

SECTION 6

DEMAND MANAGEMENT MEASURES

6.1 Introduction

Demand Management Measures (DMMs) are mechanisms used in increasing water conservation. The Urban Water Management Plan Act includes 14 DMMs (CWC 10631 (f)) that must be evaluated in the UWMP. The 14 DMMs are listed in the Requirement #26 below:

Requirement

#26. (Describe and provide a schedule of implementation for) each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following: (A) water survey programs for single-family residential and multifamily residential customers; (B) residential plumbing retrofit; (C) system water audits, leak detection, and repair; (D) metering with commodity rates for all new connections and retrofit of existing connections; (E) large landscape conservation programs and incentives; (F) high-efficiency washing machine rebate programs; (G) public information programs; (H) school education programs; (I) conservation programs for commercial, industrial, and institutional accounts; (J) wholesale agency programs; (K) conservation pricing;(L) water conservation coordinator; (M) water waste prohibition; (N) residential ultra-lowflush toilet replacement programs (10631(f)(1) and (2).

DMM A: Water Survey Programs for Residential Customers

ML&WC surveys customers' water use through regular meter readings. The meter readings alert ML&WC of any abnormally excessive water use, and the customer, where the high consumption occurs, is promptly notified by telephone or by leaving a door hanger at the billing address. The customer then coordinates with ML&WC to determine the cause of the high consumption. Following a water audit, the customer is advised on water conservation practices to avoid future excessive usage and high water bills.

DMM C: System Water Audits, Leak Detection, and Repair

As part of ML&WC's system maintenance activities, the water system is regularly audited for irregularities, such as leaks and other defects, so repairs can be promptly performed. Field crews, customers, and neighboring agencies collectively monitor the distribution system by reporting any anomalies to ML&WC. ML&WC then logs the problems and appropriate actions are taken. In addition, ML&WC operates a Meter Exchange Program, in which meters are evaluated for accuracy and are replaced if proven defective.

DMM F: High-Efficiency Washing Machine Rebates Program

In the past, rebates of up to \$100 per high-efficiency washing machine installed were offered to ML&WC's residential customers. Twenty-one customers were documented to have taken advantage of this program.

DMM G: Public Information Programs

ML&WC keeps its customers informed of various water conservation issues and shortage announcements through news articles and media inserts in the customers' water bills. ML&WC also encourages the public, particularly the local schools, civic organizations, and any groups of concerned citizens, to come to the ML&WC office if they have any water-related questions or concerns, and ML&WC will gladly provide them with the information they need.

DMM H: School Education Programs

Over the years, ML&WC has conducted water education programs at the local elementary and middle schools. The students are taken on a guided tour of ML&WC’s plant and office facilities and given materials that contain information on responsible water use and conservation. In addition, Water Awareness programs and contests are held at the local schools through the help of school personnel and teaching staff. Fremont Elementary and Montebello Intermediate School have participated in these programs.

DMM I: Conservation Programs for Commercial, Industrial, and Institutional Accounts

Similar to toilet rebates offered to residential customers, rebates were also available to commercial, industrial, and institutional customers. Items that qualify for such rebates include high efficiency washers, water brooms, pre-rinse spray valves, and water-free urinals.

DMM K: Conservation Pricing

ML&WC encourages water conservation by implementing a tiered water rate structure. As shown in Table 6-1, the cost of water per hundred cubic feet increases as consumption goes up. This pricing strategy encourages customers to be more aware of their water use and keep it to a minimum to avoid higher charges.

Table 6-1 Consumption and Water Rates			
Zone	Category	Consumption	Water Rate (per Ccf)
Lower Pressure Zone	Single Family Residential	< 20 Ccf	\$ 1.69
	Single Family Residential and Government	21 to 31 Ccf	\$ 1.89
	Single Family Residential and Government	> 32 Ccf	\$ 2.09
	All Others		\$ 2.02
Booster Area Pressure Zone	Single Family Residential and Government	< 20 Ccf	\$ 1.75
	Single Family Residential and Government	21 to 31 Ccf	\$ 1.95
	Single Family Residential and Government	> 32 Ccf	\$ 2.15
	All Others		\$ 2.08

DMM M: Water Waste Prohibition

As discussed in Section 5, while ML&WC does not have its own laws and prohibitions that regulate water waste and use, it abides by the City of Montebello’s municipal code. The water waste prohibitions and penalties are all enforced by the City.

DMM N: Residential Ultra-Low Flush Toilet Replacement Programs

In the past, ML&WC distributed ultra-low flush toilets to its customers. Rebates of up to \$50 per toilet were also available. Hundreds of new water efficient toilets were installed by residential customers under this program.

Requirement

#27. A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan (10631(f)(3)).

ML&WC evaluates the effectiveness of the implemented DMMs by monitoring consumption through regular meter readings. All existing service connections in the residential, commercial, and industrial sectors are metered. Future service connections will be metered as well.

Requirement

#28. An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand (10631(f)(4)).

Since the adoption and implementation of the 2005 UWMP, the daily per capita water use within ML&WC's service area has dropped from 95 gpcd in 2005 to 86 gpcd in 2010, which translates into a savings of 9 AFY. The only exceptions are the years 2007 and 2008, in which the daily per capita water use are 95 gpcd and 96 gpcd, respectively. This substantial decrease in consumption demonstrates the effectiveness of the conservation programs that ML&WC has supported and implemented. Programs in leak detection, public education and information, plumbing fixtures retrofits, and water conservation tariff requirements have all largely contributed to the water savings. ML&WC's efforts in coordinating with customers, who have high consumptions, have also helped in reducing water use by timely identification of the cause of the high water use and formulating solutions to prevent it.

In effect, the current water savings show that further reductions in demand are feasible.

Requirement

#29. An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following: (1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors; (2) Include a cost-benefit analysis, identifying total benefits and total costs; (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost; (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation (10631(g)).

DMM B: Residential Plumbing Retrofit

Requirements for retrofitting residential plumbing are implemented by building and plumbing codes of the City of Montebello and the County of Los Angeles.

DMM D: Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections

Plumbing retrofits of existing connections are regulated by City and County building and plumbing ordinances; therefore, they are not within the scope of ML&WC's service.

DMM E: Large Landscape Conservation Programs and Incentives

Regulation of large landscapes, along with irrigation practices and related water conservation, are implemented by the City of Montebello.

DMM J: Wholesale Agency Programs

ML&WC is a retailer, not a wholesaler. However, Central Basin Municipal Water District (CBMWD), from whom ML&WC is going to take recycled water, is a wholesaler that runs a variety of water conservation programs. One of CBMWD's primary water conservation campaigns is the *Shut Your Tap!* Campaign, which encourages water customers to be mindful of their water consumption by making simple lifestyle changes, such as taking shorter showers, making sure that sprinklers do not have any leaks, and substituting water brooms for hoses when cleaning paved areas. As part of the campaign, CBMWD sends speakers to various community events to further promote the importance of water use efficiency, and publications on a variety of water-related topics are also available. Moreover, the *Shut Your Tap!* Campaign holds a monthly forum for cities, water agencies, and other water stakeholders to trade ideas and information on water conservation issues. CBMWD also provides cities and retail agencies with a "Conservation Messaging Tool Kit," which consists of water conservation tip sheets, door hangers, bill inserts, local cable TV announcements, countertop tent cards, and sample newsletter articles. The tool kit is designed to aid cities and retail agencies in sharing information to the water customers (Reference: CBMWD UWMP 2010).

CBMWD also promotes MWD's "Mandatory Water Use Efficiency Ordinance."

DMM L: Water Conservation Coordinator

CBMWD's staff includes a full-time conservation coordinator, who leads the promotion of water conservation through about CBMWD's service area. The coordinator also works closely with cities and other water retail agencies in implementing water conservation programs and encouraging water customers to be more aware of and minimize their water use (Reference: CBMWD UWMP 2010).