

## CHAPTER 5

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### WATER DEMAND MANAGEMENT MEASURES

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#### 5.1 WATER DEMAND MANAGEMENT MEASURES AND BEST MANAGEMENT PRACTICES

Establishing goals and choosing water conservation measures is a continuing planning process. Goals are developed, adopted and then evaluated periodically. Implementation of specific conservation measures are phased in and then evaluated for their effectiveness, achievement of desired results, and customer satisfaction. Water conservation can achieve a number of goals such as:

- Meeting legal mandates
- Reducing average annual potable water demands
- Reducing sewer flows
- Reducing demands during peak seasons
- Improving the reliability of the system
- Meeting drought restrictions

The Act identifies 14 Water Demand Management Measures (DMMs) that correspond with the California Urban Water Conservation Council's 14 Urban Best Management Practices (BMPs).

The California Urban Water Conservation Council was created to increase efficient water use statewide through partnerships among urban water agencies, public interest organizations, and private entities. The Council's goal is to reduce California's long-term urban water demands by integrating urban water conservation BMPs into the planning and management of California's water resources.

In 1991, nearly 100 urban water agencies and environmental groups signed an historic **Memorandum of Understanding** that pledges development and implementation of the fourteen BMPs. The BMPs are currently implemented by the signatories to the MOU on a voluntary basis. However, the CALFED Bay-Delta Program has included mandatory implementation of the BMPs and certification of water use efficiency programs in its final Environmental Impact Statement/Report and Record of Decision. This certification requirement would take effect by December 2002 and would apply to any agency subject to the Urban Water Management Planning Act that is located in the CALFED solution area.

In July 2004, The City of Beverly Hills became a member to the California Urban Water Conservation Council and, therefore, a signatory to the MOU with other signatory groups

(water suppliers, public advocacy organizations and other interested groups) regarding urban water conservation in California. While not required to implement the BMP's, local agencies have voluntarily complied with many of them, as discussed in this chapter.

## **5.2 IMPLEMENTATION LEVELS OF DMMs/BMPs**

### **DMM 1: WATER SURVEY PROGRAMS FOR SINGLE-FAMILY RESIDENTIAL AND MULTI-FAMILY RESIDENTIAL CUSTOMERS**

Retail agencies are required to develop a strategy for targeting and marketing water use surveys to single-family and multi-family residential customers.

The City conducted a water survey program for single-family and multi-family residential customers in 1992. The surveys identified and quantified leaks.

MWD provided approximately 6,000 water conservation kits to the City for distribution to City customers. The kits contained shower flow restrictors, and dye tablets to check for toilet leaks.

According to MWD, low-flow showerheads use 2.5 gallons of water each minute as opposed to an older model showerhead that uses 4 gallons per minute. The savings using the 6,000 shower flow restrictors will amount to approximately 9,000 gallons per minute during water use.

### **DMM 2: RESIDENTIAL PLUMBING RETROFIT**

The City, in order to effectively address potential problems concerning existing water supplies and ever increasing wastewater flow in the sewage system, has adopted a citywide conservation program, which became effective May of 1991. The ordinance states the following:

“No building permit shall be issued for any new building unless all showerheads, water closets and urinals meet the following requirements:

1. Showerheads: All showers shall be equipped with low flow showerheads.
2. Water Closets: All water closets shall be ultra low flush, as defined in this article.
3. Urinals: All urinals shall be ultra low flow as defined in this article.”

**Table 5-1** shows quantities of low flow devices that were installed by customers between 1992 and 2005 in accordance with the City Ordinance.

Approximately 50,373 low flow devices were installed by the City’s residents between 1992 and 2005. An average of 58 acre-feet of water per year was saved between 2002 and 2005.

**Table 5-1  
Savings Due to Installation of Low Flow Devices**

Year	Quantity					Total
	1992-2001	2002	2003	2004	2005	
Single Family	} 37,755	2,352	2,674	2,687	2,571	48,039
Multi-Family		714	462	512	646	2,334
<b>Total</b>	<b>37,755</b>	<b>3,066</b>	<b>3,136</b>	<b>3,199</b>	<b>3,217</b>	<b>50,373</b>
<b>Water Savings (Acre-foot)</b>						
Toilets	247	9	9	9	9	283
Faucets	317	12	11	12	12	364
Showers	348	38	37	38	39	500
<b>Total</b>	<b>912</b>	<b>59</b>	<b>57</b>	<b>59</b>	<b>60</b>	<b>1,147</b>

- 3.5 Gallons for every toilet flush
- 1.5 Gallons per faucet for each minute it runs
- 1,800 Gallons per year per person for showers
- 1 Acre-foot = 325,851 Gallons

**Calculations for savings per device:**

- Assume an average of 2 people in a single family home.      Assume 2 flushes per person/per day.
- Assume an average of 3 people in a multi-family home.      Assume 3 minutes of faucet running per person/day.
- Assume 1,800 gallons per person per year for showers.
- Assume the low flow devices are divided equally between shower heads, toilets, and faucets.

**Table 5-2  
Projected Installation of Low Flow Devices**

Year	Quantity					Total
	2006	2007	2008	2009	2010	
Single Family	2,571	2,571	2,571	2,571	2,571	12,855
Multi-Family	584	584	584	584	584	2,920
<b>Total</b>	<b>3,155</b>	<b>3,155</b>	<b>3,155</b>	<b>3,155</b>	<b>3,155</b>	<b>15,775</b>
<b>Projected Water Savings (Acre-foot)</b>						
Toilets	9	9	9	9	9	45
Faucets	12	12	12	12	12	60
Showers	38	38	38	38	38	190
<b>Total</b>	<b>59</b>	<b>59</b>	<b>59</b>	<b>59</b>	<b>59</b>	<b>295</b>

- Gallons for every toilet flush
- 1.5 Gallons per faucet for each minute it runs
- 1,800 Gallons per year per person for showers
- 1 Acre-foot = 325,851 Gallons

**Calculations for savings per device:**

- Assume an average of 2 people in a single family home.      Assume 2 flushes per person/per day.
- Assume an average of 3 people in a multi-family home.      Assume 3 minutes of faucet running per person/day.
- Assume 1,800 gallons per person per year for showers.
- Assume the low flow devices are divided equally between shower heads, toilets, and faucets.

It is projected that approximately 15,755 low flow devices will be installed in properties within the City between 2006 and 2010 (See **Table 5-2**). The low flow devices will include showerheads that save approximately 1,800 gallons of water per year per person, faucets that save approximately 1.5 gallons for each minute they run, and toilets that save approximately 3.5 gallons on every flush. The total water savings will approximately be an additional 59 acre-feet per year. Implementation of this measure will accumulatively amount to approximately 885 acre-feet in water savings between 2006 and 2010.

**DMM 3: SYSTEM WATER AUDITS, LEAK DETECTION, AND REPAIR**

Section 10631 (f) of the act requires that conservation measures currently adopted and being practiced be identified. The City has developed and implemented a broad range of both water conservation and water management programs in its service area. The City is

presently engaged in water conservation through a variety of methods and programs, including identification and corrective efforts.

Leak detection is done on an informal basis based on visual reports from meter readers, field crew personnel, and the public. The City will immediately repair any leak in the distribution system after the leak is made known to or is discovered by the City water staff.

The City implements the following methods of leak detection for system and service leaks:

**System Leak Detection:** The water Division responds in a timely manner to all leaks reported by the public or other departments of the City. Any suspected leaks are investigated by the Water Service Representative to determine if they are customer or City leaks. Following this investigative procedure, the customer is notified if their lines are leaking or a City work order is issued to insure timely repairs. In addition, the Meter Reader(s) are required to report all visible leaks at meters or leaks that are just beginning to surface in the streets and alleys on their route.

**Service Leak Detection:** The utility billing clerk will track service leaks utilizing a High/Low Exception Report generated by the billing computer system. Excessive or irregular high water consumption by a particular service address is flagged and recorded as part of the High/Low Exception Report. The utility billing clerk, with the assistance of public works field staff, investigates these addresses to determine the possibility of service leaks. The meter reader also prepares work orders for leaks detected in the field.

Valve maintenance exercising is another important aspect of the City's preventative maintenance program. The City has invested in purchasing a new truck to accommodate two (2) crew members to this valve program. It is the City's goal to exercise 3,600 valves annually at the rate of approximately 300 valves per month.

In addition, the billing computer automatically flags high meter reads and all such reads are rechecked for accuracy to determine if leaks exist on customer property. If such leaks are found and determined to be on the customer's service line, the customer is advised to correct the problem immediately. Likewise, if there is a low meter reading, the account is again flagged and a recheck is scheduled to determine if the meter is malfunctioning or the property is vacated.

A test and repair program for pressure-reducing valves was established several years ago and is maintained on a semi-annual basis. Each valve is regularly exercised, tested and pressures are reset according to the reservoir elevation. Pressure recorders, combined with high low-pressure alarm, monitor all pressure zones throughout the distribution

system to reduce or minimize the incidence of water main failures due to fluctuations of pressures.

Operational checks and repairs are presently being made to the telemetry system, which monitors the reservoir water levels to prevent accidental overflows. Those reservoirs, whose telemetry systems are found to be malfunctioning, are physically checked four times daily until such time as the necessary repairs to the telemetry systems can be completed.

In December of 1998, the City upgraded the telemetry system to a fully computerized SCADA System (Supervised Control and Data Acquisition System). Besides data collection, the SCADA systems include security alarms for all reservoirs and other remote sites. A stand-alone video surveillance system has also been incorporated into the total security system. Currently, the City is in the process of upgrading the SCADA system.

The City's entire water system is metered. In 1995, the City was in the fourth year of a fourteen year meter replacement program that was designed to replace all meters 3" and smaller to maintain meter accuracy. (4", 5" and 6" meters have been replaced). However, the City decided to expedite the installation and replaced all meters 3" and smaller at one time.

In an effort to upgrade its distribution system and control leaks, the City of Beverly Hills has had an aggressive water meter and water main replacement program in place since 2000 in addition to other water related projects.

**Table 5-3** presents a list of water projects and related expenditures. The City's capital improvement program, between 2000 and 2004, included an expenditure of \$6,408,906 for Water Main-Hydrant replacement, \$649,064 in miscellaneous annual maintenance, and \$256,556 for water meter replacement.

The City will continue to implement the Capital Improvement Program for the next 5 years.

**Table 5-3  
Water Related Projects 2003-2004**

Year	2000	2001	2002	2003	2004
Project Type	Cost \$				
Standby Engine	\$ 5,237				
Water Main-Hydrant Repl.	\$2,826,619	\$ 2,120,454	\$ 969,431	\$ 344,896	\$ 147,506
Telemetry	\$ 21,957		\$ 4,900	\$ 121,549	\$ 8,181
Coldwater Canyon Reservoir	\$ 42,929	\$ 34,854	\$ 82,196	\$ 673,189	\$ 2,824,814
Production Well	\$ 900,107	\$ 459,547	\$ 1,737,905	\$ 298,049	\$ 3,972
Annual Maintenance	\$ 99,387	\$ 70,548	\$ 175,000	\$ 175,000	\$ 129,129
Water Meter Replacement	\$ 46,696	\$ 50,027	\$ 96,095	\$ 17,260	\$ 46,479
Water Treatment Plant	\$ 215,105	\$ 459,383	\$ 524,455	\$2,252,150	\$ 151,761
Replace Reservoir FE	\$ 154,675	\$ 183,842		\$ 342,401	\$ 96,325
Water System Master		\$ 494,517	\$ 61,472	\$ 89,437	
	<b>\$4,812,712</b>	<b>\$ 3,873,172</b>	<b>\$ 3,651,454</b>	<b>\$4,313,931</b>	<b>\$ 3,408,167</b>

Table 5-4 presents the water consumption data between FY2000-01 and FY2004-05.

**Table 5-4  
Water Consumption FY2000-01 to FY2004-05**

Year	Water Supply			Water Sales			Unaccounted
	Local Wells	MWD	Total	Beverly Hills	West Hollywood	Total	
FY 2000-01	0	13,597	13,597	NA	NA	NA	NA
FY 2001-02	0	13,598	13,598	11,016	1,537	12,553	1,044.50
FY 2002-03	405	13,178	13,583	10,865	1,535	12,400	1,183
FY 2003-04	1,854	12,188	14,042	11,234	1,586	12,820	1,222
FY 2004-05	1,362	11,918	13,280	10,358	1,649	12,007	1,273

**DMM 4: METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS**

Water agencies are required to place water meters on all new service connections per California state law. The DMM also requires retrofitting of existing unmetered connections, and charging a commodity rate for water. The City has incorporated this DMM into their operations and maintenance procedures.

Meters have been installed on all the City's water services and landscape connections. Records of water use by user type are kept and summarized annually.

The City has replaced a large portion of its meters throughout the City and expenditure has reached an amount of \$166,557 between 2000 and 2004 for the water meter replacement program.

**DMM 5: LARGE LANDSCAPE CONSERVATION PROGRAMS AND INCENTIVES**

The DMM requires agencies to contact non-residential customers with large landscape areas and offer water use surveys. For those customers with dedicated irrigation meters, agencies must assign ET-based water use budgets.

In 1993, the City passed a landscape efficiency ordinance that modified the irrigation water use. In addition, literature provided by MWD is available, on request, for California Friendly (drought resistant plantings). The Public Works Facility is presently using drought resistant plantings.

In 2003, Protector Del Agua courses were provided to residents and gardeners. The City's park maintenance staff and six private gardening maintenance companies, serving the City, attended this course. The class is a six week course that includes a review of plant materials, appropriate watering, and low flow irrigation devices to achieve water efficiency and apply water conservation measures.

In 2004, the City distributed 4,000 18-months calendars that had environmental themes including water use efficiency. These calendars were distributed to Beverly Hills Unified School District students and to the public at community events.

The City has adopted the Efficient Landscaping Ordinance pursuant to the Water Conservation Act. The City modified the Landscape ordinance model prepared by the California Department of Water Resources in order to address the unique characteristics of the City. The ordinance specifies that the landscape, irrigation and drainage plans be certified by a Landscape Architect or a State Certified Landscape irrigation Auditor and must address the following criteria:

1. Plant materials are to be grouped according to water needs.
2. Erosion and runoff control are addressed.
3. Irrigation system design is based on water efficiency

If the above criteria are met, then the Director of Building and Safety shall issue a Water Efficient Landscape permit to the applicant. This ordinance is not currently implemented. The City is planning on implementing this ordinance in the next five years. (See **Appendix H**).

In addition, the Parks Division is installing computerized radio-controlled irrigation systems in conjunction with drought-resistant planting to reduce water consumption.

The City is beginning to develop more sustainable practices throughout its operation. During the participation of the update of the Urban Water Management Plan, the City's Public Works Commission requested that the City develop a water conservation strategic plan that includes how the City educates consumers and requests consumer accountability. In pursuit of achieving an inter-departmental approach to conserving water, an internal Environmental Sustainability Task Force is meeting to plan a workshop to educate community leaders and staff on different topics that can assist the City when making decisions in the future regarding natural resource consumption. The first topic to be addressed will be landscaping – irrigation, plant materials, hardscape, urban forest, etc.

#### **DMM 6: HIGH-EFFICIENCY WASHING MACHINE REBATE PROGRAMS**

This DMM encourages agencies to offer customer rebates for the purchase of high-efficiency clothes washers, if local energy providers or wastewater utilities also offer rebates. Efficient dishwashers reduce the amount of water required per load. Efficient washing machine use 9.5 to 12.0 gallons per load. A non-conserving washing machine uses about 14 gallons per load. The Metropolitan Water District offers a rebate program for the City to help purchase high-efficiency washing machines.

The City has distributed 30 washer rebates between November 2004 and August 2005 for an approximate amount of \$3,400.

#### **DMM 7: PUBLIC INFORMATION PROGRAMS**

The City participates in public information programs sponsored by MWD and the California Department of Water Resources. The City is also independently active in creating public awareness programs to drought conditions and the need to continue to conserve water.

The City prepares a Consumer Confidence Report (CCR) annually. (See **Appendix E**). The City uses this report as an opportunity to include information regarding ways to conserve water, and information on residential water use efficient appliance rebate program.

In an effort to encourage water conservation and raise public awareness, the City provides the following:

1. Water bills are designed to indicate the prior year historical month, current water usage and daily average use.
2. Distribution of water conservation guides, kits, and devices to gardeners, restaurants, and City offices.
3. Installation of water “Customer service line” not only to gather input concerning conservation but to report leaks and other water problems.
4. Distribution of outreach brochures to all customers in the service area discouraging irrigation runoff as required under the National Pollution Discharge Elimination System.
5. Utilization of the Environmental Inspector to monitor and advise citizens about conservation and irrigation runoff control.
6. Distribution of conservation kits, and conservation literature.

In addition, the Water Utility Staff participates in three community events and one program each year:

1. **Earth Day:** During this event, the City encourages visitors to become Partners in Environmental Protection. Displays are provided to educate the public about water conservation, recycling, and waste management. Vendors provide environmentally friendly products at this event to the public.
2. **Design & Garden Show:** This show offers gardens designed by landscape architects to be water and fire wise.
3. **Safety Expo:** During this event, the City educates the public about emergency preparedness and safety. The City provides visual information through displays on various safety issues, including earthquake, flooding, and public safety. Vendors provide safety products to the public at this event.

The City has a Used Oil and Filter Program designed to encourage the residents to recycle their used motor oil and oil filters. This will minimize illegal dumping and reduce the infiltration of hazardous material to groundwater.

**DMM 8: SCHOOL EDUCATION PROGRAMS**

MWD and the City have provided the Public Schools with the MWD Water Conservation and Quality Curriculum. The goals of the school and community education programs are to familiarize children and adult consumers with the critical importance of water within our everyday lives, while providing them with information on how to efficiently manage individual water consumption.

In 1994, the Metropolitan Water District offered a supplemental education program for students in K through sixth grade called the “Water Hunt Program.” Its purpose was to educate young children about conservation, detecting leaky toilets and the use of low flow showerheads. The City co-sponsored this program.

**DMM 9: CONSERVATION PROGRAMS FOR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL (CII) ACCOUNTS**

This DMM calls for identification of all commercial, industrial, and institutional accounts and ranking them according to water use. All CII accounts are to be contacted on a regular basis and offered either a) a water-use survey and customer incentives program, or b) agencies may attempt to achieve a water use reduction target in the entire CII customer sector.

The City will determine the cost effectiveness of conducting audits and offering incentives, and conducting five-year follow-up audits.

The City’s Building and Safety Department implements state flush volume standards for water closets and urinals installed in new commercial, industrial, and institutional buildings. Building permits require the use of the following low-consumption fixtures:

Toilets	1.6 gpf maximum
Urinals	1.6 gpf maximum
Showerheads	2.7 gpm maximum

The City of Beverly Hills, jointly with MWD, adopted a commercial rebate program since early 1990. Rebate flyers and applications are distributed to residents to encourage the use of high efficiency clothes washers, low flush toilets, and other water efficient devices. The rebate flyers include:

1. Replacing high flush-volume, pre-1992 toilets with new, water-efficient 1.6 gallon-per-flush toilets. 46 rebates were distributed with a value of \$60 each.
2. Use of high-efficiency clothes washers that have a water factor of 6.0 or below. Rebate amount \$110.
3. Use of dual-flush toilets that can save an average of 2,250 gallons a year. Rebate amount \$80.

Over the past five years, the City's commercial and institutions have participated in MWD's Save a Buck rebate program as follows:

- Years 2000-2004: 11 conductivity controllers, 14 high efficiency washers, 88 water brooms, and 161 Rinse and Save.
- Year 2005: 330 low flush toilets (all one large hotel), five high efficiency washers, and 5 Rinse and Save.

The lifetime savings for all devices are approximately 333 AF. The savings do not include Rinse and Save tools.

#### **DMM 10: WHOLESALE AGENCY PROGRAMS**

MWD provides extensive assistance to retail water agencies to implement water use efficiency programs. This includes: 1) implementation of regional programs on behalf of member retail water agencies, and 2) technical assistance regarding local program design and implementation, benefit/cost analysis, conservation base rate structures, and program marketing.

The City makes available, upon request, brochures and literature provided by MWD on drip irrigation, lawn watering demand and watering techniques. The City presently has Environmental Inspectors who advise service area residences regarding irrigation runoff and over watering. The Efficient Landscaping Ordinance requires plant material to be grouped according to water needs, erosion and runoff control and irrigation efficiency. In addition, **Appendix I** includes the 2005 MWD's 2005 Draft Regional Urban Water Management Plan, Section III-Implementing the Plan. This appendix shows a detailed description of the Conservation Programs implemented by MWD.

#### **DMM 11: CONSERVATION PRICING**

The City contracted with Raftelis Financial Consulting to conduct a water rate study that was completed in April of 2005 and implemented in July 9, 2005. The water rate study maintained meter charges as a bi-monthly flat charge and reallocated the tiered rate structure by customer type and added a fourth tier that served as a penalty rate for the top 20% of the City's water consumption. **Table 5-5** illustrates the rate structure that became effective July 9, 2005. As this Urban Water Management Plan is being adopted, the City is proposing a rate increase of 8% that would become effective January 2006, and 12% that would become effective July 2006. **Table 5-6** illustrates the proposed rate increase.

**Table 5-5**

<b>Existing Water Rate Structures</b>			
	SFR & Duplexes	MFR (per units in facility)	Inside City
Tier 1	up to 10 ccf	4 ccf	\$ 1.96
Tier 2	up to 55 ccf	9 ccf	\$ 2.13
Tier 3	up to 120 ccf	16 ccf	\$ 2.83
Tier 4	over 120 ccf	over 16 ccf	\$ 4.65
Non Residential Rate*			\$ 2.62
SFR: Single Family Residential    ccf: 100 cubic feet    MFR: Multi Family Residential			

**Table 5-6**

<b>Proposed Water Rate Structures</b>						
	SFR & Duplexes	MFR (per units in facility)	Inside City, Effective		Outside City, Effective	
			January 2006	July 2006	January 2006	July 2006
Tier 1	up to 10 ccf	4 ccf	\$ 1.99	\$ 2.15	\$ 2.49	\$ 2.69
Tier 2	up to 55 ccf	9 ccf	\$ 2.23	\$ 2.52	\$ 2.79	\$ 3.15
Tier 3	up to 120 ccf	16 ccf	\$ 3.05	\$ 3.45	\$ 3.81	\$ 4.31
Tier 4	over 120 ccf	over 16 ccf	\$ 5.15	\$ 5.89	\$ 6.44	\$ 7.36
Non Residential Rate*			\$ 2.85	\$ 3.22	\$ 3.56	\$ 4.03
SFR: Single Family Residential    ccf: 100 cubic feet    MFR: Multi Family Residential						

**DMM 12: WATER CONSERVATION COORDINATOR**

The City does not have a water conservation coordinator. However, through its staff, operators, and inspectors, the City maintains its water conservation program and implements the Demand Management Measures.

### **DMM 13: WATER WASTE PROHIBITION**

In 1992, the City adopted Ordinance No.92-02139 (**See Appendix G**) that prohibited water waste. The Ordinance calls for water conservation stages during drought times, which included reduction in potable water use for restaurants, public restrooms, landscape irrigation, refilling of swimming pools, operation of water fountains, exterior wash of buildings and vehicles.

The ordinance also addresses the excessive use of water penalties which may include fines, and termination of water supply.

### **DMM 14: RESIDENTIAL ULTRA-LOW-FLOW TOILET REPLACEMENT PROGRAM**

The City with the Metropolitan Water District assistance assisted in the installation of residential ultra-low-flow toilets. MWD has provided approximately 6000 water conservation kits to the City for distribution to City customers. The kits contain dye tablets to check for toilet leaks. This work has been completed prior to 2000.

The City has distributed 39 low flow toilet rebates for an amount of \$2,340 between November 2004 and August 2005.

## **5.3 SUMMARY**

In summary, the current types of conservation and monitoring measures being practiced by the City include the following:

1. One hundred percent of all residential, commercial, industrial and municipal users are metered.
2. All source supplies of water into the City are metered.
3. Identification of use records by user type, i.e., residential, industrial, commercial and governmental.
4. Implementation of leak detection program.
5. Implementation of a valve maintenance program.

6. Continual monitoring of the operation system.
7. Implementation of a meter change out program.
8. Use of a tiered rate structure to encourage conservation.
9. Verification of all high meter reads.
10. Implementation of a maintenance program for all pressure regulation valves.
11. Implementation of computerized, radio controlled irrigation program for City Parks.
12. Adoption of Mandatory Water Conservation Program.
13. Implementation of Public Information Program.

**Table 5-7** provides an overview of the City’s progress in the implementation of the DMM’s.

**Table 5-7  
Water Demand Management Measures**

DMM	Description	Implementation	Implementation Schedule
1	Residential Water Survey Programs	Yes	Completed
2	Residential Plumbing Retrofit	Yes	Completed
3	System Water Audits, Leak Detection, and Repair	Yes	On-going
4	Metering with Commodity Rates	Yes	On-going
5	Landscape Conservation Programs and Incentives	Yes	On-going
6	High-Efficiency Washing Machine Rebate Programs	Yes	On-going
7	Public Information Programs	Yes	On-going
8	School Education Programs	Yes	On-going
9	Commercial, Industrial, and Institutional Conservation Programs	Yes	On-going
10	Wholesale Agency Programs	Yes	On-going
11	Conservation Pricing	Yes	On-going
12	Water Conservation Coordinator	Yes*	On-going
13	Water Waste Prohibition	Yes	On-going
14	Residential ULFT Replacement Programs	Yes	On-going

\*The City does not have a specific person for water conservation coordination. However, through its staff, operators, and inspectors, the City maintains its water conservation program and implements the Demand Management Measures.