

## CHAPTER 4 WATER CONSERVATION PROGRAM

### 4.1 OVERVIEW

The CDA is a water wholesaler which provides potable water to its member agencies. Conservation is an important component of water resources management for the CDA retail (member) agencies. Although the CDA as an agency does not have a water conservation program, due to its wholesaler status, each of its retail member agencies does. In addition, both IEUA and WMWD have wholesale water conservation programs that supplement retail programs. Therefore, the CDA uses the conservation programs of each of the member agencies. Nonetheless, over the last five years, a variety of specific programs and educational approaches have been undertaken to encourage greater participation and awareness of the need for conservation and for retail water agencies to meet their water management goals. The various programs are summarized in this chapter, which include Ultra-Low flush toilet exchange, high efficiency appliances rebates, commercial rebates, landscape audits, water awareness & education, CII-rebates, and weather based irrigation controller programs, among others. Detailed information regarding these programs can be requested from each of the member agencies, and they can also be found on the agency's corresponding websites.

The Inland Empire region remains one of the top growth areas in the state as well as in the country. This growth in population and industry puts pressure on the local retail water agencies in the CDA service area to meet the anticipated water demand over the next twenty-five years. Implementing conservation programs now helps reduce expected future increases in demand. Additionally, when viewed as a water supply option, conservation programs are cost-effective because it is one of the least expensive sources of new water.

The Inland Empire Utilities Agency (IEUA) and Western Municipal Water District (WMWD) are signatories to the Memorandum of Understanding (MOU) regarding Urban Water Conservation in California and are members of the California Urban Water Conservation Council (CUWCC). IEUA and WMWD have made the 14 Best Management Practices (BMPs) the cornerstone of their respective conservation programs and a key element in the overall water resource management strategy for the region.

Members of the CUWCC are required to provide BMP "Activity Reports" every two years. These reports provide specific details of IEUA and WMWD's efforts to implement each particular BMP. The BMPs are functionally equivalent to the Demand Management Measures (DMM) written in Water Code Section 10631 of the Urban Water Management Planning Act (Act). The Act requires an agency to describe each of the DMMs that have been implemented unless the agency is a signatory to the MOU. The Act allows an agency to provide the BMP Activity Report in-lieu of describing each of the DMMs. Therefore, IEUA and WMWD have both included their most recent BMP Activity Reports in the appendix of their respective 2010 Urban Water Management Plans. For expanded conservation information for each CDA retail agency, please refer to each agency's 2010 UWMP.

## 4.2 CONSERVATION OPPORTUNITIES AND VALUE OF CONSERVATION

Over the last five years, the CDA agencies have developed a strong partnership and a coordinated approach to conservation management measures that reduce water use. Conservation has multiple benefits, one of which is the value of conservation to the region's ratepayers. Conservation saves money to the ratepayer.

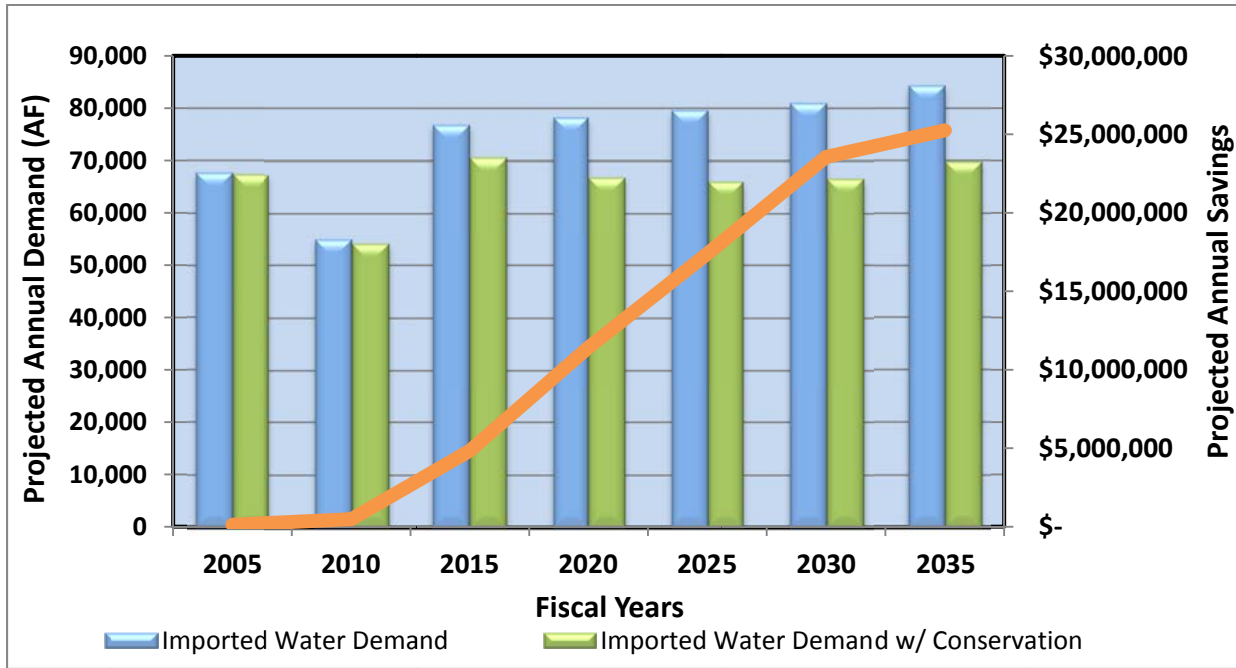
The CDA agencies, along with IEUA and WMWD, developed a strong working accord and accomplished the following as a result of the planning process:

- Agreement on a regional strategy to focus on landscape water use efficiency as well as a portfolio of regional programs;
- Completion of a documented plan that provides the implementation steps necessary to launch the programs as well as clearly defined roles/responsibilities between IEUA, WMWD and the retail agencies; and,
- Commitment from IEUA and WMWD to administer the regional programs with retail agencies responsible for implementing and possibly augmenting programs within their individual service areas.

Many agencies may need to develop an individual plan for their own agency in order to understand their specific compliance requirements and to address the local needs of their respective service areas.

Figure 4-1 is an example of IEUA's projected cumulative amount of "new" water that will be conserved over the next twenty-five years (not including saved prior to 2005) and how that affects the retail agencies financially. The avoided imported water purchases, at the Tier II rate, are projected to be more than 60,000 AF which is equivalent to more than \$83 million saved.

Figure 4-1 IEUA Avoided Tier II Costs Due to Conservation (Dry Year)



Source: Conservation projections from Table 2-4 & MWD’s Long Range Finance Plan and MWD staff projections

IEUA and WMWD provide water use demands without conservation estimates, by single-family, multi-family, commercial/industrial, and non-metered uses in their respective 2010 UWMP’s.

Overall, there are multiple benefits of conservation:

- Ratepayers save money on their water utility bills;
- Reduced urban runoff from improved irrigation efficiency;
- Avoidance of purchasing additional expensive imported water; and
- Environmental benefits

Another regional benefit for maintaining a strong support for conservation is the reduced dependence on imported water from the California Bay-Delta (Bay-Delta). The Bay-Delta is the single most important link in California’s water supply system. Two major water supply projects, the State Water Project (SWP) and the Central Valley Project (CVP) convey Bay-Delta water to more than 22 million Californians and 7 million acres of farmland. The IEUA and WMWD service area receives a significant portion of its supply (about 30 percent for IEUA and 60 percent for WMWD) from the SWP via Metropolitan Water District. WMWD also receives approximately 25 percent of its supply from the Colorado River Aqueduct. Local water supply

projects such as conservation help limit the amount of water taken out of the Bay-Delta for water supply, thus enhancing Bay-Delta water supply, water quality and environmental protection. Conservation also helps increase irrigation efficiency which reduces runoff and the associated damage to the asphalt of roads and parking lots that can be very expensive to repair.

Finally, conservation also benefits the region through energy savings. Whenever water moves from one point to another, energy is involved. Electricity to pump water is the single greatest use of power in the state amounting to about 19 percent of all power used in California. When water deliveries are reduced, significant energy is saved.

### **4.3 LEGISLATIVE AND REGULATORY REQUIREMENTS**

The strategies and programs included in this Chapter are designed to meet the compliance requirements of the following:

- California Urban Water Conservation Council's Best Management Practices
- Assembly Bill 1420 - Implementation of Demand Management Measures
- Senate Bill X 7-7 - Governor's call for 20% per capita water use reduction by 2020
- Future conservation legislation and regulation

#### **California Urban Water Conservation Council**

The California Urban Water Conservation Council (CUWCC) was created to increase efficient water use statewide through partnerships among urban water agencies, public interest organizations, and private entities. The CUWCC's goal is to integrate voluntary urban water conservation Best Management Practices (BMPs) into the planning and management of California's water resources.

A Best Management Practice (BMP) means a policy, program, practice, rule, regulation or ordinance, or the use of devices, equipment or facilities, which meets either of the following criteria:

#### **Implementation**

"Implementation" means achieving and maintaining the staffing, funding and, in general, the priority levels necessary to achieve the level of activity called for in the descriptions of the various BMPs and to satisfy the commitment by the signatories to use good faith efforts to optimize savings from implementing BMPs as described in the MOU.

The BMPs listed below are incorporated into the MOU:

<b>RETAILER BMPS</b>	
<b>Foundational</b>	
BMP 1	<b>Utility Operations</b>
BMP 1.1	Conservation Coordinator
BMP 1.2	Water Waste Prevention
BMP 1.4	System Water Audits, Leak Detection and Repair
BMP 1.5	Metering with Commodity Rates For All New Connections and Retrofit of Existing Connections
BMP 1.6	Retail Conservation Pricing
BMP 2	<b>Education Programs</b>
BMP 2.1	Public Information Programs
BMP 2.2	School Education

<b>WHOLESALE BMPS</b>	
<b>Foundational</b>	
BMP 1	<b>Utility Operations</b>
BMP 1.1	Conservation Coordinator
BMP 1.3	Wholesale Agency Assistance Programs
BMP 1.4	System Water Audits, Leak Detection and Repair
BMP 2	<b>Education Programs</b>
BMP 2.1	Public Information Programs
BMP 2.2	School Education

<b>Programmatic</b>	
<b>BMP 3</b>	<b>Residential Programs</b>
BMP 3.1	Residential Landscape Water Survey Program
BMP 3.2	Residential Leak Assistance Program
BMP 3.3	High Efficiency Clothes Washers
BMP 3.4	WaterSense Specification Toilets
<b>BMP 4</b>	<b>Commercial, Institutional, Industrial</b>
<b>BMP 5</b>	<b>Landscape</b>

**Assembly Bill 1420 (Laird/Feuer)**

Effective January 1, 2009, the terms of, and eligibility for, a water management grant or loan made to an urban water supplier and awarded or administered by the department, state board,

or California Bay-Delta Authority or its successor agency shall be conditioned on the implementation of the water demand management measures (DMMs).

The Department of Water Resources (DWR) must consider whether an agency is implementing or has scheduled to implement the DMM activities that an agency has identified in its Urban Water Management Plan in evaluating applications for grants and loans financed by specified bond funds.

DMMs are equivalent to water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable, beneficial, and efficient use and reuse of available supplies (CUWCC BMP activities).

### **The Water Conservation Act of 2009 (SBx7-7)**

Enacted in November 2009, SBx7-7 establishes a statewide urban per capita water use reduction of 20% by 2020. This initiative applies to all urban retail water suppliers serving a minimum of 3,000 customers or supplying 3,000 acre-feet or more. Urban retail water suppliers must establish a baseline daily per capita water use (GPCD) and report it in their 2010 urban water management plans by July 1, 2011.

Beginning in 2010, an urban retail water supplier must establish a baseline and continue to implement required demand management measures under AB 1420. On July 1, 2016, SBx7-7 will repeal AB 1420 and condition eligibility of all state water management grants and loans on meeting or exceeding the 20% water use reduction target by 2020. An interim target of 10% must be met by December 31, 2015.

### **Assembly Bill 1881 (2006)**

AB 1881 (Laird 2006), the Water Conservation in Landscaping bill, requires statewide agencies to update and adopt local landscaping ordinances by January 1, 2010. The adopted landscaping ordinances must be “at least as effective as” the State Model Landscape Ordinance (SMO) developed by the Department of Water Resources.

Key elements in the updated ordinances include: a water budget approach and applies to large, new and redeveloped landscapes which require a permit, reducing the evapotranspiration adjustment factor used in the calculation of a the water budget to at least 0.7, increasing the public’s awareness of the importance of water use efficiency in landscaping, requiring Smart Controllers, and adopting and enforcing statewide prohibitions on overspray and runoff.

## **Summary**

IEUA, as an urban wholesale water supplier, is not required to develop a baseline or set reduction targets to achieve a 20% reduction in gallons per capita day by 2020 as written under SB X 7-7. However, as the statute does require urban retail water suppliers to comply, IEUA takes the position of preparing a regional approach establishing a baseline and setting targets based on regional demands and in support of its eight retail member agencies that must comply.

WMWD, as an urban wholesale and retail water supplier, is required to meet the necessary requirements of SBx 707 for the retail service area. WMWD and each of the retail agencies within WMWD's service area will detail plans to establish a baseline and set targets for each of their service areas within their individual UWMP.

IEUA and all of its member agencies are signatories to the Memorandum of Understanding regarding Urban Water Conservation in California and are members of the California Urban Water Conservation Council. IEUA, as one of the original signatories to the MOU in 1991, and WMWD's, which signed in 1994, highest conservation priority has been to ensure that good-faith efforts are made on behalf of the member agencies in implementing Best Management Practices, locally.

Since signing the MOU, IEUA and WMWD have been committed to developing and implementing many core regional conservation programs that have been designed on the foundation of BMPs, and these programs continue to serve as a key component in the overall regional water resource management portfolio for the region.

## **4.4 CONSERVATION PROGRAMS TO DATE**

Over the years, IEUA, WMWD, and the CDA member agencies have dramatically increased local conservation programs from a minimal ultra-low flush (ULF) toilet distribution program to a series of diverse residential, commercial, industrial, institutional (CII), and school education incentive programs. The cornerstone of IEUA and WMWD's efforts over the last five years has been the development of programs that meet the requirements of the Memorandum of Understanding (MOU) regarding Urban Water Conservation Best Management Practices (BMP), as listed below. More details can be found in the IEUA and WMWD 2010 UWMP's.

### **Core Strategies for Our Region**

#### ***Regional Goals***

- Achieve and maintain compliance with AB 1420 (BMP/DMM) to ensure eligibility for member agencies for grants and loans

- Achieve and maintain compliance with other water use efficiency laws and regulations
- Achieve a reduction in per-capita water use by 20% by 2020, as called for by the Governor
- Guide regional water use efficiency programs
- Relieve drought and environmental impacts on regional water supply
- Increase water use efficiency, eliminate waste, and improve water supply reliability
- Contribute to other regional water resource management goals through the identification and integration of common interests such as groundwater recharge, recycled water, and composting

### ***Regional Principles***

There were five key elements to the 2005-2010 water conservation strategy within the Chino Basin:

- **Promote Water Resource Management.** Manage cost-effective water use efficiency programs at a regional level using sound business decision-making practices to develop and implement strategies to meet water use efficiency targets and stretch limited water resources.
- **Develop and Implement Regional Programs.** Take advantage of economies of scale and stretch the limited regional water use efficiency budget by implementing programs on a regional basis. It is recognized that some programs can only be implemented at the individual agency level, such as budget-based tiered rate structures and water use efficiency ordinances.
- **Build Member Agency Cooperation.** Foster the cooperation, collaboration, and active participation of all Member Agencies for the successful development and implementation of water use efficiency programs. It is recognized that successful development and implementation of regional water use efficiency programs requires member agency cooperation in obtaining accurate water demand data, by customer class, in a timely manner, and promotion of cost-effective programs to customers.
- **Develop Incentive-Based Programs.** Develop cost-effective incentive programs that encourage participation, provide public benefit, and achieve quantifiable water savings.
- **Public Recognition.** Provide recognition to customers who have implemented measures resulting in extraordinary water use efficiency achievements.

## **4.5 CONSERVATION PROGRAMS 2010-2035**

As signatories to the MOU, IEUA and WMWD will continuously develop new conservation programs over the next twenty-five years to meet the requirements of each of the fourteen BMPs. In 2008, WMWD adopted a Water Use Efficiency Master Plan that will aid the expansion of programs within its service area. Developing technology, opportunities, and funding will dictate the direction of these programs in both service areas. Additional information on water conservation is contained in the IEUA, WMWD and CDA retail agency UWMPs.