratory projects that will commence in 2014.

WATERSHED INITIATIVES

Metropolitan is participating in several statewide and local efforts to manage watersheds and enhance or restore environmental resources such as natural habitats and wetlands. A high-quality supply from Northern California is key for local solutions such as water recycling to continue and expand. But supplies have become less reliable due to deteriorating envi-



Regional Conservation Savings

By encouraging water-use efficiency, Metropolitan promotes the shift toward regional self-reliance. Since the 1990s, Metropolitan's Conservation Credits Program has directly invested in "active conservation," i.e. water agency-funded programs such as rebates, device installations and education. At the same time, there has been significant progress in "code-based" conservation achieved through legislation, building and plumbing codes and ordinances, and from reduced consumption resulting from changes in water pricing.

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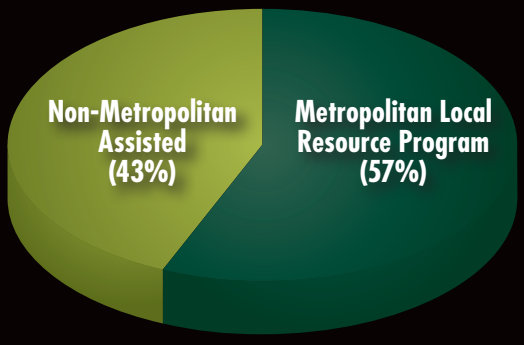
ronmental conditions in the Sacramento-San Joaquin Delta. Since 2007, state and federal leaders have been working toward a comprehensive solution to the infrastructure and environmental problems of the state's water supply hub. The Bay Delta Conservation Plan process outlines wide scale plans with tens of thousands of acres of wetlands and floodplain earmarked for restoration to provide habitat for fish, wildlife and plant species. The BDCP aims to modernize the Delta's major water delivery systems to ensure reliable water supplies for urban and agricultural users, and to help protect the state's economy. In December 2013, a public review draft of the BDCP and environmental documentation was made available for 120 days of formal review. During the review period, a series of informational public meetings were scheduled.

Metropolitan has always been an agency with an eye towards the future. The agency was formed to build an aqueduct to serve future Southern California residents. Over time, Metropolitan has moved from securing reliability by emphasizing imported supplies to embracing local solutions and a diverse portfolio approach. Recognizing the need to adapt to change and diversify the region's resource supply mix has allowed Metropolitan to remain true to its original mission of providing reliable water supplies to Southern California.



Fiscal Year 2012/13

Recycled Water and Groundwater Recovery

While recycled wastewater and recovered degraded groundwater are local sources of water supply, Metropolitan provides financial incentives for 57 percent of their development. Member agencies and other local agencies also independently fund and develop recycled water and groundwater recovery. In fiscal year 2012/13, about 413,000 acre-feet of recycled and groundwater recovery water were produced.

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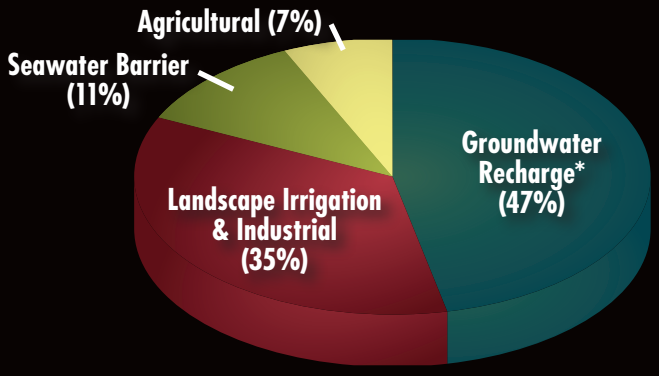
Uses of Recycled Water

Recycled water can be put toward various uses that benefit the region. In fiscal year 2012/13, more than 420,000 acre-feet of recycled water was used. The largest portion of recycled water, about 47 percent, was used by local agencies to recharge groundwater basins. The remainder was used for landscape irrigation and industries (35%), seawater intrusion barriers along the coastal basins (11%) and for farms producing livestock crops (7%).



Fiscal Year 2012/13

* Includes estimated recharge of wastewater discharges to the Santa Ana River base flow.

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Achievements

ACHIEVEMENTS SCORECARD

Conservation	
FY 2012/13 New Water Saved From Conservation Credits Program	8,600 acre-feet
FY 2012/13 Water Saved From New & Existing Conservation Credits Program[1]	161,000 acre-feet
Cumulative Water Saved From Conservation Credits Program[2]	1.9 million acre-feet
FY 2012/13 Metropolitan Conservation Investment[3]	$11.4 million
FY 2012/13 Member Agency Investment[4]	$11.5 million
Cumulative Conservation Investment (excluding funding by member agencies)	$333 million
FY 2012/13 Annual Total Savings (including code-based savings)[5]	906,000 acre-feet
Recycled Water[6]	
FY 2012/13 Production	178,000 acre-feet
FY 2012/13 Investment	$28.9 million
Cumulative Production	1,853,000 acre-feet
Cumulative Investment	$331 million
FY 2012/13 Annual Regional Production (including member, retail agencies and SAR base flow)	419,000 acre-feet
Groundwater Recovery[6]	
FY 2012/13 Production	55,000 acre-feet
FY 2012/13 Investment	$7.0 million
Cumulative Production	653,000 acre-feet
Cumulative Investment	$118 million
FY 2012/13 Annual Regional Production (including member and retail agencies)	100,000 acre-feet
Conjunctive Use Program[7]	
Metropolitan Cumulative Capital Investment	$26.5 million
Proposition 13 Grant Funds Administered by Metropolitan	$45.0 million
Water Stored Since Program Inception through August 2013	273,000 acre-feet
Water Extracted Since Program Inception through August 2013[7]	206,000 acre-feet
Groundwater Replenishment[8]	
Cumulative Investment through September 2013	$347 million
Cumulative Replenishment Delivery through September 2013	3.2 million acre-feet

REGIONAL SUMMARY

	FY 2012/13	Since 1991
Water Conservation[5], Recycled Water, and Groundwater Recovery	1.43 million acre-feet	16.7 million acre-feet
Metropolitan's Investment in Water Conservation, Recycled Water, and Groundwater Recovery	$47.3 million	$782 million

Footnotes on page 9

READER'S GUIDE TO THE ACHIEVEMENTS SCORECARD

Conservation

For the purpose of this report, conservation is water saved directly as a result of incentives from Metropolitan's Active Conservation Credits Program and other water agencies. The program, established in 1991, provides rebates for device retrofits, process improvements, landscape efficiency improvements and other efficiency measures utilized in commercial, industrial and residential sectors. Also shown is additional water conserved as a result of plumbing codes and other laws governing appliances and products' efficiency standards.

Recycled Water

Municipal water is recycled and treated to a quality level allowed for specific uses such as landscape irrigation, groundwater recharge and seawater intrusion barriers. Metropolitan provides financial assistance to produce recycled water through its Local Resources Program, which began in 1982.

Groundwater Recovery

Degraded groundwater is recovered for potable use through treatment techniques that reduce high salt or other contaminant levels. Financial assistance for groundwater recovery has been provided since 1991 through Metropolitan's Local Resources Program.

Conjunctive Use Program

Metropolitan works in partnership with its member agencies and groundwater basin managers to store surplus imported water in local aquifers for future withdrawal.

Groundwater Replenishment

When supply and system conditions are favorable, Metropolitan can deliver water supplies to its member agencies to replenish local groundwater supplies.

Footnotes for Achievement Scorecard on page 8

Numbers in this report are based on best available information during the production of this report and subject to revision for accounting reconciliation.

1. This includes water savings initially achieved through Metropolitan's Conservation Credits Program and subsequently maintained through plumbing codes. It includes savings from devices installed through fiscal year 2012/13 and savings from member agency-funded programs administered through Metropolitan's region-wide residential and commercial programs.
2. This is cumulative water savings since 1991 and includes water savings initially achieved through Metropolitan's Conservation Credits Program and subsequently maintained through plumbing codes.
3. Conservation investment includes administrative fees for contracted program vendors and education and advertising campaigns to promote conservation.
4. In addition to Metropolitan's Conservation Credits Program, member agencies and retailers also implemented local water conservation programs within their respective service areas. Member agency investment figures include rebate funding beyond rebates already provided by Metropolitan's Conservation Credits Program.
5. Annual total savings includes savings from Metropolitan's Conservation Credits Program, code-base conservation achieved through legislation, building and plumbing codes and ordinances, reduced consumption resulting from changes in water pricing, and pre-1990 device retrofit. Figure reflects revised demographic data from the Department of Finance that resulted in a lower figure compared to previous year's report.
6. Figures reflect actual and estimated deliveries for all Metropolitan-assisted projects and payments reported through June 2013; cumulative production and investment reflect accounting reconciliation as data become available; annual regional production for recycled water includes an estimated 106,000 acre-feet of wastewater discharged to the Santa Ana River base flow that percolates into downstream groundwater basins.
7. Construction of the conjunctive use storage programs was completed in 2008. Proposition 13 refers to Chapter 9 of the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Bond Act of 2000. Water extracted since program inception includes losses.
8. Figure is cumulative since 1990. Prior to 2013, Metropolitan had provided replenishment water at a discounted rate to encourage long-term recharge and maintenance of groundwater basins and local reservoirs. Although the discounted replenishment rate was discontinued January 1, 2013, Metropolitan continues to provide water for replenishment purposes at full service rates. Figure may not include all deliveries used for replenishment purposes.

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Conservation

By the Numbers

Conservation Credits Program

7.3 million
Rebates issued under Metropolitan's Conservation Credits Program since 1991

1.4 million
Water budget programs, surveys and audits performed under Metropolitan's Conservation Credits Program that resulted in reduced water use since 1991

1.9 million acre-feet
Water saved to date from the Conservation Credits Program

$333 million
Metropolitan's cumulative investment in conservation since 1991

Metropolitan and its member agencies have long been leaders in water conservation. Water-use efficiency is encouraged with financial incentives and a tiered pricing structure, outreach and education programs, and support for new plumbing codes and other regulations that facilitate water savings. Metropolitan invested more than $333 million in the last two decades to improve water supply reliability.

Metropolitan offers financial incentives in the form of rebates for high-efficiency devices. In fiscal year 2012/13, the rebates funded through Metropolitan's Conservation Credits Program generated approximately 8,600 acre-feet of new water savings. In total, the region had projected savings of 906,000 acre-feet of water from Metropolitan's Conservation Credits Program, code-based and price-based conservation in fiscal year 2012/13.

Fiscal Year 2012/13 Program Highlights

- Metropolitan provided $10.9 million in rebates to help water customers improve water use efficiency in their homes and businesses.
- Metropolitan launched the Water Savings Incentive Program, a pay-for-performance program for custom projects in the commercial, industrial, institutional, large landscapes, and agricultural sectors and signed up more than 25 projects.
- Metropolitan was awarded a $500,000 CALFED grant to increase the incentive for high-efficiency clothes washers from $85 to $110.
- Metropolitan began providing irrigation surveys to assist large landscape customers to identify opportunities to improve irrigation efficiency.
- Metropolitan resumed providing hands-on California Friendly Landscape classes for residential customers with a focus on managing irrigation.
- With a $150,000 grant from the federal Bureau of Reclamation, Metropolitan conducted a conservation market study to analyze the commercial and large landscape markets which resulted in targeted incentives added to the regional rebate program.

Conservation Credits Programs

Metropolitan's Conservation Credits Program focuses on two main areas: residential and commercial water use.

Residential Conservation Programs

Metropolitan's residential conservation programs consist of two targeted efforts: SoCal Water$mart for residential customers and programs implemented by member agencies. Metropolitan projects savings of about 4,100 acre-feet of new water with rebates issued through the residential conservation programs in fiscal year 2012/13.

SoCal Water$mart

Launched in 2008, SoCal Water$mart provides rebates to residential customers to reduce the cost of water-efficient products. Current program rebates include high-efficiency clothes washers, multi-stream rotary sprinkler nozzles and weather-

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based irrigation controllers. Recent refinements, such as online applications and automatic email notifications to customers, have streamlined operations, resulting in faster processing times and increased customer satisfaction while enhancing budget controls. Metropolitan projects savings of about 1,300 acre-feet of water from 31,000 rebates issued through the region-wide residential program in fiscal year 2012/13.

Member Agency Residential Programs

Metropolitan also provides funding to member agencies for locally-administered water conservation programs. Member agencies receive Metropolitan incentives for qualified water-saving activities. Qualifying residential projects included turf removal, toilet distribution and replacement programs, direct-installation clothes washer programs and residential water audits. Member agency residential programs were projected to save about 2,800 acre-feet of water annually with Metropolitan funding of about $1.3 million in fiscal year 2012/13.

Popular Rebates

Turf removal

Aided by a Proposition 50 grant from the state Department of Water Resources and grant funding from the federal Bureau of Reclamation, Metropolitan implemented a turf removal program that provides residential and commercial customers financial incentives to remove their lawn and replace it with lower water-use plants. Metropolitan projects savings of about 360 acre-feet of water annually from 2.7 million square-feet of turf removed in fiscal year 2012/13.

High-efficiency clothes washers

High-efficiency clothes washers (HECW) continue to be the most popular residential product in Metropolitan's rebate program. The eligibility requirement for HECWs is currently set at water factor 4.0, which saves more than 10,000 gallons per washer per year over a conventional top loading clothes washer. The water factor is the measure of the amount of water used to wash a standard load of laundry. Metropolitan projects HECW rebates issued in fiscal year 2012/13 to save about 960 acre-feet of water annually. Metropolitan supplements its HECW rebate using state or federal grants when they are available.

High-efficiency toilets

High-efficiency toilets (HET) use approximately 20 percent less water per flush than the conventional ultra-low-flush toilets currently required by law. Metropolitan uses the federal Environmental Protection Agency's WaterSense list of HET models to qualify for rebates. Metropolitan projects savings of about 2,140 acre-feet of water annually from HET rebates that were issued for both residential and commercial customers in fiscal year 2012/13.

Irrigation evaluations and residential surveys

Metropolitan provides funding to member agencies that offer customers irrigation evaluations and indoor water surveys. Evaluations include a recommended watering schedule, along with suggestions for system efficiency improvements. Indoor residential

By the Numbers

Turf Removal

9.5 million square feet
Turf removed and replaced with lower water-use plants to date with financial incentives from Metropolitan's Conservation Credits Program

13,000 acre-feet
Projected lifetime water savings

$5 million
Total investment by Metropolitan since 2010

Irrigation Controllers

175,000
Weather-based irrigation controller rebates provided with funding from Metropolitan's Conservation Credits Program

90,000 acre-feet
Projected lifetime water savings

$20 million
Total investment by Metropolitan since 2005

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By the Numbers

Clothes Washers

478,000
Water-efficient clothes washer rebates provided with funding from Metropolitan's Conservation Credits Program

194,000 acre-feet
Projected lifetime water savings

$46 million
Total investment by Metropolitan since 1995

Toilets

3 million
Toilets distributed, retrofitted and rebated with financial incentives from Metropolitan's Conservation Credits Program

2.1 million acre-feet
Projected lifetime water savings

$187 million
Total investment by Metropolitan since 1991

surveys provide customers with information on how to identify leaks, as well as suggestions for water-saving fixtures. Metropolitan projects savings of about 690 acre-feet of water annually from irrigation evaluations and residential surveys conducted in fiscal year 2012/13.

Multi-stream rotating nozzles for sprinklers

Pop-up spray heads with multi-stream, multi-trajectory rotating nozzles improve distribution uniformity. With a grant from the federal Bureau of Reclamation, Metropolitan provides enhanced incentives to residential and commercial customers to replace conventional fan spray nozzles with these more efficient models. FreeSprinkerNozzles.com, an innovative online program that utilizes Metropolitan's rebates to provide vouchers for free multi-stream rotating nozzles, was established by Metropolitan's member agencies, and has helped increase installation of these water-efficient products. Metropolitan projects savings of 1,370 acre-feet of water annually from these rebates for nozzle replacements in fiscal year 2012/13.

Weather-based irrigation controllers

Weather-based irrigation controllers (WBICs) automatically adjust irrigation schedules based on a number of factors including rain, temperature, plant type, sunlight and soil type. Metropolitan provides incentives to residential and commercial customers to replace traditional irrigation controllers with WBICs. Metropolitan projects savings of 530 acre-feet of water annually from the new rebates issued for WBICs in fiscal year 2012/13.

Commercial Conservation Programs

Metropolitan's commercial conservation programs provide rebates for water-saving devices to businesses and institutions throughout Southern California. The programs are comprised of Metropolitan's SoCal Water$mart, Water Savings Incentive Program, and member agency commercial programs. Metropolitan projects savings of about 4,500 acre-feet of water annually from new rebates issued by commercial conservation programs in fiscal year 2012/13.

Save Water, Save-A-Buck Program/SoCal Water$mart

The majority of commercial conservation activity came from Metropolitan's SoCal Water$mart regional program. (The previous program, Save Water, Save-A-Buck, was replaced by SoCal Water$mart at the beginning of fiscal year 2012/13.) SoCal Water$mart provides rebates for water-saving plumbing fixtures, landscaping equipment, food service equipment, cleaning equipment, HVAC (heating, ventilating, air conditioning) and medical equipment. These programs also targeted multi-family dwellings for fixture replacements using high-efficiency washers and toilets, along with multi-stream rotating nozzles for pop-up spray heads. Metropolitan projects savings of about 2,700 acre-feet from nearly 3,600 new rebates issued in fiscal year 2012/13.

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Member Agency Commercial Programs

Member and retail water agencies also implement water conservation programs for commercial sectors using Metropolitan incentives. Projects target specific local businesses, with many also receiving assistance from state or federal grant programs. Qualifying commercial projects have included turf removal, direct installation of high-efficiency toilets and multi-stream rotating nozzle distribution. Additionally, some member and retail water agencies created specialized water conservation programs designed for specific commercial sectors. Metropolitan projects savings of about 1,400 acre-feet of water annually from incentives in fiscal year 2012/13.

Water Savings Incentive Program

The Water Savings Incentive Program is a regional pay-for-performance program that is a collaborative effort between Metropolitan, its 26 member agencies and large water-using customers to improve water-use efficiency in the commercial, industrial, institutional, agricultural and large landscape sectors. In fiscal year 2012/13, Metropolitan projects savings of about 400 acre-feet of water annually from these programs. Incentives are paid based on the amount of water saved. Qualifying projects include but are not limited to:

- Changing an industrial process water system to capture, treat and reuse process wastewater
- Capturing condensation to supplement cooling tower water supply
- Installing new, water-efficient equipment in commercial kitchens and laundry facilities
- Changing overhead spray sprinklers to a drip systems
- Installing valves and pumps to improve agricultural irrigation efficiency

Examples of commercial sector water-saving devices

The following is a list of current and past water-saving fixtures and equipment rebated through Metropolitan's commercial conservation programs:

- Connectionless food steamer
- Cooling tower conductivity meter
- Dry vacuum pump
- High-efficiency tank and flushometer toilets
- High-efficiency urinals – ultra low flush and zero water
- In-stem flow regulators
- Laminar flow restrictors
- Large rotors - high-efficiency nozzle
- Multi-stream rotating nozzles
- pH cooling tower controllers
- Turf removal
- Water brooms
- Weather-based irrigation controllers

By the Numbers

Urinals

35,000

Water efficient urinal rebates provided with funding from Metropolitan's Conservation Credits Program

72,000 acre-feet

Projected lifetime water savings

$11 million

Total investment by Metropolitan since 1996

Pre-rinse Spray Head

17,000

Water efficient pre-rinse spray head rebates provided with funding from Metropolitan's Conservation Credits Program

13,000 acre-feet

Projected lifetime water savings

$1.1 million

Total investment by Metropolitan since 2002

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Research and Development

Innovative Conservation Program

Metropolitan encourages research and development of new and creative ways to conserve water. Metropolitan's Innovative Conservation Program is a competitive grant program that evaluates water savings and reliability of new water-savings devices, technologies and strategies. With funding provided by the federal Bureau of Reclamation, Southern Nevada Water Authority, and Central Arizona Project, approximately $450,000 of funding was available in 2013 for research. Proposals were selected through a competitive review process by an evaluation committee. Projects funded in the past include a return-on-investment calculator for landscape projects, school irrigation audit tools, plant selector applications, gray water irrigation treatment systems, real-time water-use evaluations and an economic study on demand elasticity and revenue stability.

In addition to the Innovative Conservation Program, Metropolitan initiated several research studies to advance the field of knowledge in water use efficiency:

- Metropolitan is studying the performance of multi-stream rotary nozzles.
- Metropolitan is working with the Center for Irrigation Technology at California State University, Fresno to benchmark the performance of landscape irrigation technology to help drive innovation and advances in efficiency.
- Metropolitan is working with the California Turfgrass and Landscape Foundation and the Turfgrass Research Facility at University of California, Riverside to study the effects of drought and salinity on turf grasses. University researchers are also working to develop new, more drought tolerant turf grasses.
- Metropolitan conducted a study on retention rates of waterless urinals in its service area.

Long Term Conservation Plan

In 2011, Metropolitan's Board of Directors adopted a Long Term Conservation Plan (LTCP) that was developed in collaboration with its member agencies, retailers and other stakeholders. The LTCP provides a framework for achieving water-use efficiency goals including a 20 percent reduction in per capita water use by 2020. The goals of the LTCP are to: 1) achieve the conservation target in the 2010 IRP Update, 2) pursue innovation that will advance water-use efficiency and 3) transform the public's perception of the value of water within the region. The LTCP identifies five key strategies to achieve these goals:

1. Use catalysts for market transformation
2. Encourage action through outreach and education
3. Develop regional technical capability
4. Build strategic alliances
5. Advance water efficiency standards

In fiscal year 2012/13, Metropolitan pursued the LTCP's goals and strategies through the many actions described in the Conservation section of this Regional Progress Report. In addition to providing funding assistance for water-saving devices, custom projects, and research-and-development for new technologies, Metropolitan conducted a conservation market study to analyze commercial and large landscape markets to identify new opportunities for water use efficiency. Metropolitan's outreach and education efforts included irrigation surveys to assist large landscape customers and California Friendly Landscape classes for residential customers. To promote development of the region's technical capability, Metropolitan hosted monthly meetings for water use efficiency coordinators to share ideas and lessons learned and provided trainings through the Gas Company landscape training classes. Metropolitan collaborated with businesses, utilities, and government agencies through various venues and programs, including landscape forums and participation with the Alliance for Water Efficiency and the California Urban Water Conservation Council. To advance water use efficiency, Metropolitan initiated several research studies, including collaborations with California State University, Fresno and the University of California, Riverside.

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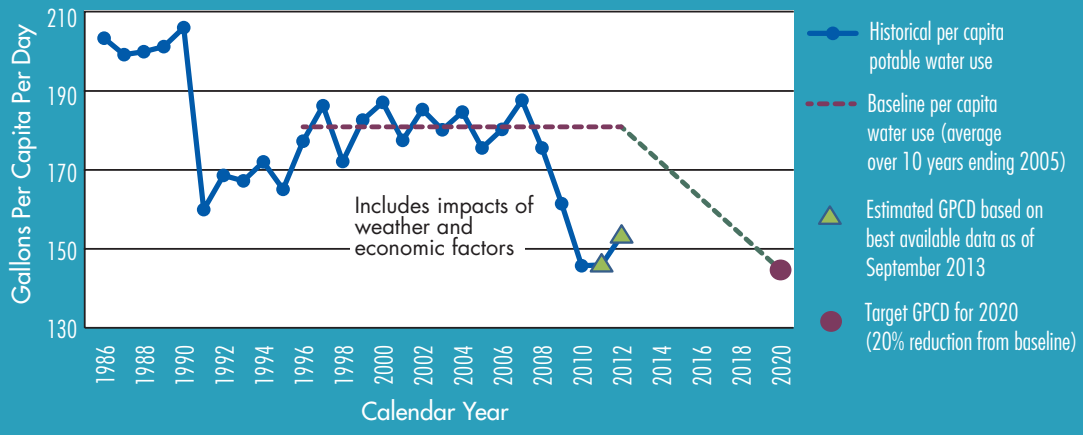
Select Southern California water customers qualify for a turf removal rebate which rewards homeowners for removing turf grass and replacing it with low-water-using plants and landscape elements.

Water-Use Efficiency Strategy

Senate Bill X7-7 Water Conservation Act of 2009 (20x2020)

Metropolitan and the Natural Resources Defense Council cosponsored the Water Conservation Act of 2009 (SBX7-7), which targets a 20 percent reduction statewide in urban per capita water use by the year 2020. Per capita water use is one indicator of progress in advancing water use efficiency. Although factors such as weather and economic conditions affect the calculation of per capita water use; the trend shows continued lower per capita water use over time. California is working to achieve a 20 percent reduction in urban per capita potable water use by 2020. After adjusting for revised population estimates resulting from the 2010 Census, Metropolitan's baseline is 181 GPCD and the 2020 reduction target is 145 GPCD (see chart below). Using preliminary data, per capita water use is estimated at 146 GPCD in 2011 and 153 GPCD in 2012. The region's increase in per capita water use in 2012 can be explained in part by improved economic conditions and drier weather as compared with the previous year. The current estimate of 153 GPCD represents a 15 percent decrease from baseline GPCD, and indicates solid progress toward the region's 2020 target.



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Communications and Outreach

Metropolitan sponsored conservation-related educational outreach efforts and programs throughout its service area during fiscal year 2012/13. Online and social media included Google search advertising focused on water conservation and water-use efficiency. Metropolitan's bewaterwise.com® website continues to be an important tool in educating the public, attracting more than 484,600 unique visitors in fiscal year 2012/13. The site is also available in Spanish.

Community Outreach

Metropolitan continues to maintain a strong presence in community water resource education and conservation awareness activities and events. Metropolitan cosponsored numerous water-awareness conferences and other educational events throughout its six-county service area.

Education Programs

During fiscal year 2012/13, the Southern California World Water Forum College Grant Program concluded its two-year program cycle with presentations by the 15 grant recipients featuring water conservation and treatment technologies and water awareness messaging, among other projects. The purpose of the program is to provide grants to colleges and universities for projects that improve technology related to water supply and delivery, water conservation, and/or sanitation programs and for projects that enhance community awareness of water issues. In addition to Metropolitan, program sponsors include the federal Bureau of Reclamation, the Los Angeles County Sanitation Districts, Water for People and Friends of the United Nations.

Thirty-nine teams from Southern California high schools competed in the 11th annual Solar Cup™, Metropolitan's signature high school education event held at Lake Skinner in Temecula on May 17-19. More than 800 students participated in the event, which includes conservation as a core part of the curriculum.

Teams from 39 Southland high schools competed in the nation's largest solar powered boat competition culminating an 8-month hands-on program of energy and water resources education.

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For the 20th year, the Diamond Valley Lake Education Program conducted numerous field trips engaging nearly 2,100 fourth- through seventh-graders in the all-day program. Additionally, the education program provided ongoing activities for more than 3,100 students in grades 2-5 visiting the DVL Visitor Center in collaboration with the Western Science Center outreach program.

Metropolitan's web page for K-12 students drew nearly 17,000 visitors, a 41 percent increase triggered by the increased emphasis on water in the K-12 core science curriculum. Metropolitan also expanded the number of program teachers from throughout the service area involved in the water education curriculum, adding 50 new teachers.

California Friendly® Landscape Online Training

During fiscal year 2012/13, Metropolitan continued to provide online water-wise landscape training for professional landscapers and residential homeowners.

Community Partnering Program

The Community Partnering Program (CPP) continued to support water-related educational outreach on water resource issues such as conservation, water quality and watershed protection. CPP enhances consumer awareness of water resource issues and fosters collaboration with a variety of stakeholders including community organizations, public agencies, professional associations and educational institutions through sponsorships and educational support services.

By the Numbers

Communications and Outreach

484,600 visitors
to bewaterwise.com, a website sponsored by Metropolitan that has extensive information about how to use water more efficiently in fiscal year 2012/13

17,000 visitors
to Metropolitan's education website portal for K-12 students in fiscal year 2012/13

5,200 students
went on tour at Diamond Valley Lake Visitor Center in fiscal year 2012/13

39 high school teams
with more than 800 students competed in Metropolitan's annual Solar Cup program which focuses on solar energy and water conservation in fiscal year 2012/13

41 sponsorships
under Metropolitan's Community Partnering Program in fiscal year 2012/13

8,600 visitors
completed online California Friendly Landscape Training course on bewaterwise.com in fiscal year 2012/13

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Local Resources

By the Numbers

Local Resources Program

2.5 MILLION ACRE-FEET
Recycled water and recovered degraded groundwater produced with Metropolitan's incentives since 1982

$449 MILLION
Total incentives by Metropolitan for recycled water and groundwater recovery since 1982

Water recycling, groundwater recovery and groundwater storage are important elements in the region's diverse local resource portfolio and help bring greater water supply reliability to Southern California. Metropolitan provides financial incentives through its Local Resources Program (LRP) for the development and use of recycled water and recovered groundwater. Since the inception of the LRP in 1982, Metropolitan has provided more than $331 million to produce about 1.9 million acre-feet of recycled water. Metropolitan also provided $118 million to produce 653,000 acre-feet of recovered degraded groundwater for municipal use. Currently, Metropolitan provides financial assistance for 73 recycling projects and 23 groundwater recovery projects.

In 2013, Metropolitan launched a two-year pilot Foundational Actions Funding Program to support member agencies in conducting technical studies and pilot projects that would reduce barriers to future production of recycled water, stormwater, seawater desalination, and groundwater resources if the need arises.

Water Recycling & Groundwater Recovery

In fiscal year 2012/13, Metropolitan funding supported the production of about 178,000 acre-feet of recycled water for non-potable and indirect potable uses and about 55,000 acre-feet of recovered groundwater for municipal use. In addition, another estimated 241,000 acre-feet of recycled water, which includes approximately 106,000 acre-feet of estimated base flow recharge from the Santa Ana River, and 44,000 acre-feet of recovered groundwater were produced by local agencies through other funding sources. Figures 1 and 2 illustrate total recycled water and groundwater recovery production in Metropolitan's service area, including local agency funded projects.

Water Recycling and Groundwater Recovery

Recycling and groundwater recovery are local resources that add balance to the region's diverse portfolio of resource options. Figures 1 and 2 show the production of these local resources as the region places greater emphasis on water-use efficiency and improving basin health. While water recycling and groundwater recovery projects are developed by local water agencies, many projects receive financial incentives for water production through Metropolitan's Local Resources Program. Figure 1 includes wastewater discharged to the Santa Ana River base flow that percolates into downstream groundwater basins.

Figure 1. Regional Recycled Water Production

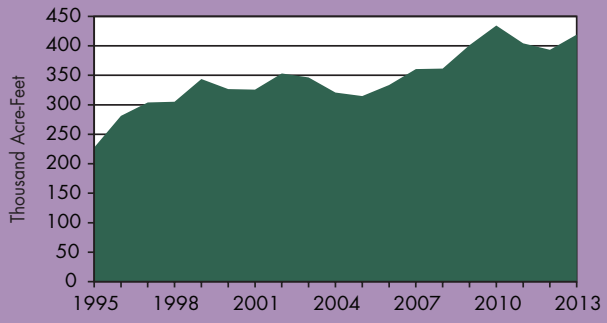
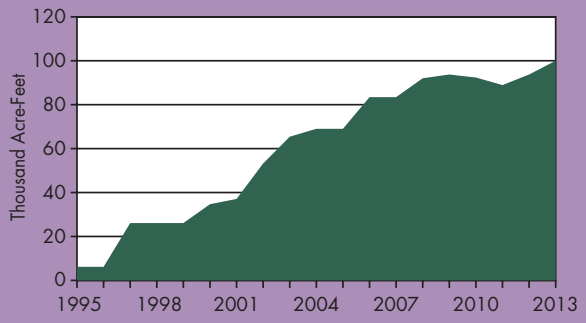


Figure 2. Regional Groundwater Recovery Production



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Fiscal Year 2012/13 LRP Highlights

Metropolitan entered into agreements with local agencies for one recycled water project and one groundwater recovery project. When fully developed, they will produce about 1,175 acre-feet of recycled water and about 1,000 acre-feet of recovered groundwater, respectively:

- The El Toro Water Recycling System Expansion Project will be owned and operated by El Toro Water District (El Toro). The project will expand El Toro's existing recycled water distribution system. It will deliver up to 1,175 acre-feet per year of recycled water to new users for landscape irrigation in common areas, golf courses, parks, homeowners associations, and a school.
- The Round Mountain Water Treatment Plant Project will be owned and operated by Camrosa Water District. The project will treat up to 1,000 acre-feet per year of contaminated groundwater for potable use by California State University, Channel Islands and existing customers within Camrosa's service area. The project is part of Camrosa's Renewable Water Resource Management Program that seeks to improve local water quality through managed transport of salts out of the Calleguas Creek Watershed.

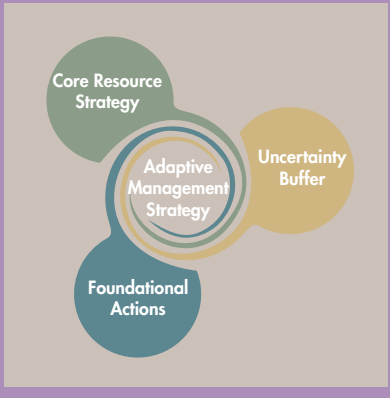
Groundwater Management

Conjunctive Use

Since the 1950s, Metropolitan's local water management strategy has included conjunctive use of surface and groundwater resources. Conjunctive use refers to the practice of storing imported surface water in groundwater basins during years when there is a surplus of supply for use in times of drought or other supply interruptions. Metropolitan currently has nine storage projects that were constructed in the 2000s specifically to increase dry-year supplies. These nine projects have nearly 212,000 acre-feet of storage capacity and can withdraw up to about 70,000 acre-feet per year during shortage years. During the 2007-2009 drought, Metropolitan extracted more than 140,000 acre-feet to meet demands. With improved water supply conditions beginning in fiscal year 2010/11, Metropolitan began to refill these accounts. As of July 1, 2013, more than 67,400 acre-feet are stored in nine conjunctive use accounts.

Foundational Actions Funding Program

As a component of the 2010 IRP Update's adaptive planning framework, Foundational Actions were identified as low-risk, low-regret actions that can be taken to help ensure the region's readiness to implement new water supply programs, should the need arise. In April 2013, Metropolitan's Board of Directors approved a two-year pilot Foundational Actions Funding (FAF) Program.



Actions proposed under the FAF Program consist of technical studies or pilot projects related to recycled water (including direct and indirect potable reuse), seawater desalination, stormwater, and groundwater enhancement.

In May 2013, Metropolitan issued a Request for Proposals under the 2013 FAF Program. Under the FAF Program member agencies could request up to $500,000 of funding, which they would be required to match dollar-for-dollar with non-Metropolitan funds. In September 2013, the Board authorized staff to enter into agreements for 16 proposals with a total funding level of up to $3.3 million. These proposals consist of six recycled water projects, six groundwater projects, two stormwater projects, and two seawater desalination projects. Final reports for the projects are due February 2016.

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Watershed Initiatives

Metropolitan is active on planning boards and organizations formed to improve watershed management and restoration. Metropolitan works with stakeholders in the Sacramento-San Joaquin Delta watershed and participates in the Greater Los Angeles County Integrated Regional Water Management Plan, the Council for Watershed Health and the Southern California Water Committee.

Integrated Regional Water Management Planning

Integrated Regional Water Management (IRWM) is a state initiative that encourages collaboration among multiple agencies, stakeholders, individuals and groups within a region generally organized around watershed boundaries to manage all aspects of water resources. IRWM groups typically consist of public agencies with water or wastewater authorities, cities, counties, special districts and non-governmental organizations that address a broad range of issues. These issues include growing water demands; water supply reliability; water quality; stormwater management; open space and habitat; and project financing. There are currently seven IRWM groups within Metropolitan's service area, and all the member agencies participate in one or more IRWM groups. Metropolitan continues to participate in the Greater Los Angeles County Region Leadership Committee as its surface water management area representative. Metropolitan also provides data, and reviews and participates in technical work groups of other IRWM groups in the service area when requested. DWR announced the draft recommendation for IRWMP grants in September 2013 and recommended over $60 million for implementing projects for the Southern California regions. All the IRWM groups are preparing their IRWM Plans or are in the process of updating their previously adopted Plans by Spring 2014 to be ready for the next round of state grants.

Stormwater Capture

Metropolitan's IRP identifies expanded stormwater capture as a potential resource for increased local water supply development. Existing regional stormwater capture efforts recharge about 477,000 acre-feet per year to groundwater basins within the Metropolitan service area. Studies have estimated about 1 million acre-feet per year in the region that is not captured. The IRP also identifies issues and challenges needing additional study and evaluation to answer how to cost-effectively increase the capture of stormwater. These include:

- Correlations between stormwater capture, groundwater recharge and changes in groundwater production
- Costs and benefits associated with distributed and regional stormwater capture and recharge facilities
- Partnering with stormwater, flood control, water supply, water quality and groundwater management groups

Southern California Water Committee Stormwater Task Force

In January 2011, the Southern California Water Committee formed a Stormwater Task Force to bring together flood control, water supply, groundwater, water quality and environmental interests from throughout Southern California to explore common issues. Metropolitan supported the Southern California Water Committee in the formation of the task force, became a charter member and participated in its work to further stormwater as a water supply resource. The white paper – Stormwater Capture: Opportunities to Increase Water Supplies in Southern California – was published in 2012. The paper examines policies, goals and plans related to integrated stormwater management including opportunities and constraints for increased stormwater capture. Following the release of the white paper, a workshop was held in June 2012 to facilitate discussion on a range of topics including:

- Value of stormwater to local and regional water supply
- Quantification of the range of benefits achieved with stormwater capture and use
- Opportunities for partnerships among federal, state and local entities
- Funding strategies inclusive of state and federal grants, multi-benefit partnerships and stormwater fees

In June 2013, the Stormwater Task Force held a second workshop. Discussion focused on opportunities to integrate stormwater requirements for surface water quality (requirements of Municipal Separate Storm Sewer System (MS4) permits) with increased capture of stormwater for local water supply. Topics addressed costs and benefits and partnering to achieve multi-purpose stormwater projects.

Los Angeles Basin Stormwater Conservation Study

The Los Angeles Basin Stormwater Conservation Study (Basin Study) is a cooperative effort among the Los Angeles County Flood Control District (LACFCD), the federal Bureau of Reclamation and several local agencies, including Metropolitan. The Basin Study area covers approximately 1,900 square miles and is home to about 10 million people (about one-quarter of California's population). The purpose of the Basin Study is to identify alternatives, conduct trade-off analyses and develop recommendations for bridging the gap between current and future water supplies and demands in the watersheds of the greater Los Angeles area. Its goals are to:

- Evaluate the long-term potential of existing LACFCD flood control dams, reservoirs, spreading grounds, and other inter-related facilities to conserve increased amounts of stormwater for water supply.
- Analyze the potential for new facilities and operational changes to capture increased stormwater volumes for water supply.

Work began on the $2.4 million Basin Study in December 2012, and is expected to be complete by May 2015. To date, Metropolitan has participated in scoping and technical advisory sessions.

Council for Watershed Health

Metropolitan has been partnering with the Council for Watershed Health (CWH) since 2000 in various research studies and educational outreach efforts related to improving water supply reliability, water quality and promotion of water-use efficiency. CWH functions as a forum for coordination of multi-stakeholder watershed protection, planning and management activities. Currently CWH has four programs: urban stormwater, sustainable landscape, watershed coordination and watershed monitoring. Metropolitan provides staffing support to the CWH sustainable landscape program, which focuses on California Friendly® landscaping and promoting water conservation ethics. In addition, Metropolitan has been active in technical project oversight groups conducting research under the urban stormwater program. These groups investigate water supply potential and water quality gains from stormwater capture and management.

Metropolitan is active in groups focused on watershed protection to safeguard the reliability and quality of the Southland's drinking water supply, and to find ways to put local supplies to more beneficial use.

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By the Numbers

Delta Watershed

25 million Californians
use water that passes through the Delta

12 million visitors
come to the Delta for recreation each year

500 million tons
of cargo is transported through the Delta each year

7 million acres
of farmland are irrigated in the Delta, producing 45 percent of the nation's fruits and vegetables

Sacramento-San Joaquin Delta Watershed

The Sacramento-San Joaquin Delta watershed is an important source of water supply delivered to Southern California through the State Water Project. A healthy Delta watershed ensures regional water supply reliability. Metropolitan continues to work with agencies and stakeholders throughout the Delta watershed to conduct studies and develop policies and programs to restore the ecosystem and protect Delta water quality for drinking water uses and aquatic wildlife.

Metropolitan participates in the Bay Delta Conservation Plan (BDCP) process, which is a voluntary collaboration of state, federal and local water agencies; state and federal fish and wildlife agencies; environmental organizations; and other interested parties. The purpose of the BDCP is to develop a long-term plan for restoration of Delta ecosystems and recovery of sensitive species and their habitats in a way that also will enhance water supply reliability.

The revised administrative drafts of the BDCP and associated environmental review documents were released in spring 2013 for information sharing. The state and federal agencies released the public draft BDCP and accompanying environmental documents in December 2013 for formal public review.

Metropolitan continued to support the state Department of Water Resources' Municipal Water Quality Investigations (MWQI) Program, which implements water quality monitoring and special studies in the Delta and its tributaries. These investigations help to develop a better understanding of how constituents of concern appear in Delta waters and how drinking water quality is impacted. In fiscal year 2012/13, this program continued to operate five real-time water quality stations and expanded modeling tools in support of water quality forecasting activities.

Metropolitan continued to work on a multi-year effort with several agencies and stakeholder groups to develop a drinking water policy for surface waters in the Delta watershed. In February 2013, the Central Valley Regional Water Quality Control Board released the proposed Drinking Water Policy Basin Plan amendment for public review. The plan includes a narrative water quality objective for pathogens and water quality monitoring recommendations, which will help protect source water quality in the Delta watershed. In July 2013, the Central Valley Regional Water Quality Control Board adopted the amendment.

Metropolitan also continued to work with the state and federal water contractors to support studies and regulatory decisions addressing the impacts of nutrients and ammonia in the Delta watershed and the impact of nutrients on the Delta food web.

In addition to involvement in research efforts and studies, Metropolitan supported and financially assisted the Battle Creek Salmon and Steelhead Restoration Project, which began in fall 2010. This federal project is one of the largest cold-water fish restoration efforts in North America. It is being supported through federal, state and private funding. The project will open almost 50 miles of winter-, spring- and late fall-run salmon and steelhead habitat in the Sacramento River watershed. Construction is anticipated to be completed by 2016.

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Ethics Office

Established by special legislation enacted in 2000, the Ethics Office is responsible for promoting a transparent and ethical culture at Metropolitan by proposing and administering Metropolitan's ethics-related regulations and providing advice and education to the Metropolitan community.

The Ethics Office maintains services to facilitate the reporting of potential violations of Metropolitan's ethics rules. For those who wish to remain anonymous, the Ethics Office maintains a hotline through an independent third-party vendor, which accepts anonymous reports of potential violations by directors, officers or employees.

The Ethics Office is responsible for conducting independent investigations of potential violations, including in areas such as conflicts of interest, contracts, gifts, lobbying, and campaign contributions. The Ethics Office must maintain procedures to protect the job security of individuals bringing allegations of ethics violations, the confidentiality of sources, and the due process rights of individuals under investigation. In addition the office must make available to the public the results of investigations, subject to any exceptions under the California Public Records Act or other applicable laws.

Ethics Office personnel routinely hold outreach events at various Metropolitan's facilities to increase awareness of the office and its ability to address ethics-related concerns and questions. During fiscal year 2012/13, the Ethics Office received approximately 100 communications requesting advice or reports of potential ethics-related violations.

The Ethics Office is also responsible for maintaining records regarding compliance with state-mandated ethics provisions, including state-mandated ethics training and sexual harassment prevention training. In addition to maintaining records of compliance, Ethics Office personnel track renewal requirements for directors and assist them with finding resources through which to access these trainings.

In November 2012, Metropolitan appointed a new Ethics Officer, Deena R. Ghaly, former director of enforcement at the Los Angeles City Ethics Commission. The new Ethics Officer has undertaken a comprehensive assessment of the Ethics Office's programs, policies, and procedures, and is in the process of introducing a series of initiatives for consideration by Metropolitan's Board of Directors.

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Excerpts from Public Hearing Comments

In accordance with section 130.5 of the MWD Act, Metropolitan held a public hearing on December 9, 2013 to receive comment on the draft annual report on achievements in conservation, recycling and groundwater recharge for fiscal year 2012/13. The following summaries are from comments received and submitted at the public hearing. Water use efficiency programs for conservation and recycled water were the focus of reviewer comments and will be considered as Metropolitan develops the framework for regional long-term conservation and recycled water programs consistent with the 2010 Regional Urban Water Management Plan and for consideration by Metropolitan's Board of Directors.

Placeholder

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Placeholder

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Glossary

Acre-foot: The amount of water that would cover one acre of land, one foot deep. An acre-foot is 325,851 gallons. On average, an acre-foot supplies five to seven people in Southern California for one year.

Bewaterwise.com®: A website sponsored by Metropolitan that has extensive information on water-use efficiency.

California Friendly®: A program that encourages Southern California residents to make their homes California Friendly by using native and drought-tolerant plants, smart irrigation systems and water-wise appliances that meet certain efficiency standards.

Community Partnering Program: A Metropolitan program that provides funding for water-related, educational outreach on regional water resource issues, such as conservation, watershed protection or water quality.

Conjunctive Use: The storing of imported water in a local aquifer, in conjunction with groundwater, for later retrieval and use.

Groundwater Recovery: The extraction and treatment of groundwater making it usable for a variety of applications by removing chemicals and/or high levels of salts.

HECW (High-efficiency clothes washers): Washing machines that use less water than conventional washers; most are included in Metropolitan's incentive programs.

HET (High-efficiency toilet): Newer generation toilets that on average use about 1.28 gallons per flush, saving about 8,000 gallons per year.

IRP (Integrated Water Resources Plan): Metropolitan's plan to ensure reliable water delivery to its member agencies amid population growth, dry spells and droughts. The IRP portfolio includes water storage, conservation, best management practices, recycling, desalination and groundwater recovery, among others.

LRP (Local Resources Program): Metropolitan's funding mechanism for local recycling and groundwater recovery projects with member agencies.

Potable/Non-Potable: Drinkable and non-drinkable water, respectively, according to California Department of Public Health standards.

Replenishment: The delivery of Metropolitan water supplies to member agencies to replenish local groundwater basins, when supply and system conditions are favorable.

Smart Controllers (weather-based irrigation controllers): Smart controllers that adjust automatically to current weather conditions, increasing efficiency of irrigation systems.

Watershed: A region from which water drains or runs off to a river or a stream.

Sections 130.5 and 130.7 of The Metropolitan Water District Act

Added by Statutes of 1999, Chapter 415 (Senate Bill 60 (Hayden))

130.5. (a) The Legislature finds and declares all of the following:

(1) The Metropolitan Water District of Southern California reports that conservation provides 7 percent of its "water resource mix" for 1998, and conservation is projected to provide 13 percent of its total water resources by 2020.

Conservation, water recycling, and groundwater recovery combined, provide 12 percent of the district's total water resources for 1998 and those water resources are projected to increase to 25 percent of the district's total water resources by 2020.

(2) It is the intent of the Legislature that The Metropolitan Water District of Southern California expand water conservation, water recycling, and groundwater recovery efforts.

(b) The Metropolitan Water District of Southern California shall place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures.

(c) The Metropolitan Water District of Southern California shall hold an annual public hearing, which may be held during a regularly scheduled meeting of the Board of Directors of The Metropolitan Water District of Southern California, during which the district shall review its urban water management plan, adopted pursuant to Part 2.6 (commencing with Section 10610) of Division 6 of the Water Code, for adequacy in achieving an increased emphasis on cost-effective conservation, recycling, and groundwater recharge in accordance with this section.

The Board of Directors of The Metropolitan Water District of Southern California may modify any ongoing program as necessary to meet that requirement, consistent with the district's urban water management plan.

(d) The district shall invite to the hearings knowledgeable persons from the fields of water conservation and sustainability, and shall consider factors of availability, water quality, regional self-sufficiency, benefits for species and environment, the totality of life-cycle costs, including avoided costs, and short- and long-term employment and economic benefits.

(e) On or before February 1, 2001, and on or before each February 1 thereafter, The Metropolitan Water District of Southern California shall prepare and submit to the Legislature a report on its progress in achieving the goals of increased emphasis on cost-effective conservation, recycling, and groundwater recharge in accordance with this section, and any recommendations for actions with regard to policy or budget matters to facilitate the achievement of those goals.

(f) Nothing in this section shall diminish the authority of The Metropolitan Water District of Southern California pursuant to Section 25 or any other provision of this act, or otherwise affect the purposes of The Metropolitan Water District of Southern California as described in existing law.

130.7. (a) The Metropolitan Water District of Southern California, in cooperation with the following entities, shall participate in considering programs of groundwater recharge and replenishment, watershed management, habitat restoration, and environmentally compatible community development utilizing the resource potential of the Los Angeles River, the San Gabriel River, or other southern California rivers, including storm water runoff from these rivers:

(1) Member public agencies whose boundaries include any part of the Los Angeles River, the San Gabriel River, or any other river in southern California.

(2) The Water Replenishment District of Southern California.

(3) Local public water purveyors and other appropriate groundwater entities.

(4) The County of Los Angeles.

(5) The United States Army Corps of Engineers.

(b) Nothing in this section affects the powers and purposes of the Water Replenishment District of Southern California or any other groundwater management entity, the County of Los Angeles, local public water purveyors, or the United States Army Corps of Engineers.

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Metropolitan's Member Agencies

Joined Metropolitan
December 6, 1928

Joined Metropolitan
December 6, 1928

Joined Metropolitan
December 6, 1928

Joined Metropolitan
December 14, 1960

Joined Metropolitan
November 12, 1954

Joined Metropolitan
June 23, 1931

Joined Metropolitan
October 16, 1950

Joined Metropolitan
January 15, 1953

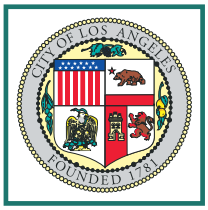
Joined Metropolitan
February 27, 1931

Joined Metropolitan
December 6, 1928

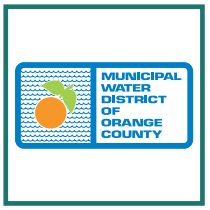
Joined Metropolitan
November 26, 1951

Joined Metropolitan
December 1, 1960

Joined Metropolitan
February 27, 1931



Joined Metropolitan
December 6, 1928



Joined Metropolitan
November 26, 1951

Joined Metropolitan
December 6, 1928

Joined Metropolitan
December 17, 1946

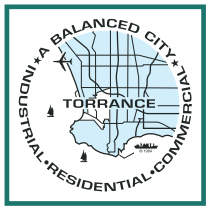
Joined Metropolitan
November 12, 1971

Joined Metropolitan
December 6, 1928

Joined Metropolitan
December 6, 1928

Joined Metropolitan
December 6, 1928

Joined Metropolitan
November 15, 1950



Joined Metropolitan
February 27, 1931

Joined Metropolitan
March 27, 1963

Joined Metropolitan
July 23, 1948

Joined Metropolitan
November 12, 1954

DRAFT

Metropolitan's Service Area

LEGEND

- Department of Water Resources' California Aqueduct
- Metropolitan's Colorado River Aqueduct
- Water Treatment Plants

DRAFT

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

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