



● Member Agency efforts in Water Use Efficiency

Summary

In August, the Water Planning and Stewardship Committee requested staff to provide a report on member agency water use efficiency efforts. This report contains information on regional per capita urban water use, conservation programs, ordinances, rate structures and recycled water use. Regional per capita trends are also provided for Metropolitan's service area.

Attachments

[Attachment 1: Per Capita Urban Water Use](#)

[Attachment 2: Member Agency Water Use Efficiency Efforts](#)

Detailed Report

Metropolitan's service area urban per capita water use, adjusted for water recycling, has declined from a 1996-2005 average of 177 gallons per capita per day (GPCD) to 166 GPCD in 2008. The decline reflects the region's conservation and water recycling efforts, drought-related conservation ordinances, and the current economic recession. Regional per capita information is summarized in [Attachment 1](#). This report provides information currently available to Metropolitan, but is limited by what has been voluntarily provided by the member agencies.

Per Capita Urban Water Use

In 2008, Governor Schwarzenegger declared a statewide water emergency and called on water agencies to reduce urban per capita water use 20 percent by 2020. Commonly referred to as "20 by 2020," this declaration became law in November 2009 through SBX7-7. The law establishes reductions in per capita potable water use as a measure of water use efficiency. Retail agencies have four options for complying with 20 by 2020 and may also comply as part of a regional strategy. Per capita reductions can be achieved through a combination of conservation and water recycling.

Water Use Efficiency Efforts

Southern California is a recognized leader in water use efficiency. This achievement is linked to the long-standing partnership between Metropolitan and the member agencies in advancing regional and local water use efficiency. Member agency water use efficiency efforts encompass a broad range of activities that include:

- Full participation by all member agencies in Metropolitan's regional conservation programs
- 21 member agencies supplementing Metropolitan's regional incentive programs with local funds
- 18 member agencies report administering local programs with non-Metropolitan funding
- All member agencies report conservation or drought ordinances for all or part of their service areas
- 15 member agencies report conservation-oriented rate structures covering all or part of their service areas
- 19 member agencies use recycled water to meet a portion of their urban demands

Related information is provided in [Attachment 2](#).

Per Capita Urban Water Use

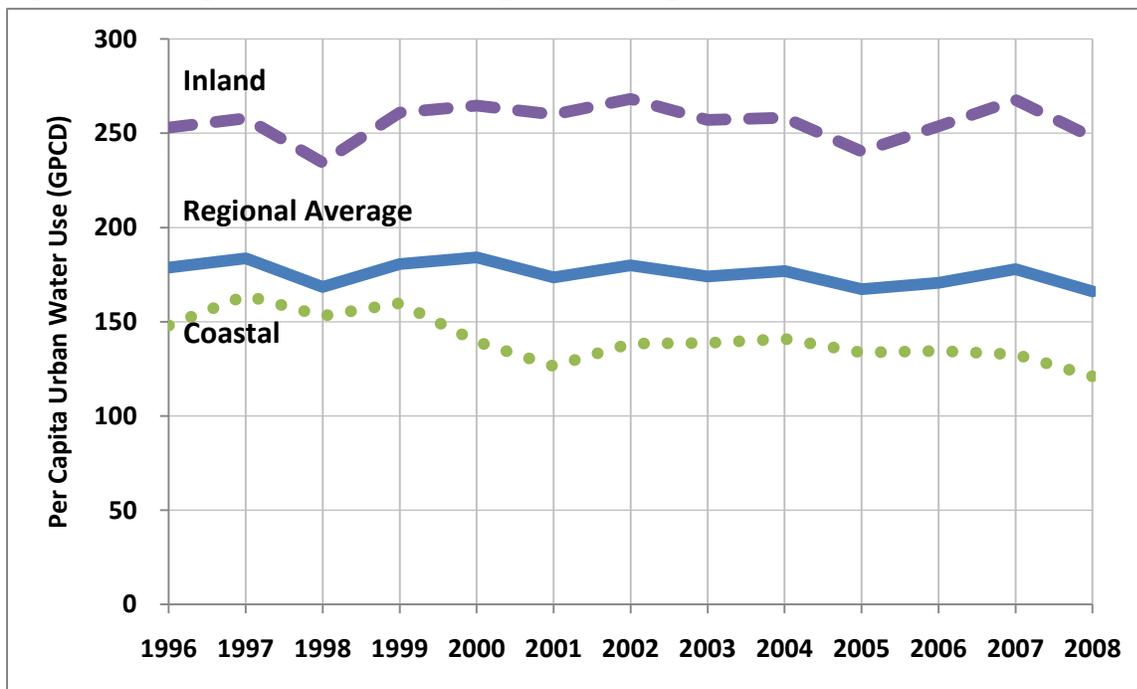
Retail level urban per capita water use is affected by both short-term and long-term factors. Short-term factors include weather, economic cycles, and drought-related conservation actions. Longer-term factors include conservation programs as well as changes in codes, ordinances, water rates, housing density, household income, public values, climate, and socioeconomic trends. In Metropolitan’s service area, per capita trends are further affected by disproportionate growth in hotter and drier inland areas.

While per capita water use information can be useful for tracking accomplishments in water use efficiency, it is less useful for comparing water use efficiency efforts between agencies. This is due to the wide range of geographic variation in the factors mentioned above that influence urban water use.

Under 20 by 2020, reductions in per capita urban water use can be achieved through a combination of conservation and increased water recycling. **Figure 1** shows the trend in regional per capita water use adjusted for recycling, and the typical range due to climate zone impacts based on averages of representative member agencies. After adjusting for recycled water, regional per capita water use has dropped from a 1996-2005 average of 177 gallons per capita per day (GPCD) to 166 GPCD in 2008. The decline reflects the region’s conservation and water recycling efforts, drought-related conservation ordinances and the current economic recession.

Metropolitan’s record of per capita water use is derived from a combination of Metropolitan sales data, local water use data collected from the member agencies, and population data developed by Metropolitan and reviewed by the member agencies. The latest per capita estimates are for calendar year 2008. Local water use data for 2009 is not yet available for all member agencies.

Figure 1: Metropolitan Service Area Regional Per Capita Trends



Member Agency Water Use Efficiency Efforts

Metropolitan maintains records of regional efficiency efforts and has periodically collected local information provided by the member agencies as part of various regional planning processes. To develop the information in this report, staff combined internal records with information voluntarily submitted to Metropolitan by the member agencies for the Allocation Plan, IRP and RUWMP data collection processes.

Member agency water use efforts encompass a broad range of activities, including but not limited to:

- Partnering in Metropolitan's regional conservation programs
- Administering local conservation programs
- Enacting drought ordinances
- Implementing conservation rate structures
- Developing recycled water projects

Metropolitan also partners with the member agencies to research new technologies and implementation approaches, promote new regulations, and influence the development of State policies and codes through active participation in the California Urban Water Conservation Council.

Regionally Funded Conservation

Member agencies have the option to participate in Metropolitan's regional conservation incentive programs as well as the Metropolitan-funded/member agency administered program. To date, all 26 member agencies currently participate in Metropolitan's regional conservation programs. An additional 24 member agencies verified that they will participate in the Metropolitan-funded/member agency administered programs. Staff has also informally confirmed participation with the remaining two member agencies.

Locally-Funded Conservation

Member agencies administer conservation programs funded through local sources and grants, and also supplement Metropolitan's regional incentives with local funds. Based on information submitted to Metropolitan through the IRP technical workgroups and RUWMP data collection efforts, a total of 18 member agencies are currently administering locally-funded conservation programs. In addition, 21 member agencies add supplemental funding to at least one of Metropolitan's regional conservation incentives.

Table 1: Member Agency-Implemented Conservation Programs

Agency	Local or Grant-funded Programs*	Local Funds added to Regional Incentives
Anaheim	X	X
Beverly Hills	data not available	
Burbank	X	X
Calleguas MWD	X	X
Central Basin MWD	X	X
Compton	data not available	
Eastern MWD	X	X
Foothill MWD	X	X
Fullerton	data not available	X
Glendale	X	X
Inland Empire UA	X	X
Las Virgenes MWD	data not available	X
Long Beach	X	X
Los Angeles	X	X
MWDOC	X	X
Pasadena	X	X
San Diego CWA	X	X
San Fernando	data not available	
San Marino	data not available	
Santa Ana	data not available	X
Santa Monica	X	X
Three Valleys MWD	X	X
Torrance	data not available	
Upper San Gabriel MWD	X	X
West Basin MWD	X	X
Western MWD	X	X
MWD Total	18	21

*Submitted to Metropolitan through the IRP technical workgroups and RUWMP data collection processes.

Conservation Ordinances

In 2008, the Board adopted a water supply alert resolution calling for local cities, counties, member agencies and retail agencies to implement water conservation and drought ordinances. Staff reported to the Board in 2009 that more than 60 local jurisdictions had voluntarily submitted to Metropolitan conservation ordinances. Today, 153 jurisdictions have adopted or enacted conservation ordinances in all 26 member agencies.

Table 2: Water Conservation and Drought Ordinances

Agency	Adopted Ordinances	
	June 2009	September 2010
Anaheim	1	1
Beverly Hills	1	1
Burbank	data not available	1
Calleguas MWD	2	7
Central Basin MWD	2	19
Compton	data not available	1
Eastern MWD	1	5
Foothill MWD	1	3
Fullerton	1	1
Glendale	1	1
Inland Empire UA	6	8
Las Virgenes MWD	1	1
Long Beach	1	1
Los Angeles	1	1
MWDOC	5	25
Pasadena	1	1
San Diego CWA	22	23
San Fernando	data not available	1
San Marino	data not available	1
Santa Ana	1	1
Santa Monica	1	1
Three Valleys MWD	4	8
Torrance	1	1
Upper San Gabriel MWD	5	19
West Basin MWD	1	16
Western MWD	3	5
MWD Total	63	153

Conservation-Oriented Escalating Water Rate Structures

Through Metropolitan's allocation planning process, member agencies had the option to submit information on conservation-oriented rate structures to receive allocation adjustments. A total of 15 member agencies voluntarily submitted information confirming that qualified rate structures covered part or all of their service area. These agencies had escalating block rate structures with the second block at least 10 percent higher than the first block. Metropolitan does not have information for agencies that opted not to participate in the allocation adjustment.

Table 3: Member Agency Conservation-Oriented Rate Structures

Agency	Conservation-Oriented Rate Structure**
Anaheim	data not available
Beverly Hills	X
Burbank	X
Calleguas MWD	X
Central Basin MWD	data not available
Compton	data not available
Eastern MWD	X
Foothill MWD	X
Fullerton	data not available
Glendale	X
Inland Empire UA	X
Las Virgenes MWD	X
Long Beach	X
Los Angeles	X
MWDOC	X
Pasadena	data not available
San Diego CWA	X
San Fernando	data not available
San Marino	X
Santa Ana	data not available
Santa Monica	X
Three Valleys MWD	data not available
Torrance	data not available
Upper San Gabriel MWD	data not available
West Basin MWD	X
Western MWD	data not available
MWD Total	15

**Submitted to Metropolitan for allocation plan adjustments.

Recycled Water

Water recycling represents 100 percent potable water savings for landscape irrigation and other uses. Under the 20 by 2020 requirements, water recycling efforts contribute to reductions in per capita water use. A total of 19 member agencies have developed recycled water projects to meet a portion of their urban uses.

Table 4: Recycled Water Projects

Agency	Recycled Water Use
Anaheim	
Beverly Hills	
Burbank	X
Calleguas MWD	X
Central Basin MWD	X
Compton	
Eastern MWD	X
Foothill MWD	X
Fullerton	
Glendale	X
Inland Empire UA	X
Las Virgenes MWD	X
Long Beach	X
Los Angeles	X
MWDOC	X
Pasadena	
San Diego CWA	X
San Fernando	
San Marino	
Santa Ana	X
Santa Monica	X
Three Valleys MWD	X
Torrance	X
Upper San Gabriel MWD	X
West Basin MWD	X
Western MWD	X
MWD Total	19