# LAKESIDE WATER DISTRICT

# **URBAN WATER MANAGEMENT PLAN**

2015

Chapt	er	Page
	Append	lices & Tables Listv
1	<b>Introdu</b> 1.1 1.2	Iction Executive Summary1-1 California Urban Water Management Planning Act1-1
2	Plan Pr 2.1	eparation Plan Preparation and Outreach2-1
3	System 3.1 3.2 3.3	DescriptionHistory of Lakeside Water District.3-1Service Area3-13.2.1 Geography3-13.2.2 Climate3-23.2.3 Population3-2Physical Water Delivery System3-23.3.1 Water System Specifications3-23.3.2 Capital Improvement Plan3-2
4	System 4.1	Water UseHistoric and Projected Water Use4.1.1Historic Water Use4.1.2Projected Water Use4.1.3Daily per Capita Water Use & Targets4-2
5	Baselin 5.1 5.2 5.3 5.4	es and Targets Water Conservation Act of 2009 SBX7-7
6	Water 5 6.1	SupplyWater Sources6-16.1.1 Imported Water Connections6-16.1.2 Groundwater6-16.1.3 Development of Desalinated Water6-4
7	Water 9 7.1 7.2	Service Reliability Projected Normal Year Supply and Demand7-1 Projected Dry Year and Multiple Dry Year Supply and Demand7-1

## Chapter

## Page

	7.3	Reliabi 7.3.1 7.3.2 7.3.3	lity of Water Supply SDCWA Supply Reliability District Supply Reliability Water Impacts on Reliability	7-2 7-2 7-3 7-3
	7.4	Potent	ial Projects to Increase Water Supply	7-3
		7.4.1	Development of Desalinated Water	7-4
		7.4.2	Recycled Water	7-4
8	Water	Shortag	e Contingency Plan	
	8.1	Emerge	ency Storage	8-1
		8.1.1	SDCWA Emergency Storage Project	8-1
		8.1.2	District Emergency Storage	8-1
	8.2	Remed	ial Actions by District and Other Responsible Entities	8-2
		8.2.1	Supply And Demand Monitoring	8-2
		8.2.2	Discontinuance/Interruption of Service	8-2
		8.2.3	Authority to Take Necessary Steps to Conserve Water Supplies	8-2
		8.2.4	Implementation of District's Ordinance 91-02 "Water Conservation Plan"	8-2
		8.2.5	MWD "Incremental Interruption and Conservation Program"	8-3
		8.2.6	Authorization of Greywater Use by County of Environmental Health	8-3
	8.3	Provisi	ons to Reduce Water Use	8-3
		8.3.1	Use Restrictions	8-3
		8.3.2	Conservation Rate Structure	8-5
		8.3.3	Penalties for Excessive Use	8-5
	8.4	Fiscal I	mpact Analysis	8-6
		8.4.1	Estimates of Decreased Revenues at 75 Percent Level of Service	8-6
		8.4.2	Expenditures/Measures to Overcome This Impact	8-6
	8.5	Monito	ring of Actual Use Reductions	8-6
		8.5.1	Meter-Reading Schedule	8-6
		8.5.2	Reservoir Level Monitoring	8-7
		8.5.3	Metering Water Through SDCWA Connection	8-7
	8.6	Plan In	nplementation	8-7

## 9 Water Demand Management

9.1	Description	9-1
9.2	Senate Bill 7 of the Seventh Extraordinary Session	9-1
9.3	Water Conservation Achievements	9-1
	9.3.1 Grant Funding	9-2
	9.3.2 Water Authority Staffing	9-2
	9.3.3 Regional WaterSmart Turf Replacement Program	9-2
	9.3.4 SoCal WaterSmart Residential Program	9-3
	9.3.5 SoCal WaterSmart Commercial, Industrial, and Institutional Program	9-3
	9.3.6 Public Agency Landscape Program	9-3
	9.3.7 Fitness Center Program	9-3
	9.3.8 Water Savings Incentive Program	9-4
	9.3.9 On-Site Recycled Water Conversions	9-4
	9.3.10 Audits and Surveys	9-4

## Chapter

## Page

	9.3.11 Water and Energy Efficiency Programs	.9-5
	9.3.12 WaterSmart Customer Education and Workforce Training	.9-5
	9.3.13 WaterSmart Tools and Resources	.9-6
9.4	Public Outreach	.9-9
9.5	Conclusion	9-11

## 10 Plan Adoption, Submittal, and Implementation

10.1	Plan Adoption and Submittal	10-	-1
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## Tables

3-1	Current and Projected Population Projections	3-2
4-1	Past, Current, and Projected Water Deliveries	4-1
4-2	Historical GPCD	4-2
6-1	Local Groundwater Pumped by Lakeside	6-2
6-2	Summary of Hydrogeologic Characteristics Santee-El Monte Alluvial Aquifer	6-3
7-1	Projected Supply and Demand Comparison (AFY)	7-1
7-2	District Supply Reliability (AFY)	7-2
9-1	Types of Programs Awarded Grant Funding	9-1
9-2	Water Conservation Devices	9-1
9-3	Water Authority Sponsored Landmark Water Use Efficency Laws	9-1

## Appendices

- A. California Water Code Urban Water Management Planning
- B. California Water Code Sustainable Water Use and Demand Reduction (SB X7-7)
- C. UWMP Tables and SB X7-7 Verification Form Tables
- D. DWR Checklist
- E. Glossary of Terms, Acronyms, & Abbreviations
- F. Lakeside's Drought Response Conservation Program
- G. California Urban Water Conservation Council's Best Management Practices Reports
- H. AWWA Water Audit for System Losses
- I. Lakeside's Public Notice & Resolution Adopting the 2015 UWMP
- J. Quantifying Increased Regional Reliability

## 1. Introduction

## 1.1 Lakeside's 2015 Urban Water Management Plan Executive Summary

This report is the 2015 update of Lakeside's 2010 Urban Water Management Plan including achieving per capita water use targets as required by Water Code section 10608.36. Since adopting the 2010 Plan, Lakeside has made great strides in conservation. New for the 2015 Plan are measures, programs, and policies to achieve per capita water use targets as required by Water Code § 10608.36. In accordance with the Act, Lakeside coordinated its planning efforts with the San Diego County Water Authority, its wholesale water supplier, to ensure that supply and demand data and issues are presented accurately. The checklist provided by the California Department of Water Resources was also utilized to assure that the Plan meets all requirements. Lakeside's completed DWR checklist is included in **Appendix D**.

Prior to adoption, Lakeside provided this Plan to its key stakeholders for review, including the San Diego County Water Authority and the County of San Diego. The Plan was placed on the District's website and copies were made available at the District office for public review. The District also notified its key stakeholders, at least 60 days prior to the public hearing on the Plan, that Lakeside will be reviewing the Plan and considering amendments or changes to the Plan. On June 7, 2016, Lakeside's Board of Directors held a public hearing and adopted the 2015 Plan. A copy of the resolution adopting the 2015 Plan is in **Appendix I**. The adopted Plan will be on the District's website, submitted to the City, County, and the California State Library within 60 days of adoption.

## 1.2 California Urban Water Management Planning Act

The California Urban Water Management Planning Act of 1983 (Act) which comprises sections 10610 through 10656 of the California Water Code, requires all urban water suppliers in the state to prepare and adopt an urban water management plan (Plan) and update it every five years, to assure the efficient use of urban water supplies and their reliability during normal, dry and multiple dry water years. The full text of the Act is contained in **Appendix A**. The Act states,

"The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level."

## 2. Plan Preparation

## 2.1 Preparing the 2015 Urban Water Management Plan

Lakeside Water District prepared the 2015 UWMP in conjunction with other local water districts and in coordination with San Diego's regional water supplier San Diego County Water Authority. Regional UWMP meetings were held at the regional supplier's headquarters and a meeting with Department of Water Resources regarding the 2015 changes from the 2010 UWMP. Meetings were held to coordinate with San Diego County Water Authority all future water projects and water demand projections including estimated future demands. Public outreach was made by a listing in the local newspaper and a notice on the District's website regarding the review and adoption of the UWMP at a public hearing. Lakeside also sent a notice of the 2015's plan preparation to applicable cities and the county (see Appendix i).

## 3.1 History of Lakeside Water District

The District was organized as the Lakeside Irrigation District in 1924. Its source of water was ground water and a connection to the Cuyamaca Water Company. The District's function was primarily as an agricultural water provider. In 1980, the District changed its name to the Lakeside Water District. Lakeside is a single purpose agency providing retail domestic water service. In 2006 Lakeside consolidated with Riverview Water District which was formed in 1916 as Riverview Farms Mutual Water District. In 1954 Riverview Water District became a local Public Agency and the District began to purchase water from Metropolitan Water District via Padre Dam who was the wholesale distributor and the water supply came from the San Diego County Water Authority and the R. M. Levy Water Treatment and Filtration Plant, owned and operated by Helix Water District.

## 3.2 Service Area

#### 3.2.1 Geography

Lakeside's service area spans approximately 20 square miles of the unincorporated community of Lakeside, including Eucalyptus Hills, Moreno Valley and Muth Valley, as shown in **Figure 3-1**. An elevation gain from Lakeside's water connections with SDCWA to its Reservoirs' is only 575 feet but requires 11 pumping stations because it is a hilly area.



Figure 3-1 Map of Lakeside Water District's Service Area In San Diego County

#### 3.2.2 Climate

Lakeside's customers enjoy a Mediterranean climate with the average annual high and low temperatures of 78 degrees and 52 degrees. The annual precipitation is approximately 12 inches and over 80% of the precipitation occurs between December and March. Winter temperatures occasionally dip below freezing and summer temperatures often exceed 90 degrees Fahrenheit.

Variations in weather patterns affect regional short-term water requirements, causing reductions in water use during wet cycles and demand spikes during hot, dry periods. Over the last seven years, we have experienced the latter event. Since 1999, local rainfall exceeded the historic annual average only twice. These predominantly dry conditions resulted in record level demands during fiscal year 2004. With record rainfall in fiscal year 2005, total demands decreased. 2010 had a cool summer which reduced demand. On a monthly basis, water requirements tend to increase during the summer months when a decrease in rainfall combines with an increase in temperatures and an increase in evapotranspiration levels

#### 3.2.3 Population

Lakeside currently serves 6,900 accounts and a population of about 35,000 per SANDAG. Population projections for Lakeside's service area are estimated with little growth because the district area is 95% built out. Population estimates for base year gallons per person per day and the 2015 population estimates for the UWMP were required to originate from the Department of Water Resources Population Tool and are presented below in Table 3-1.

Table 3-1 Current and Projected Service Area Population

	2015	2020	2025	2030	2035	2040
Service Area Population	30,986	31,915	32,873	33,859	34,875	35,921

#### 3.3 Physical Water Delivery System

#### 3.3.1 Water System Specifications

Lakeside's water distribution system is a Grade 4 system including 120 miles of water mains, 11 reservoir tanks with a total storage capacity of 14 million gallons, and 11 pumping stations.

Lakeside Water District also has two well fields. The Riverview well field has been inactive since 2007 due to MTBE Contamination and high levels of total dissolved solids (salt). The Vine Street Well Field produces a total of 800 acft per year or about 20% of Lakeside's usage.

#### 3.3.2 Capital Improvement Program

Lakeside reviews its capital improvement program on an annual basis to provide flexibility and to meet the needs of the district.

## 4. System Water Use

The District currently supplies approximately 3,258 AFY of potable water to its customers. The potable water supply is currently 80% imported from the SDCWA and 20% produced from local wells.

#### 4.1 Historic and Projected Water Use

#### 4.1.1 Historic Water Use

There was a decline in water use during the early 1990s when water conservation measures were first adopted, followed by a gradual increase for the following 10 years to about 5,500 AFY at 2007. Water usage decreased by 20% in 2015 due to California statewide water restrictions after a slight increase in 2013. The 20% reduction in 2015 is in addition to the 20% in 2009 and 2010 due to drought conditions requiring water use restrictions with the adoption of the Conservation Plan and the increasing cost of water. There has been a decrease in water usage when compared with over 20 years ago in spite of a population increase.

#### 4.1.2 Projected Water Use

**Table 2-1** provides current and projected water deliveries to the District. Currently, the District's demand is approximately 68 percent single family; 22 percent multifamily; 7 percent commercial, industrial, and institutional; and about 1 percent other, including construction meters and fire service. The projected demand by land use category for 2030 is expected to be similar. Lower income household usage in 2015 was 24 acre feet, and only consists of 165 residential apartment units. Lower income residential usage is less than one percent of the District's overall usage.

Year	Water Use Sectors	Single Family	Multi- Family	Comm/Inst	Other	System Losses	TOTAL
2015	No. of Accounts	6069	423	283	39		6814
	Deliveries (AF/Y)	2492	792	271	53	171	3779
2020	No. of Accounts	6075	423	283	39		6821
	Deliveries (AF/Y)	2821	896	299	60	171	4247
2025	No. of Accounts	6081	424	284	39		6828
	Deliveries (AF/Y)	3214	1021	341	62	172	4810
2030	No. of Accounts	6087	424	284	39		6835
	Deliveries (AF/Y)	3329	1058	353	64	172	4976
2035	No. of Accounts	6093	425	284	39		6841
	Deliveries (AF/Y)	3368	1070	357	65	172	5032

#### Table 4-1 Past, Current, and Projected Water Deliveries

#### 4.1.3 Daily per Capita Water Use & Targets

**Table 4-2** provides historical data on Lakeside's daily per capita water use (GPCD). SBX7-7 was enacted to require retail urban water agencies within the state to achieve a 20 percent reduction in urban per capita water use by December 31, 2020. Lakeside's 10 year average from 1999 to 2008 is 155 gpcd. The region's target of 148 gpcd per method 3 of the CUWCC (region 4 "South Coast) is the goal Lakeside District is using. The District must still conserve 5% from the region's target. The Lakeside SBX7-7 target for 2020 is 141.6 gpcd with an interim target of 144.6 gpcd in 2015.

Year	DWR Population	Annual Water Use	Daily Per Capita Water Use (GPCD)		
1999	30746	4736	138		
2000	31000	5731	165		
2001	30943	5321	154		
2002	30935	5709	165		
2003	30927	5191	150		
2004	30914	5858	169		
2005	30915	4981	144		
2006	30897	5390	156		
2007	30884	5541	160		
2008	30862	5298	153		
10 Year Average Baseline GPCD <b>155</b>					

## Table 4-2 Historical <u>G</u>allons <u>P</u>er <u>C</u>apita Per <u>D</u>ay

## 5.1 Water Conservation Act of 2009 SB X7-7

The State Legislature passed Senate Bill 7 as part of the Seventh Extraordinary Session, referred to as SBX7-7, on November 10, 2009, which became effective February 3, 2010. This new law was the water conservation component to the Delta legislation package, and seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. (See Appendix B) The law requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent goal by 2020, and an interim water reduction target by 2015.

In the 2015 Plan, water agencies must demonstrate compliance with their established water use target for the year 2015. This will also demonstrate whether or not the agency is currently on track to achieve its 2020 target. Compliance is verified by DWR's review of the SB X7-7 Verification Form submitted with an agency's 2015 UWMP. The SB X7-7 Verification Form is found in Appendix C.

## 5.2 Baselines and Targets

There is a 10 year and a 5 year baseline period to determine what target that must be met to be in compliance. Lakeside's 10 year baseline period is from 1999 to 2008 and the 5 year baseline period is from 2003 to 2007. For those periods gross water use is compared with populations to get gpcd (gallons per capita per day) or how many gallons each person uses each day on average for each year. Populations figures used for this calculation are from DWR's Population tool online which is slightly lower population numbers when compared with SANDAG. Using DWR's population estimates Lakeside's baseline gpcd is 155.28 for the 10 year baseline period and 155.75 gpcd for the 5 year baseline period. As you can see both are very close so Lakeside's baseline target for 2020 is 20% less than the baseline of 155 gpcd which is a target of 124 gpcd by 2020. This is a fairly low gpcd due to past conservation efforts and conservation hardening which is why Lakeside decided to use Target Methodology 3 for the South Coastal Hydrological Region which has a 2020 regional target of 147.9 gpcd. Using methodology 3 gives Lakeside a 2015 Interim target of 151 gpcd.

## 5.3 Water Consumption and Population for GPCD

Interim target calculations use population estimates for 2015 from DWR's Population tool of 30,986 for 2015. SANDAG estimated about 35,000. All water sources into Lakeside's system in 2015 was 3706.8 acre feet which is converted to gallons and divided by the population of 30,986 and divided by 365 days in a year. Lakeside's actual gpcd for 2015 is 106.8.

## 5.4 Compliance with 2015 and 2020 Targets

Lakeside's 2015 interim target is 151 gpcd and the 2020 target is 147.9 gpcd. The actual consumption for 2015 was 106.8 gpcd which is well under our interim target and exceeds the 2020 target by about 28%.

## 6.1 Water Sources

The District purchased 73.4% of its water supply from SDCWA in 2015, which buys 57% from MWD. MWD imports water through the Colorado River Aqueduct and facilities of the State Water Project (SWP). SDCWA imports 91 percent of the water used by county residents; the remaining 9 percent is from local sources, such as water recycling, groundwater, local runoff, and a newly added desalinization plant. SDCWA also has transfer agreements with Imperial Valley Famers (IID transfer) 19% of water imported and the Quantification Settlement Agreement (QSA) transfer agreement for relining the All-American and Coachella Canals which is 15% of water imported. Critical issues in water resources planning, such as the County's rapidly growing population, limited storage capacity, water transmission facilities, uncertainties over water imported from northern California, and the loss of water imported from the Colorado River, are requiring SDCWA to develop long-range plans for meeting future water demands called the Supply Diversification Plan.

The District produced 26.6% of its water supply from local wells in 2015. The Vine Street well field has three wells with a dual media package treatment plant for iron and manganese that produced 866 acft in 2015. The Riverview well field has four wells with an aeration treatment plant to remove MTBE, a gasoline additive, which was made inactive as of 2007.

## 6.1.1 Imported Water Connections

The District currently imports treated potable water through the SDCWA 12" metered connection with Helix Water District's 54" line at Channel Road through an 11.5 mgd maximum connection. The Helix WD treats raw water, stored at Lake Jennings, at its Levy WTP, which is located just to the east of the District's boundary. The District also has two emergency connections to Padre Dam's wholesale system. They are located on Woodside Avenue, one 6" and one 10". There is also one 6" emergency connection with Helix Water District on Melrose Street.

## 6.1.2 Groundwater

The District averages 20% of its water supply from local wells and proactively meets all groundwater management standards. There is currently not a groundwater management plan and the basin is not adjudicated. Lakeside is one of four agencies that have formed a voluntary cooperative groundwater monitoring association that complies with the Department of Water Resources "California Statewide Groundwater Elevation Monitoring" (CASGEM) program for the San Diego River Valley basin. The CASGEM voluntary program has been established in accordance with California State Senate Bill x7-6 that amended the State Water Code and mandates a statewide groundwater elevation monitoring program to track seasonal and long-term trends in groundwater elevation in California's groundwater basins. The intent of the CASGEM program is to establish a permanent, locally-managed program of regular and systematic monitoring in all of California's groundwater basins. The goal is to determine that the basins are sustainably managed and operated.

Our well field on Vine Street has three wells with a package dual media treatment plant for iron and manganese that produced 866 acft in 2015. The Riverview well field was made inactive in 2007 and is off of Highway 67 between Wintergardens Blvd. and Riverford Ave. It has four wells with an aeration treatment plant to remove MTBE, a gasoline additive. This well field's production was considerably lower when compared to the other well field and also contains a high levels of total dissolved solids and nitrates. Table 4-1 quantifies the historical amount of local groundwater pumped by Lakeside. The District has estimated pumping 900 acre feet per year in the future.

	<u>FY2015</u>	<u>FY2014</u>	<u>FY2013</u>	<u>FY2012</u>	<u>FY2011</u>	<u>FY2010</u>
Local Water @ Vine St. Well Field Total Imported Water from SDCWA	815 2,859	551 3,766	584 3,665	665 3,375	659 3,251	675 3,332
Total	3,674	4,317	4,249	4,040	3,910	4,007

Table 6-1Local Groundwater Pumped by Lakeside in Acre Feet

#### **Groundwater Basins**

The primary aquifer within the District's service area is the Santee-El Monte aquifer. This aquifer is comprised of loose alluvial sediments that extend along the San Diego River and major tributaries. The Santee-El Monte Alluvial Aquifer provides significant groundwater storage capacity, and has excellent recharge characteristics which has not been identified as over drafted nor projected to become over drafted. Well yields within the Santee-El Monte Alluvial Aquifer are good (typically on the order of hundreds of gallons per minute). The Santee-El Monte alluvial groundwater aquifer covers an area of approximately 4,600 acres. The aquifer stretches approximately 11 miles along the San Diego River from the eastern portion of the community of Lakeside to the western portions of the City of Santee.

The Santee-El Monte Basin consists of three distinct sub basins. The Santee Sub basin comprises the western half of the basin, and extends along the broad San Diego River flood plain downstream from the intersection of San Vicente Creek and the San Diego River. The Moreno Valley sub basin extends downstream from San Vicente Reservoir to the San Diego River. The El Monte Sub basin comprises the eastern portion of the Santee-El Monte Basin. The El Monte Sub basin is situated in the relatively narrow river valley along the San Diego River upstream from the river's confluence with San Vicente Creek.

#### Hydrogeology and Water Use

**Table 6-2** summarizes hydro geologic parameters for the three sub basins that comprise the Santee-El Monte Alluvial Aquifer. As shown in the table, hydro geologic conditions vary widely within the three sub basins. In general, however, groundwater storage coefficients, hydraulic conductivities, and well yields are higher in the upstream reaches of the basin.

Past studies have reported a wide range of estimates for the groundwater storage capacity of the overall basin. (These estimates range from approximately 50,000 acre-feet (AF) to 100,000 AF.) The best available information, however, indicates that overall combined storage in the three sub basins of the Santee-El Monte Alluvial Aquifer is on the order of 70,000 AF. Hydraulic conductivity values in the sub basins (as reported in past studies) range from approximately 25 feet per day to 125 feet per day.

## 6. Water Supply

Parameter	Santee Subbasin	Moreno Subbasin	El Monte Subbasin
Principal Surface Watercourse	San Diego River	San Vicente Creek	San Diego River
Location	Santee	Moreno Valley	Lakeside
Basin Length <sup>1</sup>	6 miles	2 miles	5 miles
Average Basin Width <sup>1</sup>	4,500 feet	2,000 feet	2,500 feet
Basin Elevation <sup>1</sup>	300 - 400 feet MSL <sup>2</sup>	400-500 ft MSL <sup>2</sup>	400 - 800 ft MSL <sup>2</sup>
Primary Aquifer Type <sup>3</sup>	Unconfined alluvium	Unconfined alluvium	Unconfined alluvium
Aquifer Composition <sup>3</sup>	Medium to coarse grained sand, and gravel	Medium to coarse grained sand and gravel	Medium to coarse grained sand and gravel
TDS <sup>4</sup>	800-2500 mg/L	500 - 800 mg/L	300 - 800 mg/L
Hydraulic Conductivity <sup>4,</sup>	25 - 100 ft/day 50 ft/day average	25-125 ft/day 75 ft/day average	50-125 ft/day 100 ft/day average
Specific Yield <sup>4</sup>	5 percent-20 percent range	5 percent-22 percent range	10 percent-22 percent
	13 percent average	13 percent average	range 15 percent average
Average Basin Hydraulic Gradient <sup>1</sup>	0.003 ft/ft	0.009 ft/ft	0.015 ft/ft
Estimated Basin Storage <sup>4</sup>	30,000-50,000 AF	5,000-8,000 AF	20,000-30,000 AF
Aquifer Thickness <sup>4</sup>	200 feet maximum 100 feet average	150 feet maximum 100 feet average	200 feet maximum 100 feet average
Current Estimated Pumping <sup>4</sup>	400 AFY <sup>5</sup>	200 AFY <sup>5</sup>	4,000 AFY <sup>5</sup>
Approximate Well Pumping Capacity <sup>4,6</sup>	200 - 1000 gpm	200 - 1000 gpm	800 - 1600 gpm
Areas of Greatest Surface Infiltration <sup>4</sup>	Along the San Diego river channel	Upper reaches of basin; along San Vicente Creek channel	Along San Diego River channel

Table 6-2 Summary of Hydro geologic Characteristics Santee-El Monte Alluvial Aquifer

1 Measured or estimated from USGS topographic maps for the El Cajon, San Vicente, and Alpine quads.

2 Elevations listed in feet above mean sea level (MSL).

3 From USGS (1985) and NBS/Lowry (1995).

4 Estimate based on information presented in State of California Department of Water Resources (1984), USGS (1985), SDCWA (1987), Luke-Dudek (1987), Clean Water Program for Greater San Diego (1990), NBS/Lowry (1995), and Welch & SDCWA (1997). In general, storage coefficients and hydraulic conductivity are higher in the upstream (El Monte and San Vicente) subbasins. Highest well yields occur in the El Monte Subbasin.

5 Estimate based on well surveys conducted by Clean Water Program for Greater San Diego (1990) and NBS/Lowry (1995).

6 Based on large-diameter irrigation wells. Maximum pumping rates from small diameter private domestic wells within the subbasins may be on the order of 100 (gallons per minute) gpm or less. (See NBS/Lowry (1995).

## 6. Water Supply

Streamflow infiltration comprises the dominant source of recharge within the Santee-El Monte Basin. Much of this streamflow infiltration recharge is believed to occur in the El Monte Subbasin. Because of limited groundwater pumping within the Moreno and Santee Subbasins, these subbasins typically remain filled or nearly filled with groundwater. Thus, while the potential for significant streamflow infiltration exists within the Moreno and Santee Subbasins, streamflow infiltration is typically limited by a lack of available groundwater basin capacity.

Infiltration from agricultural and urban surface runoff also is a key component of groundwater recharge within the overall Santee-El Monte Alluvial Aquifer. Infiltrating applied waters, infiltrating precipitation, septic tank discharges, and subsurface inflow also contribute to groundwater recharge within the Santee-El Monte Alluvial Aquifer.

The Clean Water Program for Greater San Diego (1990) and NBS/Lowry (1995) conducted detailed well surveys of the Santee-El Monte Basin. These surveys show that groundwater use within the Santee Subbasin has decreased substantially within the past several decades (probably due to water quality limitations). While more than 20 historic wells existed within the Santee Subbasin, only a few wells remain active. Current groundwater use within the Santee Subbasin is on the order of several hundred acre-feet per year. The surveys report that many wells (over 20) are still active within the Moreno subbasin. Total existing groundwater use within the Moreno subbasin was estimated to be on the order of approximately 200 AFY.

A significant majority of the overall groundwater use within the Santee-El Monte Basin, however, occurs within the El Monte Subbasin. A total of more than 50 active irrigation and domestic wells exist within this basin. Total pumping within the El Monte Basin is estimated at approximately 4,000 AFY (NBS/Lowry, 1995). Groundwater users include private landowners and public entities. Lakeside Water District develops approximately 1,000 AFY of supply from the basin (Welch & SDCWA, 1997).

#### Basin Water Balance

Streamflow infiltration represents a key source of recharge to the Santee-El Monte Alluvial Aquifer. Infiltrating storm and urban runoff, percolating precipitation, percolating applied waters, septic tank discharges, and groundwater inflow from adjoining aquifers provide additional recharge to the aquifer. Once recharged to the basin, groundwater may exit the basin through groundwater pumping, withdrawal by phreatophytes (deep-rooted vegetation), surfacing groundwater, and subsurface outflow.

The quantity of basin recharge and discharge varies with hydrologic conditions, changes in land use, and changes in local water use. While depths to groundwater fluctuate in response to these factors, over a long period of time, overall basin and recharge and discharge are balanced. The recharge and discharge terms of this balance offer insight to appropriate strategies for developing additional water supply within the basin. Overall water balance estimates for the Santee-El Monte Basin have been presented in several previous studies, including DMJM and Lowry & Associates (1978), USGS (1985), NBS/Lowry (1994) and Bundy/Huntley/SDSU (2001). Differences exist between the studies in the manner in which individual recharge/discharge terms are defined and estimated. Even taking these differences into account, however, water balances presented in previous studies demonstrate that excess recharge capacity exists within the Santee-El Monte basin. (That is to say, increased pumping within the basin results in increased streamflow infiltration.)

Using information from these past studies to develop a water balance concluded that current long-term streamflow infiltration totals within the Santee-El Monte Basin are limited by the fact that the basins are typically too "full" to accept infiltrating streamflows. As a result, streamflow that would normally infiltrate into the basin flows out to the ocean.

#### 6.1.3 Development of Desalinated Water

The District's wholesale water supplier, SDCWA, has developed a desalinated water supply. It is expected to provide 8% of the region's supply by the year 2020. Additional detail may be found in the Water Authority's 2015 UWMP. Lakeside Water District does not have a desalination opportunity.

## 7.1 Projected Normal Year Supply and Demand

**Table 7-1** presents the projected supply and demand comparison. This table indicates that in average precipitation years, the District has sufficient water to meet its customers' needs, through 2035. This is based on continued commitment to conservation programs and additional water supply from SDCWA who says in their 2015 UWMP at section 9 "That no shortages are anticipated within the Water Authority's service area in a normal year through 2040." The district has also added many ground water wells over its history. Adding new wells as olds ones become inefficient to maintain supply reliability. The district currently has four active wells on Vine Street and four inactive wells along Highway 67, west of Wintergardens Blvd.

Table 7-1 Normal Year Supply and Demand Comparison							
Year	Year 2020 2025 2030						
Supply totals	4205	4730	4919	4966			
Demand totals	4138	4703	4869	4925			

## 7.2 Projected Dry Year and Multiple Dry Year Supply and Demand

**Table 7-2** presents a supply and demand comparison for a single dry year and multiple dry years from 2020 through 2035. The District's ability to meet its customer demands in dry years is based on SDCWA's ability to provide a reliable water supply. SDCWA has documented its plans to provide a reliable water supply to the region, even in multiple dry years, in its 2003 Water Master Plan, 2004 Water Supply Report, 2010 and 2015 Urban Water Management Plans. The District's groundwater experiences little, if any, reduction in a single dry-year. SDCWA is diversifying its supply with the IID transfer, canal lining projects, carryover storage projects, and seawater desalination projects which are all considered "drought-proof" supplies. Metropolitan Water District allocates its supplies through their Supply Allocation Plan which allocates based on preferential rights. In years where shortages may still occur, the Drought Response Conservation Program (Appendix F) will be enforced to fill the supply shortage. Water use restrictions helped manage water supply shortages from 2007 through 2010 and again from 2015 to 2016.

Table 7-2 Multiple Dry Years Supply and Demand Comparison						
		2020	2025	2030	2035	
First year	Supply totals	4,138	4,703	4,869	4,925	
	Demand totals	4,138	4,703	4,869	4,925	
	Difference	0	0	0	0	
Second year	Supply totals	3,724	4,233	4,382	4,433	
	Demand totals	3,724	4,233	4,382	4,433	
	Difference	0	0	0	0	
Third year	Supply totals	3,310	3,762	3,895	3,940	
	Demand totals	3,310	3,762	3,895	3,940	
	Difference	0	0	0	0	

## 7.3 Reliability of Water Supply

Since the District imports most of its potable water, supply reliability issues are largely determined by the reliability of SDCWA and MWD supply systems. SDCWA is diversifying its supply with projects like the IID transfer, canal lining projects, carryover storage projects, recycled water, and seawater desalination projects which are all considered "drought-proof" supplies. In an emergency the District can also transfer water from Helix Water District or from Padre Dam Municipal Water District. No other exchange opportunities exist.

## 7.3.1 SDCWA Supply Reliability

The SDCWA is working to diversify its supply and decrease its dependence on MWD over the next 20 years. SDCWA has also implemented an Emergency Storage Project (ESP), a system of reservoirs, interconnected pipelines and pumping stations designed to make water available to all communities in the San Diego region in the event of a disaster that would interrupt imported water deliveries. Some projects include increasing the height of San Vicente Dam and connecting San Vicente Lake to El Capitan Lake via pipes using El Capitan Lake for storage. San Vicente provides approximately 100,000 acre-feet of local storage and is scheduled to be completed in 2012. The SDCWA plans to provide reliable supply in average, dry, and multiple dry year conditions.

## 7.3.2 District Supply Reliability

Single and multiple dry years do not lead to a reduction in local supplies. The SDCWA is planning on the use of dry year options and transfers to meet the shortage scenarios without impacting reliability. **Table 7-1** presents the projected supply and demand comparison in AFY. **Table 7-2** provides the District's estimated water supply projections associated for a single dry year and multiple dry years. Supply and demand comparisons using maximum day capacity to assess service reliability can be found in Chapter 7

## 7.3.3 Water Quality Impacts on Reliability

Since the SDCWA provides a majority of the District's water supply and SDCWA is providing treated water, any changes to water quality and resulting reliability over the next 20 years is overseen by SDCWA. Based on the SDCWA's UWMP, no changes to water supply reliability as a result of water quality are expected for the next 20 years.

Water quality is tested at the Lake Skinner Treatment Plan and Helix's Levy Treatment Plant, where water is treated before it is supplied to the District. Based on the District's 2014 Water Quality Report, all primary and secondary standards showed both ranges and averages for all tested parameters to be within the maximum contaminant levels (MCL) required by the U.S. EPA and California Department of Public Health.

The District's well fields are sensitive to drought conditions and contamination from local runoff, MTBE, nitrates, and total dissolved solids. Water quality is constantly tested and currently meets all primary and secondary standards for all tested parameters to be within the maximum contaminant levels (MCL) required by the U.S. EPA and California Department of Public Health.

#### 7.4 Potential Projects to Increase Water Supply

The District is part of a project to improve or increase water supply referred to as the East County Regional Treated Water Improvement Program/Eastern Service Area (ESA) Secondary Supply Connection Project.

The East County Regional Treated Water Improvement Program is a comprehensive integrated program of capital improvements and usage guarantees involving the District, the SDCWA, Helix Water District, Padre Dam Municipal Water District, and Otay Water District. This program is intended to improve the regional treatment capacity in the East San Diego County, including the District's service area, by maximizing the use of the treatment capacity in Helix Water District's Levy Water Treatment Plant. Although it will not create a new supply, this program will reduce treated water demand from SDCWA and will provide a more reliable water supply to the District because the source of the raw water is locally stored imported water.

### 7.4.1 Development of Desalination Water

The District's wholesale water supplier, SDCWA, has developed a desalinated water supply. It is expected to provide 8% of the region's supply by the year 2020. Lakeside Water District does not have a desalination opportunity. Other San Diego County area desalination projects are also planned at Camp Pendleton and Rosarito Beach. Additional detail may be found in the Water Authority's 2015 UWMP.

#### 7.4.2 Recycled Water

The District looks to SDCWA and to the local sewer agencies to take the lead in developing and implementing waste water reclamation programs to make more water available to the entire region. Waste water collection, treatment and disposal or reclamation services within the District's boundaries are performed by completely separate and unrelated agencies so the District does not have recycled water opportunities. No recycled water is currently being used in the District.

To prepare for potable water shortages due to natural disasters or drought, the District prepared and adopted a **Drought Response Conservation Program** in 2008 by Resolution 08-04 (see **Appendix F**). The elements of the 2008 Plan were fully coordinated with SDCWA, and appropriate state and federal assistance agencies. This section summarizes the key features of the existing contingency plan.

## 8.1 Emergency Storage

As previously described, the District is dependent on both the SDCWA and the Helix Water District facilities to supply its potable water needs. The SDCWA adopted Ordinance No. 91-6 on June 25, 1991, which "...establishes rules, regulations, and restrictions so that available water supplies are allocated among member agencies for the greatest public interest and benefit." Included in this ordinance is a list of water use restrictions that can be imposed upon all retailers within the SDCWA's service area in the event of an emergency or long-term supply reduction.

The following sections present a synopsis of the emergency storage infrastructure in the region operated by MWD, SDCWA, and the District.

#### 8.1.1 SDCWA Emergency Storage Project

The SDCWA currently does not have sufficient emergency water storage to supply its member agencies during an extended period. Although several member agencies of the SDCWA own and operate their own emergency reservoirs; in general, these reservoirs can only service specific isolated areas.

The SDCWA has initiated an Emergency Storage Project (ESP) for catastrophic failure of the aqueduct system. The intent of the ESP is to provide additional storage within the county and construct facilities that will convey emergency storage water to member agencies. Considering both local storage within member agencies and additional ESP storage, it is anticipated that upon completion of ESP facilities, 75 percent of the average day demands during the summer can be supplied for a two-month period. Increasing the height of San Vicente Dam provides approximately 100,000 acre-feet of local storage.

#### 8.1.2 District Emergency Storage

As mentioned previously, the District does not have natural reservoirs and hence, is mostly reliant on SDCWA Connections. In the event that the treated water supply was interrupted, the District would have to rely on the operational storage contained in its 10 potable water reservoirs. The wells can currently supply less than one-fifth of the normal day demands.

If the District were to have supplies reduced by 50 percent for a lengthy duration, as might result from a severe drought, compensatory reductions in potable water consumption would need to occur. Therefore, a 50 percent reduction in the District's supply would be matched by a 50 percent reduction in consumption throughout the District. A Level 4 Drought Emergency would go into effect (Appendix E) and Tier 3 and Tier 4 pricing levels would also go into effect for high water usage customers.

The current combined total potable emergency water storage of 12.6 MG available in District reservoirs can provide approximately three to four days use under existing maximum day demand and three days under year 2020 maximum day demands. With a 50 percent reduction in customer maximum day demand and outdoor use banned this reserve could last for 10 days.

## 8.2 Remedial Actions by District and Other Responsible Entities

During an emergency water shortage event that results in a 50 percent reduction in supply, the District and its suppliers intend to take the following actions.

#### 8.2.1 Supply And Demand Monitoring

The District, in consultation with SDCWA, monitors supply and demand conditions to determine when water management regulations are required to be put into practice. During water shortages the District implements water management strategies to preserve water for the highest priority uses: human consumption, public health, safety or welfare. If needed, further restrictions, including those on residential usage, may be imposed to further preserve water supplies.

After assessing the severity of the water supply situation, the General Manager or designee for the District may take all steps appropriate and necessary to inform the public of any restrictions on current water use and the prognosis of future availability of water. The General Manager or designee may declare a "Water Supply Management Condition" which imposes restrictions in varying degrees in the following areas:

- Issuance of new permanent meters
- Issuance of temporary meters (including construction meters)
- Interruption of service to certain classification of users, and
- The issuance of facility availability and commitment forms.

#### 8.2.2 Discontinuance/Interruption of Service

Under existing policies, during times of severe water shortages, the General Manager of the District has the authority to discontinue or interrupt service to meters that are not providing water for human consumption, public health, safety or welfare.

#### 8.2.3 Authority to Take Necessary Steps to Conserve Water Supplies

District Rules and Regulations authorize the General Manager or designee to take any appropriate actions necessary to achieve the water conservation goals set for the District in cases of supply shortages or emergencies.

#### 8.2.4 Implementation of District's Water Conservation Plan

California Water Code Sections 350 et seq. and Sections 71640 et seq. "... permit the governing body of a distributor of a public water supply to declare a Water Shortage Emergency Condition to prevail within the area served by such distributor, whenever it finds and determines there is an emergency caused by drought, a threatened or existing water shortage, or that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection."

To this extent, the General Manager of the District has the option to declare a Water Shortage Emergency Condition and the elements contained in the Conservation Plan (included in **Appendix F**) to be in effect. At the next regular meeting of the Board of Directors, it would ratify, modify or rescind the declaration of a Water Shortage Emergency Condition.

#### 8.2.5 MWD "Incremental Interruption and Conservation Program"

The level of conservation required for the southern California region is set by the MWD. MWD has established an "Incremental Interruption and Conservation Program" (IICP), which was adopted on December 11, 1990 as a means of allocating water to its member agencies during drought conditions. The SDCWA is obliged to comply with reductions and restrictions enacted by the MWD and to pass them on to its member agencies.

#### 8.2.6 Authorization of Greywater Use by the County Department of Environmental Health

The San Diego County Board of Supervisors has the authority to proclaim the existence of a local water emergency due to a drought and/or dramatic reductions in water supplies for the residents of the county. As such, the County Department of Environmental Health has a process for approving the appropriate use and/or distribution of household greywater for the duration of the emergency. Only approved uses and distribution systems that have been inspected by the Department of Environmental Health and approved by local health officers are allowed.

#### 8.3 Provisions to Reduce Water Use

#### 8.3.1 Use Restrictions

The District has adopted the "Drought Response Conservation Program" (Conservation Plan) in 2008, **Appendix F**, which contains water use restrictions for its customers and was developed collaboratively with SDCWA and all county water districts. The Conservation Plan has been incorporated into the District's Rules and Regulations. The Conservation Plan contains "Water Use Restrictions" and "Enforcement Measures" to be in effect during times of water supply shortages.

Normal water use restrictions include:

(a) A Drought Response Level 1 condition is also referred to as a "Drought Watch" condition. A Level 1 condition applies when the Water Authority notifies its member agencies that due to drought or other supply reductions, there is a reasonable probability there will be supply shortages and that a consumer demand reduction of up to 10 percent is requested in order to ensure that sufficient supplies will be available to meet anticipated demands. The General Manager or designee shall declare the existence of a Drought Response Level 1 and take action to implement the Level 1 conservation practices identified in the resolution.

(b) During a Level 1 Drought Watch condition, Lakeside Water District will increase its public education and outreach efforts to emphasize increased public awareness of the need to implement the following water conservation practices. [The same water conservation practices become mandatory if Lakeside Water District declares a Level 2 Drought Alert condition]:

1. Stop washing down paved surfaces, including but not limited to sidewalks, driveways, parking lots, tennis courts, or patios, except when it is necessary to alleviate safety or sanitation hazards.

2. Stop water waste resulting from inefficient landscape irrigation, such as runoff, low head drainage, or overspray, etc. Similarly, stop water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

3. Irrigate residential and commercial landscape before 10 a.m. and after 6 p.m. only.

4. Use a hand-held hose equipped with a positive shut-off nozzle or bucket to water landscaped areas, including trees and shrubs located on residential and commercial properties that are not irrigated by a landscape irrigation system.

5. Irrigate nursery and commercial grower's products before 10 a.m. and after 6 p.m. only. Watering is permitted at any time with a hand-held hose equipped with a positive shut-off nozzle, a bucket, or when a drip/micro-irrigation system/equipment is used. Irrigation of nursery propagation beds is permitted at any time. Watering of livestock is permitted at any time.

6. Use re-circulated water to operate ornamental fountains.

7. Wash vehicles using a bucket and a hand-held hose with positive shut-off nozzle, mobile high pressure/low volume wash system, or at a commercial site that re-circulates (reclaims) water onsite. Avoid washing during hot conditions when additional water is required due to evaporation.

8. Serve and refill water in restaurants and other food service establishments only upon request.

9. Offer guests in hotels, motels, and other commercial lodging establishments the option of not laundering towels and linens daily.

10. Repair all water leaks within five (5) days of notification by the Lakeside Water District unless other arrangements are made with the General Manager or designee.

11. Use recycled or non-potable water for construction purposes when available.

(c) During a Drought Response Level 2 condition or higher, all persons shall be required to implement the conservation practices established in a Drought Response Level 1 condition.

The Conservation Plan also contains a section entitled "Emergency Condition," with additional measures and strengthens the restrictions. The restrictions in this section are to be used in times of severe cutbacks from SDCWA or in times of a temporary disruption of supply, storage, distribution or other facilities. The language and extent of the restrictions were developed by SDCWA and adopted by the District and many other member agencies of SDCWA.

(a) A Drought Response Level 4 condition is also referred to as a "Drought Emergency" condition. A Level 4 condition applies when the Water Authority Board of Directors declares a water shortage emergency pursuant to California Water Code section 350 and notifies its member agencies that Level 4 requires a demand reduction of more than 40 percent in order for the Lakeside Water District to have adequate supplies available to meet anticipated demands. The Lakeside Water District shall declare a Drought Emergency in the manner and on the grounds provided in California Water Code section 350.

(b) All persons using Lakeside Water District water shall comply with conservation measures required during Level 1 Drought Watch, Level 2 Drought Alert, and Level 3 Drought Critical conditions and shall also comply with the following additional mandatory conservation measures:

1. Stop all landscape irrigation, except crops and landscape products of commercial growers and nurseries. This restriction shall not apply to the following categories.

A. Maintenance of trees and shrubs that are watered on the same schedule set forth in section 6 (b) (1) by using a bucket, hand-held hose with a positive shut-off nozzle, or low-volume non-spray irrigation;

B. Maintenance of existing landscaping necessary for fire protection as specified by the Fire Marshal of the local fire protection agency having jurisdiction over the property to be irrigated;

C. Maintenance of existing landscaping for erosion control;

D. Maintenance of plant materials identified to be rare or essential to the well-being of rare animals;

E. Maintenance of landscaping within active public parks and playing fields, day care centers, school grounds, cemeteries, and golf course greens, provided that such irrigation does not exceed two (2) days per week according to the schedule established under section 6 (b) (1);

- F. Watering of livestock; and
- G. Public works projects and actively irrigated environmental mitigation projects.

2. Repair all water leaks within twenty-four (24) hours of notification by the Lakeside Water District unless other arrangements are made with the General Manager or designee.

(c) The Lakeside Water District may establish a water allocation for property served by the District.

#### 8.3.2 Conservation Rate Structure

The District established an inclining block rate structure to encourage decreased water use during times of supply shortages. There are normally two tiered levels of water usage; Life Line Rate, which is the lowest rate, and Standard Rate, which is the higher rate. The more water that is used by the customer the higher the rate is charged to that customer encouraging water conservation. Under a Drought Level 2 condition a third highest tier was added to encourage conservation. Under Level 3 and 4 another tier can be added to penalize those who do not conserve water. Lakeside has a very low set meter charge of \$12 bi-monthly for a 5/8" meter. If a customer reduces water usage it can be seen in the total amount of the bill so customers with low usage also have a low bill. Customers have the ability to save money by reducing their water usage.

#### 8.3.3 Penalties for Excessive Use

The District's inclining block rate structure contains two or three different prices for water used in different quantities. The highest rate is called "High Water Usage" and is priced to discourage water used in quantities subject to these rates.

Contained within the District's Rules and Regulations are penalties or charges for violations of the water use restrictions during water shortage conditions. An increasing level of fines is levied for up to four violations at the same address. Any subsequent violations at the same address will result in appropriate limitation of service by use of a flow restrictor or discontinuance of service.

#### 8.4 Fiscal Impact Analysis

The following sections present an estimate of the financial impact that a reduction in water supply will have on the District.

#### 8.4.1 Estimates of Decreased Revenues at 75 Percent Level of Service

An earthquake that severely damages the aqueducts bringing water from MWD is the most catastrophic event that could threaten the SDCWA's water supply. SCDWA has initiated the ESP to enhance supplies to its member agencies during that event. Once completed, the ESP will provide member agencies with 75 percent of normal demand for a two-month period if the aqueducts are severed completely. Alternatively, ESP would provide 75 percent of normal demand for a six-month period assuming that it is available through the aqueducts from MWD. During both emergency events, member agencies are expected to enact the same percent water use restrictions on their customers and utilize emergency and local supplies, including local storage and groundwater. Hence, under the ESP scenarios, the greatest shortage in supply would be six months with 75 percent level of service.

In fiscal year 2009-2010, the District's revenue from retail commodity sales was \$4.4 million. A 75 percent level of service results in a 25 percent reduction in revenue; therefore, the District's losses over a six-month emergency period would be approximately \$550,000.

#### 8.4.2 Expenditures/Measures to Overcome This Impact

In the event that revenues are decreased from water sales would also be accompanied by decreased expenses for imported water and pumping costs. The District has over \$19 million in U.S. Agency Securities and Certificates of Deposit investments which could be easily liquidated into cash quickly to stabilize the District from financial impacts.

#### 8.5 Monitoring of Actual Use Reductions

It will be of critical importance for the District to determine if water use reduction goals are being met during the water shortage events. Penalties may be incurred from the SDCWA or MWD if the District cannot meet water consumption reduction goals. Careful monitoring of water imported into the system and metered user records will enable the District to check water use and levels of reduction.

#### 8.5.1 Meter-Reading Schedule

During normal supply conditions, construction meters are read once every 30 days. All other retail meters are read every 60 days.

During times when supplies have been cut back, this schedule has remained unchanged. However, the largest accounts can be monitored on a monthly basis. Using historical water use data for these largest accounts, it is possible to determine their impact during severe supply shortages and the need to discontinue service at any time, if needed. Service would not be discontinued on accounts supplying water for human consumption, health, safety or welfare purposes.

During water shortages, water use totals are monitored and provided in a written report to the appropriate members of the management team. These totals compare current water use with any target goals for the same period set by the SDCWA. If target reduction goals are not met, the General Manager can take corrective action as needed.

#### 8.5.2 Reservoir Level Monitoring

The District has a 24-hour telemetry system, installed in 1992 and updated to utilize current technology, which monitors the water flows in the distribution system, pump stations, and reservoirs (water storage tanks), as well as control valve settings on the turnouts. If any difficulties or questions of accuracy develop in the telemetry monitoring of the District's facilities, due to power outages, etc., crews will be dispatched at least twice a day to take manual readings. During emergencies, or 50 percent supply cutbacks, the reservoir levels will be reported to the General Manager on a daily basis.

#### 8.5.3 Metering Water through the SDCWA Connection

During normal supply times the District and SDCWA personnel read the supply meter in addition to the telemetry monitoring. This is the only direct source of water into the District from the SDCWA infrastructure.

#### 8.6 Plan Implementation

The District adopted "Conservation Water Rates" which established normal and conservation rates, an inclining block rate structure, and use allowances to appropriately allocate diminished water supplies. Yearly updates of the normal rates and conservation rates are adopted. Current normal and conservation water rates were adopted in Resolutions 00-05, 01-07, 02-09, 03-11, 04-11, 05-08, 06-10, 07-09, 07-11, 08-05, 09-04, 09-03, 10-03, 10-04.

Currently the potable water supply is 81% imported from the SDCWA and 19% produced from local wells to reduce demand on SDCWA. The District's well production decreased from 27% to 19% in the last five years.

## 9.1 Description

Demand management, better known as water conservation, comprises a number of methods to reduce the demand for water in Lakeside. Lakeside is part of a bigger conservation program through SDCWA and MWD. Lakeside customers benefit by being part of the larger regional program. The water saved through conservation can be used to offset the demand on other water sources, which is why water conservation is a critical part of the long term strategy of SDCWA to provide a diversified and reliable water supply for the County's future population and economy. Conservation programs: (1) reduce demand for expensive, imported water; (2) demonstrate a continued commitment to the Best Management Practices; (3) assist water districts in the County to meet the statutory requirements of the Water Conservation Act of 2009 (SBX7-7) as discussed in section 5; and (4) ensure a reliable future water supply.

## 9.2 Senate Bill 7 of the Seventh Extraordinary Session of 2009

SBX7-7 was enacted to require retail urban water agencies within the state to achieve a 20 percent reduction in urban per capita water use by December 31, 2020. (Water Code Section 10608.20). Examples of active measures and programs include residential and commercial water use surveys and education programs. Active water conservation management strategies include participation in Metropolitan's regional programs and partnerships with San Diego Gas & Electric (SDG&E) on water and energy programs, and incentives to businesses and property owners based on actual water savings. Passive water conservation management strategies include programs that encourage long-term behavior change towards measurable reductions in outdoor water use; increase the landscape industry's basic knowledge regarding the interdependency between water efficiency design, irrigation design, and maintenance; and participation on statewide, national, and industrial committees to advance behavior-based conservation strategies. Additional passive programs and policies include outreach activities, plumbing code changes, legislation, and conservation-based rate structures.

The use of these active and passive water conservation measures, programs, and policies will facilitate market transformation and promote the behavioral change that is at the core of the long-term conservation planning.

## 9.3 Water Conservation Achievements

Lakeside is part of SDCWA Conservation Programs. This section provides information on the Water Authority's recent achievements in water conservation. These programs and activities provide a foundation for the existing and future measures, programs, and policies discussed in Section 9.3 below that will support Lakeside's efforts to comply with the requirements of SBX7-7 and any state mandated drought restrictions.

## 9.3.1 Grant Funding

The Water Authority supplements funding of its water conservation programs through the use of grant funding. The Water Authority was awarded private, state, local, and federal grants with a cumulative value of more than \$7.7 million from fiscal years 2012 to 2017. Grant funding sources include the Bureau of Reclamation, DWR, SDG&E, and the Hans and Margaret Doe Charitable Trust. Examples of the types of programs awarded grant funding are shown in Table 9-1.

WaterSmart Landscape Makeover Program	Sustainable Landscape Program	
Landscape Water Use Evaluations	School Education Programs	
Drought Response Outreach and Communications	Agricultural Irrigation Efficiency Program	
WaterSmart Turf Replacement Program	Detention Facility Retrofits	

#### Table 9-1 Types of Programs Awarded Grant Funding

## 9.3.2 Water Authority Staffing

The Water Authority's Public Outreach and Conservation Department has 19 full-time staff members to design, implement and manage regional water-use efficiency and public outreach programs; develop and support water-use efficiency policy; manage the Water Authority's Small Contractor Outreach and Opportunities Program; provide technical assistance to its 24 member agencies; implement regional programs to support member agency compliance with SBX7-7; and perform grant acquisition and administration duties.

## 9.3.3 Regional WaterSmart Turf Replacement Program

The Water Authority implemented a regional, grant-funded turf replacement rebate program from December 2012 to January 2016 that provided financial incentives to participants who replace existing turf with water-efficient landscaping. The WaterSmart Turf Replacement Program promoted outdoor water-use efficiency through financial incentives of \$1.50 per square foot to participants who replaced existing water-intensive turf grass with WaterSmart landscapes that included climate-appropriate plants and water-efficient irrigation systems. Turf replacement projects had to be in front or side yards and visible to the public and had to inspire others to pursue landscape conversions. Eligible residential sites received up to \$3,000 in incentives; eligible commercial, institutional, and industrial sites up to \$9,000. The program's rebates were funded with more than \$1.7 million in grants from a combination of state and federal sources.

## 9.3.4 SoCal WaterSmart Residential Program

The SoCal WaterSmart regional residential program offers rebates for turf removal, high-efficiency clothes washers and toilets, weather-based irrigation controllers, rotating nozzles, and rain barrels for stormwater capture. Since the Water Authority joined the program in 2008, more than 52,000 high-efficiency clothes washers and 29,000 high-efficiency toilets were installed in the region through the program. In addition, more than 6.6 million square feet of turf grass was removed. The estimated lifetime water savings for these measures exceeds 59,000 acre-feet.

## 9.3.5 SoCal WaterSmart Commercial, Industrial, and Institutional Program

The SoCal WaterSmart Commercial, Industrial, and Institutional (CII) program offers an incentive to eligible CII customers to remove existing water-intensive turf grass and replace it with water efficient landscaping. Through this program, more than 6 million square feet of turf grass was replaced with water-efficient landscapes with a lifetime water savings of more than 8,000 acre-feet. The SoCal WaterSmart Program offered rebates to replace select, older, inefficient devices with water-efficient devices, including enhanced rebates for fixtures for fitness centers and enhanced rebates for public agencies for landscape devices. Since 2012 more than 105,000 water-efficient devices were installed in the region through the program with a lifetime water savings of more than 10,000 acre-feet. Examples of the types of efficient water-use devices are shown in Table 9-2.

Table 9-2 Water Efficient Devices Available through the SoCal WaterSmart CII Progra	am
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<ul> <li>Plumbing Fixtures</li> <li>High-efficiency toilets</li> <li>Ultra-low and zero water urinals</li> <li>Plumbing control valves</li> </ul>	Landscape Equipment <ul> <li>Irrigation controllers</li> <li>Rotating and large rotary nozzles</li> <li>In-stem flow regulators</li> <li>Soil moisture sensor systems</li> </ul>
Food Equipment	HVAC Equipment
<ul> <li>Connectionless food steamers</li> </ul>	<ul> <li>Cooling tower conductivity controllers</li> </ul>
<ul> <li>Air-cooled ice machines</li> </ul>	<ul> <li>Cooling tower ph controllers</li> </ul>
Medical and dental equipment	
Dry vacuum pumps	

#### 9.3.6 Public Agency Landscape Program

The Public Agency Landscape Program offers enhanced incentives for public agencies to install waterefficient landscape devices at their facilities. The program paid incentives up-front to encourage public agencies that had not already installed water-efficient landscape equipment to do so.

## 9.3.7 Fitness Center Program

The Fitness Center Program offers businesses, whose primary function is fitness, enhanced incentives for replacing older toilets and urinals with new, high-efficiency models. Due to the high volume of use of these types of devices in these facilities, significant potential exists to increase water savings.

## 9.3.8 Water Savings Incentive Program

The Water Savings Incentive Program targets commercial, industrial, institutional and agricultural customers with high water use to improve water-use efficiency through financial incentives for customized water efficiency projects. Projects eligible to participate included changing an industrial process water system to capture, treat and reuse process wastewater; installing new, water-efficient equipment in commercial kitchens and laundries; and contracting with a qualified water manager to improve landscape irrigation efficiency.

## 9.3.9 On-Site Recycled Water Conversions

The On-Site Recycled Water Conversions Program provides financial incentives to property owners to convert potable water irrigation or industrial water systems to recycled water service. Items eligible for incentives included project design, permitting, construction costs associated with the retrofit of potable to recycled water systems, connection fees, and required recycled water signage.

## 9.3.10 Audits and Surveys

#### WaterSmart Checkups

The Water Authority and its member agencies offer WaterSmart Checkups to assist single- and multifamily customers and businesses to identify water-saving opportunities specific to their site. Certified landscape irrigation auditors evaluate a site's landscape and irrigation system and provide the customer with a list of recommendations to improve water efficiency, including plant alternatives and a proposed watering schedule. Residential sites also receive an indoor evaluation that identified waterwasting fixtures and practices. The service is provided at no cost to the customer.

#### Landscape Irrigation Surveys

Landscape Irrigation Surveys provide no-cost, site-specific water-saving recommendations from certified irrigation professionals to CII sites with one or more acres of irrigated landscape. Eligible landscapes included commercial and industrial sites; homeowner association common areas; and institutional sites such as schools, parks, and government facilities.

#### Agricultural Water Management Program

The Water Authority's Agricultural Water Management Program (AWMP) has provided agricultural water management services since 1990. Over that period, more than 1,900 agricultural irrigation system evaluations on more than 32,000 acres of avocados, citrus, field flowers, and other fruits and ornamentals were performed. The program provides technical assistance to growers to enable them to irrigate crops as efficiently as possible to obtain the maximum economic benefit from limited water.

The program provides additional assistance through visual observations of the irrigation system, an examination of soil and crop materials, and answering questions. A written report summarizes the irrigation system's hydraulic characteristics and soil profiles, and provides recommendations to improve the overall system efficiency. Local weather data and crop water demand information are also provided. Potential improvements in crop yield and water savings realized from improvements in irrigation efficiency are explained to the grower. Follow-up service is provided to determine if system improvements were implemented and, if not, to encourage implementation of the recommendations.

The program also includes an agricultural recycled water retrofit project and an electrical conductivity mapping and soil sensor installation program. The agricultural recycled water retrofit project will support conversions from potable water to recycled water for agricultural irrigation. The electrical conductivity mapping and soil sensor installation program will allow growers to identify soil properties that can affect crop production. Both programs utilize DWR grant funding.

## 9.3.11 Water and Energy Efficiency Programs

For more than 25 years, the Water Authority and SDG&E have partnered on a variety of programs and projects to generate significant water and embedded energy savings. Highlights from the Water Authority and SDG&E partnership include showerhead distributions, pre-rinse spray valve installations, high-efficiency clothes washer rebates, energy efficiency assessments for water agencies, home energy and water savings kit distributions, joint marketing strategies, and a water-energy pilot program that evaluated embedded energy use in the water sector. Over the last five years, the focus on the relationship between water use and energy use in California increased and the California Public Utilities Commission (CPUC) directed energy utilities to form partnerships with water agencies to reduce embedded energy use through water efficiency programs. Moving forward, Water Authority and SDG&E partnership activities include a continuation of the joint rebate for residential high-efficiency clothes washers, collaboration with SDG&E on its residential Energy Savings Assistance Program, cross-marketing of water and energy efficiency programs, and an assessment of additional joint program opportunities. Information on existing and previous partnership programs is shown below.

## WaterSmart Landscape Efficiency Program

The WaterSmart Landscape Efficiency Program targeted a 20 percent reduction in water use at sites with multiple acres of irrigated landscape. The program achieved a portion of the water savings through a pre-implementation audit of the site's irrigation system to identify and fix any malfunctioning and broken irrigation components, and a portion of the water savings through services provided by a water management service company that adjusted the site's irrigation schedule to match the site's irrigation demand. The program is being redesigned to address the reduction of stormwater runoff associated with dry weather flows and inefficient irrigation.

## Leak Loss Control Program

The Leak Loss Control Program saved water and embedded energy through top-down water audits of retail water agency distribution systems. The water audits were available at no cost to the Water Authority's member agencies. The top-down water audits were performed by a third-party contractor and balanced the total volume of water entering a retail water system against authorized consumption and water losses. The program also identified opportunities for the Water Authority's member agencies to implement pressure management measures to reduce or eliminate water loss due to leaks.

## **Detention Facility Retrofits Program**

The Detention Facility Retrofits Program at the Vista Detention Facility and Kearny Mesa Juvenile Detention Facility saved water and embedded energy through the installation of water-efficient devices, including electronic flush valves, low-flow showerheads, and aerators. The County of San Diego, the facility's owner and operator, provided financial and in-kind services to support the program.

## 9.3.12 WaterSmart Customer Education and Workforce Training

Consistent with its focus to promote the long-term market transformation of conventional urban landscapes to more water-efficient and sustainable landscapes, the Water Authority offers a variety of education and training opportunities for customers and landscape industry professionals, respectively. Course content is designed to promote best practices for landscape water-use efficiency while empowering customers to take action and make informed purchasing decisions when upgrading their landscapes. The following are offered in partnership with the Water Authority's 24 member agencies:

#### WaterSmart Landscape Makeover Series

The series of four workshops provides homeowners an overview and the basic skills necessary for the successful conversion of a traditional turf grass yard into a WaterSmart landscape. Participants receive technical assistance that includes a professional site inspection and development of a base plan to scale, in addition to a professional design consultation. Upon completion of the course, participants

have a landscape design with planting and irrigation plans that are ready for implementation. Recent program upgrades include providing stormwater retention plans based on "first flush" calculations. The average size of the turf replacement projects planned by participants is more than 1,000 square feet.

### WaterSmart Landscape Design for Homeowners Workshop

To accommodate homeowners who prefer an abbreviated version of the WaterSmart Landscape Makeover Series of classes, the Water Authority developed a three-hour version of the classes. This short-format workshop accommodates higher numbers of participants per session, which helps to accelerate the number of homeowners who will be empowered to convert existing water-intensive yards into landscapes that can achieve significant water savings through climate-appropriate plant choices, irrigation efficiency upgrades and stormwater runoff prevention.

#### WaterSmart Landscape Makeover Videos On Demand

To help make the main content of the WaterSmart Landscape Makeover Series even more widely available and convenient for homeowners to access, the Water Authority transformed the program Section 3. Demand Management into a series of online videos. These videos, as well as links to a variety of resources, take the participant through the steps to achieve a WaterSmart landscape. The steps include identification of their landscape target, creation of a basic plot plan, an evaluation of their site, soil analysis, landscape design, irrigation retrofit and landscape maintenance. Future videos will address sustainable landscape concepts such as capturing rainwater to prevent urban stormwater runoff.

#### California Friendly Landscape Training

The Water Authority and its member agencies partnered with Metropolitan to offer free introductory training classes on WaterSmart landscaping. The classes introduced a holistic approach to landscape design and maintenance that emphasized water-use efficiency. The three-hour classes were fast-paced and informative and offered solutions to common landscape problems. Participants learned to think about landscapes from the soil up. In addition, they learned how to design landscapes that are sustainable in the region's climate. Class topics included how to make the best use of the region's limited rainfall, irrigate efficiently, and choose the best plants for the site.

#### Ad Hoc Training Events

The Water Authority periodically sponsored training events as a technical outreach activity to target landscape industry professionals. The objective was to create new educational opportunities to help empower the regional workforce to follow best practices for sustainable landscape design, installation and maintenance. Events included "Get Ahead or Get Parched: Six Ways to Survive the Drought," in 2014, and "When in Drought: Irrigation and Tree Care Workshop for Landscape Professionals," in 2015.

#### Qualified Water Efficient Landscaper (QWEL) Training

The Water Authority introduced this robust training program to San Diego County as a workforce training opportunity to help landscape industry professionals learn the latest techniques for landscape water-use efficiency. Originally developed by the Sonoma-Marin Saving Water Partnership, QWEL is recognized by U.S. Environmental Protection Agency (EPA) as a WaterSense labeled Professional Certification Program for Irrigation System Audits.

## 9.3.13 WaterSmart Tools and Resources

Feedback from polls and focus groups indicates the public understands the need for water-use efficiency and wants to do the right thing, but is often overwhelmed by how to accomplish it. In response, tools and resources were developed to inspire, educate and empower residents and business to take a water-efficient action. These tools and resources foster long-term behavioral change and market transformation by showcasing the beauty and value of WaterSmart landscapes, products and services. Tools and resources developed by the Water Authority are described below.

## WaterSmartSD Website

In 2013, the Water Authority launched a comprehensive water conservation website as an online resource to inspire, educate, and empower the region's residents to make water-efficient lifestyle choices. The website, WaterSmartSD.org, features information about conservation incentives, tools and programs designed to make the most of the region's limited water supplies. The site is organized to provide content relevant to the residential and business sectors. The website also features news items and events, videos, a photo gallery highlighting successful WaterSmart landscaping projects, case studies and other information about indoor and outdoor water-use efficiency. It includes conservation tips and answers to frequently asked questions, along with links to helpful tools such as a water-use calculator, free garden design software and residential landscape design templates. The Water Authority updates WaterSmartSD.org regularly and visitors can sign up for automatic notifications relevant to their areas of interest.

## eGuide to a WaterSmart Lifestyle

The eGuide to a WaterSmart Lifestyle is an online magazine that covers a wide array of topics, including landscape design, water-efficient plants, outdoor rooms, finding and fixing leaks, healthy soil, smart buys on plumbing fixtures, landscape maintenance and drought survival for gardens. It offers everything from design ideas for creating themed planting zones to strategies for using graywater at homes and irrigating efficiently.

## A Homeowner's Guide to a WaterSmart Landscape

A Homeowner's Guide to a WaterSmart Landscape is the companion guide to the Water Authority's award-winning WaterSmart Landscape Makeover Series. This no-cost guide offers instructions for homeowners who want to make their landscapes more water-efficient. The guide reflects California's Model Water-Efficient Landscape Ordinance standards and explains the principles of a WaterSmart landscape design and irrigation, climate-appropriate plants and BMPs.

#### **Residential Landscape Design Templates**

Professionally drawn, water-efficient landscape plans are available online to provide ideas and inspiration for single-family homeowners, particularly for do-it-yourselfers. San Diego landscape architects designed four templates that support the state's 2015 Model Water Efficient Landscape Ordinance. Plans are themed to fit common family audiences, including Empty Nesters, Entertainer, Pet Friendly, Children Friendly, and Native/Wildlife Friendly Landscape.

## **Online Residential Water-Use Calculator**

The Water Authority launched its Residential Water-Use Calculator (watersmartsd.org/watercalculator) in 2013 in partnership with the Alliance for Water Efficiency. The objective of the water-use calculator is to assess and educate homeowners about their indoor and outdoor water use and inspire them to make changes in their behavior, fixtures or landscape that will make their home more water-efficient.

## Smart Water Application Technologies

The Water Authority collaborated with industry for many years to promote the research and application of the best practices and technologies to save water. Under the auspices of the Irrigation Association, water utilities, irrigation product manufacturers and other landscape professionals collaborated in the Smart Water Application Technologies (SWAT) committee. SWAT's achievements include the development of a standardized testing protocol for weather-based irrigation controllers to help water utilities establish product eligibility standards for rebates. The standardized testing protocol was also a precursor to the establishment of EPA's ongoing WaterSense product labeling standards. Looking ahead, SWAT testing protocols under development include pressure-regulating spray heads, spray head sprinkler nozzles, pop-up sprinkler head check valves, rain sensors, weather-based controllers, and soil moisture-based controllers. The test results will provide valuable information in the development of the next generation of water-efficient products.

## San Diego County Fair

The San Diego County Fair is one of the most popular county fairs on the West Coast with more than 1 million attendees each year. The Water Authority uses the fair to reach residents from throughout the region and to partner with regional horticultural gardens to sponsor award-winning landscape exhibits. While following previous fair themes such as "A Fair to Remember: Celebrate The World's Fairs & Balboa Park" and "The Fab Fair," the Water Authority's exhibits continue to demonstrate a beautiful, low-water-use display that can be integrated into a residential setting. In addition, each year the Water Authority presents an award to the fair's garden show exhibit that best exemplified a WaterSmart landscape through eye-catching colors, textures, and designs. The award and its monetary prize encouraged landscape exhibitors to install water-efficient gardens, thus increasing the public's exposure to the beauty and potential of a WaterSmart landscape. Judging criteria included design, plant choice, maintenance and use of water-efficient irrigation components.

#### Water Conservation Garden

The Water Conservation Garden opened in 1999 to educate the public about the steps they can take to conserve water in landscapes. It occupies nearly six acres adjacent to Cuyamaca College in the eastern part of the Water Authority's service area. The Garden showcases 16 different mini-gardens and exhibits and provides school-education programs and outreach, low-water-use classes and workshops, and community events. The Water Authority joined the Garden's Joint Powers Authority in 2001 and continues to support its efforts to promote water efficiency in the landscape sector.

#### San Diego Botanic Garden

The San Diego Botanic Garden is located in the north-coastal area of San Diego County. The Water Authority supports its vision through a corporate sponsorship. The mission of the Botanic Garden is to promote sustainable use of natural resources. Low-water-use plants and water-saving technologies and displays make up the majority of the gardens. In an effort to reduce outdoor water use in the region, the Botanic Garden also provides classes on water conservation and garden tours throughout the year in an effort to reduce outdoor water use in the region.

## San Diego County Garden Friendly Plant Fairs

The region's residents who were interested in making their yards and gardens more attractive and water-efficient had a great opportunity to get information from gardening experts and receive significant discounts on varieties of low-water-use plants at San Diego County Garden Friendly Plant Fairs. The events are held annually in the spring and fall at select The Home Depot locations. Plant fairs feature discounts on more than 20 types of plants, preselected by a panel of experts as water-efficient for the San Diego region. Industry experts are available to provide customers with information on water-efficient irrigation supplies and how to select and plant low-water-use plants. The Home Depot-certified nursery consultants host informative how-to workshops and local retail water agencies provide customers with information on water conservation programs and services.

#### Artificial Turf Discount Program

In response to drought conditions in 2015, the Water Authority launched an artificial turf discount pilot program to reduce the cost to replace water-intensive grass with artificial turf. Under this public-private partnership, participating artificial turf companies provide customers with a 10 percent discount on products and services. The discount is available whether the installation was performed by the artificial turf company or by a do-it-yourself customer who purchased only materials. The program is available to residential, commercial and public sector customers. The discount is provided directly by the participating artificial turf company.

#### WaterSmart Landscaping in San Diego County

The WaterSmart Landscape web portal links viewers to an extensive plant database, inspirational gardens, tips and other landscape-related resources.

## 9.4 Public Outreach

The Water Authority has consistently promotes water-use efficiency programs through its communications and outreach channels as part of its overall long-term strategy to improve the reliability of the region's water supplies by diversifying its water supply sources and advancing conservation. In addition, during times of shortage or drought, the Water Authority has dedicates additional resources to public awareness campaigns that call upon the public to take more immediate actions to save water.

## "20-Gallon Challenge" Campaign

In response to worsening water supply conditions that began in 2007 and lasted until April 2011, the Water Authority conducted an aggressive outreach campaign branded as the "20-Gallon Challenge." The campaign's name reflected the initial call to cut urban water use voluntarily by 10 percent, or about 20 gallons per capita per day (GPCD) at the time. The outreach campaign was a multi-faceted approach to educate the community on the short- and long-term water supply challenges, specific tips to save water, and resources available to implement those changes. Tactics to help the region meet an 8 percent overall shortage allocation between July 2009 and April 2011 included traditional advertising, media relations, online communications, water agency relations, education curriculum and contests, government relations, and community outreach via presentations and events. The campaign, combined with the ongoing implementation of other Water Authority conservation programs and outreach efforts conducted by its local member agencies, helped achieve water savings well above the allocation target. Total potable water use dropped from 211 gallons per person per day in fiscal year 2007 to 140 gallons per person per day in fiscal year 2011.

#### Promoting WaterSmart Programs

Since the end of shortage allocations in 2011, the Water Authority has been focusing outreach efforts on building awareness and public acceptance for water-use efficiency as a desirable lifestyle and permanent civic responsibility through promoting the Water Authority's WaterSmart-branded conservation programs and classes. Staff promotes these resources primarily through ongoing media relations, community relations activities (such as attending special events and making presentations to community groups), targeted advertising, promotional materials, videos, electronic newsletters, innovative public-private partnerships such as the water-efficient plant fairs with local The Home Depot stores, and through tools such as social media (primarily Facebook, Twitter and YouTube) and the WaterSmartSD.org website.

#### "When in Drought" Campaign

In early 2014, water supply conditions worsened to the point where it again became necessary to launch an urgent drought-response outreach campaign as called for under the Water Authority's Water Shortage and Drought Management Plan. Since April 2014, the Water Authority has executed an aggressive drought response outreach campaign themed "When in Drought: Save Every Day, Every Way," to help achieve increased water conservation by the public, and to enhance public understanding of how ratepayers' investments in projects and their commitment to water conservation have reduced the region's vulnerability to shortages from drought conditions. The campaign was partially supported in 2014 and 2015 by state Proposition 50 grant funds. In May 2015, the Board authorized an additional \$1 million to support enhanced outreach and water conservation programs designed to help the Water Authority's member agencies comply with state mandated water-use reduction targets that are in effect from June 2015 through October 2016. In anticipation of continued drought conditions in 2016, the Water Authority was awarded \$1.1 million in Proposition 84 Final Round grant funds to sustain enhanced drought response outreach efforts in 2016 and potentially beyond.

The campaign employed a wide array of communications tactics, including paid advertising, ongoing media relations, website communications, electronic newsletters, social media posts, videos, a Speakers Bureau, school education programs, community partnerships and promotions, and government relations. Ads and messages were translated into Spanish, and advertising and community event
schedules were constructed to ensure reach into a diverse set of audiences around the region. The Water Authority also launched a "When in Drought" smartphone app in August 2015 to make it more convenient for the region's residents to report potential incidents of water waste to local water districts so they can be fixed sooner. The Water Authority also used public opinion polls and other research opportunities to test messages and tactics and revise them as needed to increase effectiveness. If drought and water supply conditions ease to the point where maintaining the "When in Drought" campaign is no longer necessary, the Water Authority will continue to promote the "WaterSmart" brand or conduct other outreach on an ongoing basis that continues to advocate water-use efficiency as a desirable and permanent way of life in the San Diego region.

### Other Outreach Efforts

In addition, the Water Authority consistently promotes conservation activities and programs through a range of activities, including the following:

- Conducting research on the public's knowledge of water issues
- Support for water conservation and other supply management and development strategies, and attitudes toward water-efficient landscaping
- Using social media, electronic newsletters, community events, and speaker's bureau presentations
- Supporting regional water-efficiency demonstration gardens, such as the Water Conservation Garden and the San Diego Botanic Garden
- Developing and providing school education materials, assemblies, and an exhibit at the Reuben H. Fleet Science Center in Balboa Park
- Administering a Citizens Water Academy that educates emerging leaders on regional water issues, including the importance of water-use efficiency and prudent investments in water supply reliability, through in-depth and engaging interactions with senior Water Authority staff and tours of key regional water facilities
- Sharing updates on local water issues, fact sheets, and information on Board meetings via a Water News smartphone app for Apple and Android devices

### Water-Use Efficiency Legislative Sponsorship

The Water Authority has been a statewide leader in sponsoring legislation to improve water-use efficiency standards since 1991. Many bills sponsored by the Water Authority have set precedent and been instrumental in the development of new strategies in water resource management, including advancement of standards for high-efficiency toilets and residential clothes washers, and water-efficient landscapes. Most recently, the Water Authority sponsored Assembly Bill 349, which prohibits common interest developments from banning artificial turf. This landmark water conservation legislation was signed into law in 2015 and will enhance outdoor water conservation opportunities statewide. Water Authority sponsored landmark water-use efficiency laws are shown in Table 9-3.

### Table 9-3 Water Authority Sponsored Landmark Water-Use Efficiency Laws

Toilets and Clothes Washer Standards	Statewide Requirement for Water Meters
• SB 1224 (Killea, 1991)	• AB 514(Kehoe, 2003)
• AB 952 (Kelley, 2001)	• AB 2572 (Kehoe, 2004)
• AB 1561 (Kelley, 2002)	• SB 1050 (NR&W, 2007)
Statewide Landscape Irrigation Standards	Statewide Conservation Best Management Practices
• AB 2717 (Laird, 2004)	• SB 553 (Kelley, 2000)
• AB 1881 (Laird, 2006)	• AB 1465 (Hill, 2009)
Artificial Turf in HOAs	Urban Water Management Plans
• AB 349 (Gonzales, 2015)	• AB 2067 (Weber, 2014)

## 9.5 Conclusion

Water-use efficiency will continue to play a central role in the Water Authority's efforts to maximize the reliability of the region's water supply through diversification. The achievements in water conservation discussed in this section provide a foundation for the existing and future measures, programs, and policies. Moving forward, the Water Authority will support its member agencies' efforts to comply with the GPCD reductions required under SBX7-7 and any future long-term state water-use efficiency framework in effect through various means, including a continued emphasis on behavioral change and market transformation.

### 10.1 Plan Adoption and Submittal

Public outreach was made to Lakeside residents by a listing in the local newspaper on April 8th and a notice on the District's website regarding the review and adoption of the UWMP at a public hearing. Lakeside also sent a notice of the 2015's plan preparation to applicable cities and the county (see Appendix i). The 2015 UWMP was adopted by the Board at a public hearing on June 7, 2016 at 5:30 pm at the District headquarters, with Resolution 16-03 (see Appendix i). After the Board adopts the 2015 UWMP it is submitted electronically to DWR online before July 1<sup>st</sup> and sent to other applicable agencies (See Appendix i).

# Appendix A

# Urban Water Management Planning Act

# Appendix A: California Urban Water Management Planning Act and Senate Bill 7 (SBX7-7)

## CALIFORNIA WATER CODE DIVISION 6 PART 2.6. URBAN WATER MANAGEMENT PLANNING

<u>10610-10610.4</u> <u>10611-10617</u>

<u>10620-10621</u> <u>10630-10634</u> <u>10635</u> <u>10640-10645</u> 10650-10656

All California Codes have been updated to include the 2010 Statutes.

CHAPTER 1. CHAPTER 2. CHAPTER 3.	GENERAL DECLARATION AND POLICY DEFINITIONS URBAN WATER MANAGEMENT PLANS
Article 1.	General Provisions
Article 2.	Contents of Plans
Article 2.5.	Water Service Reliability
Article 3.	Adoption and Implementation of Plans
CHAPTER 4.	MISCELLANEOUS PROVISIONS

## WATER CODE SECTION 10610-10610.4

**10610.** This part shall be known and may be cited as the "Urban Water Management Planning Act."

**10610.2.** (a) The Legislature finds and declares all of the following:

(1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.

(2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.

(3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.

(4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years.

(5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.

(6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.

(7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.

(8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.

(9) The quality of source supplies can have a significant impact

on water management strategies and supply reliability.

(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

**10610.4.** The Legislature finds and declares that it is the policy of the state as follows:

(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.

(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

### WATER CODE SECTION 10611-10617

**10611.** Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

**10611.5.** "Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

**10612.** "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

**10613.** "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

**10614.** "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

**10615.** "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

10616. "Public agency" means any board, commission, county, city

and county, city, regional agency, district, or other public entity.

**10616.5.** "Recycled water" means the reclamation and reuse of wastewater for beneficial use.

**10617.** "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

### WATER CODE SECTION 10620-10621

**10620.** (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d) (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

(2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

**10621.** (a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero.

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days prior to the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

## WATER CODE SECTION 10630-10634

**10630.** It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

**10631.** A plan shall be adopted in accordance with this chapter that shall do all of the following:

(a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:

(1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.

(2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.

(3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records. (4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(c) (1) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:

(A) An average water year.

(B) A single dry water year.

(C) Multiple dry water years.

(2) For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

(d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

(e) (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors, including, but not necessarily limited to, all of the following uses:

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

(H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

(I) Agricultural.

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1) A description of 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-low-flush toilet replacement programs.

(2) A schedule of implementation for all water demand management measures proposed or described in the plan.

(3) 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.

(4) 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.

(g) 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.

(h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

(i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

 (j) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivisions (f) and
 (g) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.

(k) Urban water suppliers that rely upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

**10631.1.** (a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

**10631.5.** (a) (1) Beginning 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 described in Section 10631, as determined by the department pursuant to subdivision (b).

(2) For the purposes of this section, water management grants and loans include funding for programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation. This section does not apply to water management projects funded by the federal American Recovery and Reinvestment Act of 2009 (Public Law 111-5).

(3) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if the urban water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the water demand management measures. The supplier may request grant or loan funds to implement the water demand management measures to the extent the request is consistent with the eligibility requirements applicable to the water management funds.

(4) (A) Notwithstanding paragraph (1), the department shall

determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if an urban water supplier submits to the department for approval documentation demonstrating that a water demand management measure is not locally cost effective. If the department determines that the documentation submitted by the urban water supplier fails to demonstrate that a water demand management measure is not locally cost effective, the department shall notify the urban water supplier and the agency administering the grant or loan program within 120 days that the documentation does not satisfy the requirements for an exemption, and include in that notification a detailed statement to support the determination.

(B) For purposes of this paragraph, "not locally cost effective" means that the present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure.

(b) (1) The department, in consultation with the state board and the California Bay-Delta Authority or its successor agency, and after soliciting public comment regarding eligibility requirements, shall develop eligibility requirements to implement the requirement of paragraph (1) of subdivision (a). In establishing these eligibility requirements, the department shall do both of the following:

(A) Consider the conservation measures described in the Memorandum of Understanding Regarding Urban Water Conservation in California, and alternative conservation approaches that provide equal or greater water savings.

(B) Recognize the different legal, technical, fiscal, and practical roles and responsibilities of wholesale water suppliers and retail water suppliers.

(2) (A) For the purposes of this section, the department shall determine whether an urban water supplier is implementing all of the water demand management measures described in Section 10631 based on either, or a combination, of the following:

(i) Compliance on an individual basis.

(ii) Compliance on a regional basis. Regional compliance shall require participation in a regional conservation program consisting of two or more urban water suppliers that achieves the level of conservation or water efficiency savings equivalent to the amount of conservation or savings achieved if each of the participating urban water suppliers implemented the water demand management measures. The urban water supplier administering the regional program shall provide participating urban water suppliers and the department with data to demonstrate that the regional program is consistent with this clause. The department shall review the data to determine whether the urban water suppliers in the regional program are meeting the eligibility requirements.

(B) The department may require additional information for any determination pursuant to this section.

(3) The department shall not deny eligibility to an urban water supplier in compliance with the requirements of this section that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.

(c) In establishing guidelines pursuant to the specific funding authorization for any water management grant or loan program subject to this section, the agency administering the grant or loan program shall include in the guidelines the eligibility requirements developed by the department pursuant to subdivision (b).

(d) Upon receipt of a water management grant or loan application by an agency administering a grant and loan program subject to this section, the agency shall request an eligibility determination from the department with respect to the requirements of this section. The department shall respond to the request within 60 days of the request.

(e) The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities. In addition, for urban water suppliers that are signatories to the Memorandum of Understanding Regarding Urban Water Conservation in California and submit biennial reports to the California Urban Water Conservation Council in accordance with the memorandum, the department may use these reports to assist in tracking the implementation of water demand management measures.

(f) This section shall remain in effect only until July 1, 2016, and as of that date is repealed, unless a later enacted statute, that is enacted before July 1, 2016, deletes or extends that date.

**10631.7.** The department, in consultation with the California Urban Water Conservation Council, shall convene an independent technical panel to provide information and recommendations to the department and the Legislature on new demand management measures, technologies, and approaches. The panel shall consist of no more than seven members, who shall be selected by the department to reflect a balanced representation of experts. The panel shall have at least one, but no more than two, representatives from each of the following: retail water suppliers, environmental organizations, the business community, wholesale water suppliers, and academia. The panel shall be convened by January 1, 2009, and shall report to the Legislature no later than January 1, 2010, and every five years thereafter. The department shall review the panel report and include in the final report to the Legislature the department's recommendations and comments regarding the panel process and the panel's recommendations.

**10632.** (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

(1) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.

(2) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic

sequence for the agency's water supply.

(3) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

(4) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

(5) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

(6) Penalties or charges for excessive use, where applicable.

(7) An analysis of the impacts of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

(8) A draft water shortage contingency resolution or ordinance.

(9) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

(b) Commencing with the urban water management plan update due December 31, 2015, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

**10633.** The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier's

service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

**10634.** The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

## WATER CODE SECTION 10635

**10635.** (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

(c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(d) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

### WATER CODE SECTION 10640-10645

**10640.** Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630).

The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

**10641.** An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

**10642.** Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

**10643.** An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

**10644.** (a) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(b) The department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part. The report prepared by the department shall identify the exemplary elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

(c) (1) For the purpose of identifying the exemplary elements of the individual plans, the department shall identify in the report those water demand management measures adopted and implemented by specific urban water suppliers, and identified pursuant to Section 10631, that achieve water savings significantly above the levels established by the department to meet the requirements of Section 10631.5.

(2) The department shall distribute to the panel convened pursuant to Section 10631.7 the results achieved by the implementation of those water demand management measures described in paragraph (1).

(3) The department shall make available to the public the standard the department will use to identify exemplary water demand management measures.

**10645.** Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

### WATER CODE SECTION 10650-10656

**10650.** Any actions or proceedings to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(a) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.

(b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.

**10651.** In any action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

**10652.** The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

**10653.** The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

**10654.** An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the

"Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.

**10655.** If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

**10656.** An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

Appendix B

Senate Bill 7 (SBX7-7)

#### Senate Bill No. 7

### CHAPTER 4

An act to amend and repeal Section 10631.5 of, to add Part 2.55 (commencing with Section 10608) to Division 6 of, and to repeal and add Part 2.8 (commencing with Section 10800) of Division 6 of, the Water Code, relating to water.

#### [Approved by Governor November 10, 2009. Filed with Secretary of State November 10, 2009.]

#### LEGISLATIVE COUNSEL'S DIGEST

SB 7, Steinberg. Water conservation.

(1) Existing law requires the Department of Water Resources to convene an independent technical panel to provide information to the department and the Legislature on new demand management measures, technologies, and approaches. "Demand management measures" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

This bill would require the state to achieve a 20% reduction in urban per capita water use in California by December 31, 2020. The state would be required to make incremental progress towards this goal by reducing per capita water use by at least 10% on or before December 31, 2015. The bill would require each urban retail water supplier to develop urban water use targets and an interim urban water use target, in accordance with specified requirements. The bill would require agricultural water suppliers to implement efficient water management practices. The bill would require the department, in consultation with other state agencies, to develop a single standardized water use reporting form. The bill, with certain exceptions, would provide that urban retail water suppliers, on and after July 1, 2016, and agricultural water suppliers, on and after July 1, 2013, are not eligible for state water grants or loans unless they comply with the water conservation requirements established by the bill. The bill would repeal, on July 1, 2016, an existing requirement that conditions eligibility for certain water management grants or loans to an urban water supplier on the implementation of certain water demand management measures.

(2) Existing law, until January 1, 1993, and thereafter only as specified, requires certain agricultural water suppliers to prepare and adopt water management plans.

This bill would revise existing law relating to agricultural water management planning to require agricultural water suppliers to prepare and adopt agricultural water management plans with specified components on or before December 31, 2012, and update those plans on or before December

31, 2015, and on or before December 31 every 5 years thereafter. An agricultural water supplier that becomes an agricultural water supplier after December 31, 2012, would be required to prepare and adopt an agricultural water management plan within one year after becoming an agricultural water supplier. The agricultural water supplier would be required to notify each city or county within which the supplier provides water supplies with regard to the preparation or review of the plan. The bill would require the agricultural water supplier to submit copies of the plan to the department and other specified entities. The bill would provide that an agricultural water supplier is not eligible for state water grants or loans unless the supplier complies with the water management planning requirements established by the bill.

(3) The bill would take effect only if SB 1 and SB 6 of the 2009–10 7th Extraordinary Session of the Legislature are enacted and become effective.

#### The people of the State of California do enact as follows:

SECTION 1. Part 2.55 (commencing with Section 10608) is added to Division 6 of the Water Code, to read:

#### PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION

#### Chapter 1. General Declarations and Policy

10608. The Legislature finds and declares all of the following:

(a) Water is a public resource that the California Constitution protects against waste and unreasonable use.

(b) Growing population, climate change, and the need to protect and grow California's economy while protecting and restoring our fish and wildlife habitats make it essential that the state manage its water resources as efficiently as possible.

(c) Diverse regional water supply portfolios will increase water supply reliability and reduce dependence on the Delta.

(d) Reduced water use through conservation provides significant energy and environmental benefits, and can help protect water quality, improve streamflows, and reduce greenhouse gas emissions.

(e) The success of state and local water conservation programs to increase efficiency of water use is best determined on the basis of measurable outcomes related to water use or efficiency.

(f) Improvements in technology and management practices offer the potential for increasing water efficiency in California over time, providing an essential water management tool to meet the need for water for urban, agricultural, and environmental uses.

(g) The Governor has called for a 20 percent per capita reduction in urban water use statewide by 2020.

(h) The factors used to formulate water use efficiency targets can vary significantly from location to location based on factors including weather, patterns of urban and suburban development, and past efforts to enhance water use efficiency.

(i) Per capita water use is a valid measure of a water provider's efforts to reduce urban water use within its service area. However, per capita water use is less useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

10608.4. It is the intent of the Legislature, by the enactment of this part, to do all of the following:

(a) Require all water suppliers to increase the efficiency of use of this essential resource.

(b) Establish a framework to meet the state targets for urban water conservation identified in this part and called for by the Governor.

(c) Measure increased efficiency of urban water use on a per capita basis.

(d) Establish a method or methods for urban retail water suppliers to determine targets for achieving increased water use efficiency by the year 2020, in accordance with the Governor's goal of a 20-percent reduction.

(e) Establish consistent water use efficiency planning and implementation standards for urban water suppliers and agricultural water suppliers.

(f) Promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.

(g) Establish standards that recognize and provide credit to water suppliers that made substantial capital investments in urban water conservation since the drought of the early 1990s.

(h) Recognize and account for the investment of urban retail water suppliers in providing recycled water for beneficial uses.

(i) Require implementation of specified efficient water management practices for agricultural water suppliers.

(j) Support the economic productivity of California's agricultural, commercial, and industrial sectors.

(k) Advance regional water resources management.

10608.8. (a) (1) Water use efficiency measures adopted and implemented pursuant to this part or Part 2.8 (commencing with Section 10800) are water conservation measures subject to the protections provided under Section 1011.

(2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision (b) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to January 1, 2021. Nothing in this paragraph limits the use of data reported to the department or the board in litigation or an

administrative proceeding. This paragraph shall become inoperative on January 1, 2021.

(3) To the extent feasible, the department and the board shall provide for the use of water conservation reports required under this part to meet the requirements of Section 1011 for water conservation reporting.

(b) This part does not limit or otherwise affect the application of Chapter 3.5 (commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.

(d) The requirements of this part do not apply to an agricultural water supplier that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect. After the expiration of the Quantification Settlement Agreement, to the extent conservation water projects implemented as part of the Quantification Settlement Agreement remain in effect, the conserved water created as part of those projects shall be credited against the obligations of the agricultural water supplier pursuant to this part.

#### Chapter 2. Definitions

10608.12. Unless the context otherwise requires, the following definitions govern the construction of this part:

(a) "Agricultural water supplier" means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water. "Agricultural water supplier" includes a supplier or contractor for water, regardless of the basis of right, that distributes or sells water for ultimate resale to customers. "Agricultural water supplier" does not include the department.

(b) "Base daily per capita water use" means any of the following:

(1) The urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

(2) For an urban retail water supplier that meets at least 10 percent of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the calculation described in paragraph (1) up to an additional five years to a maximum of

a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

(3) For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 31, 2007, and no later than December 31, 2010.

(c) "Baseline commercial, industrial, and institutional water use" means an urban retail water supplier's base daily per capita water use for commercial, industrial, and institutional users.

(d) "Commercial water user" means a water user that provides or distributes a product or service.

(e) "Compliance daily per capita water use" means the gross water use during the final year of the reporting period, reported in gallons per capita per day.

(f) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

(g) "Gross water use" means the total volume of water, whether treated or untreated, entering the distribution system of an urban retail water supplier, excluding all of the following:

(1) Recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier.

(2) The net volume of water that the urban retail water supplier places into long-term storage.

(3) The volume of water the urban retail water supplier conveys for use by another urban water supplier.

(4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.

(h) "Industrial water user" means a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.

(i) "Institutional water user" means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.

(j) "Interim urban water use target" means the midpoint between the urban retail water supplier's base daily per capita water use and the urban retail water supplier's urban water use target for 2020.

(k) "Locally cost effective" means that the present value of the local benefits of implementing an agricultural efficiency water management practice is greater than or equal to the present value of the local cost of implementing that measure.

(*l*) "Process water" means water used for producing a product or product content or water used for research and development, including, but not limited to, continuous manufacturing processes, water used for testing and maintaining equipment used in producing a product or product content, and

water used in combined heat and power facilities used in producing a product or product content. Process water does not mean incidental water uses not related to the production of a product or product content, including, but not limited to, water used for restrooms, landscaping, air conditioning, heating, kitchens, and laundry.

(m) "Recycled water" means recycled water, as defined in subdivision (n) of Section 13050, that is used to offset potable demand, including recycled water supplied for direct use and indirect potable reuse, that meets the following requirements, where applicable:

(1) For groundwater recharge, including recharge through spreading basins, water supplies that are all of the following:

(A) Metered.

Ch. 4

(B) Developed through planned investment by the urban water supplier or a wastewater treatment agency.

(C) Treated to a minimum tertiary level.

(D) Delivered within the service area of an urban retail water supplier or its urban wholesale water supplier that helps an urban retail water supplier meet its urban water use target.

(2) For reservoir augmentation, water supplies that meet the criteria of paragraph (1) and are conveyed through a distribution system constructed specifically for recycled water.

(n) "Regional water resources management" means sources of supply resulting from watershed-based planning for sustainable local water reliability or any of the following alternative sources of water:

(1) The capture and reuse of stormwater or rainwater.

(2) The use of recycled water.

(3) The desalination of brackish groundwater.

(4) The conjunctive use of surface water and groundwater in a manner that is consistent with the safe yield of the groundwater basin.

(o) "Reporting period" means the years for which an urban retail water supplier reports compliance with the urban water use targets.

(p) "Urban retail water supplier" means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.

(q) "Urban water use target" means the urban retail water supplier's targeted future daily per capita water use.

(r) "Urban wholesale water supplier," means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

CHAPTER 3. URBAN RETAIL WATER SUPPLIERS

10608.16. (a) The state shall achieve a 20-percent reduction in urban per capita water use in California on or before December 31, 2020.

(b) The state shall make incremental progress towards the state target specified in subdivision (a) by reducing urban per capita water use by at least 10 percent on or before December 31, 2015.

10608.20. (a) (1) Each urban retail water supplier shall develop urban water use targets and an interim urban water use target by July 1, 2011. Urban retail water suppliers may elect to determine and report progress toward achieving these targets on an individual or regional basis, as provided in subdivision (a) of Section 10608.28, and may determine the targets on a fiscal year or calendar year basis.

(2) It is the intent of the Legislature that the urban water use targets described in subdivision (a) cumulatively result in a 20-percent reduction from the baseline daily per capita water use by December 31, 2020.

(b) An urban retail water supplier shall adopt one of the following methods for determining its urban water use target pursuant to subdivision (a):

(1) Eighty percent of the urban retail water supplier's baseline per capita daily water use.

(2) The per capita daily water use that is estimated using the sum of the following performance standards:

(A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the department's 2016 report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.

(B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992. An urban retail water supplier using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.

(C) For commercial, industrial, and institutional uses, a 10-percent reduction in water use from the baseline commercial, industrial, and institutional water use by 2020.

(3) Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009). If the service area of an urban water supplier includes more than one hydrologic region, the supplier shall apportion its service area to each region based on population or area.

(4) A method that shall be identified and developed by the department, through a public process, and reported to the Legislature no later than December 31, 2010. The method developed by the department shall identify per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31, 2020. In developing urban daily per capita water use targets, the department shall do all of the following:

(A) Consider climatic differences within the state.

(B) Consider population density differences within the state.

(C) Provide flexibility to communities and regions in meeting the targets.

(D) Consider different levels of per capita water use according to plant water needs in different regions.

(E) Consider different levels of commercial, industrial, and institutional water use in different regions of the state.

(F) Avoid placing an undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.

(c) If the department adopts a regulation pursuant to paragraph (4) of subdivision (b) that results in a requirement that an urban retail water supplier achieve a reduction in daily per capita water use that is greater than 20 percent by December 31, 2020, an urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may limit its urban water use target to a reduction of not more than 20 percent by December 31, 2020, by adopting the method described in paragraph (1) of subdivision (b).

(d) The department shall update the method described in paragraph (4) of subdivision (b) and report to the Legislature by December 31, 2014. An urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may adopt a new urban daily per capita water use target pursuant to this updated method.

(e) An urban retail water supplier shall include in its urban water management plan required pursuant to Part 2.6 (commencing with Section 10610) due in 2010 the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.

(f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.

(g) An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).

(h) (1) The department, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical methodologies and criteria for the consistent implementation of this part, including, but not limited to, both of the following:

(A) Methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, and landscaped area water use.

(B) Criteria for adjustments pursuant to subdivisions (d) and (e) of Section 10608.24.

(2) The department shall post the methodologies and criteria developed pursuant to this subdivision on its Internet Web site, and make written copies

available, by October 1, 2010. An urban retail water supplier shall use the methods developed by the department in compliance with this part.

(i) (1) The department shall adopt regulations for implementation of the provisions relating to process water in accordance with subdivision (l) of Section 10608.12, subdivision (e) of Section 10608.24, and subdivision (d) of Section 10608.26.

(2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

(j) An urban retail water supplier shall be granted an extension to July 1, 2011, for adoption of an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) due in 2010 to allow use of technical methodologies developed by the department pursuant to paragraph (4) of subdivision (b) and subdivision (h). An urban retail water supplier that adopts an urban water management plan due in 2010 that does not use the methodologies developed by the department pursuant to subdivision (h) shall amend the plan by July 1, 2011, to comply with this part.

10608.22. Notwithstanding the method adopted by an urban retail water supplier pursuant to Section 10608.20, an urban retail water supplier's per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use as defined in paragraph (3) of subdivision (b) of Section 10608.12. This section does not apply to an urban retail water supplier with a base daily per capita water use at or below 100 gallons per capita per day.

10608.24. (a) Each urban retail water supplier shall meet its interim urban water use target by December 31, 2015.

(b) Each urban retail water supplier shall meet its urban water use target by December 31, 2020.

(c) An urban retail water supplier's compliance daily per capita water use shall be the measure of progress toward achievement of its urban water use target.

(d) (1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:

(A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.

(B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.

(C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.

(2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.

(e) When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a substantial percentage of industrial water use in its service area, may exclude process water from the calculation of gross water use to avoid a disproportionate burden on another customer sector.

(f) (1) An urban retail water supplier that includes agricultural water use in an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) may include the agricultural water use in determining gross water use. An urban retail water supplier that includes agricultural water use in determining gross water use and develops its urban water use target pursuant to paragraph (2) of subdivision (b) of Section 10608.20 shall use a water efficient standard for agricultural irrigation of 100 percent of reference evapotranspiration multiplied by the crop coefficient for irrigated acres.

(2) An urban retail water supplier, that is also an agricultural water supplier, is not subject to the requirements of Chapter 4 (commencing with Section 10608.48), if the agricultural water use is incorporated into its urban water use target pursuant to paragraph (1).

10608.26. (a) In complying with this part, an urban retail water supplier shall conduct at least one public hearing to accomplish all of the following:

(1) Allow community input regarding the urban retail water supplier's implementation plan for complying with this part.

(2) Consider the economic impacts of the urban retail water supplier's implementation plan for complying with this part.

(3) Adopt a method, pursuant to subdivision (b) of Section 10608.20, for determining its urban water use target.

(b) In complying with this part, an urban retail water supplier may meet its urban water use target through efficiency improvements in any combination among its customer sectors. An urban retail water supplier shall avoid placing a disproportionate burden on any customer sector.

(c) For an urban retail water supplier that supplies water to a United States Department of Defense military installation, the urban retail water supplier's implementation plan for complying with this part shall consider the United States Department of Defense military installation's requirements under federal Executive Order 13423.

(d) (1) Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier. (2) This part shall not be construed or enforced so as to interfere with the requirements of Chapter 4 (commencing with Section 113980) to Chapter 13 (commencing with Section 114380), inclusive, of Part 7 of Division 104 of the Health and Safety Code, or any requirement or standard for the protection of public health, public safety, or worker safety established by federal, state, or local government or recommended by recognized standard setting organizations or trade associations.

10608.28. (a) An urban retail water supplier may meet its urban water use target within its retail service area, or through mutual agreement, by any of the following:

(1) Through an urban wholesale water supplier.

(2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31 (commencing with Section 81300)).

(3) Through a regional water management group as defined in Section 10537.

(4) By an integrated regional water management funding area.

(5) By hydrologic region.

(6) Through other appropriate geographic scales for which computation methods have been developed by the department.

(b) A regional water management group, with the written consent of its member agencies, may undertake any or all planning, reporting, and implementation functions under this chapter for the member agencies that consent to those activities. Any data or reports shall provide information both for the regional water management group and separately for each consenting urban retail water supplier and urban wholesale water supplier.

10608.32. All costs incurred pursuant to this part by a water utility regulated by the Public Utilities Commission may be recoverable in rates subject to review and approval by the Public Utilities Commission, and may be recorded in a memorandum account and reviewed for reasonableness by the Public Utilities Commission.

10608.36. Urban wholesale water suppliers shall include in the urban water management plans required pursuant to Part 2.6 (commencing with Section 10610) an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.

10608.40. Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631. The data shall be reported using a standardized form developed pursuant to Section 10608.52.

10608.42. The department shall review the 2015 urban water management plans and report to the Legislature by December 31, 2016, on progress towards achieving a 20-percent reduction in urban water use by December 31, 2020. The report shall include recommendations on changes to water efficiency standards or urban water use targets in order to achieve

the 20-percent reduction and to reflect updated efficiency information and technology changes.

-12-

10608.43. The department, in conjunction with the California Urban Water Conservation Council, by April 1, 2010, shall convene a representative task force consisting of academic experts, urban retail water suppliers, environmental organizations, commercial water users, industrial water users, and institutional water users to develop alternative best management practices for commercial, industrial, and institutional users and an assessment of the potential statewide water use efficiency improvement in the commercial, industrial, and institutional sectors that would result from implementation of these best management practices. The taskforce, in conjunction with the department, shall submit a report to the Legislature by April 1, 2012, that shall include a review of multiple sectors within commercial, industrial, and institutional users and that shall recommend water use efficiency standards for commercial, industrial, and institutional users among various sectors of water use. The report shall include, but not be limited to, the following:

(a) Appropriate metrics for evaluating commercial, industrial, and institutional water use.

(b) Evaluation of water demands for manufacturing processes, goods, and cooling.

(c) Evaluation of public infrastructure necessary for delivery of recycled water to the commercial, industrial, and institutional sectors.

(d) Evaluation of institutional and economic barriers to increased recycled water use within the commercial, industrial, and institutional sectors.

(e) Identification of technical feasibility and cost of the best management practices to achieve more efficient water use statewide in the commercial, industrial, and institutional sectors that is consistent with the public interest and reflects past investments in water use efficiency.

10608.44. Each state agency shall reduce water use on facilities it operates to support urban retail water suppliers in meeting the target identified in Section 10608.16.

### CHAPTER 4. AGRICULTURAL WATER SUPPLIERS

10608.48. (a) On or before July 31, 2012, an agricultural water supplier shall implement efficient water management practices pursuant to subdivisions (b) and (c).

(b) Agricultural water suppliers shall implement all of the following critical efficient management practices:

(1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10 and to implement paragraph (2).

(2) Adopt a pricing structure for water customers based at least in part on quantity delivered.

(c) Agricultural water suppliers shall implement additional efficient management practices, including, but not limited to, practices to accomplish all of the following, if the measures are locally cost effective and technically feasible:

(1) Facilitate alternative land use for lands with exceptionally high water duties or whose irrigation contributes to significant problems, including drainage.

(2) Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not harm crops or soils.

(3) Facilitate the financing of capital improvements for on-farm irrigation systems.

(4) Implement an incentive pricing structure that promotes one or more of the following goals:

(A) More efficient water use at the farm level.

(B) Conjunctive use of groundwater.

(C) Appropriate increase of groundwater recharge.

(D) Reduction in problem drainage.

(E) Improved management of environmental resources.

(F) Effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions.

(5) Expand line or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce seepage.

(6) Increase flexibility in water ordering by, and delivery to, water customers within operational limits.

(7) Construct and operate supplier spill and tailwater recovery systems.

(8) Increase planned conjunctive use of surface water and groundwater within the supplier service area.

(9) Automate canal control structures.

(10) Facilitate or promote customer pump testing and evaluation.

(11) Designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports.

(12) Provide for the availability of water management services to water users. These services may include, but are not limited to, all of the following:

(A) On-farm irrigation and drainage system evaluations.

(B) Normal year and real-time irrigation scheduling and crop evapotranspiration information.

(C) Surface water, groundwater, and drainage water quantity and quality data.

(D) Agricultural water management educational programs and materials for farmers, staff, and the public.

(13) Evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage.

(14) Evaluate and improve the efficiencies of the supplier's pumps.

(d) Agricultural water suppliers shall include in the agricultural water management plans required pursuant to Part 2.8 (commencing with Section 10800) a report on which efficient water management practices have been implemented and are planned to be implemented, an estimate of the water use efficiency improvements that have occurred since the last report, and an estimate of the water use efficiency improvements estimated to occur five and 10 years in the future. If an agricultural water supplier determines that an efficient water management practice is not locally cost effective or technically feasible, the supplier shall submit information documenting that determination.

(e) The data shall be reported using a standardized form developed pursuant to Section 10608.52.

(f) An agricultural water supplier may meet the requirements of subdivisions (d) and (e) by submitting to the department a water conservation plan submitted to the United States Bureau of Reclamation that meets the requirements described in Section 10828.

(g) On or before December 31, 2013, December 31, 2016, and December 31, 2021, the department, in consultation with the board, shall submit to the Legislature a report on the agricultural efficient water management practices that have been implemented and are planned to be implemented and an assessment of the manner in which the implementation of those efficient water management practices has affected and will affect agricultural operations, including estimated water use efficiency improvements, if any.

(h) The department may update the efficient water management practices required pursuant to subdivision (c), in consultation with the Agricultural Water Management Council, the United States Bureau of Reclamation, and the board. All efficient water management practices for agricultural water use pursuant to this chapter shall be adopted or revised by the department only after the department conducts public hearings to allow participation of the diverse geographical areas and interests of the state.

(i) (1) The department shall adopt regulations that provide for a range of options that agricultural water suppliers may use or implement to comply with the measurement requirement in paragraph (1) of subdivision (b).

(2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

#### Chapter 5. Sustainable Water Management

10608.50. (a) The department, in consultation with the board, shall promote implementation of regional water resources management practices through increased incentives and removal of barriers consistent with state and federal law. Potential changes may include, but are not limited to, all of the following:

(1) Revisions to the requirements for urban and agricultural water management plans.

(2) Revisions to the requirements for integrated regional water management plans.

(3) Revisions to the eligibility for state water management grants and loans.

(4) Revisions to state or local permitting requirements that increase water supply opportunities, but do not weaken water quality protection under state and federal law.

(5) Increased funding for research, feasibility studies, and project construction.

(6) Expanding technical and educational support for local land use and water management agencies.

(b) No later than January 1, 2011, and updated as part of the California Water Plan, the department, in consultation with the board, and with public input, shall propose new statewide targets, or review and update existing statewide targets, for regional water resources management practices, including, but not limited to, recycled water, brackish groundwater desalination, and infiltration and direct use of urban stormwater runoff.

#### Chapter 6. Standardized Data Collection

10608.52. (a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.

(b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier's compliance with conservation targets pursuant to Section 10608.24 and an agricultural water supplier's compliance with implementation of efficient water management practices pursuant to subdivision (a) of Section 10608.48. The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.
## CHAPTER 7. FUNDING PROVISIONS

10608.56. (a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(b) On and after July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(d) Notwithstanding subdivision (b), the department shall determine that an agricultural water supplier is eligible for a water grant or loan even though the supplier is not implementing all of the efficient water management practices described in Section 10608.48, if the agricultural water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the efficient water management practices. The supplier may request grant or loan funds to implement the efficient water management practices to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

(f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

10608.60. (a) It is the intent of the Legislature that funds made available by Section 75026 of the Public Resources Code should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for grants to implement this part. In the allocation of funding, it is the intent of the

Legislature that the department give consideration to disadvantaged communities to assist in implementing the requirements of this part.

(b) It is the intent of the Legislature that funds made available by Section 75041 of the Public Resources Code, should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for direct expenditures to implement this part.

### CHAPTER 8. QUANTIFYING AGRICULTURAL WATER USE EFFICIENCY

10608.64. The department, in consultation with the Agricultural Water Management Council, academic experts, and other stakeholders, shall develop a methodology for quantifying the efficiency of agricultural water use. Alternatives to be assessed shall include, but not be limited to, determination of efficiency levels based on crop type or irrigation system distribution uniformity. On or before December 31, 2011, the department shall report to the Legislature on a proposed methodology and a plan for implementation. The plan shall include the estimated implementation costs and the types of data needed to support the methodology. Nothing in this section authorizes the department to implement a methodology established pursuant to this section.

SEC. 2. Section 10631.5 of the Water Code is amended to read:

10631.5. (a) (1) Beginning 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 described in Section 10631, as determined by the department pursuant to subdivision (b).

(2) For the purposes of this section, water management grants and loans include funding for programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation. This section does not apply to water management projects funded by the federal American Recovery and Reinvestment Act of 2009 (Public Law 111-5).

(3) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if the urban water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the water demand management measures. The supplier may request grant or loan funds to implement the water demand management measures to the extent the request is consistent with the eligibility requirements applicable to the water management funds.

(4) (A) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if an urban water supplier submits to the department for approval documentation demonstrating that a water demand management measure is not locally cost effective. If the department determines that the documentation submitted by the urban water supplier fails to demonstrate that a water demand management measure is not locally cost effective, the department shall notify the urban water supplier and the agency administering the grant or loan program within 120 days that the documentation does not satisfy the requirements for an exemption, and include in that notification a detailed statement to support the determination.

(B) For purposes of this paragraph, "not locally cost effective" means that the present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure.

(b) (1) The department, in consultation with the state board and the California Bay-Delta Authority or its successor agency, and after soliciting public comment regarding eligibility requirements, shall develop eligibility requirements to implement the requirement of paragraph (1) of subdivision (a). In establishing these eligibility requirements, the department shall do both of the following:

(A) Consider the conservation measures described in the Memorandum of Understanding Regarding Urban Water Conservation in California, and alternative conservation approaches that provide equal or greater water savings.

(B) Recognize the different legal, technical, fiscal, and practical roles and responsibilities of wholesale water suppliers and retail water suppliers.

(2) (A) For the purposes of this section, the department shall determine whether an urban water supplier is implementing all of the water demand management measures described in Section 10631 based on either, or a combination, of the following:

(i) Compliance on an individual basis.

(ii) Compliance on a regional basis. Regional compliance shall require participation in a regional conservation program consisting of two or more urban water suppliers that achieves the level of conservation or water efficiency savings equivalent to the amount of conservation or savings achieved if each of the participating urban water suppliers implemented the water demand management measures. The urban water supplier administering the regional program shall provide participating urban water suppliers and the department with data to demonstrate that the regional program is consistent with this clause. The department shall review the data to determine whether the urban water suppliers in the regional program are meeting the eligibility requirements.

(B) The department may require additional information for any determination pursuant to this section.

(3) The department shall not deny eligibility to an urban water supplier in compliance with the requirements of this section that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.

(c) In establishing guidelines pursuant to the specific funding authorization for any water management grant or loan program subject to this section, the agency administering the grant or loan program shall include in the guidelines the eligibility requirements developed by the department pursuant to subdivision (b).

(d) Upon receipt of a water management grant or loan application by an agency administering a grant and loan program subject to this section, the agency shall request an eligibility determination from the department with respect to the requirements of this section. The department shall respond to the request within 60 days of the request.

(e) The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities. In addition, for urban water suppliers that are signatories to the Memorandum of Understanding Regarding Urban Water Conservation in California and submit biennial reports to the California Urban Water Conservation Council in accordance with the memorandum, the department may use these reports to assist in tracking the implementation of water demand management measures.

(f) This section shall remain in effect only until July 1, 2016, and as of that date is repealed, unless a later enacted statute, that is enacted before July 1, 2016, deletes or extends that date.

SEC. 3. Part 2.8 (commencing with Section 10800) of Division 6 of the Water Code is repealed.

SEC. 4. Part 2.8 (commencing with Section 10800) is added to Division 6 of the Water Code, to read:

## PART 2.8. AGRICULTURAL WATER MANAGEMENT PLANNING

CHAPTER 1. GENERAL DECLARATIONS AND POLICY

10800. This part shall be known and may be cited as the Agricultural Water Management Planning Act.

10801. The Legislature finds and declares all of the following:

(a) The waters of the state are a limited and renewable resource.

(b) The California Constitution requires that water in the state be used in a reasonable and beneficial manner.

(c) Urban water districts are required to adopt water management plans.

(d) The conservation of agricultural water supplies is of great statewide concern.

(e) There is a great amount of reuse of delivered water, both inside and outside the water service areas.

(f) Significant noncrop beneficial uses are associated with agricultural water use, including streamflows and wildlife habitat.

(g) Significant opportunities exist in some areas, through improved irrigation water management, to conserve water or to reduce the quantity of highly saline or toxic drainage water.

(h) Changes in water management practices should be carefully planned and implemented to minimize adverse effects on other beneficial uses currently being served.

(i) Agricultural water suppliers that receive water from the federal Central Valley Project are required by federal law to prepare and implement water conservation plans.

(j) Agricultural water users applying for a permit to appropriate water from the board are required to prepare and implement water conservation plans.

10802. The Legislature finds and declares that all of the following are the policies of the state:

(a) The conservation of water shall be pursued actively to protect both the people of the state and the state's water resources.

(b) The conservation of agricultural water supplies shall be an important criterion in public decisions with regard to water.

(c) Agricultural water suppliers shall be required to prepare water management plans to achieve conservation of water.

# Chapter 2. Definitions

10810. Unless the context otherwise requires, the definitions set forth in this chapter govern the construction of this part.

10811. "Agricultural water management plan" or "plan" means an agricultural water management plan prepared pursuant to this part.

10812. "Agricultural water supplier" has the same meaning as defined in Section 10608.12.

10813. "Customer" means a purchaser of water from a water supplier who uses water for agricultural purposes.

10814. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of that entity.

10815. "Public agency" means any city, county, city and county, special district, or other public entity.

10816. "Urban water supplier" has the same meaning as set forth in Section 10617.

10817. "Water conservation" means the efficient management of water resources for beneficial uses, preventing waste, or accomplishing additional benefits with the same amount of water.

#### CHAPTER 3. AGRICULTURAL WATER MANAGEMENT PLANS

# Article 1. General Provisions

10820. (a) An agricultural water supplier shall prepare and adopt an agricultural water management plan in the manner set forth in this chapter on or before December 31, 2012, and shall update that plan on December 31, 2015, and on or before December 31 every five years thereafter.

(b) Every supplier that becomes an agricultural water supplier after December 31, 2012, shall prepare and adopt an agricultural water management plan within one year after the date it has become an agricultural water supplier.

(c) A water supplier that indirectly provides water to customers for agricultural purposes shall not prepare a plan pursuant to this part without the consent of each agricultural water supplier that directly provides that water to its customers.

10821. (a) An agricultural water supplier required to prepare a plan pursuant to this part shall notify each city or county within which the supplier provides water supplies that the agricultural water supplier will be preparing the plan or reviewing the plan and considering amendments or changes to the plan. The agricultural water supplier may consult with, and obtain comments from, each city or county that receives notice pursuant to this subdivision.

(b) The amendments to, or changes in, the plan shall be adopted and submitted in the manner set forth in Article 3 (commencing with Section 10840).

## Article 2. Contents of Plans

10825. (a) It is the intent of the Legislature in enacting this part to allow levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

(b) This part does not require the implementation of water conservation programs or practices that are not locally cost effective.

10826. An agricultural water management plan shall be adopted in accordance with this chapter. The plan shall do all of the following:

(a) Describe the agricultural water supplier and the service area, including all of the following:

(1) Size of the service area.

(2) Location of the service area and its water management facilities.

(3) Terrain and soils.

(4) Climate.

(5) Operating rules and regulations.

(6) Water delivery measurements or calculations.

(7) Water rate schedules and billing.

(8) Water shortage allocation policies.

(b) Describe the quantity and quality of water resources of the agricultural

water supplier, including all of the following:

(1) Surface water supply.

(2) Groundwater supply.

(3) Other water supplies.

(4) Source water quality monitoring practices.

(5) Water uses within the agricultural water supplier's service area,

including all of the following:

(A) Agricultural.

(B) Environmental.

(C) Recreational.

(D) Municipal and industrial.

(E) Groundwater recharge.

(F) Transfers and exchanges.

(G) Other water uses.

(6) Drainage from the water supplier's service area.

(7) Water accounting, including all of the following:

(A) Quantifying the water supplier's water supplies.

(B) Tabulating water uses.

(C) Overall water budget.

(8) Water supply reliability.

(c) Include an analysis, based on available information, of the effect of climate change on future water supplies.

(d) Describe previous water management activities.

(e) Include in the plan the water use efficiency information required pursuant to Section 10608.48.

10827. Agricultural water suppliers that are members of the Agricultural Water Management Council, and that submit water management plans to that council in accordance with the "Memorandum of Understanding Regarding Efficient Water Management Practices By Agricultural Water Suppliers In California," dated January 1, 1999, may submit the water management plans identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of Section 10826.

10828. (a) Agricultural water suppliers that are required to submit water conservation plans to the United States Bureau of Reclamation pursuant to either the Central Valley Project Improvement Act (Public Law 102-575) or the Reclamation Reform Act of 1982, or both, may submit those water conservation plans to satisfy the requirements of Section 10826, if both of the following apply:

(1) The agricultural water supplier has adopted and submitted the water conservation plan to the United States Bureau of Reclamation within the previous four years.

(2) The United States Bureau of Reclamation has accepted the water conservation plan as adequate.

(b) This part does not require agricultural water suppliers that are required to submit water conservation plans to the United States Bureau of Reclamation pursuant to either the Central Valley Project Improvement Act (Public Law 102-575) or the Reclamation Reform Act of 1982, or both, to prepare and adopt water conservation plans according to a schedule that is different from that required by the United States Bureau of Reclamation.

10829. An agricultural water supplier may satisfy the requirements of this part by adopting an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) or by participation in areawide, regional, watershed, or basinwide water management planning if those plans meet or exceed the requirements of this part.

#### Article 3. Adoption and Implementation of Plans

10840. Every agricultural water supplier shall prepare its plan pursuant to Article 2 (commencing with Section 10825).

10841. Prior to adopting a plan, the agricultural water supplier shall make the proposed plan available for public inspection, and shall hold a public hearing on the plan. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned agricultural water supplier pursuant to Section 6066 of the Government Code. A privately owned agricultural water supplier shall provide an equivalent notice within its service area and shall provide a reasonably equivalent opportunity that would otherwise be afforded through a public hearing process for interested parties to provide input on the plan. After the hearing, the plan shall be adopted as prepared or as modified during or after the hearing.

10842. An agricultural water supplier shall implement the plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan, as determined by the governing body of the agricultural water supplier.

10843. (a) An agricultural water supplier shall submit to the entities identified in subdivision (b) a copy of its plan no later than 30 days after the adoption of the plan. Copies of amendments or changes to the plans shall be submitted to the entities identified in subdivision (b) within 30 days after the adoption of the amendments or changes.

(b) An agricultural water supplier shall submit a copy of its plan and amendments or changes to the plan to each of the following entities:

(1) The department.

(2) Any city, county, or city and county within which the agricultural water supplier provides water supplies.

(3) Any groundwater management entity within which jurisdiction the agricultural water supplier extracts or provides water supplies.

(4) Any urban water supplier within which jurisdiction the agricultural water supplier provides water supplies.

(5) Any city or county library within which jurisdiction the agricultural water supplier provides water supplies.

(6) The California State Library.

(7) Any local agency formation commission serving a county within which the agricultural water supplier provides water supplies.

10844. (a) Not later than 30 days after the date of adopting its plan, the agricultural water supplier shall make the plan available for public review on the agricultural water supplier's Internet Web site.

(b) An agricultural water supplier that does not have an Internet Web site shall submit to the department, not later than 30 days after the date of adopting its plan, a copy of the adopted plan in an electronic format. The department shall make the plan available for public review on the department's Internet Web site.

10845. (a) The department shall prepare and submit to the Legislature, on or before December 31, 2013, and thereafter in the years ending in six and years ending in one, a report summarizing the status of the plans adopted pursuant to this part.

(b) The report prepared by the department shall identify the outstanding elements of any plan adopted pursuant to this part. The report shall include an evaluation of the effectiveness of this part in promoting efficient agricultural water management practices and recommendations relating to proposed changes to this part, as appropriate.

(c) The department shall provide a copy of the report to each agricultural water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearing designed to consider the effectiveness of plans submitted pursuant to this part.

(d) This section does not authorize the department, in preparing the report, to approve, disapprove, or critique individual plans submitted pursuant to this part.

# Chapter 4. Miscellaneous Provisions

10850. (a) Any action or proceeding to attack, review, set aside, void, or annul the acts or decisions of an agricultural water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(1) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.

(2) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 120 days after submitting the plan or amendments to the plan to entities in accordance with Section 10844 or the taking of that action.

(b) In an action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an agricultural water supplier, on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse

93

of discretion is established if the agricultural water supplier has not proceeded in a manner required by law, or if the action by the agricultural water supplier is not supported by substantial evidence.

10851. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part. This part does not exempt projects for implementation of the plan or for expanded or additional water supplies from the California Environmental Quality Act.

10852. An agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

10853. No agricultural water supplier that provides water to less than 25,000 irrigated acres, excluding recycled water, shall be required to implement the requirements of this part or Part 2.55 (commencing with Section 10608) unless sufficient funding has specifically been provided to that water supplier for these purposes.

SEC. 5. This act shall take effect only if Senate Bill 1 and Senate Bill 6 of the 2009–10 Seventh Extraordinary Session of the Legislature are enacted and become effective.

Appendix C

# UWMP Tables and SB X7-7 Verification Form Tables

Table 2-1 Retail Only: Public Water Systems							
Public Water System Number	Public Water System Name	Number of Municipal Connections 2015	Volume of Water Supplied 2015				
3710013	Lakeside Water District	6842	3706.8				
	Up to 20 entries allowed.						
	TOTAL	6842	3706.8				
NOTES:							

Table 2-2: Plan Identification								
7	Individual	ndividual UWMP						
	Regional U (checking this	Regional UWMP (RUWMP) (checking this triggers the next line to appear)						
	Choose One:							
		RUWMP includes a Regional Alliance						
		RUWMP does not include a Regional Alliance						
NOTES:								

Table 2-3: Agency Identification							
Type of Age	ency (select one or both)						
	Agency is a wholesaler						
/	Agency is a retailer						
Fiscal or Calendar Year (select one)							
	UWMP Tables Are in Calendar Years						
7	UWMP Tables Are in Fiscal Years						
If Using Fiscal Years Provide Month and Day that the Fiscal Year Begins							
1	July						
Units of Me	easure Used in UWMP (select one)						
1	Acre Feet (AF)						
	Million Gallons (MG)						
	Hundred Cubic Feet (CCF)						
NOTES:							

# Table 2-4 Retail: Water Supplier Information Exchange

The retail supplier has informed the following wholesale supplier(s) of projected water use in accordance with CWC 10631.

# Wholesale Water Supplier Name

# San Diego County Water Authority

Up to 5 entries allowed.

NOTES:

Table 3-1 Retail: Population - Current and Projected								
Population	2015	2020	2025	2030	2035	2040 <i>(opt)</i>		
Served	30986	31017	31049	31080	31110			
NOTES: The data above is from DWR population tool. We have estimated 35,000								
in 2015 per S	andag.							

Table 4-1 Retail: Demands for Potable and Raw Water - Actual								
Use Type		2015 Actual						
select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool	Additional Description (as needed)	Level of Treatment When Delivered Drop down list	Volume					
Single Family		Drinking Water	2492					
Multi-Family		Drinking Water	792					
Commercial		Drinking Water	271					
Other		Drinking Water	53					
Losses			66					
		TOTAL	3674					
NOTES:								

Use Type Drop down list	Additional	Projected Water Use Report To the Extent that Records are Available					
May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online	times Description hat will (as needed) nonline		2025	2030	2035	2040-opt	
Single Family		2821	3214	3329	3368		
Multi-Family		896	1021	1058	1070		
Commercial		299	341	353	357		
Other		60	62	64	65		
Losses		62	65	65	65		
	TOTAL	4138	4703	4869	4925	0	

Table 4-3 Retail: Total Water Demands									
	2015	2020	2025	2030	2035	2040 (opt)			
Potable and Raw Water From Tables 4-1 and 4-2	3674	4138	4703	4869	4925	0			
Recycled Water Demand From Table 6-4	0	0	0	0	0	0			
TOTAL WATER DEMAND	3674	4138	4703	4869	4925	0			
NOTES:									

Table 4-4 Retail: Water Loss Summary Most Recent 12Month Period Available(as calculated in Appendix L worksheet)				
Reporting Period Start Date (Month/Year)	Loss			
Jul-14	5.00%			
NOTES:				

Table 4-5 Retail Only: Inclusion in Water Use Projections						
Future Water Savings Included Y/N	Yes					
If "Yes" to above, state the section or page number where citations of the codes, ordinances, etc utilized in demand projections are found.	Location in UWMP Appendix F					
Lower Income Residential Demands Included						
NOTES:						

Table 5-1 Baselines and Targets SummaryRetailAgency or Regional Alliance Only							
Baseline Period	Start Years	End Years	Average GPCD	2015 Interim Target	Confirmed 2020 Target		
10-15 year	1998	2008	155.28	151.6	148		
5 Year	2003	2008	155.75				
NOTES:							

<b>Table 5-2:</b> or Regiona	Table 5-2: 2015 Compliance       Retail Agency         pr Regional Alliance Only							
2015	2015	Opt	tional Adjustm	ents to 2015 GPC	D	A atual (an A divate d	L m	
Actual GPCD	2015 Interim Target	Extraordinary Events	Economic Adjustment	Weather Normalization	Adjusted Actual 2015 GPCD	Actual (or Adjusted Actual) as Percent of Target	In Compliance? Y/N	
107	152	From Methodology 8	From Methodology 8	From Methodology 8	From Methodology 8	29.61%	Y	
NOTES:								

Table 6-1 Retail: Groundwater Volume Pumped								
	Supplier does not pump goundwater. The supplier will not complete the table below.							
Groundwater Type Drop Down List May use each category multiple times	Location or Basin Name         2011         2012         2013         2014         2015							
Alluvial Basin	Santee-El Monte Aquifer	659	665	584	551	815		
TOTAL		659	665	584	551	815		
NOTES:								

Table 6-8 Retail: Water Supplies -	– Actual				
Water Supply Drop			2015		
down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool	e Additional Detail on Water Supply	Actual Volume	Water Quality Drop Down List	Total Right or Safe Yield (optional)	
Purchased or Imported Water		2859	Drinking Water		
Groundwater		815	Raw Water		
Total		3674		0	
NOTES:					

Table 6-9 Retail: Water Supplies — Projected						
Water Supply					l Repc	
use each category multiple times.	Additional Detail on	20	20	20	25	
These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Water Supply	Reasonably Available Volume	Total Right or Safe Yield <i>(optional)</i>	Reasonably Available Volume	Total Right or Safe Yield <i>(optional)</i>	
Purchased or Imported Water	San Diego County Water Author	3,405		3,880		
Groundwater		800		850		
	Total	4205	0	4730	0	
NOTES:						

Projected Water Supply rt To the Extent Practicable					
20	30	20	35	2040	(opt)
Reasonably Available Volume	Total Right or Safe Yield <i>(optional)</i>	Reasonably Available Volume	Total Right or Safe Yield <i>(optional)</i>	Reasonably Available Volume	Total Right or Safe Yield <i>(optional)</i>
4,019		4,066			
900		900			
4919	0	4966	0	0	0

Table 7-1 Retail: Bases of Water Year Data					
		Available supplies if year type repeats			
Year Type	Base Year	Agency may complete these columns for volume or percent only, or both			
		Volume available	% of avg supply		
Average Year	2009	4808	100%		
Single-Dry Year	2004	5858			
Multiple-Dry Years 1st Year	2000	5731			
Multiple-Dry Years 2nd Year	2001	5321			
Multiple-Dry Years 3rd Year	2002	5708			
Multiple-Dry Years 4th Year	2003	5191			
Multiple-Dry Years 5th Year	2004	5858			
Allow agency to add rows for Multiple-Dry Years up to 5th year (optional)					
Allow for multiple tables if agency separates this reporting for different water sources.					
NOTES:	NOTES:				

Table 7-2 Reta						
	2020	2025	2030	2035	2040 (Opt)	
Supply totals (autofill fm Table 6-9)	4205	4730	4919	4966	0	
Demand totals (autofill fm Table 4-3)	4138	4703	4869	4925	0	
Difference	67	27	50	41	0	
NOTES:						

Table 7-3 Retail: Single Dry Year Supply and Demand Comparison						
	2020	2025	2030	2035	2040 (Opt)	
Supply totals	4,138	4,703	4,869	4925		
Demand totals	4,138	4,703	4,869	4925		
Difference	0	0	0	0	0	
NOTES:						

	2020 2025 2030 2035 2040 (Opt)						
	Supply totals	4,138	4,703	4,869	4,925		
First year	Demand totals	4,138	4,703	4,869	4,925		
	Difference	0	0	0	0	C	
	Supply totals	3,724	4,233	4,382	4,433		
Second year	Demand totals	3,724	4,233	4,382	4,433		
·	Difference	0	0	0	0	C	
	Supply totals	3,310	3,762	3,895	3,940		
Third year	Demand totals	3,310	3,762	3 <i>,</i> 895	3,940		
	Difference	0	0	0	0	C	

Table 8-1 Retail : Stages of WSCP				
	Cor	nplete One or Both		
Stage	Percent Supply Reduction <sup>1</sup>	Water Supply Condition		
	numerical value as percent	narrative description		
1	10	Drought Watch		
2	20	Drought Alert		
3	40	Drought Critical		
4	41+	Drought Emergency		
<sup>1</sup> One stage in the WSCP must address a water shortage of 50%.				
NOTES:				

Table 8	Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses				
Stage	Restrictions and Prohibitions on End Users Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool	Additional Explanation or Reference (optional)	Penalty, Charge, or Other Enforcement? Drop Down List		
1	Landscape - Restrict or prohibit runoff from landscape irrigation		No		
1	Landscape - Limit landscape irrigation to specific times		No		
1	CII - Lodging establishment must offer opt out of linen service		No		
1	CII - Restaurants may only serve water upon request		No		
1	features, such as fountains		No		
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner		No		
1	Other - Require automatic shut of hoses		No		
1	Surfaces		No		
2	Landscape - Restrict or prohibit runoff from landscape irrigation		Yes		
2	Landscape - Limit landscape irrigation to specific times		Yes		
2	CII - Lodging establishment must offer opt out of linen service		No		
2	CII - Restaurants may only serve water upon request		No		
2	Water Features - Restrict water use for decorative water features, such as fountains		Yes		
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner		Yes		
2	Other - Require automatic shut of hoses		Yes		
2	surfaces		Yes		
3	irrigation		Yes		
3	Landscape - Limit landscape irrigation to specific times		Yes		
3	CII - Lodging establishment must offer opt out of linen service		Yes		
3	CII - Restaurants may only serve water upon request		Yes		
3	Water Features - Restrict water use for decorative water features, such as fountains		Yes		
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner		Yes		
3	Other - Require automatic shut of hoses		Yes		
3	Surfaces		Yes		
3	recycled or recirculating water		Yes		
3	Other - Prohibit use of potable water for construction and dust control		Yes		
3	Other	no new meters sol	Yes		
4	Landscape - Restrict or prohibit runoff from landscape irrigation		Yes		

4	Landscape - Limit landscape irrigation to specific times		Yes
4	CII - Lodging establishment must offer opt out of linen service		Yes
4	CII - Restaurants may only serve water upon request		Yes
4	Water Features - Restrict water use for decorative water features, such as fountains		Yes
4	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner		Yes
4	Other - Require automatic shut of hoses		Yes
4	Other - Prohibit use of potable water for washing hard surfaces		Yes
4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water		Yes
4	Other - Prohibit use of potable water for construction and dust control		Yes
4	Other	no new meters sol	Yes
4	Landscape - Prohibit all landscape irrigation		Yes
NOTES:			

Table 8-3 Retail Only: Stages of WSCP - Consumption Reduction Methods				
Stage	Consumption Reduction Methods by Water Supplier Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool	Additional Explanation or Reference (optional)		
1	Expand Public Information Campaign			
1	Offer Water Use Surveys			
1	Provide Rebates on Plumbing Fixtures and Devices			
2	Expand Public Information Campaign			
2	Offer Water Use Surveys			
2	Provide Rebates on Plumbing Fixtures and Devices			
2	Structure or Surcharge			
3	Expand Public Information Campaign			
3	Offer Water Use Surveys			
3	Provide Rebates on Plumbing Fixtures and Devices			
3	Implement or Modify Drought Rate Structure or Surcharge			
3	Moratorium or Net Zero Demand Increase on New Connections			
4	Expand Public Information Campaign			
4	Offer Water Use Surveys			
4	and Devices			
4	Implement or Modify Drought Rate			
	Moratorium or Net Zero Demand			
4	Increase on New Connections			
NOTES:				

Table 8-4 Retail: Minimum Supply Next Three Years					
	2016	2017	2018		
Available Water Supply	3744	3812	3880		
NOTES: This is purchased from SD County Water Author. Plus wells.					
Table 10-1 Retail: Notification to Cities and Counties					
---	-------------------	--------------------------------	--	--	--
City Name	60 Day Notice	Notice of Public Hearing			
City of San Deigo	~	$\checkmark$			
City of El Cajon	7	7			
San Diego County Water Authority	~				
City of Santee	~	$\overline{}$			
Up to 10	0 entries allowed				
County Name Drop Down List	60 Day Notice	Notice of Public Hearing			
San Diego County	~	$\checkmark$			
Up to 10	0 entries allowed				
NOTES:					

#### SB X7-7 Table 0: Units of Measure Used in UWMP\*

(select one from the drop down list)

Acre Feet

\*The unit of measure must be consistent with Table 2-3

NOTES:

SB X7-7 Table-1: Baseline Period Ranges					
Baseline	Parameter	Value	Units		
	2008 total water deliveries	5298	Acre Feet		
	2008 total volume of delivered recycled water	0	Acre Feet		
10- to 15-year	2008 recycled water as a percent of total deliveries	0.00%	percent		
baseline period	Number of years in baseline period <sup>1</sup>	10	years		
	Year beginning baseline period range	1998			
	Year ending baseline period range <sup>2</sup>	2008			
Eveer	Number of years in baseline period	5	years		
5-year	Year beginning baseline period range	2003			
baseline period	Year ending baseline period range <sup>3</sup>	2008			
<sup>1</sup> If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period.					

<sup>2</sup> The ending year must be between December 31, 2004 and December 31, 2010.

<sup>3</sup> The ending year must be between December 31, 2007 and December 31, 2010.

NOTES:

SB X7-7 Table 2: Method for Population Estimates				
Method Used to Determine Population				
	<b>1. Department of Finance</b> (DOF) DOF Table E-8 (1990 - 2000) and (2000-2010) and DOF Table E-5 (2011 - 2015) when available			
x	2. DWR Population Tool			
	<b>3. Other</b> DWR recommends pre-review			
NOTES:				

SB X7-7 Table 3: Service Area Population					
Y	ear	Population*	Notes		
1	LO to 15 Year	Baseline Populatior	า		
Year 1	1999	30746			
Year 2	2000	31000			
Year 3	2001	30943			
Year 4	2002	30935			
Year 5	2003	30927			
Year 6	2004	30914	text		
Year 7	2005	30915	for		
Year 8	2006	30897	eld		
Year 9	2007	30884	en fi		
Year 10	2008	30862	Ope		
Year 11					
Year 12					
Year 13					
Year 14					
Year 15					
	5 Year Bas	eline Population			
Year 1	2003	30927	ext		
Year 2	2004	30914	for t		
Year 3	2005	30915	eld 1		
Year 4	2006	30897	en fi		
Year 5	2007	30884	Ope		
2	2015 Complia	nce Year Population	า		
2	015	30986	Open text		
*Depending on the method used, the "Population" column is filled from either DOF data, DWR population tool, or manually if using "Other".					
NOTES:					

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)This tableexpandable to allow for more than one distribution system							s table may be			
			Agency's Ov	wn Water Sourc	es	Pur	rchased or Imp	orted Water So	urces	
<b>Baselir</b> Fm SB X7-	ne Year -7 Table 3	Name of Source	Volume from Own Sources	Meter Error Adjustment* <i>Optional</i> (+/-)	Corrected Volume from Own Sources	Name of Source	Volume from Purchased/ Imported Sources	Meter Error Adjustment* <i>Optional (+/-</i> )	Corrected Volume from Purchased Sources	Total Water into Distribution System
10 to 15 Ye	ear Baseline	- Water int	o Distributi	on System(s)						
					allow for entr	y of more than	one source for an	ny year		
Year 1	1999	Wells	692.2		692.2	ounty Wate	4043.6		4043.6	4735.8
Year 2	2000	Wells	668.6		668.6	ounty Wate	5062.3		5062.3	5730.9
Year 3	2001	Wells	661.1		661.1	ounty Wate	4660		4660	5321.1
Year 4	2002	Wells	802.8		802.8	ounty Wate	4905.7		4905.7	5708.5
Year 5	2003	Wells	660.2		660.2	ounty Wate	4531		4531	5191.2
Year 6	2004	Wells	960.8		960.8	ounty Wate	4896.9		4896.9	5857.7
Year 7	2005	Wells	975.1		975.1	ounty Wate	4006		4006	4981.1
Year 8	2006	Wells	1423.4		1423.4	ounty Wate	3966.6		3966.6	5390
Year 9	2007	Wells	1109.7		1109.7	ounty Wate	4431		4431	5540.7
Year 10	2008	Wells	937.1		937.1	ounty Wate	4360.9		4360.9	5298
Year 11	0				0				0	0
Year 12	0				0				0	0
Year 13	0				0				0	0
Year 14	0				0				0	0
Year 15	0				0				0	0
5 Year Base	eline - Wate	er into Distri	ibution Syst	em(s)						
Year 1	2003	Wells	660.2		660.2	ounty Wate	4531		4531	5191.2
Year 2	2004	Wells	960.8		960.8	ounty Wate	4896.9		4896.9	5857.7
Year 3	2005	Wells	975.1		975.1	ounty Wate	4006		4006	4981.1
Year 4	2006	Wells	1423.4		1423.4	ounty Wate	3966.6		3966.6	5390
Year 5	2007	Wells	1109.7		1109.7	ounty Wate	4431		4431	5540.7
2015 Comp	oliance Year	- Water int	o Distributi	on System						
20	15	Wells	847.8		847.8	ounty Wate	2859		2859	3706.8
		3	* Meter Error A	Adjustment - See gu	iidance in Meth	odology 1, Step	o 3 of Methodolog	ies Document		
NOTES:										

					De	ductions			
	Baseline Year Fm SB X7-7 Table 3	Volume Into Distribution System Fm SB X7-7 Table 4A	Recycled Water	Exported Water	Change in Dist. System Storage (+/- )	Indirect Recycled Water Fm SB X7-7 Table 4-B	Water Delivered for Agricultural Use	Process Water Fm SB X7-7 Table 4-D	Annual Gross Water Use
10 to 15 Y	'ear Baseline -	Gross Water U	se	-	_	-	_	-	
Year 1	1999	4735.8				0		0	4735.8
Year 2	2000	5730.9				0		0	5730.9
Year 3	2001	5321.1				0		0	5321.1
Year 4	2002	5708.5				0		0	5708.5
Year 5	2003	5191.2				0		0	5191.2
Year 6	2004	5857.7				0		0	5857.7
Year 7	2005	4981.1				0		0	4981.1
Year 8	2006	5390				0		0	5390
Year 9	2007	5540.7				0		0	5540.7
Year 10	2008	5298				0		0	5298
Year 11	0	0				0		0	
Year 12	0	0				0		0	
Year 13	0	0				0		0	
Year 14	0	0				0		0	
Year 15	0	0				0		0	
10 - 15 yea	ar baseline ave	erage gross wa	ter use						5375.5
5 Year Ba	seline - Gross V	Vater Use							
Year 1	2003	5191.2				0		0	5191.2
Year 2	2004	5857.7				0		0	5857.7
Year 3	2005	4981.1				0		0	4981.1
Year 4	2006	5390				0		0	5390
Year 5	2007	5540.7				0		0	5540.7
5 year bas	eline average	gross water us	e		-	•	-		5392.14
2015 Com	pliance Year - (	Gross Water Us	se						
2	2015	3706.8				0		0	3706.8
* NOTF that	the units of measu	ure must remain c	onsistent thro	oughout the U	WMP. as report	ed in Table 2-3			
					,				

SB X7-7 Ta	ble 4-C.3:	Process Water	Deduction E	ligibility			
Criteria 3	Non-indust	trial use is equa	l to or less th	an 120 GPCD			
Baselin Fm SB X7-	e Year 7 Table 3	Gross Water Use Without Process Water Deduction Fm SB X7-7 Table 4	Industrial Water Use	Non-industrial Water Use	Population Fm SB X7-7 Table 3	Non-Industrial GPCD	Eligible for Exclusion Y/N
10 to 15 Ye	ar Baseline	- Process Water	Deduction Elig	gibility			
Year 1	1999	4735.8		4735.8	30746	137.51	NO
Year 2	2000	5730.9		5730.9	31000	165.04	NO
Year 3	2001	5321.1		5321.1	30943	153.52	NO
Year 4	2002	5708.5		5708.5	30935	164.74	NO
Year 5	2003	5191.2		5191.2	30927	149.85	NO
Year 6	2004	5857.7		5857.7	30914	169.16	NO
Year 7	2005	4981.1		4981.1	30915	143.84	NO
Year 8	2006	5390		5390	30897	155.74	NO
Year 9	2007	5540.7		5540.7	30884	160.16	NO
Year 10	2008	5298		5298	30862	153.25	NO
Year 11	0	0		0	0		NO
Year 12	0	0		0	0		NO
Year 13	0	0		0	0		NO
Year 14	0	0		0	0		NO
Year 15	0	0		0	0		NO
5 Year Base	eline - Proce	ss Water Deduct	ion Eligibility				
Year 1	2003	0		0	30927	0.00	YES
Year 2	2004	5191.2		5191.2	30914	149.91	NO
Year 3	2005	5857.7		5857.7	30915	169.15	NO
Year 4	2006	4981.1		4981.1	30897	143.92	NO
Year 5	2007	5390		5390	30884	155.81	NO
2015 Comp	liance Year	- Process Water	Deduction Eli	giblity			
20	15	0		0	30986	0.00	YES
NOTES:	NOTES:						

SB X7-7 Table 4-C.4: Process Water Deduction Eligibility						
Criteria 4 Disadvantaged Community Use IRWM DAC Mapping tool http://www.water.ca.gov/irwm/grants/resources_dac.cfm						
Californ Househo	ia Median old Income	Percentage of Statewide Average	Eligible for Exclusion? Y/N			
201	5 Compliance	Year - Process Wate	r Deduction Eli	gibility		
2010	\$53,046	\$41,513 78.26%		YES		
A "Disadvantaged Community" is a community with a median household income less than 80 percent of the statewide average.						
NOTES: 2 p	arts of Lakesi	de Water are disadv	antaged comm	unties		

SB X7-7 Ta	SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)						
Baseline Year Fm SB X7-7 Table 3		Service Area Population <i>Fm SB X7-7</i> <i>Table 3</i>	Annual Gross Water Use <i>Fm SB X7-7</i> Table 4	Daily Per Capita Water Use (GPCD)			
	1	0 to 15 Year Bas	eline GPCD				
Year 1	1999	30746	4735.8	137.51			
Year 2	2000	31000	5730.9	165.04			
Year 3	2001	30943	5321.1	153.52			
Year 4	2002	30935	5708.5	164.74			
Year 5	2003	30927	5191.2	149.85			
Year 6	2004	30914	5857.7	169.16			
Year 7	2005	30915	4981.1	143.84			
Year 8	2006	30897	5390	155.74			
Year 9	2007	30884	5540.7	160.16			
Year 10	2008	30862	5298	153.25			
Year 11	0	0					
Year 12	0	0					
Year 13	0	0					
Year 14	0	0					
Year 15	0	0					
10-15 Year	Average Base	eline GPCD		155.28			
		5 Year Baselin	e GPCD				
Basel Fm SB X	ine Year 7-7 Table 3	Service Area Population <i>Fm SB X7-7</i> <i>Table 3</i>	Gross Water Use Fm SB X7-7 Table 4	Daily Per Capita Water Use			
Year 1	2003	30927	5191.2	149.85			
Year 2	2004	30914	5857.7	169.16			
Year 3	2005	30915	4981.1	143.84			
Year 4	2006	30897	5390	155.74			
Year 5	2007	30884	5540.7	160.16			
5 Year Ave	rage Baseline	GPCD		155.75			
	2	2015 Compliance	Year GPCD				
2	015	30986	3706.8	106.80			

NOTES:

<b>SB X7-7 Table 6</b> : Gallons per Capita per Day Summary From Table SB X7-7 Table 5					
10-15 Year Baseline GPCD 155.2814179					
5 Year Baseline GPCD	155.7502899				
2015 Compliance Year GPCD	106.7971914				
NOTES:					

SB X7-7 Table 7: 2020 Target Method Select Only One					
Targe	et Method	Supporting Documentation			
	Method 1	SB X7-7 Table 7A			
	Method 2	SB X7-7 Tables 7B, 7C, and 7D			
$\mathbf{x}$	Method 3	SB X7-7 Table 7-E			
	Method 4	Method 4 Calculator			
NOTES:					

TRUE

SB X7-7 Table 7-E: Target Method 3							
Agency May Select More Than One as Applicable	Hydrologic Region	Percentage of Service Area in This Hydrological Region	"2020 Plan" Regional Targets	Method 3 Regional Targets (95%)			
	North Coast		137	130			
	North Lahontan		173	164			
	Sacramento River		176	167			
	San Francisco Bay		131	124			
	San Joaquin River		174	165			
	Central Coast		123	117			
	Tulare Lake		188	179			
	South Lahontan		170	162			
X	South Coast	100.00%	149	142			
	Colorado River		211	200			
Target       14         (If more than one region is selected, this value is calculated.)       14							
NOTES:	NOTES:						

SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target					
5 Year Baseline GPCD From SB X7-7 Table 5	Maximum 2020 Target*	Calculated 2020 Target Fm Appropriate Target Table	Confirmed 2020 Target		
155.7502899	147.9627754		147.9627754		
* Maximum 2020 Target is 95% of the 5 Year Baseline GPCD					
NOTES:					

SB X7-7 Table 8: 2015 Interim Target GPCD				
Confirmed 2020 Target Fm SB X7-7	10-15 year Baseline GPCD Fm SB X7-7	2015 Interim Target GPCD		
Table 7-F	Table 5			
147.9627754	155.2814179	151.6220967		

SB X7-7 Table 9: 2015 Compliance					
			Adjustments		
2015 Interim Target GPCD <i>Fm SB X7-7</i> <i>Table 8</i>	2015 Actual GPCD Fm SB X7-7 Table 5	Extraordinary Events	Weather Normalization	Economic Adjustment	In Compliance? Y/N
151.622097	106.7971914	From Methodology 8 (Optional)	From Methodology 8 (Optional)	From Methodology 8 (Optional)	YES
NOTES:					

Appendix D

**DWR Check List** 

# **Appendix D**

## **UWMP** Checklist

This checklist is developed directly from the Urban Water Management Planning Act and SB X7-7. It is provided to support water suppliers during preparation of their UWMPs. Two versions of the UWMP Checklist are provided – the first one is organized according to the California Water Code and the second checklist according to subject matter. The two checklists contain duplicate information and the water supplier should use whichever checklist is more convenient. In the event that information or recommendations in these tables are inconsistent with, conflict with, or omit the requirements of the Act or applicable laws, the Act or other laws shall prevail.

Each water supplier submitting an UWMP can also provide DWR with the UWMP location of the required element by completing the last column of eitherchecklist. This will support DWR in its review of these UWMPs. The completed form can be included with the UWMP.

If an item does not pertain to a water supplier, then state the UWMP requirement and note that it does not apply to the agency. For example, if a water supplier does not use groundwater as a water supply source, then there should be a statement in the UWMP that groundwater is not a water supply source.

### Checklist Arranged by Water Code Section

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location (Optional Column for Agency Use)
10608.20(b)	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	Section 5.2 and App C
10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5 and App E	Section 5.2 and App C
10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply is the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.7.2	Section 5.2 and App C
10608.24(a)	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	Section 5.3 and App C
1608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	Section 5.8.2	N/A
10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	Section 10.1 Section 5
10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	Section 5.1	N/A
10608.40	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	Section 5.3 and App C
10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	Section 2.1	Section 2.1
10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	Section 2.5.2	Section 2.1 Appendix i

10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.4	Section 7.1
10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.1	Section 10.1
10621(d)	Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.	Plan Adoption, Submittal, and Implementation	Sections 10.3.1 and 10.4	Section 10.1
10631(a)	Describe the water supplier service area.	System Description	Section 3.1	Section 3.2
10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3	Section 3.2.2
10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Sections 3.4 and 5.4	Section 3.2.3
10631(a)	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	Section 3.2.3
10631(a)	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.4	Section 3.2.2
10631(b)	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	Section 6.1
10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2	Section 6.1.2
10631(b)(1)	Indicate whether a groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.2.2	Section 6.1.2
10631(b)(2)	Describe the groundwater basin.	System Supplies	Section 6.2.1	Section 6.1.2
10631(b)(2)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	Section 6.2.2	Section 6.1.2
10631(b)(2)	For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.	System Supplies	Section 6.2.3	Section 6.1.2
10631(b)(3)	Provide a detailed description and analysis of the location, amount, and sufficiency of	System Supplies	Section 6.2.4	Section 6.1.2

	groundwater pumped by the urban water supplier for the past five years			
10631(b)(4)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Sections 6.2 and 6.9	Section 6.1.2
10631(c)(1)	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.1	Section 7.1
10631(c)(1)	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.2	Section 7.1 Section 7.2
10631(c)(2)	For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.	Water Supply Reliability Assessment	Section 7.1	Section 7.1
10631(d)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	Section 6.7	Section 6.2
10631(e)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2	Section 4.1.1 Section 4.1.2
10631(e)(3)(A)	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.3	Appendix C
10631(f)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Sections 9.2 and 9.3	Section 9
10631(f)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	Sections 9.1 and 9.3	N/A
10631(g)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years.	System Supplies	Section 6.8	Section 6.2.1
10631(i)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6	Section 6.1.3 Section 7.4.1
10631(j)	CUWCC members may submit their 2013- 2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.	Demand Management Measures	Section 9.5	Appendix G
10631(j)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) – if any - with water use	System Supplies	Section 2.5.1	Section 2.1

	projections from that source.			
10631(j)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	Section 2.5.1	N/A
10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5	Section 4.1.2
10632(a) and 10632(a)(1)	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.1	Section 8.3
10632(a)(2)	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three- year historic sequence for the agency.	Water Shortage Contingency Planning	Section 8.9	Section 7.2 Tabel 7-2 Appendix C (Tabel 7-3R)
10632(a)(3)	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.8	Section 8.3
10632(a)(4)	Identify mandatory prohibitions against specific water use practices during water shortages.	Water Shortage Contingency Planning	Section 8.2	Section 8.3.1
10632(a)(5)	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.4	Appendix F
10632(a)(6)	Indicated penalties or charges for excessive use, where applicable.	Water Shortage Contingency Planning	Section 8.3	Section 8.3.2
10632(a)(7)	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.6	Section 8.4
10632(a)(8)	Provide a draft water shortage contingency resolution or ordinance.	Water Shortage Contingency Planning	Section 8.7	Appendix F
10632(a)(9)	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.5	Appendix F
10633	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.1	Section 6.4
10633(a)	Describe the wastewater collection and treatment systems in the supplier's service	System Supplies (Recycled	Section 6.5.2	Section 6.4

	area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	Water)		
10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.5.2.2	Section 6.4
10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3 and 6.5.4	Section 6.4
10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Section 6.5.4	Section 6.4
10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.5.4	Section 6.4
10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.5.5	Section 6.4
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	Section 6.4
10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.1	Section 7.1
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.3	Section 7.2
10635(b)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	Section 8.2.4 Section 8.3.1
10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	Plan Preparation	Section 2.5.2	Section 10.1 Appendix i
10642	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the	Plan Adoption, Submittal, and	Sections 10.2.2, 10.3,	Section 10.1 Appendix i

	public hearing, and held a public hearing about the plan.	Implementation	and 10.5	
10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.2.1	Section 10.1 Appendix i
10642	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	Section 10.1 Appendix i
10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4.3	Section 10.1 Appendix i
10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	Section 10.1 Appendix i
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Sections 10.4.1 and 10.4.2	Section 10.1 Appendix i
10645	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5	Section 10.1 Appendix i

### Checklist Arranged by Subject

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location (Optional Column for Agency Use)
10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	Section 2.1	Section 2.1
10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	Section 2.5.2	Section 2.1 Appendix i
10642	Provide supporting documentation that the	Plan Preparation	Section 2.5.2	Section 2.1

	water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.			
10631(a)	Describe the water supplier service area.	System Description	Section 3.1	Section 3.2
10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3	Section 3.2.2
10631(a)	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	Section 3.2.3
10631(a)	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.4	Section 3.2.2
10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Sections 3.4 and 5.4	Section 3.2.3
10631(e)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2	Section 4.1.1 Section 4.1.2
10631(e)(3)( A)	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.3	Appendix C
10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5	Section 4.1.2
10608.20(b)	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	Section 5.2 and App C
10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5 and App E	Section 5.2 and App C
10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply is the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.7.2	Section 5.2 and App C
10608.24(a)	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	Section 5.3 and App C
1608.24(d)( 2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	Section 5.8.2	N/A
10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help	Baselines and Targets	Section 5.1	N/A

	their retail water suppliers achieve targeted water use reductions.			
10608.40	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	Section 5.3 and App C
10631(b)	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	Section 6.1
10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2	Section 6.1.2
10631(b)(1)	Indicate whether a groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.2.2	Section 6.1.2
10631(b)(2)	Describe the groundwater basin.	System Supplies	Section 6.2.1	Section 6.1.2
10631(b)(2)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	Section 6.2.2	Section 6.1.2
10631(b)(2)	For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.	System Supplies	Section 6.2.3	Section 6.1.2
10631(b)(3)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.2.4	Section 6.1.2
10631(b)(4)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Sections 6.2 and 6.9	Section 6.1.2
10631(d)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	Section 6.7	Section 6.2
10631(g)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years.	System Supplies	Section 6.8	Section 6.2.1
10631(i)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6	Section 6.1.3 Section 7.4.1
10631(j)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) – if any - with water use projections from that source.	System Supplies	Section 2.5.1	Section 2.1

10631(j)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	Section 2.5.1	n/a
10633	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.1	Section 6.4
10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.5.2	Section 6.4
10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.5.2.2	Section 6.4
10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3 and 6.5.4	Section 6.4
10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Section 6.5.4	Section 6.4
10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.5.4	Section 6.4
10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.5.5	Section 6.4
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	Section 6.4
10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.4	Section 7.1
10631(c)(1)	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.1	Section 7.1
10631(c)(1)	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.2	Section 7.1 Section 7.2
10631(c)(2)	For any water source that may not be available at a consistent level of use,	Water Supply Reliability	Section 7.1	Section 7.1

	describe plans to supplement or replace that source.	Assessment		
10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.1	Section 7.1
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.3	Section 7.2
10632(a) and 10632(a)(1)	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.1	Section 8.3
10632(a)(2)	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three- year historic sequence for the agency.	Water Shortage Contingency Planning	Section 8.9	Section 7.2 Tabel 7-2 Appendix C (Tabel 7-3R)
10632(a)(3)	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.8	Section 8.3
10632(a)(4)	Identify mandatory prohibitions against specific water use practices during water shortages.	Water Shortage Contingency Planning	Section 8.2	Section 8.3.1
10632(a)(5)	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.4	Appendix F
10632(a)(6)	Indicated penalties or charges for excessive use, where applicable.	Water Shortage Contingency Planning	Section 8.3	Section 8.3.2
10632(a)(7)	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.6	Section 8.4
10632(a)(8)	Provide a draft water shortage contingency resolution or ordinance.	Water Shortage Contingency Planning	Section 8.7	Appendix F
10632(a)(9)	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.5	Appendix F
10631(f)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Sections 9.2 and 9.3	Section 9

10631(f)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	Sections 9.1 and 9.3	N/A
10631(j)	CUWCC members may submit their 2013- 2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.	Demand Management Measures	Section 9.5	Appendix G
10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	Section 10.1 Section 5
10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.1	Section 10.1
10621(d)	Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.	Plan Adoption, Submittal, and Implementation	Sections 10.3.1 and 10.4	Section 10.1
10635(b)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	Section 8.2.4 Section 8.3.1
10642	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Plan Adoption, Submittal, and Implementation	Sections 10.2.2, 10.3, and 10.5	Section 10.1
10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.2.1	Section 10.1 Appendix i
10642	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	Section 10.1
10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4.3	Section 10.1 Appendix i
10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	Section 10.1 Appendix i
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be	Plan Adoption, Submittal, and	Sections 10.4.1 and	Section 10.1

	submitted electronically.	Implementation	10.4.2	
10645	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5	Section 10.1 Appendix i

Appendix E

Terms, Acronyms, and Abbreviations

### **Abbreviations and Acronyms**

#### AB - Assembly Bill

ACT - Urban Water Management Planning Act of 1983, including amendments

AF - Acre-Foot

Baseline – The average per capita water use for the following baseline periods and calculated in accordance with Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use, DWR 2011. A 10-15 year continuous period used to calculate baseline daily per capita water use per CWC Section 10608.20. A continuous 5-year period used to determine whether the 2020 urban water use target meets the legislation's minimum water use reduction requirement per CWC Section 10608.22.

**BMP** - Best Management Practice

Board - Lakeside Water District's Board of Directors

CEHTP - California Environmental Health Tracking Program

CASGEM - California Statewide Groundwater Elevation Monitoring Program

CII - Commercial, Industrial, Institutional, water use sectors

CIMIS - California Irrigation Management Information System

CIP – Capital Improvement Plan

Conservation Plan - Lakeside's Drought Response Conservation Program

Contingency Plan - Lakeside Water Shortage Contingency Plan

County - County of San Diego

CUWCC - California Urban Water Conservation Council

CWA – San Diego County Water Authority

CWC - California Water Code

District – Lakeside Water District

DMMs - Demand Management Measures

DOF - Department of Finance

DWR - Department of Water Resources

eARDWP - Electronic Annual Reports to the Drinking Water Program (SWRCB)

ETo - Reference Evapotranspiration

FCF – Flow Control Facility

GIS - Geographic Information System

GPCD - Gallons per Capita per Day

- Gross Water Use The volume of water entering a supplier's distribution system over a 12 month period. This volume may be adjusted based on changes in system storage, sales to other agencies, recycled water use, agricultural water use, and industrial process water use. This term is used in the context of SB X7-7, The Water Conservation Act of 2009.
- Hydrologic Region A geographical division of the state based on the local hydrologic basins. The California Department of Water Resources divides California into 10 hydrologic regions that correspond to the state's major water drainage basins: North Coast, North Lahontan, Sacramento River, San Francisco Bay, Central Coast, San Joaquin River, Tulare Lake, South Coast, South Lahontan, and Colorado River.
- Interim Urban Water Use Target The 2015 urban water use target that is the midpoint between the supplier's 10-15 year baseline GPCD and their 2020 target GPCD. 2015 UWMPs will compare the interim water use target to the actual water use of 2015. This term is used in the context of SB X7-7, The Water Conservation Act of 2009.
- IFP Integrated Facilities Plan
- IRWM Integrated Regional Water Management
- ITP Independent Technical Panel
- LAFCO Local Agency Formation Commission
- Lakeside Lakeside Water District
- Methodologies A shortened term for the publication Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use (For the Consistent Implementation of the Water Conservation Act of 2009). DWR 2011. The Water Conservation Act of 2009 (also known as SB X7-7) directed DWR to develop these technical methodologies and criteria to ensure the consistent implementation of the Act and to provide guidance to urban retail water suppliers in calculating and reporting their baseline and compliance water use.
- MGRA Major Geographical Regional Area
- MOU Memorandum of Understanding
- MWD Metropolitan Water District of Southern California
- NA Not Applicable
- NOAA National Oceanic and Atmospheric Administration
- NPDES National Pollutant Discharge Elimination System

PWS - Public Water System

RWQCB - Regional Water Quality Control Board

SANDAG - San Diego Association of Governments

SANGIS – San Diego Geographic Information System

SDCWA - San Diego County Water Authority

SB - Senate Bill

SB X7-7 - Senate Bill Seven of the Senate's Seventh Extraordinary Session of 2009

SGMA - Sustainable Groundwater Management Act

Standardized Tables – DWR has specified the use of standardized tables for reporting UWMP data. Use of these tables is required in the 2015 UWMP, to the extent that the information is available. However, water agencies may include the standardized tables in an appendix and present adapted versions of the standardized tables in the body of the Plan, if that is better adapted to the agency's records and/or better reflects the information available to the agency. The standardized tables are found in Appendix E of the UWMP Guidebook.

SWP - State Water Project

SWRCB - State Water Resources Control Board

Target – The target per capita water use calculated for 2020 and 2015 as per Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use, DWR 2011. This term is used in the context of SB X7-7, The Water Conservation Act of 2009.

Target Method – The water supplier selects one of four different target methods when determining their 2020 Urban Water Use Target. See the Methodologies document (DWR 2011) and Appendix E, SB X7-7 Verification Form for details. This term is used in the context of SB X7-7, The Water Conservation Act of 2009.

RUWMP - Regional Urban Water Management Plan

UWMP - Urban Water Management Plan

Water demand/use – Water conveyed through a distribution system that is used by a water agency and its customers for any purpose, including non-potable water uses, water losses, and other non-revenue water. For purposes of the Guidebook, the terms "Water Demand" and "Water Use" will be used interchangeably and refer to all the demand sectors listed in Section 4.2

WDR - Waste Discharge Requirement

WSCP - Water Shortage Contingency Plan

Appendix F

### Lakeside's Drought Response Conservation Program

### Appendix F

#### Lakeside Water District Policy #

#### 10.1 DROUGHT RESPONSE CONSERVATION PROGRAM

#### 10.1-1 DECLARATION OF NECESSITY AND INTENT

(a) This policy establishes water management requirements necessary to conserve water, enable effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water, prevent unreasonable use of water, prevent unreasonable method of use of water within the Lakeside Water District in order to assure adequate supplies of water to meet the needs of the public, and further the public health, safety, and welfare, recognizing that water is a scarce natural resource that requires careful management not only in times of drought, but at all times.

(b) This policy establishes regulations to be implemented during times of declared water shortages, or declared water shortage emergencies. It establishes four levels of drought response actions to be implemented in times of shortage, with increasing restrictions on water use in response to worsening drought conditions and decreasing available supplies.

(c) Level 1 condition drought response measures are voluntary and will be reinforced through local and regional public education and awareness measures that may be funded in part by Lakeside Water District. During drought response condition Levels 2 through 4, all conservation measures and water-use restrictions are mandatory and become increasingly restrictive in order to attain escalating conservation goals.

(d) During a Drought Response Level 2 condition or higher, the water conservation measures and water use restrictions established by this policy are mandatory and violations are subject to criminal, civil, and administrative penalties and remedies specified in this policy and as provided in Lakeside Water District Administrative or Municipal Code.

#### 10.1-2 DEFINITIONS

(a) The following words and phrases whenever used in this chapter shall have the meaning defined in this section:

1. "Grower" refers to those engaged in the growing or raising, in conformity with recognized practices of husbandry, for the purpose of commerce, trade, or industry, or for use by public educational or correctional institutions, of agricultural, horticultural or floricultural products, and produced: (1) for human consumption or for the market, or (2) for the feeding of fowl or livestock produced for human consumption or for the market, or (3) for the feeding of fowl or livestock for the purpose of obtaining their products for human consumption or for the market. "Grower" does not refer to customers who purchase water subject to the Metropolitan Interim Agricultural Water Program or the Water Authority Special Agricultural Rate programs.

2. "Water Authority" means the San Diego County Water Authority.
3. "DMP" means the Water Authority's Drought Management Plan in existence on the effective date of this policy and as readopted or amended from time to time, or an equivalent plan of the Water Authority to manage or allocate supplies during shortages.

4. "Metropolitan" means the Metropolitan Water District of Southern California.

5. "Person" means any natural person, corporation, public or private entity, public or private association, public or private agency, government agency or institution, school district, college, university, or any other user of water provided by the Lakeside Water District.

## 10.1-3 APPLICATION

(a) The provisions of this policy apply to any person in the use of any water provided by the Lakeside Water District.

(b) This policy is intended solely to further the conservation of water. It is not intended to implement any provision of federal, State, or local statutes, policy, or regulations relating to protection of water quality or control of drainage or runoff. Refer to the local jurisdiction or Regional Water Quality Control Board for information on any storm water policy and storm water management plans.

(c) Nothing in this policy is intended to affect or limit the ability of the Lakeside Water District to declare and respond to an emergency, including an emergency that affects the ability of the Lakeside Water District to supply water.

(d) The provisions of this policy do not apply to use of water from private wells or to recycled water.

(e) Nothing in this policy shall apply to use of water that is subject to a special supply program, such as the Metropolitan Interim Agricultural Water Program or the Water Authority Special Agricultural Rate programs. Violations of the conditions of special supply programs are subject to the penalties established under the applicable program. A person using water subject to a special supply program and other water provided by the Lakeside Water District is subject to this policy in the use of the other water.

### **10.1-4 DROUGHT RESPONSE LEVEL 1 – DROUGHT WATCH CONDITION**

(a) A Drought Response Level 1 condition is also referred to as a "Drought Watch" condition. A Level 1 condition applies when the Water Authority notifies its member agencies that due to drought or other supply reductions, there is a reasonable probability there will be supply shortages and that a consumer demand reduction of up to 10 percent is requested in order to ensure that sufficient supplies will be available to meet anticipated demands. The General Manager or designee shall declare the existence of a Drought Response Level 1 and take action to implement the Level 1 conservation practices identified in this policy.

## Appendix F

(b) During a Level 1 Drought Watch condition, Lakeside Water District will increase its public education and outreach efforts to emphasize increased public awareness of the need to implement the following water conservation practices. [The same water conservation practices become mandatory if Lakeside Water District declares a Level 2 Drought Alert condition]:

1. Stop washing down paved surfaces, including but not limited to sidewalks, driveways, parking lots, tennis courts, or patios, except when it is necessary to alleviate safety or sanitation hazards.

2. Stop water waste resulting from inefficient landscape irrigation, such as runoff, low head drainage, or overspray, etc. Similarly, stop water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

3. Irrigate residential and commercial landscape before 10 a.m. and after 6 p.m. only.

4. Use a hand-held hose equipped with a positive shut-off nozzle or bucket to water landscaped areas, including trees and shrubs located on residential and commercial properties that are not irrigated by a landscape irrigation system.

5. Irrigate nursery and commercial grower's products before 10 a.m. and after 6 p.m. only. Watering is permitted at any time with a hand-held hose equipped with a positive shut-off nozzle, a bucket, or when a drip/micro-irrigation system/equipment is used. Irrigation of nursery propagation beds is permitted at any time. Watering of livestock is permitted at any time.

6. Use re-circulated water to operate ornamental fountains.

7. Wash vehicles using a bucket and a hand-held hose with positive shut-off nozzle, mobile high pressure/low volume wash system, or at a commercial site that re-circulates (reclaims) water on-site. Avoid washing during hot conditions when additional water is required due to evaporation.

8. Serve and refill water in restaurants and other food service establishments only upon request.

9. Offer guests in hotels, motels, and other commercial lodging establishments the option of not laundering towels and linens daily.

10. Repair all water leaks within five (5) days of notification by the Lakeside Water District unless other arrangements are made with the General Manager or designee.

11. Use recycled or non-potable water for construction purposes when available.

(c) During a Drought Response Level 2 condition or higher, all persons shall be required to implement the conservation practices established in a Drought Response Level 1 condition.

### 10.1-5 DROUGHT RESPONSE LEVEL 2 – DROUGHT ALERT CONDITION

(a) A Drought Response Level 2 condition is also referred to as a "Drought Alert" condition. A Level 2 condition applies when the Water Authority notifies its member agencies that due to cutbacks caused by drought or other reduction in supplies, a consumer demand reduction of up to 20 percent is required in order to have sufficient supplies available to meet anticipated demands. The Lakeside Water District Board of Directors shall declare the existence of a Drought Response Level 2 condition and implement the mandatory Level 2 conservation measures identified in this policy.

(b) All persons using Lakeside Water District water shall comply with Level 1 Drought Watch water conservation practices during a Level 2 Drought Alert, and shall also comply with the following additional conservation measures:

1. Limit residential and commercial landscape irrigation to no more than two (2) days per week. This section shall not apply to commercial growers or nurseries.

2. Limit lawn watering and landscape irrigation using sprinklers to no more than ten (10) minutes per watering station per day. This provision does not apply to landscape irrigation systems using water efficient devices, including but not limited to: weather based controllers, drip/micro-irrigation systems and stream rotor sprinklers.

3. Water landscaped areas, including trees and shrubs located on residential and commercial properties, and not irrigated by a landscape irrigation system governed by section 5 (b) (1), on the same schedule set forth in section 5 (b) (1) by using a bucket, hand-held hose with positive shut-off nozzle, or low-volume non-spray irrigation.

4. Repair all leaks within seventy-two (72) hours of notification by the Lakeside Water District unless other arrangements are made with the General Manager or designee.

5. Stop operating ornamental fountains or similar decorative water features unless recycled water is used.

6. No outdoor watering of turf or ornamental landscapes during and up to 48 hours following measurable precipitation.

### 10.1-5 (c) & (d) Suspended on August 5, 2014 to June 2015

(c) Upon the declaration of a Drought Response Level 2 condition, no new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as, will serve letters, certificates, or letters of availability) shall be issued, except under the following circumstances:

1. A valid, unexpired building permit has been issued for the project; or

2. The project is necessary to protect the public's health, safety, and welfare; or

## Appendix F

3. The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of Lakeside Water District.

This provision shall not be construed to preclude the resetting or turn-on of meters to provide continuation of water service or to restore service that has been interrupted for a period of one year or less.

(d) The Lakeside Water District may establish a water allocation for property served by the Lakeside Water District. If the Lakeside Water District establishes a water allocation it shall provide notice of the allocation by including it in the regular billing statement for the fee or charge or by any other mailing to the address to which the Lakeside Water District customarily mails the billing statement for fees or charges for on-going water service. Following the effective date of the water allocation as established by the Lakeside Water District, any person that uses water in excess of the allocation shall be subject to a penalty in the amount of \$\_\_\_\_\_for each billing unit of water in excess of the allocation. The penalty for excess water usage shall be cumulative to any other remedy or penalty that may be imposed for violation of this policy.

### **10.1-6 DROUGHT RESPONSE LEVEL 3 – DROUGHT CRITICAL CONDITION**

(a) A Drought Response Level 3 condition is also referred to as a "Drought Critical" condition. A Level 3 condition applies when the Water Authority notifies its member agencies that due to increasing cutbacks caused by drought or other reduction of supplies, a consumer demand reduction of up to 40 percent is required in order to have sufficient supplies available to meet anticipated demands. The Lakeside Water District Board of Directors shall declare the existence of a Drought Response Level 3 condition and implement the Level 3 conservation measures identified in this policy.

(b) All persons using Lakeside Water District water shall comply with Level 1 Drought Watch and Level 2 Drought Alert water conservation practices during a Level 3 Drought Critical condition and shall also comply with the following additional mandatory conservation measures:

1. Limit residential and commercial landscape irrigation to no more than two (2) assigned days per week on a schedule established by the General Manager or designee and posted by the Lakeside Water District. During the months of November through May, landscape irrigation is limited to no more than once per week on a schedule established by the General Manager or designee and posted by the Lakeside Water District. This section shall not apply to commercial growers or nurseries.

2. Water landscaped areas, including trees and shrubs located on residential and commercial properties, and not irrigated by a landscape irrigation system governed by section 6 (b) (1), on the same schedule set forth in section 6 (b) (1) by using a bucket, hand-held hose with a positive shut-off nozzle, or low-volume non-spray irrigation.

3. Stop filling or re-filling ornamental lakes or ponds, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been

actively managed within the water feature prior to declaration of a drought response level under this policy.

4. Stop washing vehicles except at commercial carwashes that re-circulate water, or by high pressure/low volume wash systems.

5. Repair all leaks within forty-eight (48) hours of notification by the Lakeside Water District unless other arrangements are made with the General Manager or designee.

(c) Upon the declaration of a Drought Response Level 3 condition, no new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as, will serve letters, certificates, or letters of availability) shall be issued, except under the following circumstances:

- 1. A valid, unexpired building permit has been issued for the project; or
- 2. The project is necessary to protect the public's health, safety, and welfare; or
- 3. No water demand offset of a new water meter(s) is allowed.

This provision shall not be construed to preclude the resetting or turn-on of meters to provide continuation of water service or to restore service that has been interrupted for a period of one year or less.

(d) Upon the declaration of a Drought Response Level 3 condition, Lakeside Water District will suspend consideration of annexations to its service area.

(e) The Lakeside Water District may establish a water allocation for property served by the Lakeside Water District. If the Lakeside Water District establishes a water allocation it shall provide notice of the allocation by including it in the regular billing statement for the fee or charge or by any other mailing to the address to which the Lakeside Water District customarily mails the billing statement for fees or charges for on-going water service. Following the effective date of the water allocation as established by the Lakeside Water District, any person that uses water in excess of the allocation shall be subject to a penalty in the amount of \$\_\_\_\_for each billing unit of water in excess of the allocation. The penalty for excess water usage shall be cumulative to any other remedy or penalty that may be imposed for violation of this policy.

## 10.1-7 DROUGHT RESPONSE LEVEL 4 – DROUGHT EMERGENCY CONDITION

(a) A Drought Response Level 4 condition is also referred to as a "Drought Emergency" condition. A Level 4 condition applies when the Water Authority Board of Directors declares a water shortage emergency pursuant to California Water Code section 350 and notifies its member agencies that Level 4 requires a demand reduction of more than 40 percent in order for the Lakeside Water District to have maximum supplies available to meet anticipated demands. The Lakeside Water District shall declare a Drought Emergency in the manner and on the grounds provided in California Water Code section 350.

## Appendix F

(b) All persons using Lakeside Water District water shall comply with conservation measures required during Level 1 Drought Watch, Level 2 Drought Alert, and Level 3 Drought Critical conditions and shall also comply with the following additional mandatory conservation measures:

1. Stop all landscape irrigation, except crops and landscape products of commercial growers and nurseries. This restriction shall not apply to the following categories.

A. Maintenance of trees and shrubs that are watered on the same schedule set forth in section 6(b)(1) by using a bucket, hand-held hose with a positive shut-off nozzle, or low-volume non-spray irrigation;

B. Maintenance of existing landscaping necessary for fire protection as specified by the Fire Marshal of the local fire protection agency having jurisdiction over the property to be irrigated;

C. Maintenance of existing landscaping for erosion control;

D. Maintenance of plant materials identified to be rare or essential to the well being of rare animals;

E. Maintenance of landscaping within active public parks and playing fields, day care centers, school grounds, cemeteries, and golf course greens, provided that such irrigation does not exceed two (2) days per week according to the schedule established under section 6 (b) (1);

F. Watering of livestock; and

G. Public works projects and actively irrigated environmental mitigation projects.

2. Repair all water leaks within twenty-four (24) hours of notification by the Lakeside Water District unless other arrangements are made with the General Manager or designee.

(c) The Lakeside Water District may establish a water allocation for property served by the Lakeside Water District. If the Lakeside Water District establishes a water allocation it shall provide notice of the allocation by including it in the regular billing statement for the fee or charge or by any other mailing to the address to which the Lakeside Water District customarily mails the billing statement for fees or charges for on-going water service. Following the effective date of the water allocation as established by the Lakeside Water District, any person that uses water in excess of the allocation shall be subject to a penalty in the amount of \$\_\_\_\_for each billing unit of water in excess of the allocation. The penalty for excess water usage shall be cumulative to any other remedy or penalty that may be imposed for violation of this policy.

# 10.1-8 CORRELATION BETWEEN DROUGHT MANAGEMENT PLAN AND DROUGHT RESPONSE LEVELS

## Appendix F

(a) The correlation between the Water Authority's DMP stages and the Lakeside Water District's drought response levels identified in this policy is described herein. Under DMP Stage 1, the Lakeside Water District would implement Drought Response Level 1 actions. Under DMP Stage 2, the Lakeside Water District would implement Drought Response Level 1 or Level 2 actions. Under DMP Stage 3, the Lakeside Water District would implement Drought Response Level 1 or Response Level 2, Level 3, or Level 4 actions.

(b) The drought response levels identified in this policy correspond with the Water Authority DMP as identified in the following table:

Drought Response Levels	Use Restrictions	Conservation Target	DMP Stage
1 - Drought Watch	Voluntary	Up to 10%	Stage 1 or 2
2 - Drought Alert	Mandatory	Up to 20%	Stage 2 or 3
3 - Drought Critical	Mandatory	Up to 40%	Stage 3
4 - Drought Emergency	Mandatory	Above 40%	Stage 3

# 10.1-9 PROCEDURES FOR DETERMINATION AND NOTIFICATION OF DROUGHT RESPONSE LEVEL

(a) The existence of a Drought Response Level 1 condition may be declared by the General Manager or designee upon a written determination of the existence of the facts and circumstances supporting the determination. A copy of the written determination shall be filed with the Clerk or Secretary of the Lakeside Water District and provided to the Lakeside Water District Board of Directors. The General Manager or designee may publish a notice of the determination of existence of Drought Response Level 1 condition in one or more newspapers, including a newspaper of general circulation within the Lakeside Water District. The Lakeside Water District may also post notice of the condition on their website.

(b) The existence of Drought Response Level 2 or Level 3 conditions may be declared by policy of the Lakeside Water District Board of Directors adopted at a regular or special public meeting held in accordance with State law. The mandatory conservation measures applicable to Drought Response Level 2 or Level 3 conditions shall take effect on the tenth (10) day after the date the response level is declared. Within five (5) days following the declaration of the response level, the Lakeside Water District shall publish a notice of declared drought response level in a newspaper used for publication of official notices.

(c) The existence of a Drought Response Level 4 condition may be declared in accordance with the procedures specified in California Water Code sections 351 and 352. The mandatory conservation measures applicable to Drought Response Level 4 conditions shall take effect on the tenth (10) day after the date the response level is declared. Within five (5) days following the declaration of the response level, the Lakeside Water District shall publish a notice of declared drought response level in a newspaper used for publication of official notices. If the Lakeside Water District establishes a water allocation, it shall provide notice of the allocation by including it in the regular billing statement for the fee or charge or by any other mailing to the address to which the Lakeside Water District customarily mails the billing statement for fees or

charges for on-going water service. Water allocation shall be effective on the fifth (5) day following the date of mailing or at such later date as specified in the notice.

(d) The Lakeside Water District Board of Directors may declare an end to a Drought Response Level by the adoption of a policy at any regular or special meeting held in accordance with State law.

## 10.1-10 HARDSHIP VARIANCE / APPEALS

(a) If, due to unique circumstances, a specific requirement of this policy would result in undue hardship to a person using agency water or to property upon which agency water is used, that is disproportionate to the impacts to Lakeside Water District water users generally or to similar property or classes of water uses, then the person may apply for a variance to the requirements as provided in this section.

(b) The variance may be granted or conditionally granted, only upon a written finding of the existence of facts demonstrating an undue hardship to a person using agency water or to property upon which agency water is used, that is disproportionate to the impacts to Lakeside Water District water users generally or to similar property or classes of water use due to specific and unique circumstances of the user or the user's property.

1. Application. Application for a variance shall be in writing and may be required to be accompanied by a non-refundable processing fee in an amount to cover administrative expenses. Applications must be received prior to a bill or fine becoming delinquent.

2. Supporting Documentation. The application shall be accompanied by photographs, maps, drawings, and other information, including a written statement of the applicant.

3. Required Findings for Variance. An application for a variance shall be denied unless the approving authority finds, based on the information provided in the application, supporting documents, or such additional information as may be requested, and on water use information for the property as shown by the records of the Lakeside Water District, all of the following:

A. That the variance does not constitute a grant of special privilege inconsistent with the limitations upon other Lakeside Water District customers.

B. That because of special circumstances applicable to the property or its use, the strict application of this policy would have a disproportionate impact on the property or use that exceeds the impacts to customers generally.

C. That the authorizing of such variance will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the Lakeside Water District to effectuate the purpose of this chapter and will not be detrimental to the public interest.

D. That the condition or situation of the subject property or the intended use of the property for which the variance is sought is not common, recurrent or general in nature.

4. Approval Authority. The Water Conservation Coordinator or designee shall exercise approval authority and act upon any completed application no later than 10 days after submittal and may approve, conditionally approve, or deny the variance. The applicant requesting the variance shall be promptly notified in writing of any action taken. Unless specified otherwise at the time a variance is approved, the variance applies to the subject property during the term of the mandatory drought response.

5. Appeals to the General Manager. An applicant may appeal a decision or condition of the Water Conservation Coordinator or designee on a variance application to the General Manager or designee on a variance application within 10 days of the decision upon written request for a hearing. The request shall state the grounds for the appeal.

6. Appeals to the Appeals Committee. An applicant may appeal a decision or condition of the General Manager or designee on a variance application to the Appeals Committee, consisting of two members of the Board of Directors within 10 days of the decision upon written request for a hearing. The request shall state the ground for the appeal. The request shall be accompanied by a non-refundable processing fee in the amount of \$100 to cover administrative expenses.

7. Appeals to Lakeside Water District Board of Directors. An applicant may appeal a decision or condition of the Appeals Committee on a variance application to the Lakeside Water District Board of Directors within 10 days of the decision upon written request for a hearing. The request shall state the grounds for the appeal. At a public meeting, the Lakeside Water District Board of Directors shall act as the approval authority and review the appeal de novo by following the regular variance procedure. The decision of the Lakeside Water District Board of Directors is final.

### 10.1-11 VIOLATIONS AND PENALTIES

(a) Any person, who uses, causes to be used, or permits the use of water in violation of this policy is guilty of an offense punishable as provided herein.

(b) Each day that a violation of this policy occurs is a separate offense.

(c) Administrative fines may be levied for each violation of a provision of this policy as follows:

1. A warning for a first violation.

2. One hundred dollars for a second violation.

3. Two hundred dollars for a third violation of any provision of this policy within one year.

4. Five hundred dollars for each additional violation of this policy within one year.

(d) Violation of a provision of this policy is subject to enforcement through installation of a flow-restricting device in the meter.

## Appendix F

(e) Each violation of this policy may be prosecuted as a misdemeanor punishable by imprisonment in the county jail for not more than thirty (30) days or by a fine not exceeding \$1,000, or by both as provided in Water Code section 377.

(f) Willful violations of the mandatory conservation measures and water use restrictions as set forth in Section 7.0 and applicable during a Level 4 Drought Emergency condition may be enforced by discontinuing service to the property at which the violation occurs as provided by Water Code section 356.

(g) All remedies provided for herein shall be cumulative and not exclusive.

Appendix G

## California Urban Water Conservation Council's Best Management Practices Reports



CUWCC BMP Retail Coverage Report

2014

Foundational Best Manegemant Practices for Urban Water Efficiency

#### Foundational BMPs

**BMP 1.1 Operation Practices** 

7020 Lakeside Water District

Name: 1. Conservation Coordinator provided with necessary resources to implement BMPs?

Title:

Jeanne Swaringen **Conservation Coordinator** Jeanne@LakesideWater.org

On Track

Email:

#### 2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://lakesidewater.org/Po licy%20Manual %202015.pdf	
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

**On Track** 



## **CUWCC BMP Coverage Report 2014**

Foundational Best Management Practices For Urban Water Efficiency

#### Foundational BMPs

#### **BMP 1.2 Water Loss Control**

7020 Lakeside Water District

On Track	Yes	Completed Standard Water Audit Using AWWA Software?		
	No	AWWA File provided to CUWCC?		
			Lakeside Water District BMP1.2 FY14	

AWWA Water Audit Validity Score?

Complete Training in AWWA Audit Method

Complete Training in Component Analysis Process?

CompComponent Analysis?

Repaired all leaks and breaks to the extent cost effective?

Locate and Repar unreported leaks to the extent cost effective?

Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.

Provided 7 Types of Water Loss Control Info

Leaks Repars	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
9	90000		119			

**On Track** 

#### At Least As Effective As

In lieau of an active leak detection program, the City has opted to replace 1% of distribution system lines each year. Lines are replaced based on age and other asset management factors. Attached documentation shows the reduction in main breaks due to 7020 Lakeside Water District BMP 1.2 Results from Main Replacement Program.

We encourage them every year to join.



BMP 1.2 Water Loss Control

2014

Agency name:	Lakeside Water District			Repor	ting unit number:
Reporting unit name (District name)	Lakeside Water District			7020	
AWWA Water Au	udit				
Agency to complete a	a Water Audit & Balance Us	sing The AWWA Sof	tware Yes		Water Audit Validity
Email to office@cuwo	cc.org - Worksheets (AWW	A Water Audit). Ente	r the name of t	the file below:	spreadsheet:
					88
Agency Completed 1	Fraining In The AWWA Wat	er Audit Method	Yes		
Agency Completed 1	raining In The Component	Analysis Process	Yes		
Completed/Updated	the Component Analysis (a	at least every 4 years	;)? Yes		
Component Analysis	Completed/Updated Date	6/30/2014 12:00:00	) AM		
Water Loss Perf	ormance	L			
Agency Repaired All	Reported Leaks & Breaks	To The Extent Cost	Effective	No	
Dat Typ Lea	e/Time Leak Reported e of Leaking Pipe Segment k Volume Estimate	or Fitting	Leak L Leak F Cost o	ocation Running Time From f Repair	Report to Repair
Agency Located and	I Repaired Unreported Leal	ks to the Extent Cost	Effective	Yes	
Type of Program Ac	tivities Used to Detect Unre	eported Leaks			
Does your agency n worksheet for the co	naintain in-house records of mpleted audit which could	f audit results or the be forwarded to CU\	completed AW VCC?	WA No	
Does your agency k incorporates results	eeps records of each comp into future annual standard	oonent analysis perfo I water balances?	rmed, and	Yes	
Annual Summar	y Information				
Complete the follow	ing table with annual summ	ary information (requ	uired for reporti	ing years 2-5 only)	
Total Ecor Leak Valu Repaired Real	nomic Economic e Of Value Of Loss Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduc Undertaken For Loss Reduction	ction Cost Of Interventions	Water Saved (AF/Year)
9 900	00	119			
Comments:					
					]



## CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

#### Foundational BMPs

## BMP 1.3 Metering With Commodity

7020 Lakeside Water District		
Numbered Unmetered Accounts	No	On Track
Metered Accounts billed by volume of use	Yes	On Track
Number of CII Accounts with Mixed Use Meters		
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No	Not On Track
Feasibility Study provided to CUWCC?	No	Not On Track
Completed a written plan, policy or program to test, repair and replace meters	Yes	On Track

At Least As Effective As No



#### CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

#### Foundational BMPs

BMP 1.4 Retail Consrvation Pricing

7020 Lakeside Water District

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?
Single-Family	Increasing Block	Yes
Commercial	Increasing Block	Yes
Multi-Family	Increasing Block	Yes
Dedicated Irrigation	Increasing Block	Yes
Fire Lines	Increasing Block	Yes

#### **On Track**

91 %

Customer Class	Water Rate Type	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Increasing Block	4515456	488289
Commercial	Increasing Block	413506	37557
Multi-Family	Increasing Block	1496896	74729
Dedicated Irrigation	Increasing Block	102117	2604
Fire Lines	Increasing Block	40674	11958
		6568649	615137

#### Calculate: V / (V + M)

Implementation Option:

Use Annual Revenue As Reported

Agency Provide Sewer Service: No

At Least As Effective As No



### **BMP 1.4 Retail Conservation Pricing**

2014

Agency name:	Lakeside Water District	Reporting unit number:
Reporting unit name (District name)	Lakeside Water District	7020
(District name)		

#### Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Water Rate Name	Customer Class Name	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)	
Increasing Block	Single-Family	4515456	488289	
Increasing Block	Commercial	413506	37557	
Increasing Block	Multi-Family	1496896	74729	
Increasing Block	Dedicated Irrigation	102117	2604	
Increasing Block	Fire Lines	40674	11958	

#### Implementation (Conservation Pricing Option)

/	Use Annual Revenue
v	As Reported

Use CWWA Rate
Design Model

Use 3 years average instead of most recent year

#### Retail Waste Water (Sewer) Rate Structure by Customer Class

No

Agency Provide Sewer Service

Select the Retail Waste Water (Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Comments:



## CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.1 Public Outreach

7020 Lakeside Water District

Retail	Only

Yes

Does a wholesale Agency implement Public Outreach Programs?

List of wholesale Agencies

	Public Outreach Program List	Number
	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	7400
	Website	7400
	Newsletter articles on conservation	7400
	General water conservation information	500
	Tota	22700
		On Track
An a /ear.	ctively maintained website that is updated regularly (minimum = 4 times i.e., at least quarterly)	s per No

Public Info	11500
Total Amount:	11500
	On Track

Description of all other Public Outreach programs

Not On Track

At Least As Effective As No



**BMP 2.1 Public Outreach** 

2014

Agency name:	Lakeside Water District		Reporting unit #	7020
Reporting unit nar (District name)	ne Lakeside Water District	Lakeside Water District		
Does a wholesale	Agency implement Public Outr	each Programs?	′es	
List of wholesale	Agencies	Please provide the	e name of Agency if not C	JWCC Group1 member
Is your agency pe	rforming public outreach?			
Report a minimum	n of 4 water conservation related	d contacts your agency ha	ad with the public during th	e year.
Did at least one co	ontact take place duringeach qu	arter of the reporting year	? No	
Public Information	on Programs List			
Number of Public Contacts	Public Information Programs N	lame		
7400	Flyers and/or brochures (total or information packets	copies), bill stuffers, mess	ages printed on bill,	
7400	Website			
7400	Newsletter articles on conserva	ation		
500	General water conservation inf	formation		
Contact with the	Media			
Does a wholesale	Agency implement Public Outr	each Programs?	′es	
List of wholesale	Agencies	Please provide the	e name of Agency if not C	JWCC Group1 member
OR Retail Agency	(Contacts with the Media)			
Did at least one co	ontact take place during each q	uarter of the reporting yea	r? No	
Media Contacts	List	-		
Does a wholesale	Agency implement Public Outr	reach Programs?	No	
List of wholesale	Agencies	Please provide th	e name of Agency if not C	UWCC Group1 membe
Is Your Agency P	erforming Website Updates?			
Enter your agenc	y's URL (website address):			
Describe a minim conservationrelat website thattook	um of four water ed updates to your agency's place during the year:			
Did at least one V	Vebsite Update take place durin	ngeach quarter of the repo	rting year? No	1
Public Outreach	Annual Budget		L	-

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discretecategories by entering many rows. Please indicate if personnel costs are included in the entry.



BMP 2.1 Public Outreach

### 2014

Annual Budget Category	Annual Budget Amount	Personal Cost Included?	Comments	
Public Info	11500			

#### **Public Outreach Expenses**

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Public Outreach Expense Category	Expense Amount	Personal Cost Included?	
Public Info	6478		

#### **Additional Public Information Program**

Please report additional public information contacts. List these additional contacts in order of howyour agency views their importance / effectiveness with respect to conserving water, with the mostimportant/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts?	Yes	1
--	-----	---

**Public Outreach Additional Information** 

#### Social Marketing Programs

#### Branding

Does your agency have a water con	servation"brand," "t	theme" or mascot?	Yes
Describe the brand, theme or masco	cribe the brand, theme or mascot. Hose Boy & Squirt		
Market Research			
Have you sponsored or participated	inmarket research	to refine your message?	No
Market Research Topic			
Brand Message			
Brand Mission Statement			
Community Committees			
Do you have a community conserva	tioncommittee?	No	
Enter the names of the community committees:			
Training			
Social Marketing Expenditures			
Public Outreach Social Marketing	Expenses		

**Partnering Programs - Partners** 

Name

Type of Program

CLCA?

BMP 2.1 Public Outreach	
2014	
Green Building Programs?	
Master Gardeners?	
Cooperative Extension?	
Local Colleges?	
Other	
Retail and wholesale outlet; name(s) and type(s	s) of programs:
Partnering Programs - Newsletters	
Number of newsletters per year	
Number of customers per year	
Partnering with Other Utilities	
Describe other utilities your agency partners with, including electrical utilities	
Conservation Gardens	
Describe water conservation gardens at your agency or other high traffic areas or new homes	
Landscape contests or awards	
Describe water wise landscape contest or awards program conducted by your agency	
Additional Programs supported by Agency but not mentioned above:	
Comments	



## CUWCC BMP Coverage Report 2014

Foundational Best Manegemant Practices for Urban Water Efficiency

Foundational BMPs

BMP 2.2 School Education Programs	
7020 Lakeside Water District	Retail Only
Does a wholesale Agency implement School Education Programs?	Yes
List of wholesale Agencies	

Agencies Name	ID number	
Metropolitan Water District of SC	161	
San Diego County Water Authority	196	
Aterials meet state education framework requirements and are grade-level app Curriculum materials developed and/or provided by Agency:	ropriate?	Yes
ee sdcwa		
Aterials Distributed to K-6? Yes		
Describe K-6 Materials		
ee sdcwa		
Materials distributed to 7-12 students? Yes (Info Only)		
nnual budget for school education program: 1000.00		
Description of all other water supplier education programs		

At Least As Effective As No



School Education Programs

7020 Lakeside Water District

Does a wholesale Agency implement School Education Programs?

List of wholesale Agencies

Metropolitan Water District of SC,San Diego County Water Authority

Agencies Name	ID number
Metropolitan Water District of SC	161
San Diego County Water Authority	196
Materials meet state education Description set framework requirements?	sdcwa
V Materials distributed to K-6 Description set Students?	sdcwa
Number of students reached	
V Materials distributed to 7-12 Description Set Students? (optional)	sdcwa
Annual budget for school education program 10	0.00
Description of all other water supplier educationprograms	
School Programs Activities	
Classroom Presentation:	
Number of presentation	Number of attendees
Describe the topics covered in your classroom presenta	ons:
Large group assemblies:	
Number of presentation	Number of attendees
Children's water festivals or other events:	
Number of presentation	Number of attendees
Cooperative efforts with existing science/water education and follow-up:	programs (various workshops, science fair awardsor judging)
Number of presentation	Number of attendees
Other methods of disseminating information (i.e. themeo	age-appropriate classroom loaner kits):
Description	
Staffing children's booths at events & festivals:	
Number of booths	Number of attendees

Yes



WMP 2.2 School Education Programs 2014

Retail Only

Please provide the name of Agency if not FORTECH Group1 members

Number distributed

Fortech WMP 2.2 School Education Programs			
Water conservation contests such as poster and photo:			
Description	Number of participants		
Offer monetary awards/funding or scholarships to students:			
Number offered	Total funding		
Teacher training workshops:			
Number of presentation	Number of attendees		
Fund and/or staff student field trips to treatment facilities, recycling facili	ties, water conservation gardens,etc.:		
Number of tours or fieldtrips	Number of participants		
Number of internship	Total funding		
Career Fairs / Workshops:			
Number of presentation	Number of attendees		
Additional program(s) supported by agency but not mentioned above:			
Description	Number of events Number of participants		
Comments			



CUWCC BMP Coverage Report 2014

7020 Lakeside Water District

#### GPCD in 2006: 148.86

GPCD in 2014

GPCD Target for 2018: 139.30

**Biennial GPCD Compliance Table** 

**ON TRACK** 

		Target		Highest A Bo	cceptable und
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%	141.90	100%	147.20
2012	2	92.8%	136.60	96.4%	141.90
2014	3	89.2%	131.30	92.8%	136.60
2016	4	85.6%	126.00	89.2%	131.30
2018	5	82.0%	139.30	82.0%	120.70

Appendix H

## AWWA Distribution System Losses Audit

	AWV	VA Free Wa <u>Reportin</u> g	ter Audit So g Workshee	oftware: • <u>t</u>		WA American Water Worl Copyright © 2014, All Rig	S v5.0 ks Association ghts Reserved
Click to access definition Click to add a comment	Water Audit Report for: Lak Reporting Year:	eside Water Dis 2015 7/	trict /2014 - 6/2015				
Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades					t		
To soloct the co	All vo	lumes to be ente	ered as: ACRE-F	EET PER YEAR			_
	utility meets or exceeds <u>all</u> criteria for t	nat grade and all	grades below it.		Master Meter and S	Supply Error Adjustmen	ts
WATER SUPPLIED		<	Enter grading i	in column 'E' and 'J'	Pcnt:	Value:	_
	Volume from own sources: +	? 8	815.000	acre-ft/yr + ?		0	acre-ft/yr
	Water exported: +	? n/a	2,859.000	acre-ft/yr + ?	Ö	0	acre-ft/yr
	WATER SUPPLIED:		3,674.000	acre-ft/yr	Enter negative % o Enter positive % or	r value for under-regist value for over-registrat	ration ion
AUTHORIZED CONSUMPTION						Click here: ?	_
	Billed metered: +	? 8	3,457.500	acre-ft/yr		for help using option	
	Unbilled metered: +	? n/a		acre-ft/yr	Pcnt:	Value:	
	Unbilled unmetered: +	?	45.925	acre-ft/yr	1.25%	0	acre-ft/yr
Default	option selected for Unbilled unmeter	red - a grading	of 5 is applied b	ut not displayed	1	Line buttone to coloct	
	AUTHORIZED CONSUMPTION:	?	3,503.425	acre-ft/yr	i 	Use buttons to select bercentage of water suppl OR value	ied
WATER LOSSES (Water Supplied -	Authorized Consumption)		170.575	acre-ft/yr	-		
Apparent Losses					Pcnt:	▼ Value:	
	Unauthorized consumption: +	?	9.185	acre-ft/yr	0.25% 🔘	0	acre-ft/yr
Default optio	n selected for unauthorized consum	ption - a grading	g of 5 is applied	but not displayed			_
	Customer metering inaccuracies: +	? 8	0.000	acre-ft/yr		0	acre-ft/yr
Default or	Systematic data handling errors: +	ndling errors - a	8.044 a grading of 5 is	acre-n/yr applied but not displayed	0.25%		acre-π/yr
Doldario	Apparent Losses:	?	17.829	acre-ft/vr			
				,			
Real Losses (Current Annual Real L	osses or CARL)						
Real Losses = W	/ater Losses - Apparent Losses:	?	152.746	acre-ft/yr			
	WATER LOSSES:		170.575	acre-ft/yr			
NON-REVENUE WATER		2	216 500	core that			-
= Water Losses + Unbilled Metered + Unbi	lled Unmetered		210.500	acientyi			
SYSTEM DATA							_
	Length of mains: +	? 8	128.0	miles			
Number of <u>active</u>	AND inactive service connections: +	? 8	6,957	conn /mile main			
				conn.,mile main			
Are customer meters typically locate	d at the curbstop or property line?		No	(length of service line	e, <u>beyond</u> the property l	ooundary,	
Avera	ge length of customer service line: +	8	50.0	tt that is the responsibi	ility of the utility)		
	Average operating pressure: +	? 10	70.0	psi			
COST DATA							-
Total oppu	al cost of operating water evetoms	? 10	\$6 721 587	\$/Year			
Customer retail unit	cost (applied to Apparent Losses): +	? 10	\$3.82	\$/100 cubic feet (ccf)			
Variable produc	tion cost (applied to Real Losses): +	? 10	\$1,534.00	\$/acre-ft Use Cu	ustomer Retail Unit Cost to	value real losses	
							_
WATER AUDIT DATA VALIDITY SCORE	<u>.</u>						7
	*** Y	OUR SCORE IS:	87 out of 100 ***	r			
A weigh	ted scale for the components of consumption	n and water loss is	included in the cal	culation of the Water Audit Data	a Validity Score		
PRIORITY AREAS FOR ATTENTION:							
Based on the information provided, audit a	accuracy can be improved by addressing the	e following compone	ents:				
1: Unauthorized consumption	, , , , , , , , , , , , , , , , , , ,	5 · ····P3					
2: Systematic data handling errors							
3. Billed metered							

Appendix i

Lakeside's Public Notice, Distribution List, and Resolution Adopting 2015 UMWP

### NOTICE OF PUBLIC HEARING OF THE BOARD OF DIRECTORS OF THE LAKESIDE WATER DISTRICT TO CONSIDER ADOPTION OF THE URBAN WATER MANAGEMENT PLAN

In accordance with Section 10642 of the Urban Water Management Planning Act of the California Water Code, notice is hereby given that Lakeside Water District will hold a Public Hearing on its Urban Water Management Plan. The purpose of the Hearing will be to receive public comment on the Plan, prior to its adoption. The Plan is available for public review at www.lakesidewater.org or at the district office. The Public Hearing will be held at 5:30 p.m. on Tuesday, June 7, 2016, in the District's Board Room at 10375 Vine St., Lakeside CA 92040. For further information concerning the Plan or the Public Hearing, contact Brett Sanders, General Manager, or call 619-443-3805. Written comments will be received at the above address until 5:30 p.m. on, June 7, 2016.

The East County Californian on 4/8/16 FOR 2 WEEKS OR 2 PUBLICATIONS

BOARD OF DIRECTORS: FRANK I. HILLIKER PETE JENKINS STEVE JOHNSON EILEEN NEUMEISTER BROOKS BOULTER



ROBERT COOK GENERAL MANAGER

> GREG MOSER ATTORNEY

DEXTER WILSON ENGINEER

## Notice of Lakeside Water District's 2015 Urban Water Management Plan Preparation

Date: March 16, 2016

This letter is to inform you that Lakeside Water District is updating its Urban Water Management Plan (UWMP). California State law requires urban water suppliers to update their UWMPs every five years and notify the cities and counties within their service area that a plan is being prepared. Lakeside Water District must adopt an updated UWMP by July 1, 2016, and submit the adopted plan to the California Department of Water Resources.

The UWMP is required to contain a detailed evaluation of the supplies necessary to reliably meet demands over at least a 20-year period in both normal and dry years. In accordance with State law, Lakeside Water District will distribute a copy of its draft 2015 UWMP by posting it at www.LakesideWater.org for public review at least two weeks prior to holding a tentatively scheduled public hearing in **June 7<sup>th</sup>**, **2016**, **at 5:30pm**.

Please feel free to contact Jeanne Swaringen at (619) 443-3806, or Jeanne@LakesideWater.org, if you have any questions or would like additional information.

Sincerely,

leanne Swaringen

Jeanne Swaringen

10375 VINE STREET, LAKESIDE, CA 92040 (619) 443-3805 FAX (619) 443-3690

#### Jurisdiction/Agency Address Phone/Fax/Email Name City of San Diego **Bill Anderson** City Planning and Community Investment 619-236-6361 Mail Station 5A 619-236-6478 fax 202 C Street AndersonW@sandiego.gov San Diego, CA 92101 City of El Cajon Melissa Ayres City of El Cajon Community Develop. Dept. 619-441-1741 200 E. Main Street 619-441-1743 fax El Cajon, CA 92020-3912 mayres@ci.el-cajon.ca.us Manjeet Ranu City of El Cajon Community Develop. Dept. 619-441-1771 200 E. Main Street 619-441-1743 fax El Cajon, CA 92020-3912 mranu@ci.el-cajon.ca.us County of San Diego Eric Gibson County Dept. of Planning and Land Use 858-694-2962 Mail Station 0650 858-694-2555 fax 5201-B Ruffin Road eric.gibson@sdcounty.ca.gov San Diego, CA 92123 **Devon Muto** County Dept. of Planning and Land Use 858-694-3016 Mail Station 0650 858-694-3373 fax 5201-B Ruffin Road devon.muto@sdcounty.ca.gov San Diego, CA 92123 City of Santee Mark Brunette City of Santee Director/Deputy City Manager 619-258-4100 x158 City of Santee Development Services 619-562-9376 fax 10601 Magnolia Avenue mbrunette@ci.santee.ca.us Santee, CA 92071-1222 Melanie Kush City of Santee Development Services 619-258-4100 x167 10601 Magnolia Avenue 619-562-9376 fax Santee, CA 92071-1222 mkush@ci.santee.ca.us **Travis Cleveland** City of Santee Development Services 619-258-4100 x160 10601 Magnolia Avenue 619-562-9376 fax Santee, CA 92071-1222 tcleveland@ci.santee.ca.us

#### LAKESIDE WATER DISTRICT 2015 UWMP PUBLIC NOTICE MAILING LIST

San Diego County	Dana Friehauf	San Diego County Water Authority	858-522-6749
Water Authority		4677 Overland Avenue	858-268-7881 fax
		San Diego, CA 92123	dfriehauf@sdcwa.org

Jurisdiction/Agency	Name	Address	Phone/Fax/Email
San Diego Association of Governments	Charles "Muggs" Stoll Department Director	SANDAG 401 B Street, Suite 800 San Diego, CA 92101	619-699-6945 619-699-1905 fax mst@sandag.org
DWR Water Use and Efficiency Branch	Coordinator, Urban Water Management Plans	P.O. Box 942836 Sacramento, CA 94236-0001	
California State Library	Government Publications Section	P.O. Box 942837 Sacramento, CA 94237-0001	Attention: Coordinator, Urban Water Management Plans
San Diego LAFCO	Ingrid Hansen Chief, Governmental Services	1600 Pacific Highway, Room 452 San Diego, CA 92101	619-531-5400 ingrid.hansen@sdcounty.ca.gov

#### **RESOLUTION NO. 16-03**

### RESOLUTION OF THE BOARD OF DIRECTORS OF THE LAKESIDE WATER DISTRICT ADOPTING THE URBAN WATER MANAGEMENT PLAN

WHEREAS, The Urban Water Management Planning Act (Water Code Section 10610 et. seq.) requires every urban water supplier, as defined in the act, to prepare and adopt an urban management plan; and

WHEREAS, the Lakeside Water District is an urban water supplier within the meaning of the act; and

WHEREAS, in cooperation with the San Diego County Water Authority, the District has drafted such a plan, a public hearing thereon following publication within the jurisdiction of the District of a notice of the time and place of the hearing pursuant to section 6066 of the Government Code; and

WHEREAS, it is in the interest of the District to adopt an urban water management plan;

NOW, THERFORE, IT IS HEREBY RESOLVED, DETERMINED AND ORDERED by the Board of Directors of the Lakeside Water District as follows:

- 1. That the URBAN WATER MANAGEMENT PLAN FOR THE LAKESIDE WATER DISTRICT, 2015, be and it is approved and adopted as the plan required by the Urban Water Management Planning Act.
- 2. That the District shall implement its plan in accordance with the schedule set forth in the plan.
- 3. That the Secretary of the District be and he is authorized and directed to file with the Department of Water Resources of the State of California a copy of the District's plan no later than 30 days after its adoption.

**PASSED AND ADOPTED** at a regular adjourned meeting of the Board of Directors of the Lakeside Water District held on June 7, 2016, by the following vote to wit:

AYES: NOES: ABSENT: Hilliker, Neumeister, Boulter

Johnson, Jenkins

Frank Hilliker, President Board of Directors

ATTEST:

Brett Sanders, Secretary Lakeside Water District

Appendix J

Quantifying Increased Regional Reliability

## Appendix J

# Increasing San Diego County's Water Supply Reliability through Supply Diversification


## Errata Sheet for Minor Corrections to Lakeside Water District 2015 Urban Water Management Plan (UWMP)

This errata sheet logs minor content errors that were identified after final adoption of the Lakeside Water District 2015 UWMP. DWR has determined that these corrections are minor and do not require the UWMP to be amended.

- ☑ These data errors have been corrected in the Department of Water Resources (DWR) UWMP database at <u>https://wuedata.water.ca.gov/secure/</u>
- ☑ This errata sheet has been filed with the UWMP in all locations where it is made publicly available, including the California State Library. Errata may be submitted to State Library via email to <u>cslgps@library.ca.gov</u>

Name and agency of the person filing errata sheet:

Jeanne Swaringen, Lakeside Water District

#	Description of Correction	Location	Rationale	Date Error
				Corrected
1	Table 4-1 volume loss was changed	Page 4-1	Improve accuracy of	September 1, 2017
	from 62 AF to 170.6 AF		reported volume.	
2	Sentence added regarding the	Page 6-2	Requested by DWR	September 1, 2017
	groundwater basin has not been	Section 6.1.2		
	identified as over drafted by DWR.			
3	Sentence added regarding	Page 7-2	Requested by DWR	September 1, 2017
	opportunities for transfers and	Section 7.3		
	exchanges.			
4	Table 6-2 Sewer Estimate Added	Table 6-2	Requested by DWR	September 1, 2017