

# DEMAND MANAGEMENT

## OVERVIEW

Demand Management costs are Metropolitan’s expenditures for funding local water resource development programs and water conservation programs. These demand management programs incentivize the development of local water supplies and the conservation of water to reduce the reliance on imported water. These programs are implemented after the service connection between Metropolitan and its member agencies and, as such, do not add any water to the quantity Metropolitan obtains from other sources or to Metropolitan’s own supply. Rather, the effect of these downstream programs is to produce a local supply of water for the local agencies.

Demand Management programs reduce the use of and burden on Metropolitan’s distribution and conveyance system, which, in turn, helps reduce the capital, operating, maintenance and capital improvement costs associated with these facilities. For example, local water resource development and conservation has deferred the need to build additional infrastructure such as the Central Pool Augmentation Project and the San Diego Pipeline No. 6. Overall, the decrease in demand resulting from these projects is estimated to defer the need for projects between four and twenty-five years at a savings of between \$324 and \$910 million. The programs also free up capacity in Metropolitan’s system to convey both Metropolitan water and water from other non-Metropolitan sources.

The budgeted costs for Demand Management are as follows:

### Demand Management Cost Summary<sup>1</sup>, \$ millions

	2014/15 Actual	2015/16 Budget	2016/17 Proposed	Change from 2015/16	2017/18 Proposed	Change from 2016/17
Conservation Credits Program	\$134.4	\$20.0	\$27.0	\$7.0	\$32.0	\$5.0
Local Resources Program	\$35.8	\$41.7	\$43.7	\$2.0	\$41.9	\$(1.8)
Future Supply Actions		0	\$4.4	\$4.4	\$2.0	\$(2.4)

<sup>1</sup> Does not include Departmental costs reflected elsewhere in this Budget.

Budgeted Demand Management costs reflect increasing the financial commitment for the Conservation Credits Program and maintaining the financial incentives for existing contracts under the Local Resources Program.

In addition to Metropolitan’s own objectives, Metropolitan also pursues local water resource development because it has uniquely been directed to do so by the state Legislature. In 1999, then Governor Davis signed Senate Bill (SB) 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase conservation and local resource development. No other water utility in California,

public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

Metropolitan's Demand Management programs also support the region's compliance with the requirements of SB X7-7. In 2009, the state Legislature passed SB X7-7, which was enacted to reduce urban per capita water use by 20 percent by December 31, 2020. Urban retail water suppliers are not eligible for state water grants or loans unless they comply with the water conservation requirements of the legislation. Demand Management programs help the region achieve urban per capita water use reductions.

Demand Management costs also support the Strategic Plan Policy Principles approved by Metropolitan's Board on December 14, 1999. These principles embody the Board's vision that Metropolitan is a regional provider of wholesale water services. In this capacity, Metropolitan is the steward of regional infrastructure and the regional planner responsible for coordinated drought management and the collaborative development of additional supply reliability and necessary capacity expansion. Through these regional services, Metropolitan ensures a baseline level of reliability and quality for service in its service area.

## DEMAND MANAGEMENT PROGRAMS REDUCE RELIANCE ON IMPORTED WATER

Metropolitan increased the emphasis on Demand Management programs after the devastating drought of the early 1990's. Metropolitan's 1996 Integrated Resources Plan identified the Preferred Resource Mix as the resource plan that achieved the region's reliability goal of providing the full capability to meet all retail-level demands during all foreseeable hydrologic events, represented the least-cost sustainable resources plan, met the region's water quality objectives, was balanced and diversified and minimized risks, and was flexible, allowing for adjustments should future conditions change.

The Preferred Resource Mix included locally developed water supplies and conservation, and recognized that regional participation was important to achieve their development. Additional imported supplies frequently have relatively lower development costs, but can create a large cost commitment for regional infrastructure to transport and store those imported supplies. On the other hand, local projects, like those designed to recycle water or increase groundwater production, may have higher development costs but require little or no additional infrastructure to distribute water supplies to customers. This trade-off between relatively lower-cost imported supplies requiring large regional infrastructure investments and relatively higher-cost local supply development requiring less additional local infrastructure was an important consideration in the development of the Preferred Resource Mix. A strategy of aggressively investing in imported water supply would lead to higher costs for the region because of the larger investments required in infrastructure. Since 1996, the Integrated Resources Plan has been updated twice, in 2004 and 2010, reaffirming long-term sustainability of the region's water supply through implementation of conservation and local resource development.

## DEMAND MANAGEMENT PROGRAMS REDUCE DEMANDS AND BURDENS ON METROPOLITAN'S SYSTEM

Demand Management programs decrease and avoid operating and maintenance and capital improvement costs, such as costs for repair of and construction of additional or expanded water conveyance, distribution, and storage facilities. The programs also free up capacity in Metropolitan's system to convey both Metropolitan water and water from other non-Metropolitan sources.

The purpose of Demand Management is to generate additional local resources or reduce consumption through conservation, which reduces the amount of water that must otherwise be transported through Metropolitan's system. Investments in Demand Management programs like conservation, water recycling

and groundwater recovery help defer the need for additional conveyance, distribution, and storage facilities. Demand Management is an important part of Metropolitan's resource management efforts. Metropolitan's incentives in these areas contribute to savings for all users of the system in terms of lower capital costs that would otherwise have been required to expand and maintain the system.

## SB 60 DIRECTED METROPOLITAN TO EXPAND DEMAND MANAGEMENT PROGRAMS

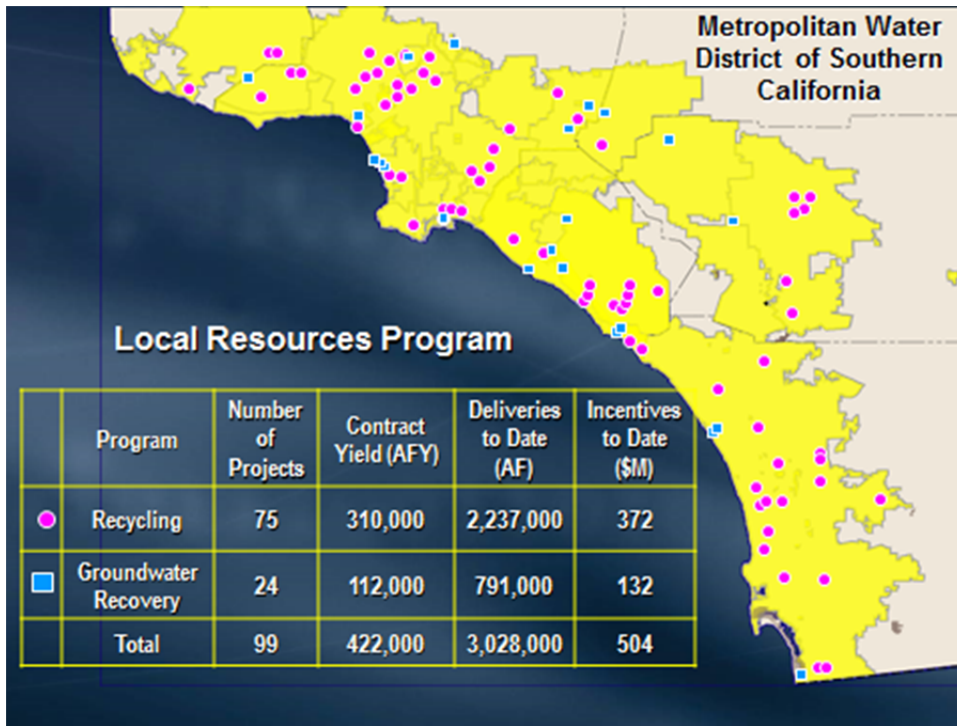
In September 1999, Governor Gray Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase "sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." SB 60 also requires Metropolitan to hold an annual public hearing to review its urban water management plan for adequacy in achieving an increased emphasis on cost-effective conservation and local water resource development, and to invite knowledgeable persons from the water conservation and sustainability fields to these hearings. Finally, Metropolitan is required to annually prepare and submit to the Legislature a report on its progress in achieving the goals of SB 60. SB 60 specifically indicated that no reimbursement was required by legislation because Metropolitan, as a local agency, has the authority to levy service charges, fees or assessments sufficient to pay for the program or level of service mandated by SB 60. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

In FY 2014/15 alone, Metropolitan's service area achieved 1.5 million acre-feet of water savings from conservation, recycled water and groundwater recovery programs. The 1.5 million acre-feet of water savings from water management activities in fiscal year 2014/15 nearly equaled actual water sold in the same period of 1.91 million acre-feet. These savings derived from programs for which Metropolitan paid incentives, as well as code-based conservation achieved through legislation, building and plumbing codes and ordinances, and reduced consumption resulting from changes in water pricing. Cumulatively, since 1990 Metropolitan has invested almost \$1 Billion to achieve water savings.

Metropolitan's Conservation Credits Program provides incentives to residents and businesses for use of water-efficient products and qualified water-saving activities. Rebates have been provided to residential customers for turf removal and purchasing of high-efficiency clothes washers and toilets. Rebates are also provided to businesses and institutions for water-saving devices. In fiscal year 2014/15, the Conservation Credits Program achieved 944,000 acre-feet of saved water through new and existing conservation initiatives funded with incentives and maintained through plumbing codes. Cumulatively, through fiscal year 2014/15 the Conservation Credits Program has achieved over 2.2 million acre-feet of water savings.

Metropolitan provides financial incentives through its Local Resources Program for the development and use of recycled water and recovered groundwater. The Local Resources Program consists of 75 recycling projects and 24 groundwater recovery projects located throughout Metropolitan's service area, of which 85 projects are in operation. From the Local Resources Program's inception in 1982 through FY 2014/15, Metropolitan has paid out about \$372 million in incentives to produce about 2.2 million acre-feet of recycled water. Metropolitan also provided approximately \$132 million to produce 791,000 acre-feet of recovered degraded groundwater for municipal use.

## Local Resources Program Projects



## SB X7-7 REQUIRES INCREASED CONSERVATION

SBX7-7 mandated a new requirement to lower urban per capita water use 20 percent by December 31, 2020. Enacted by the state Legislature and signed into law by Governor Schwarzenegger as part of a historic package of water reforms in November 2009, the “20x2020” plan gave local communities flexibility in meeting this target while accounting for previous efforts in conservation and recycling. The Legislature found that reducing water use through conservation and regional water resources management would result in protecting and restoring fish and wildlife habitats, reducing dependence on water through the Delta, and providing significant energy and environmental benefits. Metropolitan coordinates closely with its member agencies to achieve these targets both at a retail agency level in compliance with legislative requirements, and as a region in achieving a true 20 percent reduction in per-capita water use.

## BUDGET HIGHLIGHTS

The budget for the Demand Management costs is increasing slightly when comparing the biennial budget to FY 2015/16, due primarily to increased expenditures for the Conservation Credits Program.