

# Triunfo Sanitation District/Oak Park Water Service

## 2010 Urban Water Management Plan



*Triunfo  
Sanitation  
District*



Prepared By:  
Risk Management Professionals



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# 1

## INTRODUCTION & PLAN PREPARATION

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### 1.1 INTRODUCTION

The California State Legislature passed AB 797, the Urban Water Management Planning Act (Act) of 1983, which became effective January 1, 1984. The Act requires every urban water supplier providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet of water annually, to prepare and adopt an Urban Water Management Plan (UWMP). The act also requires urban water suppliers to update the UWMP in years ending in five and zero using a 25 to 30 year planning horizon. The Triunfo Sanitation District/Oak Park Water Service (District), a water purchaser and provider, fits the defined criteria, and has prepared this UWMP addressing all the requirements set forth in the State of California Water Code Sections 10610 through 10657.

Since its passage, many amendments have been added to the Act. These changes are intended to encourage increased regional planning and the cooperative management of California's most precious commodity - water. As a result, UWMPs have evolved to become:

- Foundation documents and sources of information for Water Supply Assessments and Written Verification of Water Supply,
- Long range planning documents for water supply,
- Source data for the development of regional water plans,
- Source documents for cities and counties preparing their General Plans, and
- Key components of Integrated Regional Water Management Plans.

For the District, the benefits of updating the UWMP extend beyond legislative compliance. This document is a reference document intended to compliment other UWMPs by analyzing conservation issues and the water supply available to Oak Park. An effective UWMP aimed at developing a greater level of water conservation, awareness, and reliability requires the coordinated efforts on key tasks by the Department of Water Resources (DWR), Calleguas Municipal Water District (Calleguas), and Las Virgenes Municipal Water District (Las Virgenes), along with the Oak Park residents. This document also summarizes the current and proposed water management activities performed by the District to provide dependable, adequate and

safe water. The UWMP further identifies proposed projects with a description of resulting water costs, benefits, and implementation schedule.

Specifically, the goals of this plan are:

- To provide a local perspective on current and proposed water conservation programs,
- To review current conservation programs and efforts,
- To evaluate potential conservation methods and identify improvements, as appropriate to the District programs,
- To provide a general framework for the development of mechanisms for coping with both short-term and long-term deficiencies in regional and/or local water supplies, and
- To serve as a flexible plan that can be updated periodically to reflect changes in regional and local trends, conditions and conservation policies (at least once every five years in accordance with Section 10621 and 10644 of AB 797).

In compliance with the State mandate and accordance with the best practices of water management, the District has prepared this UWMP.

## 1.2 REGULATORY CHANGES

New to the 2010 “Act” are several additions, the most important of which include:

- The Water Conservation Act of 2009 (SBx7-7, 20x2020)
- Assembly Bill 1420

SBx7-7 established the legislative framework to achieve Governor Schwarzenegger’s call for a statewide per capita water use reduction of twenty percent by the year 2020. Urban retail water suppliers are required to report in their 2010 Plans their baseline and target per capita water use reduction values and implementation strategies to assist the state in meeting this goal.

Assembly Bill 1420 conditions a water supplier’s eligibility for state-funded grants on implementation of the fourteen Demand Management Measures (DMMs). For DMMs that are not currently implemented, a schedule for implementation must be submitted, including a financing plan and budget in the grant or loan agreement. Alternatively, if a DMM is not locally cost effective, documentation supporting this argument is required. The District addresses the implementation of DMMs in Section 6 of the Plan.

## 1.3 PLAN ORGANIZATION

The chapters in this UWMP have been organized to correspond to the outline of the California Department of Water Resources’ “Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan”. Additionally, the sequence used to present the information may be different from that shown in the Act in order to present the material in a manner reflecting the unique conditions within the District service area. This UWMP is organized according to the following chapters:

**1**

### INTRODUCTION & PLAN PREPARATION

Chapter 1 describes organization of the 2010 UWMP, background related to plan preparation, stakeholder involvement and the coordination with key stakeholders.

**2**

### SYSTEM DESCRIPTION

Chapter 2 describes the District service area, including the climate, demographics, and provides an overview of the water system facilities.

**3**

### SYSTEM DEMANDS

Chapter 3 documents historical water use including use by sector, baseline and target per capita water use reduction values, demand projection calculations and the method used to develop these projections.

**4**

### SYSTEM SUPPLIES

Chapter 4 outlines the sources of water within the District service area, including documentation regarding wholesale water, groundwater, recycled water, desalination, and transfer and exchange opportunities are considered.

**5**

### WATER SUPPLY RELIABILITY & WATER SHORTAGE CONTINGENCY PLANNING

Chapter 5 outlines the District’s Water Shortage Contingency Plan, as well as documentation of the three dry year scenario, mandatory prohibitions, penalties or charges for excessive use, revenue and expenditure impacts, and mechanisms to determine reductions in water use.

**6**

### DEMAND MANAGEMENT MEASURES

Chapter 6 describes the water conservation programs implemented by the District in an effort to reduce water usage in the Oak Park Service Area.

**7**

### CLIMATE CHANGE

Chapter 7 briefly outlines the impacts of climate change on the availability of supply, as well as District strategies to minimize emissions contributing to climate change.

## 1.4 COORDINATION

***Urban Water Management Planning Act Requirement:***

*10620(d)(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.*

The District ensured the preparation of the 2010 Urban Water Management Plan was coordinated with the appropriate water and public agencies. The County of Ventura, Calleguas Municipal Water District, Metropolitan Water District, Ventura Regional Sanitation District, City of Thousand Oaks, California Service Water Company, Las Virgenes Municipal Water District, and Casitas Municipal Water District were encouraged to participate in the plan development.

***Urban Water Management Planning Act Requirement:***

*10621(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.*

The District sent notification letters to the following agencies approximately 60 days prior to the public hearing:

- County of Ventura
- Calleguas Municipal Water District
- Metropolitan Water District
- Ventura Regional Sanitation District
- City of Thousand Oaks
- California Service Water Company
- Las Virgenes Municipal Water District
- Casitas Municipal Water District

A copy of the letter is available in Appendix A, as well as the distribution addresses.

***Urban Water Management Planning Act Requirement:***

*10635(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.*

The District will provide copies of its 2010 Urban Water Management Plan Update to the following agencies within 60 days of submission of the plan to the California Department of Water Resources (DWR):

- County of Ventura
- Calleguas Municipal Water District
- Metropolitan Water District
- Ventura Regional Sanitation District
- City of Thousand Oaks
- California Service Water Company
- Las Virgenes Municipal Water District
- Casitas Municipal Water District

***Urban Water Management Planning Act Requirement:***

*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.*

The District realizes the importance different social, cultural, and economic elements within its service area can have on the quality and success of its plan and water conservation efforts. The District encouraged all members of the public to attend the public hearing, and the District solicited written input from the public. Additionally, the District advertised, and provided a draft version of the plan on its website to allow public review and comment. The public was notified through a publication in a local newspaper that the plan was available for review prior to the adoption hearing pursuant to Government Code 6066, described below.

**Urban Water Management Planning Act Requirement:**

*10642 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, the 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.*

A draft of the Urban Water Management Plan was made available on the District’s website, and electronic versions of the plan were mailed upon request. A public notice including the time and place of the hearing was advertised in the local newspaper once per week for two consecutive weeks prior to the hearing, according to Government Code Section 6066. A summary of the District’s coordination efforts is provided in Tables 1.4.1 and 1.4.2.

<b>Table 1.4.1 Coordination with Appropriate Agencies</b>			
<b>Agency</b>	<b>Participated in UWMP</b>	<b>Commented on the Draft</b>	<b>Attended Public Meetings</b>
County of Ventura			
Calleguas Municipal Water District	✓	✓	✓
Metropolitan Water District			
Ventura Regional Sanitation District	✓	✓	✓
City of Thousand Oaks			
California Service Water Company			
Las Virgenes Municipal Water District	✓	✓	
Casitas Municipal Water District			
Triunfo Sanitation District / Oak Park Water Service	✓	✓	✓
General Public	✓	✓	✓

**Table 1.4.2  
Coordination with Appropriate Agencies**

<b>Agency</b>	<b>Contacted for Assistance</b>	<b>Received Copy of Draft</b>	<b>Sent Notice of Intention to Adopt</b>	<b>Not Involved / No Information</b>
County of Ventura	✓	✓	✓	
Calleguas Municipal Water District	✓	✓	✓	
Metropolitan Water District	✓	✓	✓	
Ventura Regional Sanitation District	✓	✓	✓	
City of Thousand Oaks	✓	✓	✓	
California Service Water Company	✓	✓	✓	
Las Virgenes Municipal Water District	✓	✓	✓	
Casitas Municipal Water District	✓	✓	✓	
Triunfo Sanitation District / Oak Park Water Service	✓	✓	✓	
General Public	✓	✓	✓	

## 1.5 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

***Urban Water Management Planning Act Requirement:***

*10621(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).*

All amendments to the District’s 2010 Urban Water Management Plan shall be adopted and filed consistent with the UWMP “Act” requirements.

***Urban Water Management Planning Act Requirement:***

*10642 After the hearing, the plan shall be adopted as prepared or as modified after the hearing.*

The plan was adopted by the Board of Directors on June 27, 2011 as prepared. A copy of the adoption resolution is provided in Appendix B.

***Urban Water Management Planning Act Requirement:***

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

The District will implement the strategies set forth in the plan immediately upon adoption by the Board of Directors. Details on the implementation of specific sections are detailed in their respective sections of the plan.

***Urban Water Management Planning Act Requirement:***

*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.*

The District will submit copies of its 2010 Urban Water Management Plan to the following agencies within 30 days after adoption:

- The California Department of Water Resources
- The California State Library
- Ventura County

Additionally, any amendments or changes to the plan will be submitted to the above agencies within 30 days after adoption.

***Urban Water Management Planning Act Requirement:***

*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.*

The District will provide an electronic version of the final 2010 Urban Water Management Plan on its website for public review within 30 days of filing the plan with the California Department of Water Resources. Additionally, a hard copy will be available for review at the the District headquarters, located at 1001 Partridge Drive, Suite 150, Ventura, CA 93003.

# 2 SYSTEM DESCRIPTION

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## 2.1 SERVICE AREA PHYSICAL DESCRIPTION

*Urban Water Management Planning Act Requirement:  
10631(a) Describe the service area of the supplier.*

### General Location Overview

The Ventura County is located northwest of Los Angeles County. To its north is Kern County. The Santa Barbara County goes along some of the western border with the Pacific Ocean on the southwest edge. Ventura County is most mountainous and uninhabited north of Highway 126. This is also a pristine wilderness area mostly situated within the Los Padres National Forest.

The Triunfo Sanitation District/Oak Park Water Service's (District) service area consists of Oak Park and the communities in an unincorporated area of Ventura County, approximately three miles east of Thousand Oaks. Figure 2.1.1 illustrates the service area of the District in southeast Ventura County.

### Water System Overview

The Triunfo Sanitation District/Oak Park Water Service, organized as a special district in November 12, 1963, provides sewage services and waste water treatment for the southeastern portion of Ventura County. The District as a whole covers approximately 50 square miles, where over 4.1 square miles are served with potable water. Potable water is supplied by CMWD to TSD/OPWS. In addition, OPWS uses recycled water, which is treated and supplied by TSD. Figure 2.1.1 illustrates the District's overlapping service areas, and Figure 2.1.2 shows the Oak Park Water Service Vicinity Map.

The District's water supply comes from two sources. Potable water is imported solely from the Calleguas Municipal Water District (representing 2.6% of the delivered water supply). The other source is recycled water from the Tapia Water Reclamation Facility made available through a Joint Powers Authority between the District and Las Virgenes Municipal Water District.

The District distributes recycled water to its residential, commercial, institutional and landscape customers within the Oak Park and the Lake Sherwood areas; however, its potable water system serves only Oak Park. Other public and private water purveyors serve the potable water needs of Lake Sherwood area residents as well as others in the District’s service area.

The District’s facility includes over 120 miles of wastewater collection system pipeline – that has 4 pump stations and ½ mile pressure mains, and over 40 miles of potable distribution system pipeline. The District has a network of water storage tanks that allows some in-system transfers between reservoirs in the event of water outages. Tank levels in each of the reservoirs are also maintained, as much as possible, per specifications of the Ventura County Fire Department. Also the District has embarked on a major water system improvement project – the construction of a new water storage tank in the hills east of Lindero Canyon Road and north of Kanan Road. This 2.1 million-gallon tank will eventually replace the Conifer Tank and increase water storage capacity of the community by 1 million gallons. Presently the total storage volume is equivalent to approximately two days’ worth of supply. Table 2.1.1 provides a description of the storage tanks.

**Table 2.1.1  
Storage Capacity**

<b>Tank/Zone</b>	<b>Year of Construction</b>	<b>Construction Type</b>	<b>Capacity (Gallons)</b>
Conifer	1966	Steel	1,000,000
Deerhill	1998	Concrete	2,100,000
Savoy	1990	Steel	1,600,000
Kilburn	1986	Steel	860,000

Figure 2.1.1 – Triunfo Sanitation District Service and Oak Park Water Service Boundaries

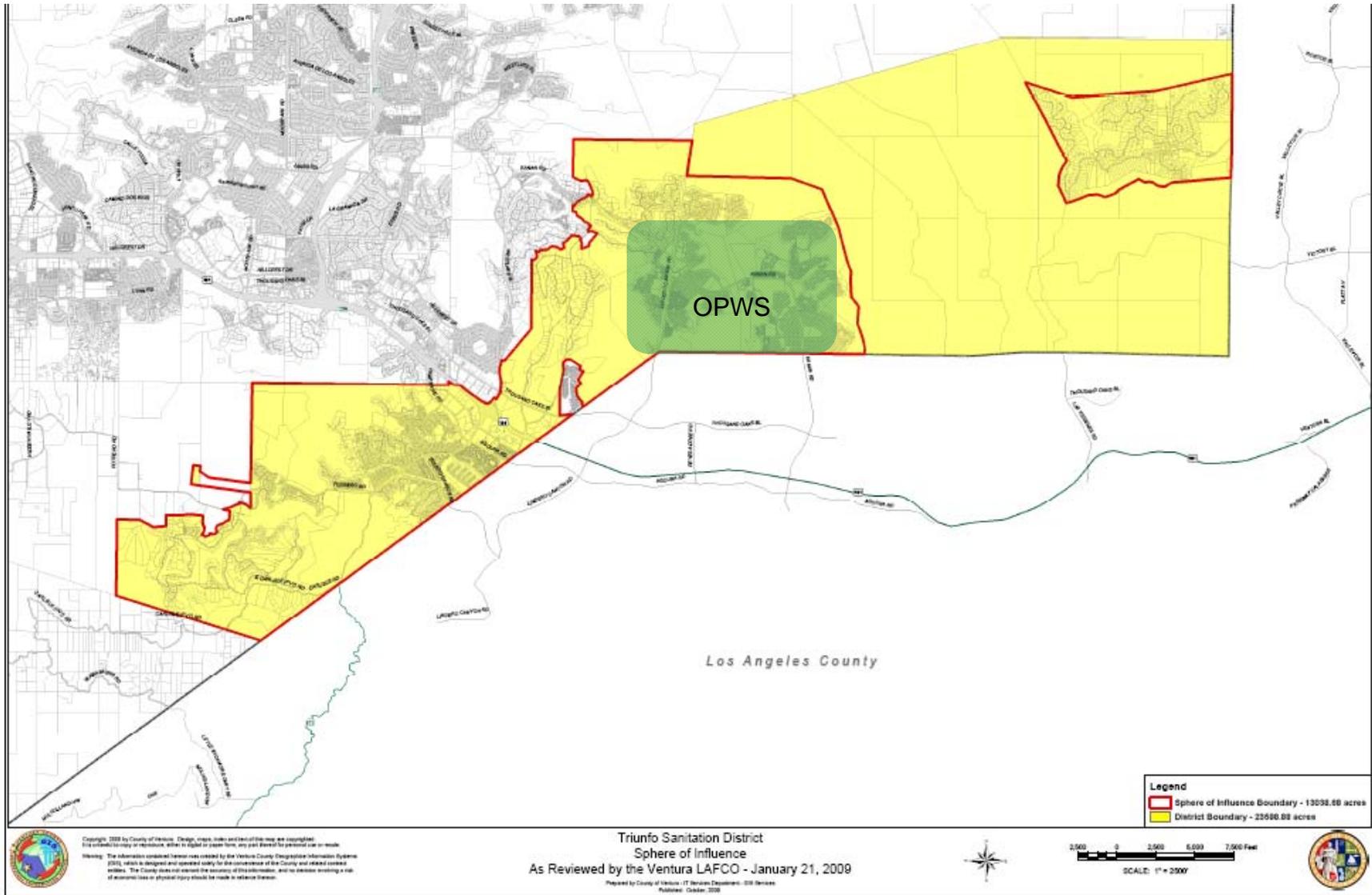
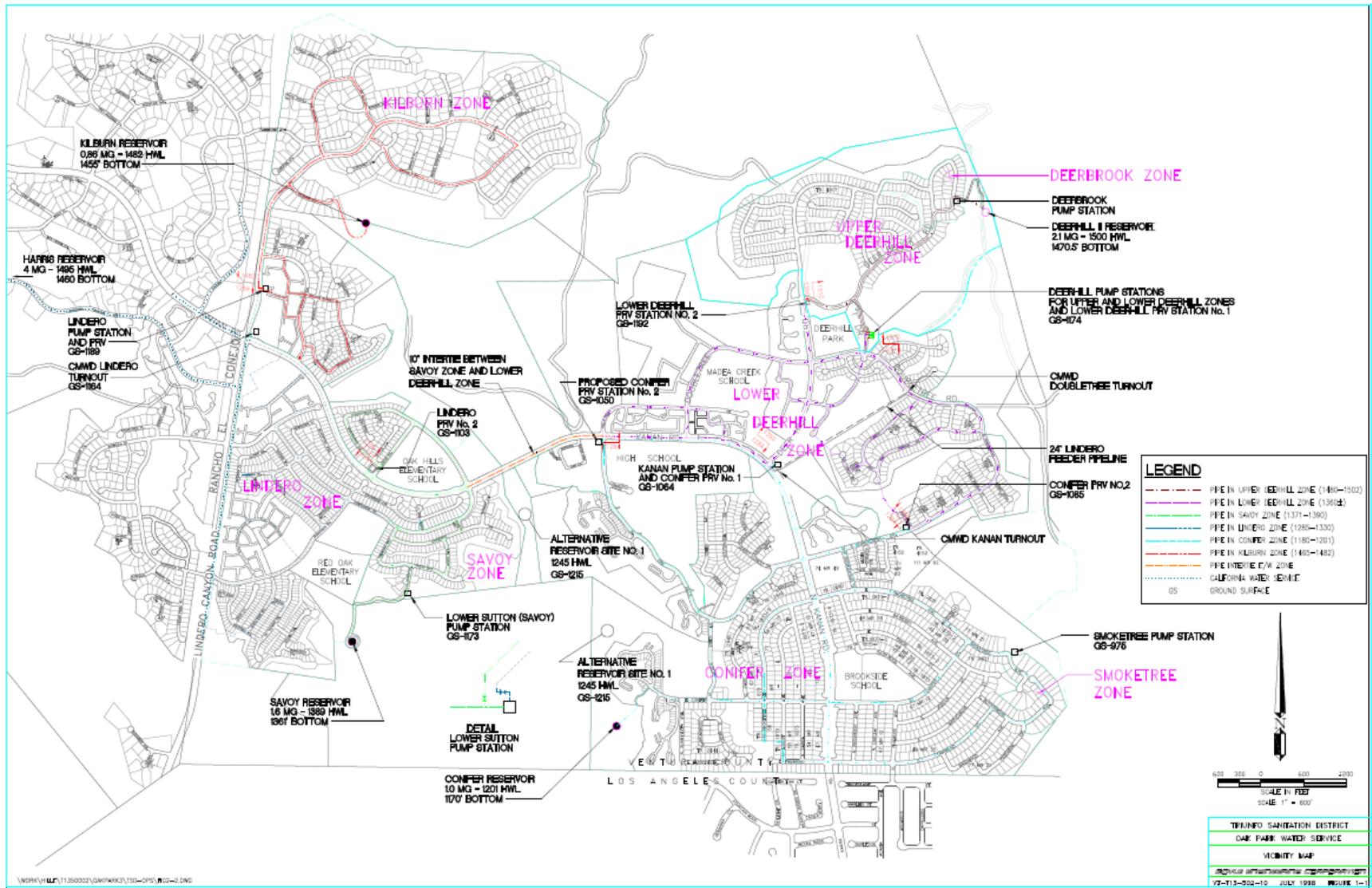


Figure 2.1.2 – Oak Park Water Service Vicinity Map



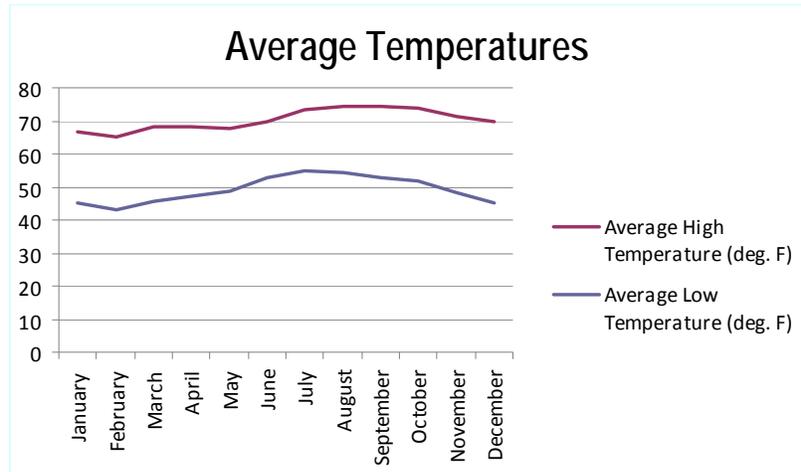
## 2.2 SERVICE AREA CLIMATE

*Urban Water Management Planning Act Requirement:  
10631(a) Describe the service area – climate.*

### Temperature

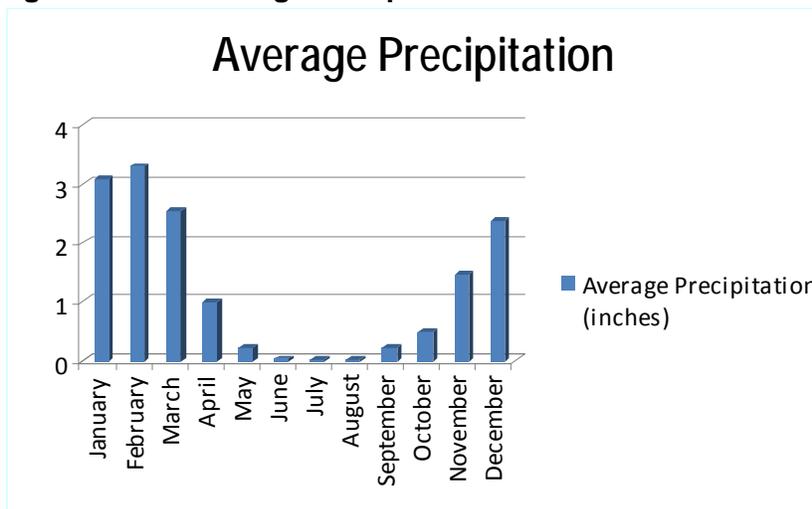
The Southeastern Ventura County’s Mediterranean semi-arid climate is temperate year-round, with warm and dry weather lasting from late spring through early fall. The temperature range is generally moderate as depicted in Figure 2.2.1; the average high temperature is 70.3 °F and the average minimum annual temperature is 49.1 °F.

**Figure 2.2.1 – Average Temperatures**



### Precipitation

**Figure 2.2.2 – Average Precipitation**



The County’s precipitation range is from 12 inches annually to over 14 inches annually with the majority of this rainfall occurring during the winter season (wet period). The 1998 El Nino conditions provided 140% of normal rainfall during this “wet” period. The average annual monthly precipitation in the County of Ventura is presented in Figure 2.2.2.

Additionally, seasonal variation in temperature, rainfall, and evapotranspiration rate are illustrated in Table 2.2.1.

Table 2.2.1 Climate Data (Period Record: 1/1/1900 – 12/31/2010)				
	Avg. High Temp. (F)	Avg. Low Temp. (F)	Avg. Precipitation	Avg. (ETo)
January	66.9	45	3.08	1.83
February	65.3	43.2	3.29	2.2
March	68.2	45.8	2.55	3.42
April	68	47.0	0.98	4.49
May	67.7	48.7	0.23	5.25
June	70.0	53	0.04	5.67
July	73.3	55.1	0.01	5.86
August	74.3	54.3	0.02	5.61
September	74.3	52.8	0.22	4.49
October	73.7	51.6	0.49	3.42
November	71.2	48.1	1.46	2.36
December	69.9	45.1	2.37	1.83

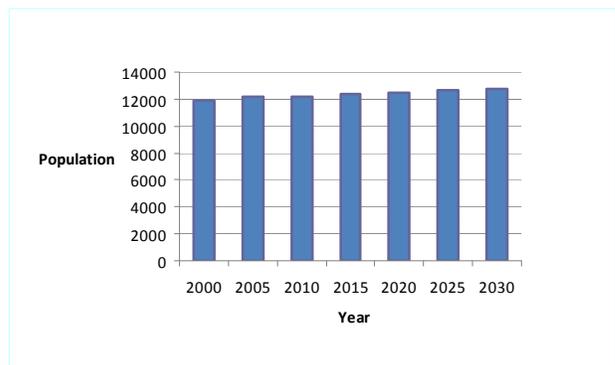
Source: Western Regional Climate Center

## 2.3 SERVICE AREA POPULATION

**Urban Water Management Planning Act Requirement:**  
 10631(a) Describe the service area – current and projected population ... 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 ... (population projections) shall be in five-year increments to 20 years or as far as data is available.

**Figure 2.3.1 – Projected Population Growth**

There are approximately 12,200 people, or approximately 4,500 households, that comprise most of the District’s potable water service area. The outlying tract has a population density of 1,329.5/sq-km (3,567.1/sq-mi). The average density of housing units is 491.4/sq-km (1,258.5/sq-mi). The actual local density is about half that because over half the land area are public parks. With the completion of its last



major development in 2001, county estimations that show the community is at 100% build out, and county estimations that show a slow increase in population, the community does not anticipate significant additional growth or water demands in the future years. This is illustrated in Table 2.3.1 and Figure 2.3.1 by the low growth rate of the population. Population estimates for the District’s service area were obtained from the Ventura County population estimates.

	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>	<b>Data source</b>
<b>Service Area Population<sup>1</sup></b>	12,201	12,341	12,483	12,627	12,772	Ventura County Population Estimates

<sup>1</sup> Service area population is defined as the population served by the distribution system. See Technical Methodology 2: Service Area Population (2010 UWMP Guidebook, Section M).

## 2.4 OTHER DEMOGRAPHIC FACTORS

***Urban Water Management Planning Act Requirement:***  
*10631(a) Describe the service area – other demographic factors affecting the supplier’s water management planning*

The population served by the District’s potable water service area and comprises only 2-3% of the demand on Calleguas Municipal Water District supplies. In 2010, The District supplied 4,596 customers defined as residential, commercial, institutional and landscape users and provided 3,137 acre-feet of water. About 580 acre-feet of that total was recycled water from the Tapia Treatment Plant. Historically, recycled water use accounts for 20% - 25% of the total water supply and is used for landscape irrigation.

The District potable water service area is predominantly residential with some commercial and institutional but no industrial. Most residents are employed in the Los Angeles County areas to the east. Rolling hills and considerable open space surround this pleasant bedroom community, giving it a casual “country” atmosphere. Both population and water use are expected to be stable in the coming 20 years. These estimates are supported by Ventura Council of Governments forecast data.

# 3

## SYSTEM DEMANDS

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### 3.1 WATER CONSERVATION BILL OF 2009 BASELINES AND TARGETS

***Urban Water Management Planning Act Requirement:***

*10608.20(e) An urban retail water supplier shall include in its urban water management plan ... 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.*

In order to improve the Sacramento-San Joaquin Delta, in 2008 Governor Schwarzenegger directed State water agencies to develop a plan to achieve a twenty percent per capita water use reduction by the year 2020. Senate Bill x7-7, passed in November 2009, provides the legislative framework to implement the conservation goals, and requires retail water suppliers to detail their strategy for achieving the reduction requirement in their 2010 Urban Water Management Plan Updates. The Urban Water Management Planning Act and SBx7-7 can be found in Appendices C and D, respectively.

Explicit methodologies were developed by the California Department of Water Resources (DWR) to assist retail water suppliers in complying with the Water Conservation Act of 2009, and they are detailed in the technical document, "Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use." The District utilized the DWR methods when determining its baseline, interim, and water use target values, the steps of which are described in detail in the following sections.

The methodologies laid out by DWR instruct urban water suppliers to determine their baseline and target water use values through performing four main steps, which are as follows:

- Step 1: Determine Base Daily Per Capita Water Use
- Step 2: Determine Urban Water Use Target
- Step 3: Compare Urban Water Use Target to the 5-year Baseline (verification of 95% minimum reduction requirement)

- Step 4: Determine interim Urban Water Use Target

Water suppliers are given the option of determining their 20x2020 target values either individually, or through a regional alliance. The Triunfo Sanitation District/Oak Park Water Service (District) elected not to join a regional alliance due to its uniquely large residential sector and has determined its baseline and target values individually.

### **3.1.1 Step 1: Determine Base Daily Per Capita Water Use**

Baseline daily per capita water use is defined as an urban water supplier's estimate of its average gross water use, reported in gallons per capita per day (GPCD) and calculated over a continuous base period.

#### *Step 1A – 1C: Determine Supplier 10- to 15-year, and 5-year Base Periods*

Urban retail water suppliers are required to choose a continuous, 10-year baseline period ending no earlier than December 31, 2004, and no later than December 31, 2010 when determining Base Daily Per Capita Water Use. The option to extend the baseline to a 15-year period is given to water suppliers if recycled water accounts for at least 10 percent of their 2008 retail water deliveries. The District used over 25% recycled water in the specified qualifying year of 2008 and qualified for a 15-year period to establish its baseline. However, the 10-year baseline period beginning July 1<sup>st</sup>, 1998 and ending June 30<sup>th</sup>, 2008 was chosen as representative of OPWS's current build out demand (yielding a higher baseline daily per capita water use).

The 5-year baseline period is used to determine the retail water supplier's minimum water use reduction, and the period must end no earlier than December 31<sup>st</sup>, 2007 and no later than December 31<sup>st</sup>, 2010. July 1<sup>st</sup>, 2003 through June 30<sup>th</sup>, 2008 was chosen as the 5-year baseline period for the District. Table 3.1.1 summarizes the District's baseline period selections.

**Table 3.1.1  
Base Period Ranges**

Base	Parameter	Value	Units
10- to 15- year base period	2008 total water deliveries	3,145	acre-ft
	2008 total volume of delivered recycled water	828	acre-ft
	2008 recycled water as a percent of total deliveries	26.33%	percent
	Number of years in base period	10	years
	Fiscal Year beginning base period range	1999	
	Fiscal Year ending base period range	2008	
5-year base period	Number of years in base period	5	years
	Fiscal Year beginning base period range	2004	
	Fiscal Year ending base period range	2008	

Units: acre-feet per year

**Step 1D – 1E: Estimate Service Area Population**

The District’s service area includes the community of Oak Park, which is in an unincorporated area of Ventura County. Therefore, the population estimates obtained from Ventura County were used to estimate the service area’s total population for the baseline years.

**Step 1F: Calculate Gross Water Use**

Wholesale water from the Calleguas Municipal Water District is the sole source of potable water supply for the District’s service area. Gross water use was estimated as the total volume purchased for each fiscal year in the baseline period.

**Step 1G – 1I: Determine Annual and Base Daily Per Capita Water Use**

Annual daily per capita water use for the District was estimated by dividing the gross water use by the service area’s total population for each year of the baseline period. The average of these values over the 10-year baseline was then determined, giving the Base Daily Per Capita Water use value for the District, **233** GPCD.

Table 3.1.2 summarizes the data used to determine the Base Daily Per Capita Water Use value.

<b>Table 3.1.2</b>				
<b>Base Daily Per Capita Water Use — 10-Year Range</b>				
<b>Base period year</b>		<b>Distribution System Population</b>	<b>Daily system gross water use (mgd)</b>	<b>Annual daily per capita water use (gpcd)</b>
<b>Sequence Year</b>	<b>Fiscal Year Ending</b>			
Year 1	1999	12,538	2.80	223
Year 2	2000	11,925	2.91	244
Year 3	2001	12,057	2.76	229
Year 4	2002	12,199	2.90	238
Year 5	2003	12,199	2.86	234
Year 6	2004	12,199	3.00	246
Year 7	2005	12,201	2.78	228
Year 8	2006	12,201	2.73	224
Year 9	2007	12,201	2.86	235
Year 10	2008	12,201	2.81	230
<b>Base Daily Per Capita Water Use (Average)</b>				<b>233</b>

### 3.1.2 Determine Urban Water Use Target

SBx7-7 provides the retail water supplier the choice of four methods for determining the urban water use target value. The four methods are:

- Method 1: 80% of Base Daily Per Capita Water Use Value
- Method 2: Performance Standards
- Method 3: 95% of the Hydrologic Region 2020 Target Value
- Method 4: Water Savings (developed by DWR)

Method 1 was chosen by the District. The other three methods imposed reduction targets greater than the 20 percent required by Method 1 and were therefore dismissed, in order to prevent placing undue burden on the District. Thus, the District's 2020 Urban Water Use Target is **186 GPCD**.

### 3.1.3 Confirm Urban Water Use Target

SBx7-7 sets a minimum reduction requirement the water supplier’s urban water use target must meet or exceed. The minimum reduction is defined as 95 percent of the 5-year baseline period’s Base Daily Per Capita Water Use Value. Table 3.1.3 provides a summary of the 5-year baseline calculations.

Table 3.1.3				
Base Daily Per Capita Water Use — 5-Year Range				
Base period year		Distribution System Population	Daily system gross water use (mgd)	Annual daily per capita water use (gpcd)
Sequence Year	Fiscal Year Ending			
Year 1	2004	12,199	3.00	246
Year 2	2005	12,201	2.78	228
Year 3	2006	12,201	2.73	224
Year 4	2007	12,201	2.86	235
Year 5	2008	12,201	2.81	230
<b>Base Daily Per Capita Water Use (Average)</b>				232

The urban water use target value of 186 GPCD exceeds the minimum reduction requirement of **220 GPCD**, and it is therefore confirmed as OPWS’s Urban Water Use Target Value.

### 3.1.4 Determine Interim Urban Water Use Target

The interim urban water use target is defined as the water use goal the water supplier is to achieve and report in the 2015 UWMP Update, and equals half of the target 2020 reduction. The interim urban water use target for the District is **210 GPCD**.

## 3.2 WATER DEMANDS

### **Urban Water Management Planning Act Requirement:**

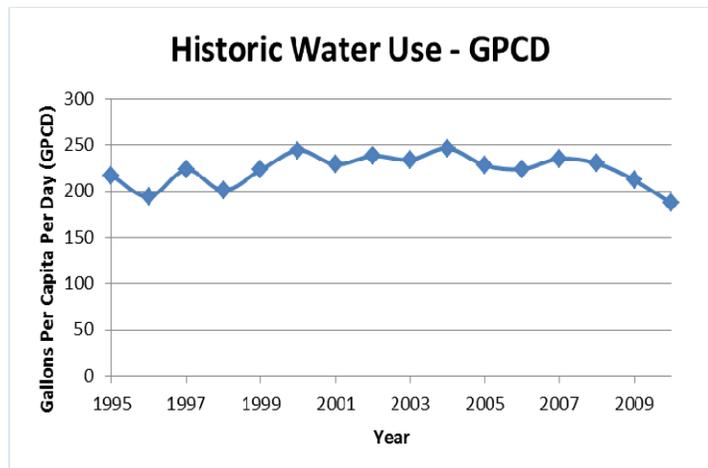
10608.20(e)(1)&(2) Quantify, to the extent records are available, past and current water use, and projected water use (over the same five-year increments described in subdivision (a)), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following uses: (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.

### 3.2.1 Historic Water Use

The Triunfo Sanitation District/Oak Park Water Service System currently serves approximately 12,200 people within its service area. With the completion of its last major development in 2001 and close to 100% build out, the community does not anticipate significant additional growth or water demands in future years.

Usage of water per capita day has shown significant fluctuation during the last fifteen years, as shown in Table 3.2.1. Consumption has ranged from a low 187 GPCD in 2010 to a maximum of 246 GPCD in 2004. The average use per day during the period from 1995 through 2010 was 223 gallons per person.

Figure 3.2.1 – Historic Water Use



**Table 3.2.1  
Historic Water Use**

<b>Year</b>	<b>Gross Water Use (MGY)</b>	<b>Population</b>	<b>Usage Per Capita Day (GPCD)</b>
1995	1,105	13,943	217
1996	977	13,829	194
1997	1,005	12,358	223
1998	916	12,466	201
1999	1,021	12,538	223
2000	1,062	11,925	244
2001	1,008	12,057	229
2002	1,059	12,199	238
2003	1,044	12,199	234
2004	1,096	12,199	246
2005	1,013	12,201	228
2006	996	12,201	224
2007	1,046	12,201	235
2008	1,025	12,201	230
2009	944	12,201	212
2010	833	12,201	187

The District's past water use and number of customer connections for the 2005 calendar year is shown in Table 3.2.2, separated by water use sector. Data is in acre feet per year.

Table 3.2.2 Water Deliveries — Actual, 2005					
	2005				
	Metered		Not metered		Total
Water use sectors	# of Accounts	Volume	# of Accounts	Volume	Volume
Single family	4,346	2,346	0	0	2,346
Multi-family	112	130	0	0	130
Commercial/Institutional	42	41	0	0	41
Industrial	0	0	0	0	0
Landscape	108	253	0	0	253
Agriculture	0	0	0	0	0
Other	0	0	0	0	0
<b>Total</b>	<b>4,608</b>	<b>2,770</b>	<b>0</b>	<b>0</b>	<b>2,770</b>

*Units: acre-feet per year*

### 3.2.2 Current and Projected Water Use by Sector

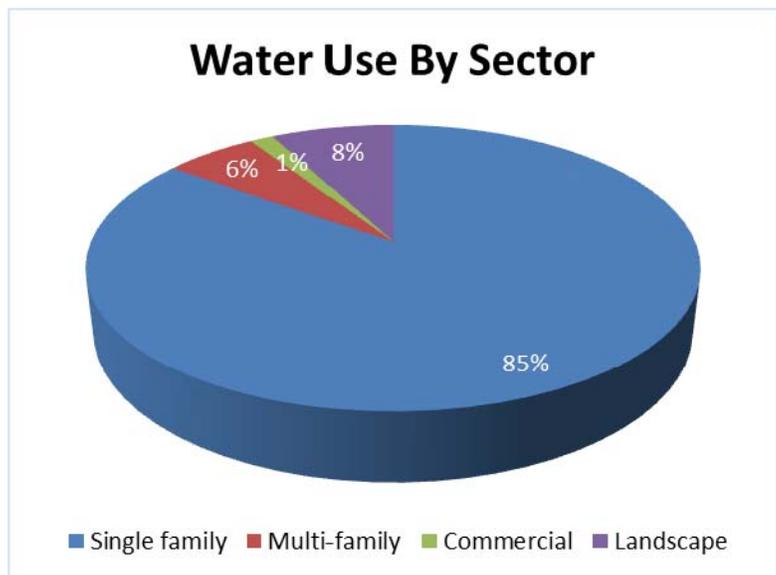
In 2010, OPWS used 2,331 acre-feet of potable water as measured by metered sales throughout OPWS. Water deliveries are broken down into the following sectors:

- Single Family Residential
- Multi-Family Residential
- Commercial & Industrial
- Government / Institutional
- Landscape

Number of connections and water use are projected for the next 20 years, in five year increments, and are broken down by sector.

The future estimations of water use and connections (by sector) are extrapolated based on the current (2010) values, anticipated population growth, and the Interim (2015) and Final (2020) Target Water Use Reduction Goals.

Figure 3.2.2 – Water Deliveries



*Residential Sector*

The District began separating single- and multi-family connections and water usage statistics in 2005. Current and future water demand projections for single- and multi-family residential customers are shown in Tables 3.2.3 – 3.2.6.

*Commercial and Industrial Sectors*

Commercial users include markets, restaurants, stores, offices, gas stations and other businesses. The District, as stated in Chapter 2, does not have industrial users. Total water usage is shown in Table 3.2.3. Future water demand predictions, shown in Tables 3.2.4 – 3.2.6, are developed based on the current year's information.

*Institutional / Governmental Sector*

The District does not have governmental users as shown in Table 3.2.3. However, institutional users, such as schools, are included with Commercial users as shown in Table 3.2.3.

*Landscape Sector*

The District uses both potable and recycled water for the landscape sector. Potable water accounts for approximately fifty percent of the total landscape water deliveries, with the remainder consisting of recycled water. The current and projected landscape water demands are shown in Tables 3.2.3 – 3.2.6.

*Agricultural Sector*

The District does not provide water for agricultural uses.

<b>Table 3.2.3</b>					
<b>Water Deliveries — Actual, 2010</b>					
	<b>2010</b>				
	<b>Metered</b>		<b>Not metered</b>		<b>Total</b>
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	4,345	1,972	0	0	1,972
Multi-family	114	136	0	0	136
Commercial/Institutional	47	34	0	0	34
Industrial	0	0	0	0	0
Landscape	88	178	0	0	178
Agriculture	0	0	0	0	0
Other	2	11	0	0	11
<b>Total</b>	<b>4,596</b>	<b>2,331</b>	<b>0</b>	<b>0</b>	<b>2,331</b>

Units: acre-feet per year

<b>Table 3.2.4</b>					
<b>Water Deliveries — Projected, 2015</b>					
	<b>2015</b>				
	<b>Metered</b>		<b>Not metered</b>		<b>Total</b>
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	4,395	2,241	0	0	2,241
Multi-family	115	155	0	0	155
Commercial/Institutional	48	39	0	0	39
Industrial	0	0	0	0	0
Landscape	89	200	0	0	200
Agriculture	0	0	0	0	0
Other	2	12	0	0	12
<b>Total</b>	<b>4,649</b>	<b>2,646</b>	<b>0</b>	<b>0</b>	<b>2,646</b>

Units: acre-feet per year

<b>Table 3.2.5</b>					
<b>Water Deliveries — Projected, 2020</b>					
	<b>2020</b>				
	<b>Metered</b>		<b>Not metered</b>		<b>Total</b>
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	4,445	2,007	0	0	2,007
Multi-family	117	138	0	0	138
Commercial/Institutional	48	35	0	0	35
Industrial	0	0	0	0	0
Landscape	90	179	0	0	179
Agriculture	0	0	0	0	0
Other	2	11	0	0	11
<b>Total</b>	<b>4,702</b>	<b>2,370</b>	<b>0</b>	<b>0</b>	<b>2,370</b>

Units: acre-feet per year

<b>Table 3.2.6</b>				
<b>Water Deliveries — Projected 2025 and 2030</b>				
	<b>2025</b>		<b>2030</b>	
	<b>metered</b>		<b>metered</b>	
Water use sectors	# of accounts	Volume	# of accounts	Volume
Single family	4,497	2,030	4,548	2,054
Multi-family	118	140	119	142
Commercial/Institutional	49	35	49	35
Industrial	0	0	0	0
Landscape	91	181	92	183
Agriculture	0	0	0	0
Other	2	11	2	11
<b>Total</b>	<b>4,757</b>	<b>2,398</b>	<b>4,810</b>	<b>2,425</b>

Units: acre-feet per year

### 3.2.3. Sales to Outside Agencies

The District does not sell wholesale water to other agencies. Table 3.2.7 is provided to quantify that the District does not intend to sell water to other water agencies within the planning period.

<b>Water Distributed</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Not Applicable	0	0	0	0	0	0
<b>Total</b>	0	0	0	0	0	0

*Units: acre-feet per year*

### 3.2.4. Other Water Uses and Losses

System losses are shown in Table 3.2.8. In addition to system losses, the District also uses Recycled water, also shown in Table 3.2.8 and accounted for in the total water demands in Section 3.2.5.

<b>Water Use</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Saline barriers	N/A	N/A	N/A	N/A	N/A	N/A
Groundwater recharge	N/A	N/A	N/A	N/A	N/A	N/A
Conjunctive use	N/A	N/A	N/A	N/A	N/A	N/A
Raw water	N/A	N/A	N/A	N/A	N/A	N/A
Recycled water	786	580	587	593	600	607
System losses	175	226	257	230	233	235
Other (define)	N/A	N/A	N/A	N/A	N/A	N/A
<b>Total</b>	961	806	844	823	833	842

*Units: acre-feet per year*

### 3.2.5 Total Water Demands

The total past, current, and future water demands for the District are summarized in Table 3.2.9.

Table 3.2.9						
Total Water Use						
Water Use	2005	2010	2015	2020	2025	2030
Total water deliveries (Tables 3.2.2 to 3.2.6)	2,770	2,331	2,646	2,370	2,398	2,425
Sales to other water agencies (Table 3.2.7)	N/A	N/A	N/A	N/A	N/A	N/A
Additional water uses and losses (Table 3.2.8)	961	806	844	823	833	842
<b>Total</b>	<b>3,731</b>	<b>3,137</b>	<b>3,490</b>	<b>3,193</b>	<b>3,231</b>	<b>3,267</b>

Units: acre-feet per year

### 3.2.6 Lower Income Housing Projections

**Urban Water Management Planning Act Requirement:**

*10631.1(a) The water use projections required by Section 10631 shall include projected water use for single-family and multi-family 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.*

The Housing Element of the Ventura County General Plan 2008 revision was utilized to determine the low-income projected water demands within the Triunfo Sanitation District/Oak Park Water Service’s service area, specifically within the unincorporated community of Oak Park. The General Plan identifies the need for 409 dwelling units within the unincorporated area of Ventura County by the year 2014; however, the assumptions detailing the potential areas available for low-income housing development do not identify Oak Park as a potential development area, since the community is predominantly built-out. Table 3.2.10 illustrates the assumption that no low-income housing will be built in the community of Oak Park.

Table 3.2.10					
Low-Income Projected Water Demands					
Low Income Water Demands	2014	2015	2020	2025	2030
Single-family residential	0	0	0	0	0
Multi-family residential	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Units: acre-feet per year

### 3.3 WATER DEMAND PROJECTIONS

***Urban Water Management Planning Act Requirement:***

*10631(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 the 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).*

The Triunfo Sanitation District/Oak Park Water Service relies on wholesale water from the Calleguas Municipal Water District as the primary source of potable water. Table 3.3.1 is provided to quantify the District demand projections provided to the Calleguas Municipal Water District for incorporation into Calleguas' Urban Water Management Plan. As illustrated below, the previously projected demand was significantly higher than the projected demands incorporating the water use targets and conservation efforts, thus, resulting in a conservative analysis in Calleguas' Urban Water Management Plan, which indicated a reliable supply with the demands listed below.

<b>Wholesaler</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Calleguas Municipal Water District	3,100	3,100	3,100	3,100	3,100
<b>Total</b>	3,100	3,100	3,100	3,100	3,100

*Units: acre-feet per year*

### 3.4 WATER USE REDUCTION PLAN

***Urban Water Management Planning Act Requirement:***

*CWC §10608.29 Urban wholesale water suppliers shall include in the urban water management plans ... an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part (10608.36). Urban retail water suppliers are to prepare a plan for implementing the Water Conservation bill of 2009 requirements and conduct a public meeting which includes consideration of economic impacts.*

The Triunfo Sanitation District/Oak Park Water Service has implemented an economical, yet sound, water use reduction plan in order to meet the 20x2020 water use reduction requirements. Options to reduce water demand in the District include:

- Encouraging the use of recycled water for landscape and irrigation purposes.
- Increasing public awareness regarding water conservation requirements and efforts that can easily be implemented to conserve water through methods such as on site reviews with customers, water hotline, and rebate participation.
- Active involvement with the California Urban Water Conservation Council training programs and Best Management Practices progress.

# 4

## SYSTEM SUPPLIES

### 4.1 WATER SOURCES

**Urban Water Management Planning Act Requirement:**

*10631 (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).*

Triunfo Sanitation District/Oak Park Water Service (District) obtains all of its potable water supplies from the Calleguas Municipal Water District (CMWD). In addition to distributing purchased water through CMWD, the District also has an extensive recycled water system. The two of these systems together delivered 3,137 AFY of water to a population of over 12,000 in 2010. Due to the slow rising population and the per capita demand reduction required by SBx7-7, total water demand for the District by projection is expected to be similar in 2030 to total demand recorded for 2010, as illustrated in Table 3.2.9.

The total projected supplies available to the District through CMWD are shown below in Table 4.1.1. The supply sources are illustrated in Figure 4.1.1.

<b>Water Supply Sources</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Calleguas Municipal Water District	2,557	3,100	3,100	3,100	3,100
Supplier-Produced Groundwater <sup>2</sup>	0	0	0	0	0
Supplier-Produced Surface Water	0	0	0	0	0
Transfers In	0	0	0	0	0
Exchanges In	0	0	0	0	0
Recycled Water	786	580	587	593	600
Desalinated Water	0	0	0	0	0
<b>Total</b>	<b>3,343</b>	<b>3,680</b>	<b>3,687</b>	<b>3,693</b>	<b>3,700</b>

*Units: acre-feet per year*

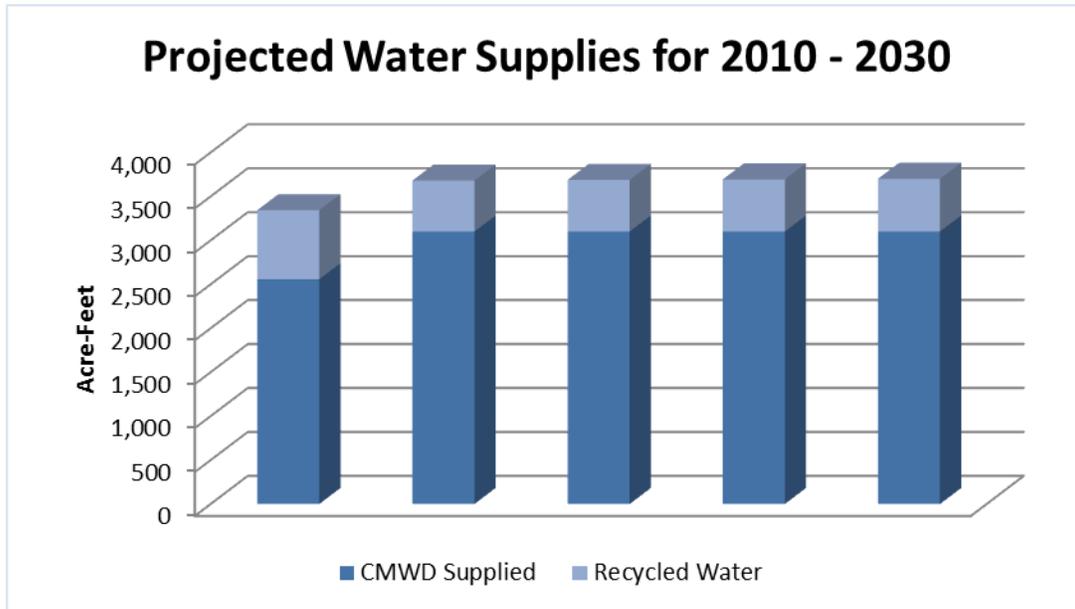


Figure 4.1.1: Projected Water Supplies for TSD through 2030

### Wholesale Water Supply

Water is purchased through the CMWD. CMWD obtains its water from a number of sources including local groundwater supplies and recycled water. However, the majority of water supplied to CMWD is done so through the Metropolitan Water District of Southern California (MWD) as part of the State Water Project (SWP). The SWP is a series of reservoirs, aqueducts, and pumping facilities that convey water from Northern to Southern California. The water for use within the District is collected and delivered to MWD via the SWP, subsequently treated at the MWD Joseph Jensen Treatment Facility, and then delivered through pipelines and pumping stations to CMWD.

CMWD has been provided with the following water supply numbers from the District. In return, CMWD has confirmed in the CMWD 2010 UWMP that this supply will be available.

Wholesale Sources	Contracted Volume	2015	2020	2025	2030
Calleguas Municipal Water District	No	3,100	3,100	3,100	3,100

Units: acre-feet per year

## Recycled Water Supply

The Triunfo Sanitation District Recycled Water system will be discussed in detail in Section 4.5.

## 4.2 GROUNDWATER

### ***Urban Water Management Planning Act Requirement:***

*10631 (b)(1) If groundwater is identified as an existing or planned course of water available to the supplier provide...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.*

*10631 (b)(2) If groundwater is identified as an existing or planned course of water available to the supplier provide...a description of any groundwater basin or basins from which the urban water supplier pumps groundwater.*

*10631 (b)(2) For those basins for which a court or the board has adjudicated the rights to pump groundwater, provide 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.*

*10631 (b)(2) For basins that have not been adjudicated, (provide) 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.*

*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. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.*

*10631 (b)(4) (Provide 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.*

Groundwater is not a source of potable water to the Triunfo Sanitation District, and therefore this section of the UWMP is not applicable.

Table 4.2.1 illustrates the amount of groundwater pumped by the Triunfo Sanitation District in the last five years.

<b>Table 4.2.1</b>						
<b>Groundwater — Volume Pumped</b>						
<b>Basin name(s)</b>	<b>Metered or Unmetered<sup>1</sup></b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
N/A	N/A	0	0	0	0	0
<b>Total groundwater pumped</b>		0	0	0	0	0
<b>Groundwater as a percent of total water supply</b>		0%	0%	0%	0%	0%

*Units: acre-feet per year*

### 4.3 TRANSFER OPPORTUNITIES

***Urban Water Management Planning Act Requirement:***

*10631 (d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.*

There are currently no short-term or long-term transfer opportunities available to the Triunfo Sanitation District. This is illustrated below in Table 4.3.1.

<b>Table 4.3.1</b>			
<b>Transfer and Exchange Opportunities</b>			
<b>Transfer Agency</b>	<b>Transfer or Exchange</b>	<b>Short Term or Long Term</b>	<b>Proposed Volume</b>
Not Applicable	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

*Units: acre-feet per year*

## 4.4 DESALINATED WATER OPPORTUNITIES

***Urban Water Management Planning Act Requirement:***

*10631 (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.*

The District is currently not exploring the possibility of using desalinated water as a water source independently. However, both CMWD and MWD are currently exploring the potential for use and distribution of desalinated water. As an end user of water supplied through both CMWD and MWD, the District is likely to receive water as a result of this effort in discovering the opportunity for desalination as part of the CMWD and MWD water supply. Therefore, a brief description of efforts in water desalination are discussed.

CMWD has initiated the salinity management pipeline (SMP) project, which is intended to be an integral part of future brackish water desalination projects. The SMP will collect concentrate from demineralization of brackish groundwater, potable water, and high quality recycled water and distribute it for beneficial reuse or discharge it into the ocean. The SMP is currently under construction and is designed to receive and dispose of salt concentrate from Desalter plants, currently in the planning phase. It is estimated that the SMP could ultimately remove 42,300 tons per year of salt from the watershed.

In 2001, the MWD created the Seawater Desalination Project (SDP) to explore the potential for using seawater as a long term water supply. The SDP provides incentives for its member agencies to develop water through desalination; up to \$250 per AF for all produced supplies. Currently, four desalination projects are receiving funding through MWD's SDP program. Each program has been vital in discovering and addressing both the technical and legal challenges associated with constructing a desalination plant. As of 2011, MWD reports that the Long Beach, South Orange Coastal, and West Basin Water Desalination Projects are currently in the pilot study process, while the Carlsbad Seawater Desalination Project is in the permitting phase. Table 4.4.1 shows the projected supplies provided by these four water desalination plants. In the coming years, these projects will help to determine the feasibility of using desalinated water for distribution through the District, either by establishing a water desalinating plant or through purchase of desalinated water through MWD or another source.

Table 4.4.1 Current Desalination Projected Capacities		
Project	Member Agency	Projected Capacity (AFY)
Long Beach Seawater Desalination Project	Long Beach Water Department	10,000
South Orange Costal Ocean Desalination Project	Municipal Water District of Orange County	16,000-28,000
Carlsbad Seawater Desalination Project	San Diego County Water Authority	56,000
West Basin Seawater Desalination Project	West Basin Municipal Water District	20,000
<b>Total</b>		102,000-114,000

MWD’s current goal is to supply 125,000 AFY of water through seawater desalination by 2025.

## 4.5 RECYCLED WATER OPPORTUNITIES

***Urban Water Management Planning Act Requirement:***

*10633 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.*

The District is committed to potable water conservation through the treatment and distribution of recycled water for non-potable uses. This effectively decreases the total water that must be purchased through CMWD, and is a significant part in the statewide effort to conserve and manage potable water resources.

The District entered into a Joint Powers Authority with Las Virgenes Municipal Water District (LVMWD) in 1964 to treat wastewater at the Tapia Water Reclamation facility, and recycling from the facility began in 1972. Since then, CMWD has joined the recycled water effort with LVMWD and TSD by subsidizing the expense of pipe infrastructure for the OPWS area to allow the area to utilize recycled water. Together, the three Districts are committed to maximizing the use of recycled water to conserve potable water resources through the treatment of wastewater and subsequent distribution as recycled water. Since 1972, the recycled water system of the Joint Powers Authority has evolved to distribute nearly 7,600 AFY of water for non-potable use.

The current infrastructure consists of 4 tanks, 5 pumping stations, 3 reservoirs, and 66 miles of pipeline. Each pumping station has three pumps, with an individual pump capacity anywhere between 800 and 6,200 GPM. Due to the constant fluctuation in daily demand, reservoirs storing approximately 16 million gallons are filled with recycled water to help meet peak flows when the quantity from the Tapia Water Reclamation Facility (TWRP) is not sufficient over the entire Las Virgenes and Triunfo use area. In the event that these reservoirs run dry, the system can also be supplemented with potable water to ensure that irrigation demands are met.

Recycled water, used for irrigation purposes, is treated (as described below) and then distributed or disposed of as necessary. The recycled water system is designed to serve irrigation water for customers including golf courses, homeowner's association grounds, and public landscapes such as parks, schools, and highway medians.

***Urban Water Management Planning Act Requirement:***

*10633 (a) (Describe) 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.*

Wastewater from the District is collected by the District through the sewer system described in Chapter 2. Water is sent to TWRP where it is treated. TWRP was constructed as part of the two District Joint Powers Authority described above, and treats wastewater for multiple service areas. The total capacity of TWRP is currently 16 MGD, all of which receives tertiary treatment and is suitable for recycled water use. However, TWRP has undergone modifications which are estimated to reduce its total capacity to 12 MGD. These modifications, completed in 2010, improve the water treatment process to meet new regulations on the content of ammonia (set at 2.3 mg/L) and nitrate plus nitrite (set at 8 mg/L) in recycled water.

When wastewater enters TWRP, macroscopic materials are removed first. Large materials (e.g., rags and paper) are removed by passing the waste stream through a vertical slatted screen bar. Finer materials (e.g., eggshells and coffee grounds) are removed in a grit chamber. The flow is then slowed down and air is injected to keep small, organic particles suspended while allowing heavier, inert materials to fall to the bottom. These materials are removed from the wastewater and sent to landfill. At this point, the wastewater is 99% water and 1% solids.

Following the initial treatment, the wastewater goes through primary treatment, which takes place in the primary sedimentation tanks. Most of the solids that remain suspended in the wastewater are allowed to settle to the bottom of the tank. At the same time, oil and grease float to the surface and are removed by skimming the surface. Waste collected from this portion

of the process is sent to the Rancho Las Virgenes Composting Facility.

The water is then sent to secondary treatment. This process cleans the water through a biological process, utilizing beneficial microorganisms. These microorganisms remove contaminants as they feed, grow, and multiply. The process is accelerated by holding the water in an environment optimized for the microorganisms to thrive. This is done monitoring oxygen and feed contents in the water through the organic content of the water and injecting air into the tanks.

The microorganisms are then allowed to settle out and are returned to the secondary treatment aeration tanks, while the treated water moves to its final, tertiary treatment stage. Chemicals are added to the water to allow small particles to coagulate so they can be removed by filters. The water is disinfected with chlorine. After four hours, the chlorine is neutralized, and the final product is safe and ready to be distributed as recycled water for non-potable use.

*Units: acre feet per year*

**Urban Water Management Planning Act Requirement:**  
 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.

Currently, 100% of the wastewater collected by the District and sent to TWRP is treated to recycled water standards, and available for use if necessary. However, the water that is not needed for recycled water use is either stored within the reservoirs, or disposed of. In 2010, the TWRP reported an average flow from OPWS of 2.7 MGD, or 3,024 AF. The total projected wastewater from OPWS for the next 20 years is shown below in Table 4.5.1.

Type of Wastewater	2005	2010	2015	2020	2025	2030
<b>Wastewater collected &amp; treated in service area</b>	3,020	3,024	3,055	3,090	3,126	3,162
<b>Volume that meets recycled water standard</b>	3,020	3,024	3,055	3,090	3,126	3,162

*Units: acre feet per year*

Water that is not sold for recycled water purposes must be discharged. Methods and projected quantities of disposal are summarized below in Table 4.5.2. The numbers provided are based on the average daily flows of wastewater treated at the TWRP of 12 MGD and the average daily recycled water demands on the system (*all* recycled water demand from TWRP), as reported in the 2007 Recycled Water Master Plan. The amount discharged was equal to the average daily flow of 12 MGD, as provided by the TWRP, minus the projected recycled water use of 6.5 MGD for the whole facility.

<b>Table 4.5.2</b>						
<b>Recycled Water — Non-Recycled Wastewater Disposal</b>						
<b>Method of Disposal</b>	<b>Treatment Level</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Discharge to Malibu Creek or LA River Basin	Tertiary	6,161	6,161	6,161	6,161	6,161
<b>Total</b>		6,161	6,161	6,161	6,161	6,161

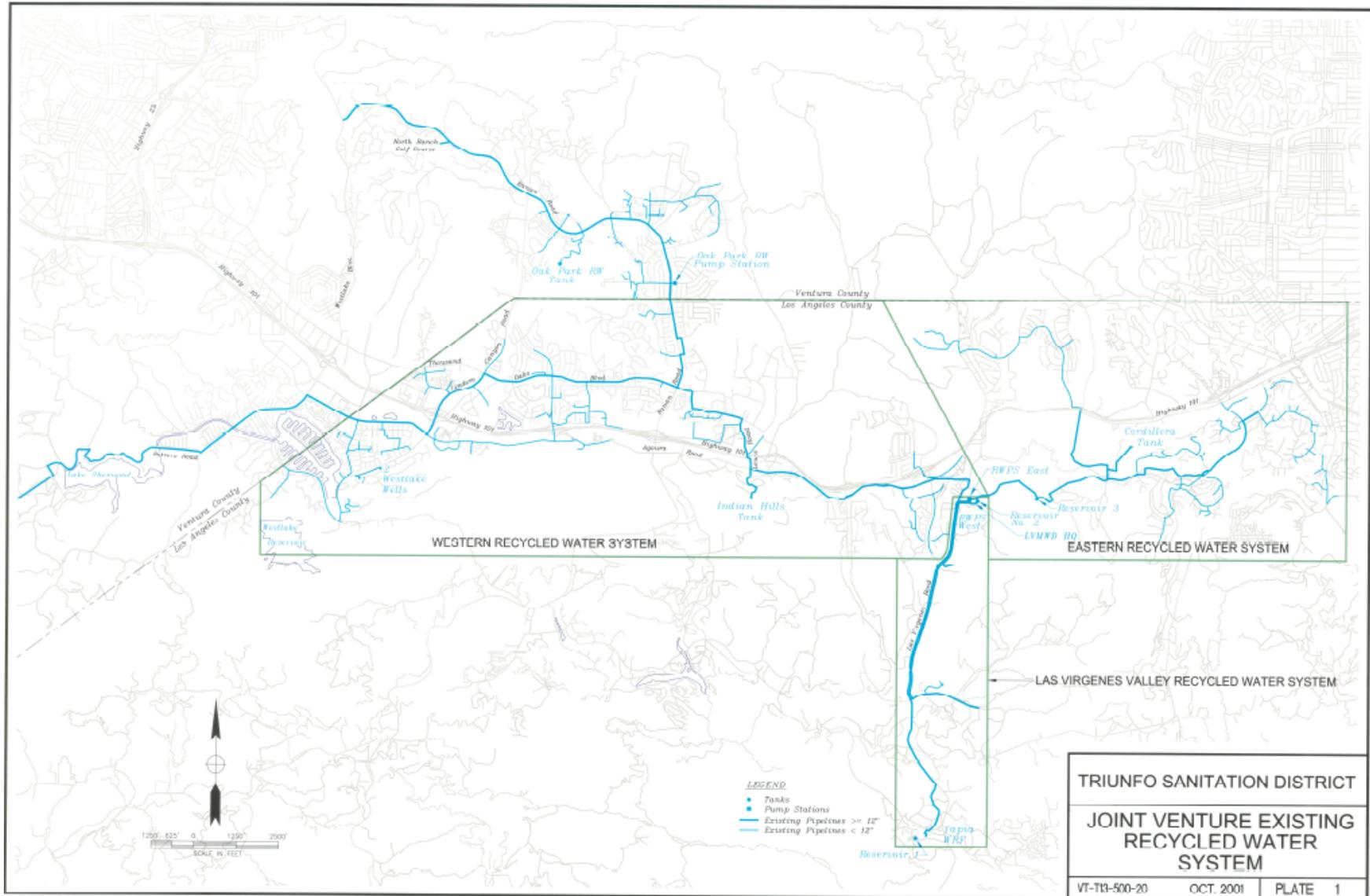
*Units: acre feet per year*

**Urban Water Management Planning Act Requirement:**  
 10633 (c) (*Describe*) the recycled water currently being used in the supplier’s service area, including, but not limited to, the type, place, and quantity of use

All reclaimed water use in the OPWS area is subject to supply agreements through the two Districts’ Joint Powers Authority (LVMWD and TSD). Specifically, TSD and LVMWD supply the reclaimed water from the TWRP for distribution by CMWD to OPWS. TWRP is the single source of reclaimed water to the OPWS system. TSD offers recycled water discounting in a two-tier incentive system to encourage recycled water use when possible.

Under the Joint Powers Authority agreement, the District conveys reclaimed water at tertiary treatment quality levels. Current data suggests that the District uses about 0.5 MGD (560 AFY) in its service area each day. Reclaimed water is largely applied as landscape irrigation. A map showing the recycled water distribution system for the District is shown in Figure. 4.5.1 on the following page. Water purchased has historically been used to irrigate golf courses, school grounds, highway medians, parks and homeowner association grounds. The use of reclaimed water for irrigation reduced the need for potable water in the District by 35% (including Lake Sherwood).

Figure 4.5.1: TSD Joint Venture Recycled Water System



***Urban Water Management Planning Act Requirement:***

*10633 (d) (Describe and quantify) 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.*

Currently, the availability of recycled water supply is limited by peak/off-peak infrastructure. In other words, the amount of water available for treatment and use is seasonal due to significantly less irrigation demand during the winter months as opposed to the summer months. During the summer months, wastewater flows are unable to meet peak recycled water demands. Due to infrastructure and funding issues, recycled water produced during the winter months cannot be stored for the summer months. Therefore, the peak demand and peak supply occur at different times and peak supply cannot be offset by stored recycled water from the peak demand, and recycled water must be supplemented with potable water during summer months to meet irrigation needs. The recycled water system is also supplemented with approximately 400 acre-feet per year of groundwater, reducing the amount of potable water needed for this purpose.

The 2007 Recycled Water Master Plan identifies few improvements that can be made to the District's service area to increase the use of recycled water as a result of the peak/off peak infrastructure described above. Instead, the report focuses mainly on other water service areas also served by TWRF.

The potential users of recycled water are identified in Table 4.5.3. These are based on an estimate that half of the water supplied for landscape irrigation use in 2010 was recycled water and the other half was potable. Based on this, an additional 580 AFY of recycled water could potentially be used; however this use is not feasible, as the infrastructure is limited to supply recycled water during peak demand periods to both LVMWD and TSD/OPWS.

Table 4.5.3 Recycled Water — Potential Future Use						
User type	Description	Feasibility	2015	2020	2025	2030
<b>Agricultural irrigation</b>						
<b>Landscape irrigation</b>	Recycled water used for golf course, park, street median and homeowner association landscape irrigation	No	145	145	145	145
<b>Commercial irrigation<sup>3</sup></b>						
<b>Golf course irrigation</b>						
<b>Wildlife habitat</b>						
<b>Wetlands</b>						
<b>Industrial reuse</b>						
<b>Groundwater recharge</b>						
<b>Seawater barrier</b>						
<b>Geothermal/Energy</b>						
<b>Indirect potable reuse</b>						
<b>Total</b>		No	145	145	145	145

Units: acre-feet per year

**Urban Water Management Planning Act Requirement:**

*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 pursuant to this subdivision.*

As can be seen in Table 4.5.4, the District’s 2005 UWMP overestimated the total amount of water supplied within the service area. This may be the result of interpolation based on data leading up to 2004, in which significant improvements were made to the recycled water distribution system. However, as identified in the 2007 Recycled Water Master Plan, there is little improvement to be made in terms of diversifying the supply of recycled water to customers within the District’s area.

<b>Use type</b>	<b>2010 Actual Use</b>	<b>2005 Projection for 2010</b>
Agricultural irrigation	0	0
Landscape irrigation	580	850
Commercial irrigation	0	0
Golf course irrigation	0	0
Wildlife habitat	0	0
Wetlands	0	0
Industrial reuse	0	0
Groundwater recharge	0	0
Seawater barrier	0	0
Geothermal/Energy	0	0
Indirect potable reuse	0	0
<b>Total</b>	<b>580</b>	<b>850</b>

*Units: acre-feet per year*

***Urban Water Management Planning Act Requirement:***

*10633 (f) (Describe the) 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.*

TSD, LVMWD, and CMWD all encourage recycled water use among their customers through financial incentives and assisting with the installation and adoption of recycled water for landscape users. For TSD, recycled water is available at a 10% discount to customers who use water, allowing financial savings while encouraging water conservation. In addition, the District provides technical support to landscape users interested in switching to recycled water. This encourages users to retrofit previous potable water systems with recycled water systems while educating them regarding the requirements and regulations of proper recycled water use and maintenance.

Quantification of the results of the potential impact of the incentives is estimated below in Table 4.5.5. The numbers reported are based on the estimate that recycled water use is not expected to increase within the District, as supplies are limited during peak demand periods. Due to the sufficiency and extensive use of the current recycled water systems, as well as the limited potential for additional recycled water customers, methods to encourage facilities to switch to

recycled water are limited. The quantities reported in Table 4.5.5 illustrate the predictions that the anticipated use of recycled water is not expected to increase as new facilities and landscapes are not expected to be constructed in the service area.

<b>Table 4.5.5</b>					
<b>Methods to Encourage Recycled Water Use</b>					
<b>Actions</b>	<b>Projected Results</b>				
	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Financial Incentives	0	0	0	0	0
<b>Total</b>	0	0	0	0	0

*Units: acre-feet per year*

In addition to the TSD incentives, MWD also has an extensive incentive program for encouraging the use of recycled water among its member agencies. Please refer to the Metropolitan Water District of Southern California 2010 UWMP for more information.

***Urban Water Management Planning Act Requirement:***

*10633 (g) (Provide 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.*

The TSD/LVMWD recycled water system was implemented in 1972. Since then, the system has become sophisticated and efficient in terms of the treatment, delivery, and disposal of recycled water. The District includes in its annual budget funds specifically for maintaining, repairing, and expanding the recycled water system. Funds for this are provided solely through the revenue generated by recycled water sales. Projects currently include renovating recycled water pump stations, expanding wastewater collection, and maintaining and updating the TWRF. These projects are separately funded through CMWD, TSD, and LVMWD.

## 4.6 FUTURE WATER PROJECTS

### ***Urban Water Management Planning Act Requirement:***

*10631 (h) (Describe) 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.*

Due to the fact that the District does not pump its own water, and instead purchases all water through the CMWD, there are currently no capital projects in progress or planned to increase the quantity of water supply to the area. In addition, the slow growth of the population, combined with the water conservation efforts being implemented reduces the total demand of water from the system. The projected demands on the supply system customers within OPWS were discussed in Chapter 3. This is summarized below in Table 4.6.1.

<b>Project Name</b>	<b>Start &amp; End Date</b>	<b>Potential Project Constraints</b>	<b>Normal -year supply</b>	<b>Single-dry year supply</b>	<b>Multiple -dry year first year supply<sup>3</sup></b>	<b>Multiple -dry year second year supply<sup>3</sup></b>	<b>Multiple -dry year third year supply<sup>3</sup></b>
N/A	N/A	N/A	0	0	0	0	0
<b>Total</b>		N/A	0	0	0	0	0

*Units: acre-feet per year*

# 5

## WATER SUPPLY RELIABILITY & WATER SHORTAGE CONTINGENCY PLANNING

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### 5.1 Water Supply Reliability

***Urban Water Management Planning Act Requirement:***

*10620(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.*

Water supply reliability includes both the availability of the water purchased through the Calleguas Municipal Water District (CMWD) and the distribution and storage facilities that make up the District's water system. The water supplied through CMWD is considered a reliable source. There are currently no opportunities being pursued by the Truinfo Sanitation District (TSD) to discontinue wholesale water service through CMWD for service to OPWS.

As a result of the TSD water supply being provided by CMWD, which in turn is provided through MWD and the SWP, the reliability analysis for this Chapter will be heavily dependent on the reliability analyses of these agencies. Although TSD is dependent on these sources to provide a reliable water supply, TSD/OPWS is one of twenty CMWD purveyors that will continue to ensure supply and reliability in the future. Instead of attempting to replace water supplies that are deemed unreliable by seeking alternate water sources, TSD will continue to work with CMWD to ensure that the necessary improvements are made to ensure a high quality and reliable source of water.

**Urban Water Management Planning Act Requirement:**

*10631(c)(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.*

Currently, the only source of potable water that the TSD utilizes is wholesale distributed water through CMWD. Additional water supplies are obtained by treating wastewater (at TWRF) from service areas outside of the OPWS area and using it as recycled water for irrigation purposes only.

**Table 5.1.1  
Factors Resulting in Inconsistency of Supply**

<b>Water Supply Sources</b>	<b>Legal</b>	<b>Environmental</b>	<b>Water Quality</b>	<b>Climatic</b>	<b>Additional information</b>
CMWD Wholesale Water			✓		NA
Recycled Water			✓		NA

*Units: acre-feet per year*

**CMWD Wholesale Water**

CMWD identified that its water supply to the District is considered reliable and sufficient to meet demand. However, the reliability of the supply is dependent on the water quality delivered by the SWP to MWD. In general, the SWP quality has been considered good, with delivered water meeting the state threshold requirements but as seawater intrusion into the Bay-Delta increases, water quality may be diminished. In addition, as water moves through the Bay-Delta, levels of total organic carbon and bromide are likely to increase. Water quality can also be affected by the amount of wastewater that is disposed, as this provides a means for the transportation of salts and pathogens to clean water supplies. To prevent these water quality issues from affecting the overall reliability of supply, water quality analyses are conducted throughout the delivery process and at the water treatment plants to ensure water is safe prior to delivery. Furthermore, state regulatory factors have included biological assessments affecting the amount of water delivered from the Delta to the SWP system to prevent

degradation of water quality from the Delta. MWD, CMWD, and TSD are diligent in identifying poor water quality and acting immediately to ensure it is treated properly to ensure a clean source of potable water. Please see Section 5.3 for more information regarding water quality.

### **Recycled Water**

Recycled Water is treated as described in Chapter 4. This water supply is also deemed generally reliable. Similar to the District’s purchased water supply, water quality issues have the potential to impact reliability and threaten the supply of recycled water.

The industry must meet water quality standards set forth by regulating agencies. These standards are prone to change as new issues develop; in response to these changing standards, recycled water treatment plants (e.g. Tapia Water Reclamation Facility (TWRF)) must adapt to the regulations and modify the process as necessary to ensure that water can continually be delivered to its customers. The Joint Powers Authority between TSD and LVMWD to deliver recycled water, along with CMWD, ensures that all aspects of distributing recycled water are met, and that high quality recycled water is delivered to its customers for non-potable use. The plant is also receptive to any changes that must be made in the treatment or distribution process to ensure compliance with all water quality standards and that water is safe for irrigation use.

## **5.2 Water Shortage Contingency Planning**

### ***Urban Water Management Planning Act Requirement:***

*10632(c) 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.*

Catastrophic failures that put the water supply at risk include fires and earthquakes that could damage the infrastructure to the water distribution system. In the event of a catastrophic event that prevents the District from obtaining water for distribution, CMWD implements actions and methods to continue supplying water to customers of its member agencies. Water reserves are available in Lake Bard, and it is estimated that CMWD could provide at least 75% of its annual demand for all of its service areas for three to six months following a catastrophic event that disrupts the supply of water from MWD. In addition, methods to ensure that water is continually supplied to the customers include stockpiling emergency pipeline repair materials and

coordinating with the Office of Emergency Services (OES) and Emergency Operations Center (EOC) in the event of a catastrophic disruption of supply.

Any effect seen by the CMWD during a catastrophic event would impact the water supply to the District. As a result, the District is subject to the actions and rationing of CMWD and contains adaptive language to stages of rationing in its own 2009 Water Shortage Contingency Plan. The District is also included in the Ventura Regional Sanitation District (VRSD) Emergency Plan, which identifies the actions necessary to continue healthy water supply in the event of a disaster such as a regional power outage or earthquake. The District is discussed in Section 2.1 of the VRSD Emergency Management Plan.

### **Regional Power Outage**

The District has identified the possibility of a regional power outage and its effect on the water supply. In the event of a regional power outage, supply would continue through the service area by employing the use of emergency generators. OPWS has stationary generators located at both the Bishopswood and Lindero Pump Stations.

### **Earthquake**

CMWD has addressed the susceptibility of its water supply system to earthquakes and understands that a catastrophic earthquake could result in a devastating supply reduction. In order to mitigate the impacts associated with a large-scale earthquake, TSD and CMWD have identified specific emergency actions to implement, including facility inspections and repairs. The CMWD 2010 Urban Water Management Plan notes that “the key to efficient repair procedures is a structured approach, in which specific procedures, responsible personnel, and necessary equipment are identified and secured ahead of time.” In recognition of this, CMWD has an emergency repair protocol to address leaks as a result of earthquakes. That protocol is as follows:

- Establishment of an emergency repair organizational structure.
- Redevelopment of a spare pipe and fittings inventory and management of inventory records.
- Identification of Emergency contacts.
- Damage assessment.
- Comprehensive repair drawings, specifications, and procedures for various facility types.
- Ongoing maintenance of the protocol.

Repairs to leaks in the system and implementation of the described protocol are made possible through emergency funds and stockpiling of emergency pipeline repair materials.

In addition, the TSD Water Shortage Contingency Plan, which can be found in Appendix E, addresses specific precautions and actions that can be taken in the event of an earthquake. With the exception of the Conifer Tank, all of the water tanks meet 2008 seismic standards. In the event that some facilities are damaged in the event of a catastrophic earthquake, OPWS can supply water from any tank to any distribution zone through zone interconnections and looped distribution pipelines to allow potentially damaged portions of the service area to be quickly isolated and repaired.

CMWD Ordinance 12 requires all of its member agencies to provide “adequate storage or alternate supplies, other than from District facilities, to meet their peak daily and hourly demands.” To meet this requirement, member agencies should have sufficient storage capacity to provide uninterrupted water deliveries in the event of a service interruption by CMWD. Ordinance 12 further specifies that service interruptions may exceed 72 hours during events such as “routine maintenance, internal inspection, rehabilitation, and improvement projects on District facilities.” Currently, the total storage capacity of OPWS is approximately 48 hours of average water use.

With population growth, energy shortages, earthquakes, and the threat of terrorism experienced by California; maintaining the gentle balance between water supply and demand is a complicated task that requires planning and forethought. In the event that a water shortage occurs, simple measures can be implemented to conserve the water supply at a public level. Below, stages are discussed during which various conservation measures will be imposed by the District and CMWD.

<b>Table 5.2.1</b>		
<b>Water Shortage Contingency — Rationing Stages to Address Water Supply Shortages</b>		
<b>Stage No.</b>	<b>Water Supply Conditions</b>	<b>% Shortage</b>
Permanent - Minimal	Water conservation requirements are effective at all times, are permanent, and will help to reduce water consumption by 15%.	Up to 15%
Water Shortage Stage I – Moderate	A Stage 1 Water Supply Shortage condition exists when the TSD Board of Directors determines, in its sole discretion, that due to drought or other supply reductions, a 25% consumer demand reduction is required in order to ensure that sufficient supplies will be available to meet anticipated demands.	15-25%
Water Shortage Stage II – Severe	A Stage 2 Water Supply Shortage condition exists when the TSD Board of Directors determines, in its sole discretion, that due to drought or other supply reductions, a 35% consumer demand reduction is required in order to ensure that sufficient supplies will be available to meet anticipated demands.	25-35%
Water Shortage Stage III – Critical	A Stage 3 Water Supply Shortage condition is also referred to as an “Emergency” condition. A Stage 3 Water Supply Shortage condition exists when the TSD Board of Directors declares a water shortage emergency in a manner and upon the grounds set forth in California Water Code Section 350 et seq.	35-50%

***Urban Water Management Planning Act Requirement:***

*10632(d) 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.*

*10632(e) 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.*

In the event of a significant reduction of water supply, the District has several stages of actions to take and policies to implement to minimize the impacts of water shortage, prepare for an increase in shortage, and attempt to conserve water to prevent further shortage. The District has adopted a Water Shortage Contingency Plan and Ordinance Number TSD-67, which describe the measures to take in the event of a water shortage. The plan consists of water waste prohibitions and three additional levels of conservation measures to take in the case of a shortage of supply. The level of conservation is determined by the percent shortage. Table 5.2.2 provides an overview of the mandatory prohibitions and the consumption reduction methods the District will implement to compensate for the water shortage. A copy of Ordinance TSD-67 is in Appendix F.

<b>Table 5.2.2</b>	
<b>Water Shortage Contingency — Mandatory Prohibitions</b>	
<b>Examples of Prohibitions</b>	<b>Stage When Prohibition Becomes Mandatory</b>
Demand reduction program	All Stages
Reduce pressure in water lines	I, II, III
Flow restriction	III
Restrict for only priority uses	III
Use prohibitions	All Stages
Water shortage pricing	All Stages
Per capita allotment by customer type	III
Voluntary rationing	All Stages
Mandatory rationing	I, II, III
Incentives to reduce water consumption	All Stages
Education Program	All Stages
Percentage reduction by customer type	I, II, III
Per connection allotments	II, III

### **Prohibition Against Waste (0-15% Shortage)**

The following water conservation requirements are effective at all times in the District, as put forth in Ordinance TSD-66, and are permanent. A copy of TSD-66 can be found in Appendix G. These actions contribute to a water savings up to fifteen percent.

- Limits on Watering Hours:** Watering or irrigating of lawn, landscape or other vegetated area with potable water is prohibited between the hours of 9:00 a.m. and 5:00 p.m. on any day, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for very short periods of time for the express purpose of adjusting or repairing an irrigation system.
- Limit on Watering Duration:** Limit irrigation system watering to no more than 15 minutes per day per station. This does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour and weather based controllers or stream rotor sprinklers that meet a 70% efficiency standard.
- No Watering During Rain Events:** Irrigation is not permitted during periods of rain nor in the 24 hours following each rain event in the Oak Park Area.

- **No Excessive Water Flow or Runoff:** Watering or irrigation of any lawn, landscape or other vegetated area in a manner that causes or allows excessive water flow or run-off onto an adjoining sidewalk, driveway, street, alley, gutter or ditch must be repaired within 5 days of observation and/or notification by the District.
- **No Washing Down Hard or Paved Surfaces:** Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys is prohibited except when necessary to alleviate safety or sanitary hazards and only by use of a hand-held bucket or similar container, a low-volume high pressure cleaning machine equipped to recycle any water used or a low volume high pressure water broom.
- **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within five (5) days of observation and/or notification by the District.
- **Recirculating Water Required for Water Fountains and Decorative Water Features:** Operating a water fountain or other decorative water feature that does not use recirculating water is prohibited.
- **Limits on Washing Vehicles:** Using water to wash or clean a vehicle including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer whether motorized or not is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device.
- **Drinking Water Served Upon Request Only:** Restaurants are prohibited from providing drinking water to any person unless expressly requested by that person.

### Stage 1 Water Supply Shortage (15% - 25% reduction)

The following mandatory water conservation requirements, in addition to the prohibited uses of water for water waste, apply during such time that the Stage 1 Water Supply Shortage is in effect:

- **Limits on Watering Days:** Watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to 3 days per week. During the months of November through March, watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to no more than 2 days per week. This provision does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This

provision does not apply to use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.

- **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within seventy two (72) hours of observation and/or notification by the District.
- **Other Prohibited Uses:**
  - Use only recycled water for construction site dust control, consolidation of backfill.
  - The Board of Directors may implement other prohibited water uses as determined by the District after notice to customers.

### **Stage 2 Water Supply Shortage (25% - 35% reduction).**

The following mandatory water conservation requirements, in addition to the prohibited uses of water for water waste and Stage 1 actions, apply during such time that the Stage 2 Water Supply Shortage is in effect:

- **Limits on Watering:** Watering or irrigating of lawn, landscape or other vegetated area with potable water is restricted in accordance with the allotments in the latest version of the Triunfo Sanitation District Oak Park Water Shortage Contingency Plan (Water Shortage Contingency Plan). Watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to 2 days per week. During the months of November through March, watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to no more than 1 day per week. This provision does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision does not apply to use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.
- **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within forty eight (48) hours of observation and/or notification by the District.

- **Other Prohibited Uses:**

- No filling, cleaning and/or refilling of decorative fountains, ornamental lakes or ponds except to the extent needed to sustain aquatic life, provided that such animals have been actively managed within the water feature prior to declaration of this supply shortage stage.
- Residential car washing prohibited. Use car washes available with water recycling systems.
- The filling or topping off of any new or existing residential pools or outdoor spas is prohibited.
- Planting of new turf grass is prohibited.
- Outdoor evaporative mist coolers are prohibited.
- Main line flushing is allowed for emergency purposes only.
- The District may implement other prohibited water uses as determined by the Board of Directors, after notice to Customers.

### **Stage 3 Water Supply Shortage – Emergency Condition (Greater than 35% reduction)**

The following mandatory water conservation requirements, in addition to the prohibited uses of water for water waste and Stage 1 and Stage 2 actions, apply during such time that the Stage 3 Water Supply Shortage is in effect:

- **Limited Watering or Irrigating:** Watering or irrigating of lawn, landscape or other vegetated area with potable water is restricted in accordance with the allotments in the Water Shortage Contingency Plan for residential customers. This restriction does not apply to the use of recycled water or to the following categories of use:
  - a. Maintenance of existing landscape necessary for fire protection;
  - b. Maintenance of existing landscape for soil erosion control;
  - c. Maintenance of plant materials identified to be rare or essential to the well-being of protected species;
  - d. Maintenance of landscape within active public parks and playing fields, daycare centers, golf course greens, and school grounds, provided that such irrigation does not exceed 2 days per week;
  - e. Actively irrigated environmental mitigation projects.

- **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user’s plumbing, distribution, or irrigation system must be remedied within twenty four (24) hours of observation and/or notification by the District.
- **Other Prohibited Uses:** The District may implement other prohibited water uses as determined by the Board of Directors, after notifying customers.

In addition to the mandatory water conservation efforts described above, the District has established per-connection water allotments based on residential lot size groups (multifamily homes are considered in group A). Each group’s water use was averaged for 2008 and allocations were estimated for each group to achieve water reduction goals for stages 2 and 3. A model of the water allotment structure can be found in the Water Shortage Contingency Plan in Appendix E. The model water allotment structure contains values for the proposed water allotment in the event of a shortage; however the actual numbers may vary depending on supplies, economic factors, and severity of the drought.

***Urban Water Management Planning Act Requirement:***  
*10632(f) Penalties or charges for excessive use, where applicable.*

In the case of a water supply shortage, violators of Ordinance TSD-67 can face a maximum of fine of \$1,000 or imprisonment for no more than 30 days. Table 5.2.3 describes the penalties associated with single and recurring violations, which are outlined in the ordinance. This includes a first warning, and subsequent fines increasing from \$100, and, on the fourth violation, a notice of intent to install a flow restrictor.

<b>Table 5.2.3</b>		
<b>Water Shortage Contingency — Penalties and Charges</b>		
<b>Violation</b>	<b>Stage When Penalty Takes Effect</b>	<b>Penalty or Charge<sup>1</sup></b>
First Violation of Water Ordinance	All Stages	Written Warning
Second Violation of Water Ordinance within a 12 Month Period	All Stages	Written Warning and \$100
Third Violation of Water Ordinance within a 12 Month Period	All Stages	\$150
Fourth Violation of Water Ordinance within a 12 Month Period	All Stages	\$200
Fifth and Subsequent Violations of Water Ordinance within a 12 Month Period	All Stages	\$250 and subject to a water flow restrictor device of approximately 1 gpm

<sup>1</sup>Penalties increase for Stages 2 and 3; refer to Ordinance TSD-67, Appendix F.

**Urban Water Management Planning Act Requirement:**

*10632(g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f) 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.*

Recognizing that a time of severe water shortage will have fiscal and social impacts to the Oak Park Community, the Board of Directors for the District have established measures to alleviate these impacts to Oak Park Water Service customers.

To address the potential fiscal impact locally, the District has adopted a mechanism designed to increase rates as the supply drops and water costs to the District from its supplier begin to rise. This has the dual effect of 1) mitigating the fiscal impact to the District of a water shortage and 2) serving as an incentive to customers to work at conservation efforts. The quantity of increase is estimated for a three-tiered water rate structure in Table 5.2.4. The example water rate increases are based on estimated limited supply conditions to help meet the revenue in case of a water shortage, but may change due to varying supplies.

**Table 5.2.4**  
**Example Rate Increase Structure During Shortage**

	<b>Stage I (25%)</b>	<b>Stage II (35%)</b>	<b>Stage III (50%)</b>
Tier I	1% Increase	3% Increase	7% Increase
Tier II	5% Increase	8% Increase	18% Increase
Tier III	7% Increase	10% Increase	22% Increase

**Urban Water Management Planning Act Requirement:**  
*10632(h) A draft water shortage contingency resolution or ordinance.*

The Water Shortage Contingency Plan can be found in Appendix E. In addition, Ordinance TSD-67, which describes further actions to be taken in case of a water shortage and is referenced by the Water Shortage Contingency Plan, can be found in Appendix F.

### 5.3 Water Quality

**Urban Water Management Planning Act Requirement:**  
*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 urban water management strategies and supply reliability.*

As identified in Chapter 4, the water quality issues associated with the water supply to the District are the same as quality issues experienced by CMWD, and similar to those experienced by MWD. MWD has considered risks to the water quality of water supplied through the Colorado River and the State Water Project. MWD reports that increased salinity and chemicals (e.g., perchlorates, chromium VI, etc.) in the water it is supplied with, as a theoretical water quality event, will cause at most a 15% reduction in supply. However, MWD also noted if concentrations of these contaminants exceed the drinking water standards, tactics such as utilizing only small amounts of the affected water and blending it with potable, processed water

would reduce the concentration to treatable and acceptable levels. The MWD has stated that it “anticipates no significant reductions in water supply availability from [the Colorado River, State Water Project, and local groundwater] sources due to water quality concerns over the study period.”

The District realizes the importance of constantly assuring that the water it distributes meets potable water standards. Although there are no water quality issues that immediately threaten the supply to the District’s customers, the District maintains knowledge of water quality issues to prevent water of poor quality from being distributed. Following are a description of the most pertinent issues of concern, due to either historically increasing levels of salinity or threshold reductions for chemicals.

### **Salinity**

Increased salinity in the water received from the Colorado River has required MWD to utilize one of the tactics described above: blending SWP water with Colorado River water to reduce the overall salinity concentration. Although this has not caused water supply shortages, if salinity levels continue to increase, additional membrane treatment of water from the Colorado River may be required. This will slow the water purification process and could result in up to a 15% reduction in water supply.

To prevent a reduction in supply, MWD has established a Salinity Management Policy, which sets the goal of delivering water with less than 500 mg/L of total dissolved solids. Generally, this has caused issues with only the Colorado River; the SWP has historically been observed to have significantly lower salinity levels (250 – 300 mg/L). In comparison, the total dissolved solids concentration in groundwater sources is generally greater than 1000 mg/L.

In addition to affecting the potable water supply, high levels of salinity also reduce the quality of treated wastewater, which could potentially affect the recycled water supply. As recycled water is used for irrigation purposes within the District’s service area, high salinity levels can decrease the yield of crops. If salinity levels were to rise, it would result in prohibitions on use or more expensive wastewater treatment would be necessary at TWRF. These issues will be addressed as necessary by TWRF.

### **Chromium VI (Hexavalent Chromium)**

Currently, Chromium VI is included in the measurement of total Chromium, and total Chromium levels are maintained at or below the California Department of Public Health standard MCL (50 µg/L). In a draft release by the Office of Environmental Health Hazard Assessment (OEHHA) on December 31<sup>st</sup>, 2010, a public health goal (PHG) for Chromium VI was proposed at 0.02

µg/L. A PHG is not an enforceable regulatory standard. However, state law requires the California Department of Public Health to use the PHG as guidance in developing an MCL. Meanwhile, many local water agencies are collaborating on research to determine effective treatment options for Chromium VI in the State’s drinking water sources. MWD utilizes analytical testing to ensure that Chromium levels do not exceed the current standard, and in the event that Chromium VI-specific standards are implemented, MWD would not have to change its testing method, as the current minimum threshold for its analytical testing is below the proposed concentration threshold.

MWD records of Chromium VI content reveal that, if more stringent goals are implemented, additional treatment of SWP water may be required as levels have historically been noted to exceed the proposed PHG. The draft released by OEHHA states that the PHG of 20 ng/L is intended to be a “stringent health-protective goal” as opposed to a “maximum ‘safe’ level of chromium 6 in drinking water.” In contrast to SWP water, water from the Colorado River has historically been recorded as generally having undetectable levels of Chromium VI.

Table 5.3.1 indicates the potential impacts of water quality on the District’s water supply, as identified by CMWD and MWD.

<b>Table 5.3.1</b>						
<b>Water Quality — Current and Projected Water Supply Impacts</b>						
<b>Water source</b>	<b>Description of condition</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Calleguas Municipal Water District	No water quality issues expected	0	0	0	0	0

*Units: acre-feet per year*

## 5.4 Drought Planning

### ***Urban Water Management Planning Act Requirement:***

*10631(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.*

All potable water supplies are provided through the CMWD as part of MWD and the SWP. Since the supply is not directly obtained by the District, the determination of reliability will largely be determined by CMWD and MWD analyses to provide a consistent water supply to the District during times of normal, single dry, and multiple dry years. Although the District does not obtain its water directly from a natural source (e.g. groundwater or surface water), the District is committed to reducing water demand during times of drought in order to conserve water and improve reliability for future water supplies.

Table 5.4.1 identifies the normal, single dry, and multiple dry water years chosen to represent the water supply for supply from CMWD:

<b>Water Year Type</b>	<b>Base Year(s)</b>
<b>Average Water Year</b>	1922-2004
<b>Single-Dry Water Year</b>	1977
<b>Multiple-Dry Water Years</b>	1990-1992

During these years, the percent of supply that was available to the public for use is summarized in Table 5.4.2.

<b>Average / Normal Water Year</b>	<b>Single Dry Water Year</b>	<b>Multiple Dry Water Years</b>		
		<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
2002	1977	1990	1991	1992
Percent of Average/Normal Year:	101%	99%	99%	99%

In the single dry water year, demand increased and therefore more water was supplied to meet the demand due to increased temperatures, evapotranspiration rates, and a longer growing

season. Although this results in using more water than is naturally replenished during these years, water reserves are available to provide a reliable source of water in the event of another single dry year with similar hydrology.

**Urban Water Management Planning Act Requirement:**  
*10632(a) 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 which are applicable to each stage.*

In the event of a water supply shortage, the District has in place several stages of action to take. These are listed above in the Water Shortage Contingency Plan Section.

**Urban Water Management Planning Act Requirement:**  
*10632(b) 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.*

The table below shows the minimum water supply available during the next three years with a multiple year hydrology as defined by the 1988-1990 water years. It can be seen that water supplies for the next three years with multiple dry year hydrology are expected to be able to meet 100% of the demand for the District as identified by its water supplier, CMWD.

**Table 5.4.3  
Supply Reliability — Current Water Sources**

Water supply sources	Average / Normal Water Year Supply	Multiple Dry Water Year (1988)	Multiple Dry Water Year (1989)	Multiple Dry Water Year (1990)
		Year 2011	Year 2012	Year 2013
Calleguas Municipal Water District	3,100	3,100	3,100	3,100
Percent of normal year:		100%	100%	100%

*Units: acre-feet per year*

Although the supplies are great enough to be met for the next three years in the event of a drought, continuing to consume such quantities from the water supply may outweigh the water replenished through natural processes in the distribution chain. This could potentially result in

negative consequences, including overdraft conditions of the groundwater basins. To prevent this from happening, TSD/OPWS is among the many water districts in California committed to preserving water supplies. In the event of a single dry or multiple dry year scenario, the District would reduce demand by implementing the water conservation measures described above in the Water Shortage Contingency Plan Section. This, in conjunction with the demand management measures in place, emphasizes the importance of water conservation to the District and its customers.

Table 5.4.3 does not identify the source of recycled water as a potable water source. Recycled water is accounted for in the following tables to compare the supply and demand during normal, single dry, and multiple dry year scenarios. The data regarding total demand and supply, including recycled water, is documented in Chapters 3 and 4, respectively.

***Urban Water Management Planning Act Requirement:***

*10632(i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.*

The District receives water from CMWD and can monitor monthly delivery only. CMWD plans for its “Turnout Automation Project” to monitor instantaneous flow information; in future years, this mechanism will greatly help the District in on-demand monitoring of water deliveries and uses. Currently, OPWS regularly compares water use history (by meter) on a monthly basis to monitor reductions.

Under normal water supply conditions, potable water distribution figures are recorded monthly. Totals are logged, reported monthly and incorporated into the water usage report.

During a Stage I or Stage II water shortage, monitoring is increased. Daily distribution figures can be field monitored. The Water Distribution Operator can compare the distribution reads to the typical distribution values to verify that the reduction goal is being met. Weekly reports can be forwarded to the Operations Manager. Monthly reports would be distributed, and the District Manager would be included as a recipient. If reduction goals are not met, the Manager will notify the Board of Directors so that corrective action can be taken.

During a Stage III water shortage, the procedure listed above will be followed, with the addition of a daily usage report to the District Manager. During emergency shortages, production figures may be reported to the Water Distribution Operator, CMWD, and to the Operations Manager. Urgent reports will be provided to the District Manager.

**Urban Water Management Planning Act Requirement:**

*10635(a) Every urban water management 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.*

The following tables, 5.4.4 through 5.4.6, compare the total supply and demand as identified in Chapters 3 and 4 for normal, single dry, and multiple dry years. It can be seen that the supply available to the District, as provided in the CMWD 2010 Urban Water Management Plan, is above the total demand, even during multiple dry years. However, TSD is still committed to water conservation in single dry and multiple dry years to help preserve precious water reserves and supplies.

The data for the normal, single dry, and multiple dry year scenarios are provided in the supply portion of the CMWD 2010 Urban Water Management Plan. The plan identifies that during a single dry year scenario, demand will increase by approximately 3% over a normal year. CMWD identified that supply was sufficient in a single dry year to meet this increased demand. During a multiple dry year, it was identified that the demand will remain constant, consistent with a normal water year, due to conservation measures that will be enacted in this situation. This will offset the predicted increase in demand over a multiple dry year period. CMWD did not identify any reliability issues with delivering water during a single or multiple dry year period, and identified that supply would be sufficient to meet demand.

<b>Table 5.4.4</b>				
<b>Supply and Demand Comparison — Normal Year</b>				
	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Supply Totals</b>	3,680	3,687	3,693	3,700
<b>Demand Totals</b>	3,490	3,193	3,231	3,267
<b>Difference</b>	190	494	462	433
Difference as % Of Supply	5%	13%	13%	12%
Difference as % Of Demand	5%	15%	14%	13%

*Units are in acre-feet per year.*

During a normal year, supply as identified by CMWD will exceed the demand projected from Chapter 3.

<b>Table 5.4.5</b>				
<b>Supply and Demand Comparison — Single Dry Year</b>				
	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Supply Totals</b>	3,780	3,787	3,793	3,800
<b>Demand Totals</b>	3,595	3,289	3,328	3,365
<b>Difference</b>	185	498	465	435
Difference as % of Supply	5%	13%	12%	11%
Difference as % of Demand	5%	15%	14%	13%

*Units are in acre-feet per year.*

The demand in a single dry year was observed to increase by approximately 3%. During a single dry year, CMWD anticipates being able to exceed this demand, with an available supply of 3,200 AFY; an increase of 100 AF over a normal and multiple dry year scenario. However, as mentioned previously, the District is committed to water conservation efforts to preserve water supplies during dry years. In the event of a water shortage, measures outlined in the Water Shortage Contingency Plan will be implemented.

<b>Table 5.4.6</b>					
<b>Supply and Demand Comparison — Multiple Dry-Year Events</b>					
		<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Multiple-dry year first year supply</b>	<b>Supply Totals</b>	3,680	3,687	3,693	3,700
	<b>Demand Totals</b>	3,490	3,193	3,231	3,267
	<b>Difference</b>	190	494	462	433
	Difference as % of Supply	5%	13%	13%	12%
	Difference as % of Demand	5%	15%	14%	13%
<b>Multiple-dry year second year supply</b>	<b>Supply Totals</b>	3,680	3,687	3,693	3,700
	<b>Demand Totals</b>	3,490	3,193	3,231	3,267
	<b>Difference</b>	190	494	462	433
	Difference as % of Supply	5%	13%	13%	12%
	Difference as % of Demand	5%	15%	14%	13%
<b>Multiple-dry year third year supply</b>	<b>Supply Totals</b>	3,680	3,687	3,693	3,700
	<b>Demand Totals</b>	3,490	3,193	3,231	3,267
	<b>Difference</b>	190	494	462	433
	Difference as % of Supply	5%	13%	13%	12%
	Difference as % of Demand	5%	15%	14%	13%

*Units are in acre-feet per year.*

CMWD anticipated a supply that could exceed water demand in a multiple dry year period. However, in stages of more severe water shortages, the District may ration supplies as necessary, and implement water conservation measures resulting in up to a 50% water use reduction. This will be done in situations when water supply is projected to reach dangerously low levels, and an emergency situation is imminent.

# 6

## DEMAND MANAGEMENT MEASURES

### 6.1 DEMAND MANAGEMENT MEASURE IMPLEMENTATION

#### ***Urban Water Management Planning Act Requirement:***

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

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

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

#29. *An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following: (1) take into account economic and noneconomic factors, including environmental, social, health customer impact,*

*and technological factors; (2) Include a cost-benefit analysis, identifying total benefits and total costs; (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost; (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation (10631 (g)).*

Triunfo Sanitation District/Oak Park Water Service (District) was an early signatory to the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding regarding Urban Water Conservation in California (MOU). CUWCC represents a diverse group of water supply agencies dedicated to establishing guidelines toward implementing conservation measures and managing supply demands. The CUWCC Best Management Practices (BMP) reports for 2009-2010 were filed and the detailed BMP reports are included in Appendix H.

The District became a signatory to the CUWCC MOU after elevated concern stemming from past drought years related to the adequacy of the water supply to the region. Now urban water suppliers are under considerable cost increases with water conservation and water reuse representing significant opportunity to constrain short- and long-term rising costs. The following table summarizes the BMPs/DMMs:

Table 6.1.1 CUWCC BMP Organization and Names (2009 MOU) and UWMP DMMs					
Type	Category	BMP #	BMP Name	DMM #	DMM Name
<b>Foundational</b>	Operations Practices	1.1.1	Conservation Coordinator	12	Water conservation coordinator
		1.1.2	Water Waste Prevention	13	Water waste prohibition
		1.1.3	Wholesale Agency Assistance Programs	10	Wholesale agency programs
		1.2	Water Loss Control	3	System water audits, leak detection, and repair
		1.3	Metering with Commodity Rates for All New Connections and	4	Metering with commodity rates for all new connections and retrofit of existing

Table 6.1.1 CUWCC BMP Organization and Names (2009 MOU) and UWMP DMMs					
Type	Category	BMP #	BMP Name	DMM #	DMM Name
			Retrofit of Existing Connections		connections
		1.4	Retail Conservation Pricing	11	Conservation pricing
	Education Programs	2.1	Public Information Programs	7	Public information programs
		2.2	School Education Programs	8	School education programs
	Programmatic	Residential	3.1	Residential Assistance Program	1
2					Residential plumbing retrofit
3.2			Landscape Water Survey	1	Water survey programs for single-family residential and multifamily residential customers
3.3			High-Efficiency Clothes Washing Machine Financial Incentive Programs	6	High-efficiency washing machine rebate programs
3.4			WaterSense Specification (WSS) toilets	14	Residential ultra-low-flush toilet replacement programs
Commercial, Industrial, and Institutional		4	Commercial, Industrial, and Institutional	9	Conservation programs for commercial, industrial, and institutional accounts
Landscape		5	Landscape	5	Large landscape conservation programs and incentives

## 6.2 OPERATIONS PRACTICES

### 6.2.1 Conservation Coordinator (DMM 12)

The District has appointed an employee who is responsible for Water Conservation. Currently, the duties of the Water Conservation Coordinator do not require a full-time position, and therefore is part of the duties of another full-time employee. Duties for the Water Conservation Coordinator include:

- Coordination and oversight of conservation programs and DMM implementation.
- Keeping a log of conservation practices conducted throughout the District and point person(s) assigned to each area.
- Acting as the point of contact to the Public for general inquiries and requests for information.
- Communication and promotion of water conservation issues to the District senior management, and coordination of the District's conservation programs with operations and planning staff.

The person for the District's contact information is below:

Name: Scott Quady  
Address: 1001 Partridge Drive, Suite. 150, Ventura, CA-93003  
Phone: (805) 658-4658  
E-mail: [ScottQuady@VRSD.com](mailto:ScottQuady@VRSD.com)

### 6.2.2 Water Waste Prevention (DMM 13)

There are specific water waste prohibitions already stipulated in the District's Ordinance No. TSD-66, which can be found in Appendix G. This document works with the Water Shortage Contingency plan to reduce water waste during times of drought. For more information about the Water Shortage Contingency Plan, see Chapter 5: Water Supply Reliability and Water Shortage Contingency Plan. In addition, refer to Appendix H for the results of BMP 1.1.

### **6.2.3 Wholesale Agency Assistance Programs (DMM 10)**

This DMM is not required as the District is not a wholesale agency.

### **6.2.4 Water Loss Control (DMM 3)**

The District has implemented a system water audit to determine if leaks in the supply and distribution system exist and a method for repair in the event that the leaks become significant. Physical meter read observations are used as well as SCADA pressure monitoring and customer responses. Leak and repair reports are kept on file and mapped annually. Production is tracked monthly, and reviewed annually to determine if the system exhibits significant losses. If the metered sales divided by the total supply is greater than 0.9, the system is considered adequate. The District used the American Water Works Association (AWWA) Free Water Audit Software to analyze water losses in the system. According to the 2010 AWWA report, the total supply into the system was measured to be 2,737 AF and the metered sales were measured at 2,500 AF for the 2010 FY. This results in a metered sales / total supply ratio of 0.913, and thus a full scale audit was not required. Although not part of the AWWA reporting system, the values reported in Chapter 3 show a similar ratio: 2,557 AF of water into the system and 2,331 AF in metered delivers. This yields a metered sales / total supply ratio of 0.912. Refer to Appendix H for the results of BMP 1.2.

### **6.2.5 Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections (DMM 4)**

Part of DMM 4 includes the retrofitting of existing metered connections. The installation and use of meters at each and every point of use within the District since its formation was/is revenue driven. There are no known mixed-use meters (those serving both internal demands and landscaping) in a largely residential sector service area. All known services are metered.

Multi-family areas that have separate irrigation systems for greenbelt irrigation are identified and fitted with meters under homeowners associations. The CII accounts represent 1% of all accounts and less than 2% of the service area water use.

Installation standards, within Oak Park, are code regulated: the Ventura County Ordinance (e.g. Ord. 4369 of 2007, Sec. 101, Chapter 5, p. 7) adopts the standards of installation under the California Plumbing Code. Oak Park Water Service does not “T” off lateral lines. The typical installation for irrigation lines will have backflow devices associated with a separate meter.

There are nearly 400 backflow installations in Oak Park. Refer to Appendix H for the results of BMP 1.3.

### 6.2.6 Retail Conservation Pricing (DMM 11)

The District uses an inverted water rate structure to provide incentives to customers to reduce water use. The District develops pricing structures for water shortage stages with penalties in declared emergencies and incentives for recycled water use to conserve potable water resources. Below, Table 6.2.1 shows the current rate structure.

Table 6.2.1. Current Residential Rate Structure			
User Class	Tier 1 (0-6 HCF)	Tier 2 (7-28 HCF)	Tier 3 (28+ HCF)
Current Rate	\$2.95/Unit	\$3.67/Unit	\$4.63/Unit

Refer to Appendix H for the results of BMP 1.4.

## 6.3 EDUCATION PROGRAMS

### 6.3.1 Public Information Programs (DMM 7)

The District, Calleguas Municipal Water District (CMWD) and Las Virgenes Municipal Water District (LVMWD) work together to raise public awareness regarding many different issues regarding water and water supply. These issues include information pertaining to runoff pollution, water quality, and water conservation. The District is continuing to develop program information, implement budgets and identify future expenditures. Refer to Appendix H for the results of BMP 2.1.

### 6.3.2 School Education Programs (DMM 8)

The District, CMWD and LVMWD work together to promote school education programs and classroom activities to raise awareness. Refer to Appendix H for the results of BMP 2.2.

## 6.4 RESIDENTIAL PROGRAMS

### 6.4.1 Residential Assistance Program (DMM 2)

The District has developed a retrofit program to distribute water saving devices in conjunction with the water surveys in DMM 1. The District has developed partnerships or deferrals with the water districts in order to fund the program. Refer to Appendix H for the results of BMP 3.1.

### 6.4.2 Landscape Water Survey (DMM 1)

The District has administered residential water survey programs to its single-family and multi-family residential customers. The surveys are completed by visits, and recommendations for the installation of low demand devices are offered. Refer to Appendix H for the results of BMP 3.2.

### 6.4.3 High Efficiency Washing Machine Financial Incentive Programs (DMM 6)

CMWD/LVMWD has a high-efficiency washing machine rebate program that serves the customers of the District. Rebates were offered as of June 2008. Refer to Appendix H for the results of BMP 3.3.

### 6.4.4 WaterSense Specification (WSS) Toilets (DMM 14)

The Metropolitan Water District of Southern California began its region-wide “Smart Rebate” Program in July of 2008. As an agency under CMWD and MWDSC, the ULFT Replacement program is administered by a subcontractor in the region. Refer to Appendix H for the results of BMP 3.4.

## 6.5 COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL PROGRAMS

### 6.5.1 Commercial, Industrial, and Institutional Programs (DMM 9)

The District has initiated programs for Commercial, Industrial and Institutional (CII) incentives for water conservation. The District has identified and ranked CII's by water use for conservation priorities and developed strategies, implemented surveys and tracked accounts. Refer to Appendix H for the results of BMP 04.

## **6.6 LANDSCAPE PROGRAMS**

### **6.6.1 Large Landscape Conservation Programs and Incentives (DMM 5)**

The District has identified accounts with irrigation meters or that may have needed retrofitting with irrigation meters and has completed installs for all applications. The District encourages recycle water use for large landscape users as a part of the conservation program. Refer to Appendix H for the results of BMP 05.

# 7 CLIMATE CHANGE

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## 7.1 INTRODUCTION

Although not specifically included in the UWMP Act, Triunfo Sanitation District/Oak Park Water Service (District) has opted to address the potential impacts of climate change on the water system. It is noted in the *Guidebook to Assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan* that “inclusion of potential climate change impacts in a water supply planning document is consistent with other water supply programs and environmental requirements being implemented in California.”

Due to the fact that this section does not require specific information or topics to be discussed (as previous sections of the TSD UWMP do), the following topics will be covered:

- General Overview of Climate Change
- Effects of Climate Change
- Minimizing the Effects of Climate Change

Each of these sections will discuss the long term impact (outside of the 20 year scope identified in the prior sections).

## 7.2 CLIMATE CHANGE OVERVIEW

Although there is still some debate about the causes and effects of climate change, and even whether or not it exists, the general consensus among the scientific community is that climate change is a threat to our global climate. Climate change is a major environmental threat that is expected to result in a multitude of long term weather changes and short term weather events. The specific impacts of climate change vary greatly by region and current climate. Due to the unpredictable nature of climate change, general statements will be made in accordance with recent observations and predictions made by climate scientists.

It is generally accepted that the leading factor resulting in climate change is the emissions of greenhouse gases (GHGs). GHGs include nitrous oxides, sulfur oxides, carbon oxides, and methane, among many others. Due to the large amounts of carbon dioxide emitted in electricity

production by coal and transportation based on combustion of petroleum, effects and trends of carbon dioxide levels in the atmosphere on climate characteristics are studied heavily.

An increase in GHGs is expected to lead to climate change through a process called the Greenhouse Gas Effect. As radiation from the sun is emitted to earth, a portion of it is absorbed; the rest bounces off the surface and, in a natural process, is emitted to space. The Greenhouse Gas Effect describes the process where the radiation that would typically be emitted back to space is reabsorbed in the atmosphere by the chemicals known as Greenhouse Gases. When the radiation is reabsorbed, it is consequently reemitted back to the earth. This additional radiation that would have otherwise been emitted to space is generally accepted as the source of what we know as climate change. The GHGs emitted by the population serve as a “blanket” that holds in the sun’s radiation, and ultimately causes heat to become trapped with long term impacts on the climate.

### 7.3 EFFECTS OF CLIMATE CHANGE

Climate change is expected to have a wide variety of both short and long term impacts. These impacts will vary greatly based on geographical location and current climate. Some areas are expected to see severe decreases in average temperature and an increase in rainfall, while others are expected to experience the opposite. There is some debate about where the State of California will fall in these patterns; however it has been observed that average temperatures are increasing and weather events are becoming more intense. The Department of Water Resources has done extensive studies on climate change. Some of the findings about what has been already observed as a possible effect of climate change, as well as what is expected in the coming years, are summarized below.

#### **Wet Weather Events**

Two extremes are expected, and have been observed, when looking at the possibility of climate change. The first of these extremes is the occurrence of wet weather events such as storms and floods. These are expected to increase in both intensity and frequency. This not only impacts the water supply by overwhelming storage, it can impact infrastructure as well. California has a series of natural and manmade flood barriers that serve to protect the population and infrastructure while simultaneously assisting to help store some of the runoff water. However, as floods increase in intensity, due partially to the increased rate of melting snow (a large, natural water source for California’s water), flood protection can be overwhelmed.

In addition to floods, severe storms are likely to be an effect of climate change. While these

pose similar threats to the water supply and infrastructure as floods by causing large amounts of water flow at one time, they also increase the likelihood of events such as mudslides that are known to cause extensive property damage and, in some cases, loss of life.

### **Dry Weather Events**

In the long term, dry weather events are likely to have the most impact on the lives of California residents. Droughts are a natural occurrence in the State of California, characterized by short term (approximately 1-3 years) periods of warmer than average temperatures and reduced rainfall. Droughts have a devastating impact on the water supply reliability. Furthermore, as water storage is continually tapped at a rate much higher than water replenishment is available, decreasing availability of a clean source of water becomes a threat. The general population's lives are directly impacted by these events, requiring normal water use patterns to decrease sharply.

In addition to a reduction in water supply, droughts are also known to cause an increase in water demand due to warmer temperatures and extended growing seasons. These water demands are likely to cause additional strain on the already dwindling resources.

Although the impacts of droughts are considered in Chapter 5 of this Urban Water Management Plan, climate change has the potential to cause droughts more severe than these. Therefore, Section 7.4 will analyze the potential effects of severe and recurring droughts on water service reliability.

### **Decreased Snowpack**

Among the effects a drought is expected to have on the overall water supply, the possibility of decreased Sierra Nevada snowpack is a long term water supply issue. The Sierra Nevada snowpack is the largest water "reservoir" for the State, providing an annual average of 15 million AF. The snowpack is released as temperatures increase in the spring and summer months and melt the snow. Climate change affects this process in two ways. First, the snowpack is reduced due to warming temperatures causing less snow to fall. Instead, the precipitation is released as rain, and potentially cannot be captured and stored in reservoirs. This reduces the total stored water as snow in the Sierra Nevada. The DWR predicts a 25 to 40% decrease in snowpack in the Sierra Nevada by 2050. Furthermore, as temperatures rise, the snow that is stored is released at an accelerated pace. The DWR notes that water infrastructure was designed to handle the predicted pace of the snowmelt. However, as snowmelt rates increase, water may overwhelm the system and be lost.

### Sea Level Rise

The melting of the ice caps is a strong contributing factor to the rising of the sea level. The immediate consequences of this are recognized at the coastal California cities, where the impacts from flooding and storms are amplified. More significant to the District is the possibility of seawater intrusion into the groundwater supplies that eventually supply the Oak Park Water Service. Seawater intrusion immediately impacts the groundwater quality and increases the need for further water purification and development of supplies.

### Water Quality

Water Quality effects due to climate change are predicted to occur due to two extremes: flooding and droughts.

Flooding and higher runoff at any given time has been predicted to increase erosion and, therefore, increase the amount of sediment and contaminants in the water supply. This has the potential to increase the strain on water suppliers due to the increased need for water purification.

Droughts and lower runoff have the potential to increase the concentration of chemicals that may be present in water streams. Streams of water collect chemicals that exist in the environment. As water runoff decreases, the same quantities of these chemicals are collected in smaller amounts of water, increasing the overall concentration. As the chemical concentrations rise, the purification requirements rise with each gallon of water, and increase the risk for dangerous fluctuations.

## 7.4 MINIMIZING THE EFFECTS OF CLIMATE CHANGE

Many of the potential impacts of climate change have already been observed. In addition, models show that current GHG levels will continue to amplify the effect of climate change over the next few hundred years, even if all GHG production were to cease today. In order to minimize the impacts of climate change, innovative solutions must be developed. These solutions fall within two categories. The first strategy is mitigation. For water suppliers, this is the ability to reduce GHG emissions. The second is adaptation; the strategy of adjusting our water supply system to meet water demands as a result of permanent climate change.

## Mitigation

In addressing climate change, mitigation is the effort to increase efficiency and reduce the output of GHGs. Although no individual sector is fully responsible for implementing mitigation efforts in an attempt to eliminate GHG production, each industry can develop its own techniques to help reduce the impacts that climate change may have. The common goal throughout the world's population in regards to mitigation is to eliminate production of GHGs. Currently, this is being done by exploring ways to increase efficiency, decrease demand, and develop alternative and renewable energy sources that will reduce the impact of burning fossil fuels.

For the water distribution sector, mitigation can be done by minimizing the transportation of water. Water is a dense liquid that requires a substantial amount of energy to move around. Because of this, distribution systems are complicated and require large pumps. Electrical devices such as these pumps have an associate level of GHG emissions associated with the energy input they require. To mitigate the GHGs associated with this, the District can minimize the amount of water required for distribution by encouraging demand reduction. Current demand reduction efforts are discussed in Chapter 6. Maximizing the efficiency of the water used not only preserves water supply, but can help in reducing the overall impacts and severity that is expected in the coming years as a result of climate change.

## Adaptation

Adaptation is the strategy employed to adjust to the environmental impacts of climate change. Although not a desirable solution, this is necessary as the impacts of climate change are already beginning to take effect. Adaptation can help the population continue to thrive and minimize the potential negative consequences that result from climate change.

Although adaptation strategies for the District in terms of water service are not available, as water is supplied through wholesale suppliers, general adaptation strategies to increase water reliability have been identified by the State of California. These include adjusting designed flow rates of SWP infrastructure to ensure that all water is captured and able to be utilized with increased snowmelt and more intense precipitation periods.

Other adaptation strategies proposed by the State of California that may help in increasing the reliability of supply to TSD regardless of climate change include:

- Fully developing Integrated Regional Water Management planning to evaluate supply and demand, and encourage water districts to work together to ensure that a broad water supply is available, increasing water reliability.

- Promoting integrated flood management to decrease the impacts of floods and utilizing natural flood plains where available. Adapting to climate change in response to the threat of floods increases the economic and social wellbeing of the State, especially those in high risk zones.
- Assisting to sustain ecosystems which provide clean and reliable water. Maintaining diverse ecosystems and preventing the potential destruction of these water sources will help increase their predictability and reliability.
- Focusing on impacts at the Bay-Delta. The Bay-Delta is the source of water for a majority of Californians. Ensuring that a healthy ecosystem and that water quality at the Bay-Delta are maintained despite the effects of climate change is imperative towards continuing to use this as a source of water.
- Planning for rises in the sea level. As sea water intrusion to water resources becomes a threat to water quality, establishing a reliable system of levees and flood management programs is necessary to maintain water supplies and ensure the safety of the State's population.



# TRIUNFO SANITATION DISTRICT/OAK PARK WATER SERVICE AGENCY NOTIFICATION

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# OAK PARK WATER SERVICE

April 27, 2011

**Subject: Triunfo Sanitation District/Oak Park Water Service 2010 Urban Water Management Plan Update**

To Whom It May Concern:

California's Urban Water Management Planning Act requires the update of Urban Water Management Plans (UWMP) every five years. (Additional information regarding UWMPs can found at <http://www.water.ca.gov/urbanwatermanagement/>). Accordingly, the Triunfo Sanitation District is in the process of preparing its 2010 UWMP.

The UWMP outlines how the District will meet current and projected water demands within its service area, with emphasis on water conservation and the continued use of recycled and wholesale water to provide its customers a reliable, high quality supply. It also outlines the strategy for meeting the interim (2015) and final (2020) urban water use reduction targets, as required by Senate Bill X7-7. The 2010 UWMP will form the basis of analysis for available water supplies relative to urban planning for potential developments.

The Draft 2010 UWMP is expected to be available for public review and comment in May of 2011. There will be a public review period and a public hearing to receive comments on the draft document prior to consideration by the Board of Directors.

In the interim the District is accepting suggested strategies it should consider to meet current and future customer needs. Comments on development of the Draft 2010 UWMP should be directed to:

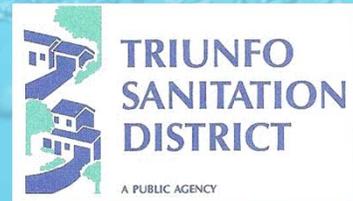
Josie Guzman  
Triunfo Sanitation District / Oak Park Water Service  
1001 Partridge Drive, Suite 150  
Ventura, CA 93003-0704  
(805) 658-4642

**B**

## RESOLUTION FOR ADOPTION

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# 2010 Urban Water Management Plan Update Project Overview



**Presented by:**

Kristin D. Norton - Senior Engineer



# Background Information

Urban Water Management Planning Act: Requires all urban water suppliers that provide, directly or indirectly, water to 3,000 or more customers (or more than 3,000 AF annually) to develop, adopt, and implement an Urban Water Management Plan

- Accomplishes water supply planning over a 20-year period, in 5-year increments
- Identifies and quantifies adequate water supplies for current and projected demands, in normal, dry, and drought years
- Implements conservation and efficient water use

**Deadline: July 1, 2011**



# Changes in UWMP Requirements Since 2005

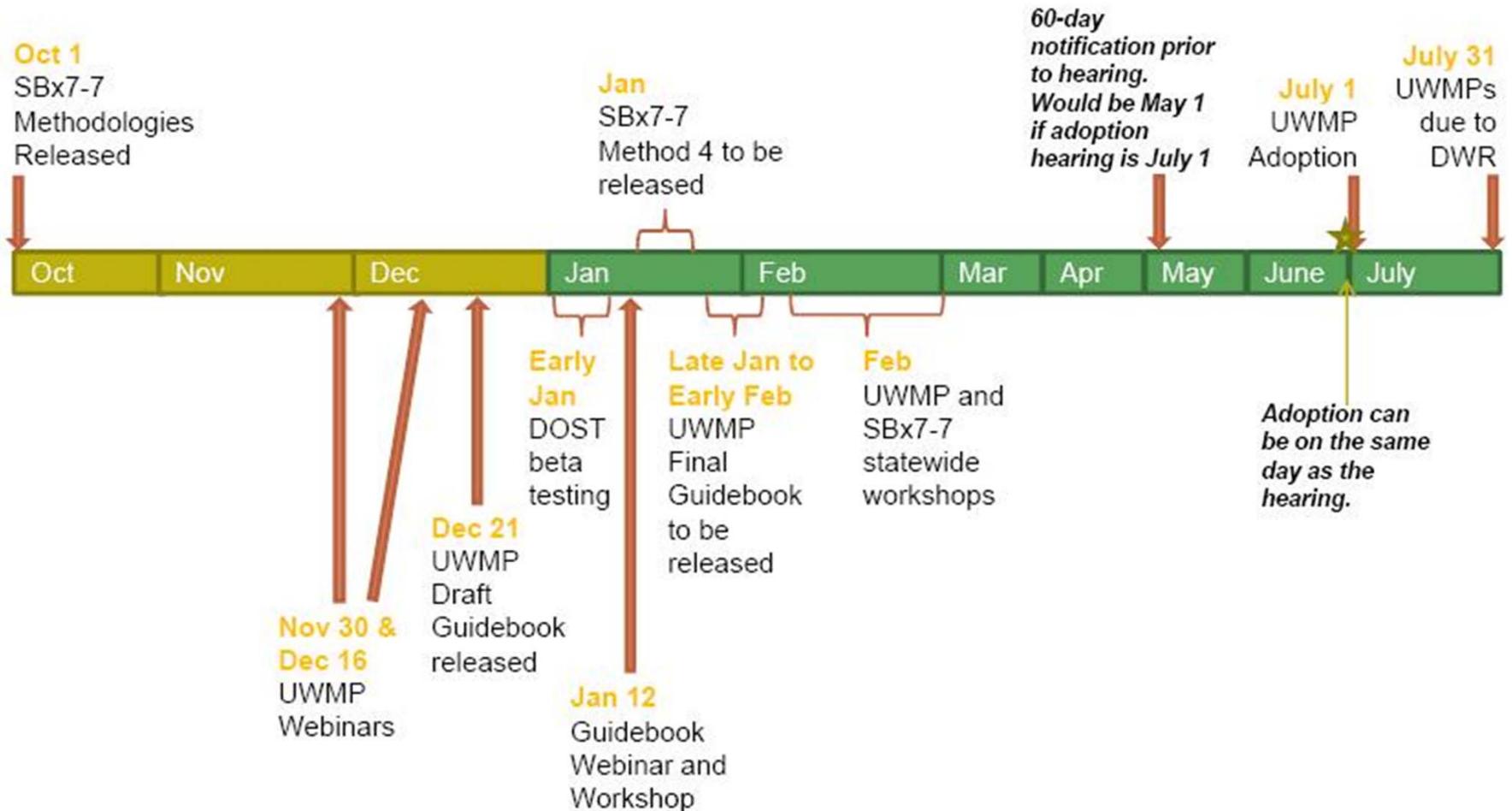
Most basic requirements are the same as 2005, except for...

- Including baseline and target data for Water Conservation Bill of 2009 compliance
- Additional public notification
- Changes associated with AB 1420 – grant or loan eligibility conditioned on the implementation of DMMs
- Lower income housing water use projections

# UWMP Key Dates

Legislated Dates

DWR Action Items





# **2010 UWMP Update Outline**

Section 1:      **Plan Preparation**

Section 2:      **System Description**

Section 3:      **System Demands**

Section 4:      **System Supplies**

Section 5:      **Water Supply Reliability and Water Shortage  
Contingency Planning**

Section 6:      **Demand Management Measures**

Section 7:      **Climate Change (optional)**

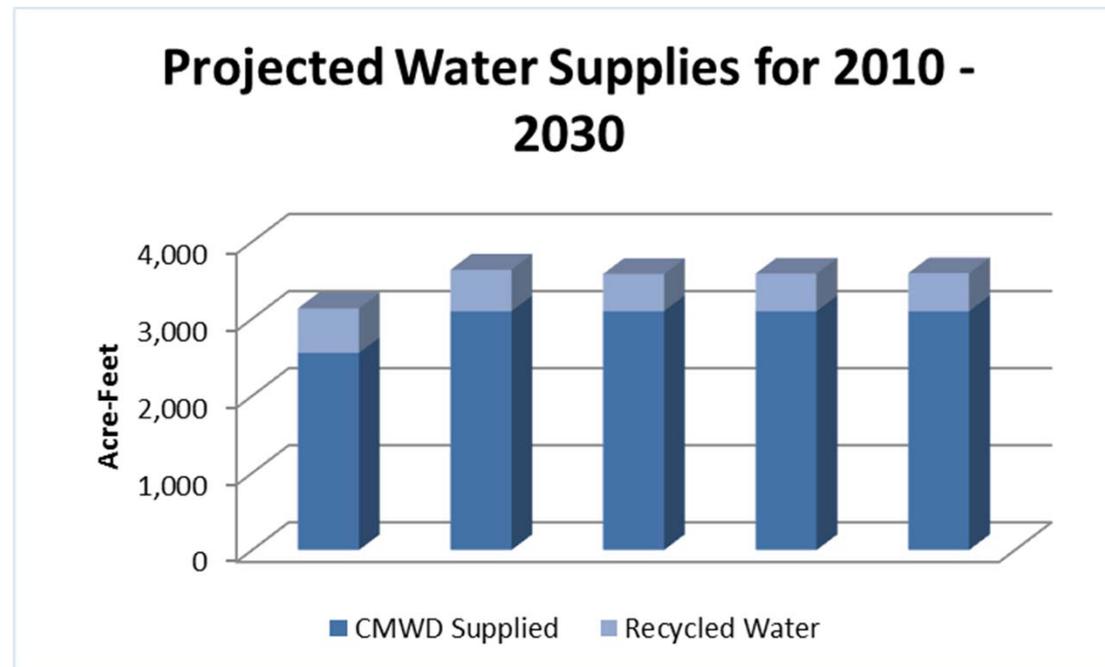


# Urban Water Use Target

- The Water Conservation Act of 2009 provides four methods for determining the urban water use target value. The four methods are:
  - Method 1: 80% of Base Daily Per Capita Water Use Value
  - Method 2: Performance Standards
  - Method 3: 95% of the Hydrologic Region 2020 Target Value
  - Method 4: Water Savings (developed by DWR)
- Method 1 effectively limits the maximum reduction the District is required to achieve to 20 percent. Thus, the District's 2020 Urban Water Use Target is **186 GPCD**. The interim urban water use target for the District in 2015 is **210 GPCD**.

# Water Supply Projections

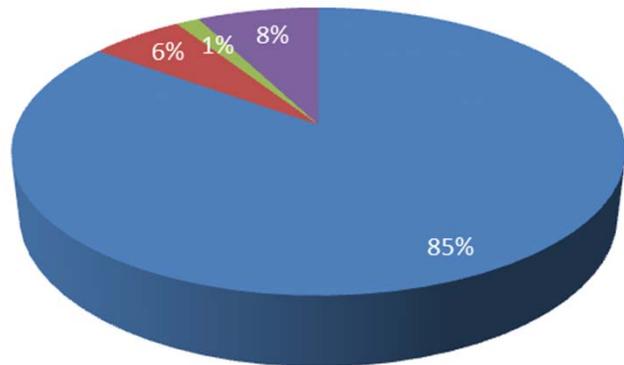
- Water supply projections were based upon data provided by the Calleguas Municipal Water District and recycled water supply projections.



# Water Demand Projections

- Projected water demand was calculated based upon historical water use, as well as projected population growth within the community of Oak Park (estimates obtained from the County).

**Water Use By Sector**



■ Single family ■ Multi-family ■ Commercial ■ Landscape

**Total Water Use**

Water Use	2005	2010	2015	2020	2025	2030
Total Water Deliveries	2,770	2,320	2,157	1,932	1,955	1,976
Additional Water Uses and Losses	489	226	209	187	190	192
<b>Total</b>	<b>3,259</b>	<b>2,546</b>	<b>2,366</b>	<b>2,119</b>	<b>2,145</b>	<b>2,168</b>

A decorative banner at the top of the slide features a blue background with numerous water droplets of varying sizes, creating a textured, bubbly effect. The title "Water Use Reduction Methods" is centered in a bold, black, sans-serif font.

# Water Use Reduction Methods

- Water use reduction plan in order to meet the 20x2020 water use reduction requirements includes:
  - Increasing the use of recycled water for landscape and irrigation purposes.
  - Increasing public awareness regarding water conservation requirements and efforts that can be easily implemented to conserve water.
  - Complying with the California Urban Water Conservation Council Best Management Practices for water conservation.



# Economic Impacts of Reduced Water Use

- To meet the water use reduction target, revenue is expected to decrease due to a reduction in water sales. Furthermore, expenditures are expected to increase due to the necessary marketing of water conservation methods to reduce water use. The fiscal impacts of implementing the District's planned conservation methods will also be closely monitored to ensure they remain cost-effective, securing the continued supply of affordable, yet reliable water to the community of Oak Park.

# Contact Information



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## **Project Contacts:**

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# URBAN WATER MANAGEMENT PLANNING ACT

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**Established:** AB 797, Klehs, 1983

**Amended:** AB 2661, Klehs, 1990

AB 11X, Filante, 1991

AB 1869, Speier, 1991

AB 892, Frazee, 1993

SB 1017, McCorquodale, 1994

AB 2853, Cortese, 1994

AB 1845, Cortese, 1995

SB 1011, Polanco, 1995

AB 2552, Bates, 2000

SB 553, Kelley, 2000

SB 610, Costa, 2001

AB 901, Daucher, 2001

SB 672, Machado, 2001

SB 1348, Brulte, 2002

SB 1384, Costa, 2002

SB 1518, Torlakson, 2002

AB 105, Wiggins, 2004

SB 318, Alpert, 2004

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

### **CHAPTER 1. GENERAL DECLARATION AND POLICY**

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.

## **CHAPTER 2. DEFINITIONS**

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.

### **CHAPTER 3. URBAN WATER MANAGEMENT PLANS**

#### **Article 1. General Provisions**

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 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).

## **Article 2. Contents of Plans**

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 and 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) 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:
    - (1) An average water year.
    - (2) A single dry water year.
    - (3) Multiple dry water years.

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) Urban water suppliers that are members of the California Urban Water Conservation Council and submit annual reports to that council

in accordance with the “Memorandum of Understanding Regarding Urban Water Conservation in California,” dated September 1991, may submit the annual reports identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivisions (f) and (g).

- (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), including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

10631.5. The department shall take into consideration whether the urban water supplier is implementing or scheduled for implementation, the water demand management activities that the urban water supplier identified in its urban water management plan, pursuant to Section 10631, in evaluating applications for grants and loans made available pursuant to Section 79163. 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.

10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier:

- (a) 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 which are applicable to each stage.
- (b) 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.
- (c) 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.

- (d) 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.
- (e) 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.
- (f) Penalties or charges for excessive use, where applicable.
- (g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), 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.
- (h) A draft water shortage contingency resolution or ordinance.
- (i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

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 recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.
- (c) 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, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

- (d) 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.
- (e) 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.
- (f) 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.

### **Article 2.5 Water Service Reliability**

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.

### **Articl 3. Adoption and Implementation of Plans**

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 file with the department 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 filed with the department 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 outstanding elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has filed its plan with 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.

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.

#### **CHAPTER 4. MISCELLANEOUS PROVISIONS**

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.

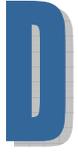
10654. An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the "Memorandum of Understanding Regarding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

10657.

- (a) The department shall take into consideration whether the urban water supplier has submitted an updated urban water management plan that is consistent with Section 10631, as amended by the act that adds this section, in determining whether the urban water supplier is eligible for funds made available pursuant to any program administered by the department.
- (b) This section shall remain in effect only until January 1, 2006, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2006, deletes or extends that date.



## Water Conservation Act of 2009 (SBx7-7, 20x2020)

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## 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.
- (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.

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

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.



# Triunfo Sanitation District Oak Park Water Service Water Shortage Contingency Plan October 2009

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**Triunfo Sanitation District  
Oak Park Water Service**

**Water Shortage  
Contingency Plan  
October 2009**

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# **TRIUNFO SANITATION DISTRICT OAK PARK WATER SERVICE WATER SHORTAGE CONTINGENCY PLAN**

## **Section 1: Introduction**

The Oak Park community has a population of approximately 14,800 people according to the 2000 census. The Oak Park Water Service (OPWS) consists of approximately 4,600 potable water service connections and in 2008 used 3,010 acre feet of water (1 acre feet = 326,000 gallons). The water delivery and storage system utilizes four reservoirs in five pressure zones. The water reservoir storage capacity of the system is 5.6 million gallons and the water usage rate is approximately half of the OPWS storage capacity per day. OPWS receives its water from the Calleguas Municipal Water District (CMWD) who receives its water from the Metropolitan Water District of Southern California (MWD). OPWS has no independent potable water supply in its service area.

Following two straight years of below average rainfall, very low snow melt run-off and the largest court-ordered water transfer restriction in State history, Governor Schwarzenegger proclaimed a statewide drought and ordered immediate action to address the situation on June 4, 2008. As a result, MWD declared a water supply alert urging cities, counties, local public water agencies and retailers to achieve extraordinary conservation by adopting and enforcing drought ordinances, accelerating public outreach, and developing local supplies in order to preserve existing reserves.

The OPWS Water Shortage Contingency Plan (WSCP) was first adopted in draft form in the draft 2005 Urban Water Management Plan (UWMP). The WSCP is a component of the Oak Park Water Service area UWMP. Current requirements for the WSCP are found in the California Water Code, Div.6, Part 2.6, Chapter 1, Section 10632 under the Urban Water Management Planning Act – see Appendix A.

This 2009 update has revisions that include supply and demand projections and an example rate structure design for each rationing stage, rationing allocations for each rationing stage, and drought/emergency planning actions.

OPWS's WSCP addresses demand reduction strategies for the Oak Park Water System. Trigger points of the OPWS rationing stages will be determined by use reduction specifications from the CMWD. The methods to reduce water consumption employed in this plan are public outreach, use restriction and residential per connection allocations.

All data presented in the WSCP is based on the standard calendar year (January-December).

## **Section 2: OPWS Water Supply**

All potable water supplies for Oak Park are delivered from CMWD, which in turn receives water from its State water contractor, the Metropolitan Water District of Southern California (MWD). OPWS has no internal and independent service area sources of potable water supply. OPWS stays in close contact with CMWD and MWD regarding the supply status.

### **Section 3: Current and Projected Demand**

Oak Park is a community of approximately 14,800 people according to the 2000 census with approximately 4,600 potable water connections serving 89% residential demand and the remaining 11% as commercial/institutional and landscape irrigation demand. Utility customers are classified into the following water use sectors: single-family residential, multi-family residential, commercial, institutional and landscape irrigation.

The following table summarizes 2008 potable water actual use and projected demand by customer category over the next three years. Projections take into account that Oak Park has been essentially built out since the 1990s and no other system wide expansions (annexations, development) are anticipated.

**Table I – Customer Category, 2008 Actual Use, and Estimated Future Potable Demand**

<b>Customer Category</b>	<b>2008 Potable Connections</b>	<b>2008 Actual Use (AF)</b>	<b>2009 Estimated Demand (AF)</b>	<b>2010 Estimated Demand (AF)</b>	<b>2011 Estimated Demand (AF)</b>
Single-Family Residential	4345	2524	2524	2524	2524
Multi-Family Residential	114	153	153	153	153
Commercial / Institutional	47	59	59	59	59
Landscape Irrigation	90	274	274	274	274
<b>Target Allocation</b>		<b>3010</b>	<b>3010</b>	<b>3010</b>	<b>3010</b>

1 Acre-Foot (AF) = 326,000 gallons (325,851).

Estimates are based on prior actual use and do not reflect the potential impact of voluntary conservation.

### **Section 4: Drought/Emergency Planning Actions**

In addition to responding to drought conditions, OPWS’s Water Shortage Contingency Plan can be used to respond to emergency conditions that interrupt water supplies to Oak Park. Water supplies may be interrupted due to water supply contamination, major transmission pipeline break, regional power outage, or a natural disaster such as an earthquake. In the event of an emergency, OPWS would respond as outlined in the OPWS 2005 Disaster Operations Plan. This plan provides operational detail and guidance for equipment failures and line breaks. During a disaster, OPWS will work cooperatively with CMWD and MWD through their Member Agency Response System (MARS) to facilitate the flow of information and respond to the requests for mutual aid. Actions that OPWS would take in the event of these emergencies are outlined below.

#### **4.1 WATER SUPPLY INTERRUPTION**

In the event that OPWS's supply from CMWD is interrupted or contaminated (i.e. due to a pipe break, chemical spill, or other environmental incident) it is possible that no water would be available to OPWS customers for a period of time. In such a case, OPWS would need to rely on water from its distribution system storage facilities and utilize resources available through the Water Agency Response Network (WARN). As participating members of WARN, water utilities are able to establish a contractual relationship under which they share resources during an emergency at the discretion of each participating agency.

Depending on water levels in its tanks, OPWS will have between 2.8 to 5.6 million gallons in storage (3.8 to 6.7 million gallons after Oak Canyon Reservoir construction). The minimum storage required to fight structure fires is 2.8 million gallons. The minimum health and safety allotment for Oak Park is about 1 million gallons based on American Water Works Association's recommendation of 69 gallons per person per day. It is important to note, this allocation for health and safety is exclusive to residents and does not include businesses or landscape irrigation.

In the event of an emergency situation where water service is interrupted, staff will notify OPWS customers through Ventura County's 'reverse 911' call system to enact emergency water conservation measures. Quick response from customers to limit their use is critical to maximize supply. Under normal circumstances (and after Oak Canyon Reservoir construction), OPWS would use its existing supply in one day. However, an immediate switch to emergency water conservation could allow up to 4 days of supply.

The emergency connection with Las Virgenes Municipal Water District (LVMWD) can supply close to 1 million gallons per day. An agreement exists between our agencies (and the facilities are in place) to move emergency LVMWD water throughout OPWS. The LVMWD connection combined with the Conifer Replacement Project, and the 'reverse 911' scenario should provide an adequate supply of water to meet the minimum health and safety supply on an interim basis until normal water supply services can be restored.

#### **4.2 AREA-WIDE ELECTRICAL POWER FAILURE**

If an area-wide electrical power failure were to occur within OPWS's service area, OPWS's supply could continue to be pumped throughout the service area by employing the use of emergency generators. OPWS has stationary emergency generators located at both the Bishopswood and Lindero Pump Stations.

#### **4.3 EARTHQUAKE**

Water system infrastructure, including pump stations, storage tanks, and pipelines, can be damaged during a strong earthquake. The OPWS facilities have been constructed in accordance with industry standard materials and construction practices. With recent retrofits, all the water tanks, with the exception of Conifer Tank, meet 2008 seismic standards.

However, it is expected that some facilities may be damaged as the result of a strong earthquake. OPWS has planned for this potential disaster scenario by constructing system redundancy into its

water system. Water can be supplied from any tank to any zone. OPWS has four water tanks, zone interconnections, and looped distribution pipelines to allow potentially damaged portions of the service area to be quickly isolated and repaired.

## **Section 5: Stages of Action for Demand Reduction up to 50%**

Demand reduction strategies will be employed at all stages of a water shortage condition. This Section includes details of *Rationing Stages, Reduction Goals, Consumption Limits, Prohibitions on Water Use, and Water Shortage Rate Structure*. The entire strategy for demand reduction is summarized in Table II.

**5.1 RATIONING STAGES:** OPWS will use the following rationing stages for response to reduced supply and in a water shortage emergency:

**Permanent** – An expected 15% overall water use reduction goal. The basic, permanent conservation program is designed as a community-wide, long-term reduction goal. It describes practices identified to eliminate water waste, use inefficiencies and to prevent losses from leaks.

**Stage 1 (moderate)** – A mandatory program with a 25% overall reduction requirement. The method of allocation in stage 1 is by waste reduction and use restriction.

**Stage 2 (severe)** – A mandatory program with 35% overall reduction. The method of allocation in stage 2 is by waste reduction, use restriction, and by establishing a per-connection allotment for single and multifamily residential customers.

**Stage 3 (critical)** is a mandatory program with 50% overall reduction. The method of allocation in stage 3 is by waste reduction, use restriction and by establishing a per-connection allotment for single and multifamily residential customers.

<b>TABLE II</b>			
<b>Water Supply Shortage: Stages &amp; Conditions</b>			
<b>Supply Shortage</b>	<b>Rationing Stage*</b>	<b>Customer Water Reduction Goal</b>	<b>Type of Rationing Program</b>
Up to 15%	Permanent – Minimal	15%	Mandatory - Waste Reduction
15 – 25%	1 – Moderate	25%	Mandatory – Waste Reduction, Use Restrictions
25 - 35%	2 – Severe	35%	Mandatory – Waste Reduction, Use Restrictions and Per Connection Allotment
35 - 50%	3 – Critical	50%	Mandatory – Waste Reduction, Use Restrictions and Per Connection Allotment

**5.2 DEMAND REDUCTION GOALS:** Overall demand reduction will be achieved through a combination of public outreach, waste restriction, use restrictions and residential water allotments. The following priorities have been established for use in developing demand reduction programs and allocations during a water shortage emergency. Priorities for use of available water, from highest to lowest priority, are:

- Residential health and safety
- Institutional and governmental services
- Commercial uses
- Landscape
- New demand - projects without permits when shortage is declared

**5.3 PUBLIC OUTREACH:**

To provide customers with the information and practical steps necessary for compliance with the water waste and use restrictions outlined in the WSCP, OPWS maintains an active public outreach program. Elements include:

- Regular communication of conservation tips through print and online media
- Availability of residential water audits from OPWS staff
- Access to rebates for the purchase of water-efficient household appliances and irrigation systems
- Sponsorship of public meetings and water-wise landscape workshops

## 5.4 RESTRICTIONS:

### Permanent

- **Limits on Watering Hours:** Watering or irrigation of lawn, landscape or other vegetated area with potable water is prohibited between the hours of 9:00 a.m. and 5:00 p.m. on any day except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.
- **Limits on Watering Duration:** Limit irrigation system watering to no more than 15 minutes per day per station. This does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour and weather based controllers or stream rotor sprinklers that meet a 70% efficiency standard.
- **No Watering During Rain Events:** Irrigation is not permitted during periods of rain nor in the 24 hours following each rain event in the Oak Park area.
- **No Excessive Water Flow or Run-Off:** Watering or irrigation of any lawn, landscape or other vegetated area in a manner that causes or allows excessive water flow or run-off onto an adjoining sidewalk, driveway, street, alley, gutter or ditch must be remedied within 5 days of observation and/or notification by the District.
- **No Washing Down Hard or Paved Surfaces:** Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys is prohibited except when necessary to alleviate safety or sanitary hazards and only by use of a hand-held bucket or similar container, a low-volume high pressure cleaning machine equipped to recycle any water used or a low volume high pressure water broom.
- **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within five (5) days of observation and/or notification by the District.
- **Re-Circulating Water Required for Water Fountains and Decorative Water Features:** Operating a water fountain or other decorative water feature that does not use re-circulating water is prohibited.
- **Limits on Washing Vehicles:** Using water to wash or clean a vehicle including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer whether motorized or not is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self closing water shut-off nozzle or device.
- **Drinking Water Served Upon Request Only:** Restaurants are prohibited from providing drinking water to any person unless expressly requested by that person.

**Stage 1** – All prohibitions established in previous stage plus:

- **Limits on Watering:** Watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to 3 days per week. During the months of November through March, watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to no more than 2 days per week. This provision does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision does not apply to use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.
- **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within seventy-two (72) hours of observation and/or notification by the District.
- **Use only recycled water for construction site dust control and consolidation of backfill.**
- **Other Prohibited Uses:** The Board of Directors may implement other prohibited water uses as determined by the District after notice to customers.

**Stage 2** – All prohibitions established in previous stage plus:

- **Limits on Watering:** Watering or irrigating of lawn, landscape or other vegetated area with potable water is restricted in accordance with the allotments in Table III. Watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to 2 days per week. During the months of November through March, watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to no more than 1 day per week. This provision does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision does not apply to use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.
- **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within forty-eight (48) hours of observation and/or notification by the District.
- **No filling, cleaning and/or refilling of decorative fountains, ornamental lakes or ponds except to the extent needed to sustain aquatic life, provided that such animals have been actively managed within the water feature prior to declaration of this supply shortage stage.**
- **Residential car washing prohibited. Use car washes available with water recycling systems.**

- The filling or topping off of any new or existing residential pools or outdoor spas is prohibited.
- Planting of new turf grass is prohibited.
- Outdoor evaporative mist coolers are prohibited.
- Main line flushing is allowed for emergency purposes only.
- Other Prohibited Uses: The District may implement other prohibited water uses as determined by the Board of Directors, after notice to customers.

**Stage 3** – All prohibitions established in previous stage plus:

- Limited Watering or Irrigating: Watering or irrigating of lawn, landscape or other vegetated area with potable water is restricted in accordance with the allotments in Table III for residential customers. This restriction does not apply to the use of recycled water or to the following categories of use, subject to the hardship waiver provisions as described in Section 5.7:
  - I. Maintenance of existing landscape necessary for fire protection;
  - II. Maintenance of existing landscape for soil erosion control;
  - III. Maintenance of plant materials identified to be rare or essential to the well-being of protected species;
  - IV. Maintenance of landscape within active public parks and playing fields, daycare centers, golf course greens, and school grounds, provided that such irrigation does not exceed 2 days per week;
  - V. Actively irrigated environmental mitigation projects.
- Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user’s plumbing, distribution, or irrigation system must be remedied within twenty-four (24) hours of observation and/or notification by the District.
- Other Prohibited Uses: The District may implement other prohibited water uses as determined by the Board of Directors, after notifying customers.

## **5.5 PER-CONNECTION ALLOTMENTS**

To achieve stage 2 or 3 mandatory water reduction goals, OPWS has established per-connection water allotments based on residential lot size groups. Multifamily homes are included in the residential group A. Each group’s water use was averaged for 2008 and allocations were assigned to each group to achieve water reduction goals for stages 2 and 3. Table III shows monthly allotments in hundreds of cubic feet (HCF). One HCF equals 748 gallons of water.

Upon successful implementation of allotments outlined in Table III, the District should be able to achieve water reduction goals as outlined in Table IV.

**Table III - Per Connection Allotment by Parcel Groups**

Per Connection Allotments (HCF/Month) [HCF = Hundred Cubic Feet = 748 gallons]

<b>Residential A</b> Lots <= 2455 sq.ft.	Dwellings 1429	2008 Average Use 5 HCF/Month	Jan/Feb/Mar (HCF/Month)	Apr/May/Jun (HCF/Month)	Jul/Aug/Sep (HCF/Month)	Oct/Nov/Dec (HCF/Month)
Stage 2 - 35%			5	5	5	5
Stage 3 - 50%			5	5	5	5

<b>Residential B</b> Lots between 2456-4955 sq.ft.	Dwellings 627	2008 Average Use 12 HCF/Month	Jan/Feb/Mar (HCF/Month)	Apr/May/Jun (HCF/Month)	Jul/Aug/Sep (HCF/Month)	Oct/Nov/Dec (HCF/Month)
Stage 2 - 35%			7	12	13	11
Stage 3 - 50%			7	12	13	11

<b>Residential C</b> Lots between 4956-7455 sq.ft.	Dwellings 1362	2008 Average Use 20 HCF/Month	Jan/Feb/Mar (HCF/Month)	Apr/May/Jun (HCF/Month)	Jul/Aug/Sep (HCF/Month)	Oct/Nov/Dec (HCF/Month)
Stage 2 - 35%			8	14	15	12
Stage 3 - 50%			7	12	13	11

<b>Residential D</b> Lots between 7456-9955 sq.ft.	Dwellings 772	2008 Average Use 27 HCF/Month	Jan/Feb/Mar (HCF/Month)	Apr/May/Jun (HCF/Month)	Jul/Aug/Sep (HCF/Month)	Oct/Nov/Dec (HCF/Month)
Stage 2 - 35%			11	18	20	16
Stage 3 - 50%			7	13	13	11

<b>Residential E</b> Lots greater than 9956 sq.ft.	Dwellings 577	2008 Average Use 44 HCF/Month	Jan/Feb/Mar (HCF/Month)	Apr/May/Jun (HCF/Month)	Jul/Aug/Sep (HCF/Month)	Oct/Nov/Dec (HCF/Month)
Stage 2 - 35%			18	30	32	26
Stage 3 - 50%			8	14	15	12

## 5.6 PENALTIES FOR VIOLATIONS OF WATER USE RESTRICTIONS AND ALLOTMENTS

The following penalties are authorized pursuant to California Water Code Section 356 as defined by ordinance applies to all use restrictions allotments in Sections 5.4 and 5.6. In addition, at the time of application for service, customers agree to comply with all of the OPWS Policy and Procedures, Rules and Regulations for the provision of water service, including regulations and restrictions established by ordinance. Therefore, the following penalties shall be imposed on any customer who violates any use restrictions for any declared stage of drought:

- a) **First Violation/Offense:** The District shall issue a written courtesy door hanger describing the violation and deliver a copy of the appropriate ordinance by mail for the first violation of the permanent and stage 1 restrictions. For stages 2 and 3 a first violation within the previous 12 calendar months is punishable by a fine as established by ordinance.
- b) **Second Violation/Offense:** A second violation within the previous 12 calendar months is punishable by a fine as established by ordinance.
- c) **Third Violation/Offense:** A third violation within the previous 12 calendar months is punishable by a fine as established by ordinance.
- d) **Fourth Violation/Offense:** A fourth violation within the previous 12 calendar months is punishable by a fine as established by ordinance.
- e) **Fifth Violation/Offense:** A fifth violation within the previous 12 calendar months is punishable by a fine as established by ordinance.
  - I. **Water Flow Restrictor:** In addition to any fines, the District may install a water flow restrictor device of approximately one gallon per minute capacity for services up to one and one-half inch in size and comparatively sized restrictors for larger services after written notice of intent to install a restrictor for a minimum of forty-eight (48) hours.
  - II. **Termination of Service:** In addition to any fines and the installation of a water flow restrictor, the District may disconnect and/or terminate a customer's water service.

Table IV – Water Reduction Goals by Customer Category illustrates the overall reduction goals by the customer category within the OPWS area. The total water allocation is calculated by averaging water use for 2008 for each parcel size group.

**Table IV – Water Reduction Goals by Customer Category  
(In Hundred Cubic Feet per Month - One Hundred Cubic Feet = 748 gallons)**

Customer Category	2008 Actual Use	Water Reduction Goal			
		Permanent (15%)	Stage 1 (25%)	Stage 2 (35%)	Stage 3 (50%)
Residential - A	6,835	6,835	6,835	6,835	6,835
		0%	0%	0%	0%
Residential - B	7,768	6,836	6,836	6,836	6,836
		12%	12%	12%	12%
Residential - C	27,872	23,412	20,068	16,444	14,912
		16%	28%	41%	46%
Residential - D	20,680	17,164	14,683	12,408	8,479
		17%	29%	40%	59%
Residential - E	25,356	21,045	18,003	15,214	7,100
		17%	29%	40%	72%
Commercial / Institutional	2,154	2,154	2,154	2,154	2,154
		0%	0%	0%	0%
Landscape Irrigation	9,864	7,990	6,806	5,425	3,946
		19%	31%	45%	60%
<b>Total of Allotment for all Customer Categories</b>	<b>100,529</b>	<b>85,437</b>	<b>75,384</b>	<b>65,316</b>	<b>50,260</b>

## 5.7 HARDSHIP WAIVER

**Undue and Disproportionate Hardship:** If, due to unique circumstances, a specific requirement of this Ordinance would result in undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water users, then the person may apply for a waiver to the requirements as provided in this section.

- a. **Written Finding:** The waiver may be granted or conditionally granted only upon a written finding of the existence of facts demonstrating an undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to 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 waiver shall be on a form prescribed by the District and shall be at the discretion of the Board accompanied by a non-refundable processing fee in an amount set by resolution of the Board.
  2. **Supporting Documentation:** The application may be accompanied by photographs, maps, drawing and other information, including a written statement of the applicant.
  3. **Required Findings for Variance:** An application for a waiver shall be denied unless the appropriate 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 District or its Agent, all of the following:
    - a. That the waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses;
    - b. That because of special circumstances applicable to the property or its use, the strict application of this Ordinance would have a disproportionate impact on the property or use that exceeds the impacts to similarly situated residences and businesses;
    - c. That the authorizing of such waiver will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the District to effectuate the purpose of this Ordinance and will not be detrimental to the public interest; and
    - d. That the condition or situation of the subject property or the intended use of the property for which the waiver is sought is not common or general in nature.
- b. **Approval Authority:** The District Manager (or designee) shall exercise approval authority and act upon any completed application no later than ten (10) days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver shall be promptly notified in writing of any action taken. Unless specified otherwise at the time a waiver is approved the waiver applies to the subject property during the term of the mandatory water supply shortage condition.
- c. **Appeals to the Board:** An applicant can appeal a decision or condition to the District Manager on a waiver application to the TSD Board 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 TSD Board shall act as the approval authority and review the appeal following the regular waiver procedure. The decision of the TSD Board is final.

## **Section 6: Water Shortage Rate Structure**

The TSD Board of Directors sets rates for potable water customers by ordinance. The potable water rates are established to cover the water system operation, maintenance, capital improvement costs and for operational reserves. The current water rate structure consists of a fixed monthly service charge and a quantity rate for water used.

Water rates developed for normal water supply conditions are designed to meet revenue requirements under status quo conditions. Under drought conditions when mandatory water restriction is required, the reduction in water sales will impact the status quo rate and revenue assumptions.

The water rate ordinance defines water rates for the various rationing stages. The quantity rate will increase in sequence with higher rationing stages to compensate for loss of revenue from reduced water sales.

Table V is an example of how rate modifications will be necessary to maintain revenue requirements during rationing at each stage.

**Table V – Water Shortage Condition Rate Impact**

	Stage 1 (25%)	Stage 2 (35%)	Stage 3 (50%)
Tier 1	1%	3%	7%
Tier 2	5%	8%	18%
Tier 3	7%	10%	22%

Percentage increase is compared to non-water shortage conditions.

The example illustrates the impacts to a three-tiered water rate structure. The rate increase percentages shown are for example only and reflect the recovery of operating costs only; they do not incorporate the impact of water conservation incentives. Actual percentage increases may be higher or lower, depending on the specific impact from rationing, and would be established by ordinance.

## **Section 7: Implementation of the Plan**

The waste restrictions are a permanent part of the Oak Park Water systems conservation program. When warranted at the time of a water shortage, the TSD Board will enact the appropriate stage of the Conservation Ordinance through a Board resolution.

## **Section 8: Monitoring Procedures**

**Stage 1** – Monthly delivery records from CMWD meters will be reported to the District Manager or designee. If overall reduction goals are not met, the District Manager will notify the TSD Board and more aggressive measures may be implemented.

**Stage 2 - 3** – Weekly delivery records from CMWD meters will be reported to the District Manager or designee. If reduction goals are not met, the District Manager will notify the TSD Board and more aggressive action may be taken.

# **APPENDICES**

*Appendix A*

**California Water Code Section 10632  
Urban Water Management Planning**

**Water Shortage Contingency Analysis**

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

- (a) 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 which are applicable to each stage.
- (b) 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.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) Penalties or charges for excessive use, where applicable.
- (g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), 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.
- (h) A draft water shortage contingency resolution or ordinance.
- (i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.



## ORDINANCE NO. TSD-67

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**ORDINANCE NO. TSD-67**

Triunfo Sanitation District/Oak Park Water Service  
Water Conservation Ordinance

September 30, 2009

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## **ORDINANCE NO. TSD-67**

### AN ORDINANCE OF THE TRIUNFO SANITATION DISTRICT ESTABLISHING A WATER CONSERVATION AND WATER SUPPLY SHORTAGE PROGRAM AND REGULATIONS

**Section I: Title**

This ordinance will be known at the Triunfo Sanitation District/Oak Park Water Service Water Conservation Program.

**Section II: Findings**

**WHEREAS**, a reliable minimum supply of potable water is essential to the public health, safety and welfare of the people and economy of the southern California region;

**WHEREAS**, Southern California is a semi-arid region and is largely dependent upon imported water supplies. A growing population, climate change, environmental concerns and other factors in other parts of the State and western United States, make the region highly susceptible to water supply reliability issues;

**WHEREAS**, careful water management that includes active water conservation measures not only in times of drought, but at all times, is essential to ensure reliable minimum supply of water to meet current and future water supply needs;

**WHEREAS**, Article X, Section 2 of the California Constitution declares that the general welfare requires that water resources be put to beneficial use, waste or unreasonable use or unreasonable method of use of water be prevented, and conservation of water be fully exercised with a view to the reasonable and beneficial use thereof;

**WHEREAS**, California Water Code Section 375 et seq. requires water suppliers to adopt and enforce a comprehensive water conservation program to reduce water consumption and conserve supplies;

**WHEREAS**, California Water Code section 350 et seq. authorizes any public entity, including a special district, to declare a water shortage emergency and, upon declaration of that emergency, adopt regulations and restrictions on the delivery and consumption of water in order to conserve water resources during the period of the emergency and until the supply of water available for distribution by the suppliers has been replenished or augmented;

**WHEREAS**, the adoption and enforcement of water conservation and supply shortage program is necessary to manage the District's potable water supply in the short- and long-term and to avoid or minimize the impacts of drought and shortage within the District. Such a program is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare; and

**WHEREAS**, based upon the above findings, the District's legal counsel advises, and the Board finds, that actions taken pursuant to this ordinance are categorically exempt from CEQA according to 14 California Code of Regulations 15301 and 15307.

**NOW, THEREFORE, BE IT RESOLVED AND DETERMINED THAT THE BOARD OF THE TRIUNFO SANITATION DISTRICT DOES ORDAIN AS FOLLOWS:**

**Section III. Declaration of Purpose and Intent**

- a. The purpose of this ordinance is to establish a water conservation and supply shortage program that will reduce water consumption within the District through conservation, enable effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water, and maximize the efficient use of water within the District to avoid and minimize the effect and hardship of water shortage to the greatest extent possible.
- b. This ordinance establishes three stages of water supply shortage response actions to be implemented during times of declared water shortage or declared water shortage emergency, with increasing restrictions on water use in response to worsening drought or decreasing supplies and emergency conditions.

**Section IV. Definitions**

- a. The following words and phrases whenever used in this ordinance shall have the meaning defined in this section:
  1. "District" means the Triunfo Sanitation District/Oak Park Water Service.
  2. "Landscape Irrigation System" means an irrigation system with pipes, hoses, spray heads, or sprinkling devices that are operated by hand or through an automated system.
  3. "Person" means any natural person or persons, corporation, public or private entity, governmental agency or institution or any other user of water provided by the District.
  4. "Potable Water" means water which is suitable for drinking.
  5. "Recycled Water" means the reclamation and reuse of non-potable water for beneficial use.

**Section V. Application**

- a. The provisions of this ordinance apply to any person in the use of any potable water provided by the District.
- b. The provisions of this ordinance do not apply to uses of water necessary to protect public health and safety or for essential government services, such as police, fire and other similar emergency services.
- c. The provisions of this ordinance do not apply to the use of recycled water.
- d. The provisions of this ordinance do not apply to the use of water by commercial nurseries and commercial growers to sustain plants, trees, shrubs, crops or other vegetation intended for commercial sale.
- e. This ordinance is intended solely to further the conservation of water. It is not intended to implement any provision of federal, state, or local statutes, ordinances, 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 state based ordinances and stormwater management plans.

## **Section VI: Stage 1 Water Supply Shortage**

- a. A Stage 1 Water Supply Shortage condition exists when the Board of Directors determines, in its sole discretion, that due to drought or other supply reductions, a consumer demand reduction is required in order to ensure that sufficient supplies will be available to meet anticipated demands. Upon the declaration of a Stage 1 Water Supply Shortage condition, the District shall implement the mandatory Stage 1 conservation measures identified in this section. These requirements are in addition to the water conservation items stated in Ordinance No. TSD-66.
- b. Water Conservation Measures: The following water conservation requirements apply during a declared Stage 1 Water Supply Shortage:
  1. Limits on Watering: Watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to 3 days per week. During the months of November through March, watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to no more than 2 days per week. This provision does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision does not apply to use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.
  2. Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within seventy two (72) hours of observation and/or notification by the District.
  3. Use only recycled water for construction site dust control, consolidation of backfill.
  4. Other Prohibited Uses: The Board of Directors may implement other prohibited water uses as determined by the District after notice to customers.

## **Section VII. Stage 2 Water Supply Shortage**

- a. A Stage 2 Water Supply Shortage condition exists when the Board of Directors determines, in its sole discretion, that due to drought or other supply reductions a consumer demand reduction is required in order to ensure that sufficient supplies will be available to meet anticipated demands. Upon the declaration of a Stage 2 Water Supply Shortage condition, the District shall implement the mandatory Stage 2 conservation measures identified in this section.
- b. Conservation Measures: In addition to the prohibited uses of water identified in Section VI, the following additional water conservation requirements apply during a declared Stage 2 Water Supply Shortage:
  1. Limits on Watering: Watering or irrigating of lawn, landscape or other vegetated area with potable water is restricted in accordance with the allotments in the latest version of the Triunfo Sanitation District Oak Park Water Shortage Contingency Plan (Water Shortage Contingency Plan). Watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to 2 days per week. During the months of November through March, watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to no more than 1 day per week. This provision does not apply to landscape irrigation systems that exclusively use very

low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision does not apply to use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.

2. **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within forty eight (48) hours of observation and/or notification by the District.
3. No filling, cleaning and/or refilling of decorative fountains, ornamental lakes or ponds except to the extent needed to sustain aquatic life, provided that such animals have been actively managed within the water feature prior to declaration of this supply shortage stage.
4. Residential car washing prohibited. Use car washes available with water recycling systems.
5. The filling or topping off of any new or existing residential pools or outdoor spas is prohibited.
6. Planting of new turf grass is prohibited.
7. Outdoor evaporative mist coolers are prohibited.
8. Main line flushing is allowed for emergency purposes only.
9. **Other Prohibited Uses:** The District may implement other prohibited water uses as determined by the Board of Directors, after notice to Customers.

c. **Water Allocations**

**Water Allocations/Water Budget:** The District will implement the water allocation plan in the most recent Water Shortage Contingency Plan for residential customers. The District must provide notice of the allocation by including it in the regular billing statement to which the District customarily mails the billing statements for on-going water service.

**Section VIII. Stage 3 Water Supply Shortage – Emergency Condition**

- a. A Stage 3 Water Supply Shortage condition is also referred to as an “Emergency” condition. A Stage 3 Water Supply Shortage condition exists when the Board of Directors declares a water shortage emergency in a manner and upon the grounds set forth in California Water Code Section 350 et seq.

Upon the declaration of a Stage 3 Water Supply Shortage condition pursuant to California Water Code Section 350 et seq., the District will implement the mandatory Stage 3 conservation measures identified in this section.

- b. **Additional Conservation Measures:** In addition to the prohibited uses of water identified in Sections VI and VII the following water conservation requirements apply during a declared Stage 3 Water Supply Shortage Emergency:
1. **Limited Watering or Irrigating:** Watering or irrigating of lawn, landscape or other vegetated area with potable water is restricted in accordance with the allotments in the Water Shortage Contingency Plan for residential customers. This restriction does not apply to the use of recycled water or to the following categories of use, subject to the hardship waiver provisions as described in Section X:
    - a. Maintenance of existing landscape necessary for fire protection;
    - b. Maintenance of existing landscape for soil erosion control;

- c. Maintenance of plant materials identified to be rare or essential to the well-being of protected species;
  - d. Maintenance of landscape within active public parks and playing fields, daycare centers, golf course greens, and school grounds, provided that such irrigation does not exceed 2 days per week;
  - e. Actively irrigated environmental mitigation projects.
2. **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within twenty four (24) hours of observation and/or notification by the District.
  3. **Other Prohibited Uses:** The District may implement other prohibited water uses as determined by the Board of Directors, after notifying customers.

**c. Water Allocations**

**Water Allocations/Water Budget:** The District will implement the water allocation plan in the most recent Water Shortage Contingency Plan for residential customers. The District must provide notice of the allocation by including it in the regular billing statement to which the District customarily mails the billing statements for on-going water service.

**Section IX. Procedures for Determination/Notification of Water Supply Shortage**

- a. **Determination and notification of a Stage 1 or Stage 2, Water Supply Shortage condition:** The existence of a Stage 1 or Stage 2 Water Supply Shortage condition will be declared by resolution of the Board adopted at a regular or special public meeting held in accordance with State law. The mandatory conservation measures applicable to Stage 1 and Stage 2 Water Supply Shortage conditions, respectively, shall take effect on the tenth day after the date the shortage condition is declared. Within five days following the declaration of the shortage condition, the District shall publish a copy of the resolution once in a newspaper used for publication of official notices.

If the Board of Directors establishes a water allocation, the District shall provide notice of the allocation by including it in the regular billing statement or by another mailing to the address to which the District customarily mails the billing statement for fees or charges for on-going water service. A water allocation shall be effective on the fifth day following the date of mailing or at such later date as specified in the notice.

- b. **Determination and notification of a Stage 3 Water Supply Shortage condition ("Emergency" condition):** The existence of a Stage 3 Water Supply Shortage condition may be declared in accordance with the requirements and procedures specified in California Water Code Section 350 et seq.

The mandatory conservation measures applicable to a Stage 3 Water Supply Shortage condition shall take effect immediately upon the Board of Directors declaration of a "Water Shortage Emergency" pursuant to California Water Code Section 350 et seq. As soon as practicable following the Board's declaration of a "Water Shortage Emergency," the District shall publish a copy of the declaration once in a newspaper used for publication of official notices.

If the Board of Directors establishes a water allocation, the District shall provide notice of the allocation by including it in the regular billing statement or by another mailing to the address to which the District customarily mails the billing statement for fees or charges for

on-going water service. A water allocation shall be effective on the fifth day following the date of mailing or at such later date as specified in the notice.

## **Section X. Hardship Waiver**

- a. **Undue and Disproportionate Hardship:** If, due to unique circumstances, a specific requirement of this ordinance would result in undue hardship to a person using water or to property upon which water is used, that is disproportionate by the impacts to water users generally or to similar property or classes of water users, then the person may apply for a waiver to the requirements as provided in this section.
- b. **Written Finding:** The waiver may be granted or conditionally granted only upon a written finding of the existence of facts demonstrating an undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to 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 waiver shall be on a form prescribed by the District and shall be accompanied by a non-refundable processing fee in an amount set by resolution of the Board.
  2. **Supporting Documentation:** The application may be accompanied by photographs, maps, drawing and other information, including a written statement of the applicant.
  3. **Required Findings for Variance:** An application for a waiver shall be denied unless the appropriate authority finds, based in the information provided in the applications, 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 District or its Agent, all of the following:
    - a. That the waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses;
    - b. That because of special circumstances applicable to the property or its use, the strict application of this ordinance would have a disproportionate impact on the property or use that exceeds the impacts to similarly situated residences and businesses;
    - c. That the authorizing of such waiver will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the District to effectuate the purpose of this ordinance and will not be detrimental to the public interest; and
    - d. That the condition or situation of the subject property or the intended use of the property for which the waiver is sought is not common or general in nature.
  4. **Approval Authority:** The District Manager (or designee) shall exercise approval authority and act upon any completed application no later than ten (10) days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver shall be promptly notified in writing of any action taken. Unless specified otherwise at the time a waiver is approved the waiver applies to the subject property during the term of the mandatory water supply shortage condition.
  5. **Appeals to the Board:** An applicant can appeal a decision or condition to the District Manager on a waiver application to the TSD Board 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 TSD Board shall act as the approval authority

and review the appeal following the regular waiver procedure. The decision of the TSD Board is final.

**Section XI. Penalties and Violations**

- a. **Misdemeanor:** Any violation of District ordinances 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 one thousand dollars (\$1,000), or by both.
- b. **Civil Penalties:** Civil penalties for failure to comply with any provisions of the ordinance shall be as follows:

Stage 1

- 1. **First Violation:** The District shall issue a written courtesy door hanger describing the violation and deliver a copy of this ordinance by mail.
- 2. **Second Violation:** A second violation within the preceding twelve (12) calendar months is punishable by a fine not to exceed one hundred dollars (\$100.00).
- 3. **Third Violation:** A third violation within the preceding twelve (12) calendar months is punishable by a fine not to exceed one hundred and fifty dollars (\$150.00).
- 4. **Fourth Violation:** A fourth violation is punishable by a fine not to exceed two hundred dollars (\$200.00).
- 5. **Fifth and Subsequent Violations:** A fifth and subsequent violation is punishable by a fine not to exceed two hundred and fifty dollars (\$250.00).
  - a. **Water Flow Restrictor:** In addition to any fines, the District may install a water flow restrictor device of approximately one gallon per minute capacity for services up to one and one-half inch size and competitively sized restrictors for larger services after written notice of intent to install a restrictor for a minimum of forty-eight (48) hours.

Stages 2 & 3

- 1. **First Violation:** The first violation is punishable by a fine not to exceed one hundred dollars (\$100.00).
- 2. **Second Violation:** A second violation within the preceding twelve (12) calendar months is punishable by a fine not to exceed two hundred dollars (\$200.00).
- 3. **Third Violation:** A third violation within the preceding twelve (12) calendar months is punishable by a fine not to exceed two hundred fifty dollars (\$250.00).
- 4. **Fourth Violation:** A fourth violation is punishable by a fine not to exceed three hundred fifty dollars (\$350.00).
- 5. **Fifth and Subsequent Violations:** A fifth and subsequent violation is punishable by a fine not to exceed five hundred dollars (\$500.00).
  - a. **Water Flow Restrictor:** In addition to any fines, the District may install a water flow restrictor device of approximately one gallon per minute capacity for services up to one and one-half inch size and competitively sized restrictors for larger services after written notice of intent to install a restrictor for a minimum of forty-eight (48) hours.
  - b. **Termination of Service:** In addition to any fines and the installation of a water flow restrictor, the District may disconnect and/or terminate a customer's water service.

- c. **Cost of Flow Restrictor and Disconnecting Service:** A person or entity that violates this ordinance is responsible for payment of the District charges for installing and/or removing any flow restricting device and for disconnecting and/or reconnecting service per the District's schedule of charges, then in effect as a charge for installing and/or removing any flow restricting device shall be paid to the District before the device is removed. Nonpayment shall be subject to the same schedules as nonpayment of basic water rates.
- d. **Separate Offenses:** Once the District issues a violation for a particular offense, no further notice of violation will be issued for the same offense until such time as the penalty for the offense has been paid or the 10 day period to appeal has expired, whichever occurs first. If an appeal is timely filed after a violation is served, then no further notice of violation for the same offense will be issued until the appeal has been heard and a decision on that appeal rendered.
- e. **Notice of Hearing:**
  - 1. The District shall issue a Notice of Violation by mail or personal delivery at least ten (10) days before taking enforcement action and said notice shall describe the action to be taken. A customer may appeal the Notice of Violation by filing a written notice of appeal with the District no later than the close of business on the day before the date scheduled for enforcement action. Any Notice of Violation not timely appealed shall be final. Upon receipt of a timely appeal, a hearing on the appeal shall be scheduled in a timely manner, and the District shall mail written notice of the hearing to the customer at least ten (10) days before the date of the said hearing.
  - 2. Pending receipt of a written appeal or pending a hearing pursuant to an appeal, the District may take appropriate steps to prevent the unauthorized use of water as appropriate to the nature and extent of the violations and the current declared water Stage condition.

## **Section XII. Severability**

If any section, subsection, sentence, clause or phrase in this ordinance or the application thereof to any person or circumstance is for any reason held invalid, the validity of the remainder of the ordinance or the application of such provision to other persons or circumstances shall be adopted thereby. The Board of Directors hereby declares it would have passed this ordinance and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses, or phrases or the application thereof to any person or circumstance be held invalid.

## **Section XIII. Effective Date**

This Ordinance is effective upon adoption.

**PASSED, APPROVED AND ADOPTED** this 30<sup>th</sup> day of September 2009.

**AYES:** Gillette, Glancy, Orkney, Parks, and Paule

**NOES:** None

**ABSENT:** None

**(signed)** \_\_\_\_\_  
Janna Orkney, Chair

**(signed)** \_\_\_\_\_  
Rhonda Catron, Clerk of the Board



# ORDINANCE NO. TSD-66

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**ORDINANCE NO. TSD-66**

Triunfo Sanitation District/Oak Park Water Service  
Water Waste Prevention Ordinance

September 30, 2009

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## **ORDINANCE NO. TSD-66**

### AN ORDINANCE OF THE TRIUNFO SANITATION DISTRICT ESTABLISHING A PROGRAM FOR PREVENTION OF THE WASTE OF WATER

**Section I: Title**

This ordinance will be known at the Triunfo Sanitation District/Oak Park Water Service Water Waste Prevention Program.

**Section II: Findings**

**WHEREAS**, a reliable minimum supply of potable water is essential to the public health, safety and welfare of the people and economy of the southern California region;

**WHEREAS**, Southern California is a semi-arid region and is largely dependent upon imported water supplies. A growing population, climate change, environmental concerns and other factors in other parts of the State and western United States, make the region highly susceptible to water supply reliability issues;

**WHEREAS**, careful water management that includes active water conservation measures not only in times of drought, but at all times, is essential to ensure reliable minimum supply of water to meet current and future water supply needs;

**WHEREAS**, Article X, Section 2 of the California Constitution declares that the general welfare requires that water resources be put to beneficial use, waste or unreasonable use or unreasonable method of use of water be prevented, and conservation of water be fully exercised with a view to the reasonable and beneficial use thereof;

**WHEREAS**, California Water Code Section 375 et seq. requires water suppliers to adopt and enforce a comprehensive water conservation program to reduce water consumption and conserve supplies;

**WHEREAS**, the adoption and enforcement of water conservation and supply shortage program is necessary to manage the District's potable water supply in the short and long-term and to avoid or minimize the impacts of drought and shortage within the District. Such a program is essential to ensure a reliable and sustainable minimum supply of water for the public health, safety and welfare; and

**WHEREAS**, based upon the above findings, the District's legal counsel advises, and the Board finds, that actions taken pursuant to this ordinance are categorically exempt from CEQA according to 14 California Code of Regulations 15301 and 15307.

**NOW, THEREFORE, BE IT RESOLVED AND DETERMINED THAT THE BOARD OF THE TRIUNFO SANITATION DISTRICT DOES ORDAIN AS FOLLOWS:**

**Section III. Declaration of Purpose and Intent**

This ordinance establishes permanent water conservation standards intended to insure water use efficiency for non-shortage conditions.

#### **Section IV. Definitions**

The following words and phrases whenever used in this ordinance shall have the meaning defined in this section:

1. "District" means the Triunfo Sanitation District/Oak Park Water Service.
2. "Person" means any natural person or persons, corporation, public or private entity, governmental agency or institution or any other user of water provided by the District.
3. "Potable Water" means water which is suitable for drinking.
4. "Recycled Water" means the reclamation and reuse of non-potable water for beneficial use.
5. "Customer side" means any component of the water conveyance system past the District's water meter.

#### **Section V. Application**

- a. The provisions of this ordinance apply to any person in the use of any potable water provided by the District.
- b. The provisions of this ordinance do not apply to the use of recycled water.
- c. This ordinance is intended solely to further the conservation of water. It is not intended to implement any provision of federal, state, or local statutes, ordinances, 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 state based ordinances and stormwater management plans.
- d. In addition to the provisions set forth in this ordinance, persons using potable and/or recycled water provided by the District may be subject to differing or more stringent limitations or requirements set forth in laws, statutes, rules, and regulations promulgated and enforced by other federal, state, and local agencies.

#### **Section VI: Water Conservation Requirements – Prohibition Against Waste**

The following water conservation requirements are effective at all times and shall be permanent. Violation of this section shall be considered waste and an unreasonable use of water.

- a. **Limits on Watering Hours:** Watering or irrigation of lawn, landscape or other vegetated area with potable water is prohibited between the hours of 9:00 a.m. and 5:00 p.m. on any day except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.
- b. **Limits on Watering Duration:** Limit irrigation system watering to no more than 15 minutes per day per station. This does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour and weather based controllers or stream rotor sprinklers that meet a 70% efficiency standard.
- c. **No Watering During Rain Events:** Irrigation is not permitted during periods of rain nor in the 24 hours following each rain event in the Oak Park area.

- d. **No Excessive Water Flow or Run-Off:** Watering or irrigation of any lawn, landscape or other vegetated area in a manner that causes or allows excessive water flow or run-off onto an adjoining sidewalk, driveway, street, alley, gutter or ditch must be must be repaired within 5 days of observation and/or notification by the District.
- e. **No Washing Down Hard or Paved Surfaces:** Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys is prohibited except when necessary to alleviate safety or sanitary hazards and only by use of a hand-held bucket or similar container, a low-volume high pressure cleaning machine equipped to recycle any water used or a low volume high pressure water broom.
- f. **Obligation to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within five (5) days of observation and/or notification by the District.
- g. **Re-Circulating Water Required for Water Fountains and Decorative Water Features:** Operating a water fountain or other decorative water feature that does not use re-circulating water is prohibited.
- h. **Limits on Washing Vehicles:** Using water to wash or clean a vehicle including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer whether motorized or not is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self closing water shut-off nozzle or device.
- i. **Drinking Water Served Upon Request Only:** Restaurants are prohibited from providing drinking water to any person unless expressly requested by that person.

## **Section VII. Hardship Waiver**

- a. **Undue and Disproportionate Hardship:** If, due to unique circumstances, a specific requirement of this ordinance would result in undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water users, then the person may apply for a waiver to the requirements as provided in this section.
- b. **Written Finding:** The waiver may be granted or conditionally granted only upon a written finding of the existence of facts demonstrating an undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to 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 waiver shall be on a form prescribed by the District and shall be at the discretion of the Board accompanied by a non-refundable processing fee in an amount set by resolution of the Board.
  2. **Supporting Documentation:** The application may be accompanied by photographs, maps, drawing and other information, including a written statement of the applicant.
  3. **Required Findings for Variance:** An application for a waiver shall be denied unless the appropriate authority finds, based in the information provided in the applications, 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 District or its Agent, all of the following:

- a. That the waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses;
  - b. That because of special circumstances applicable to the property or its use, the strict application of this ordinance would have a disproportionate impact on the property or use that exceeds the impacts to similarly situated residences and businesses;
  - c. That the authorizing of such waiver will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the District to effectuate the purpose of this ordinance and will not be detrimental to the public interest; and
  - d. That the condition or situation of the subject property or the intended use of the property for which the waiver is sought is not common or general in nature.
- c. **Approval Authority:** The District Manager (or designee) shall exercise approval authority and act upon any completed application no later than ten (10) days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver shall be promptly notified in writing of any action taken. Unless specified otherwise at the time a waiver is approved the waiver applies to the subject property during the term of the mandatory water supply shortage condition.
- d. **Appeals to the Board:** An applicant can appeal a decision or condition to the District Manager on a waiver application to the TSD Board 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 TSD Board shall act as the approval authority and review the appeal following the regular waiver procedure. The decision of the TSD Board is final.

### **Section XIII. Penalties and Violations**

- a. **Misdemeanor:** Any violation of District ordinances 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 one thousand dollars (\$1,000.00), or by both.
- b. **Civil Penalties:** Civil penalties for failure to comply with any provisions of the ordinance shall be as follows:
  - 1. **First Violation:** The District shall issue a written courtesy door hanger describing the violation and deliver a copy of this ordinance by mail.
  - 2. **Second Violation:** A second violation within the preceding twelve (12) calendar months is punishable by a fine not to exceed one hundred dollars (\$100.00).
  - 3. **Third Violation:** A third violation within the preceding twelve (12) calendar months is punishable by a fine not to exceed one hundred and fifty dollars (\$150.00).
  - 4. **Fourth Violation:** A fourth violation is punishable by a fine not to exceed two hundred dollars (\$200.00).
  - 5. **Fifth and Subsequent Violations:** A fifth and subsequent violation is punishable by a fine not to exceed two hundred and fifty dollars (\$250.00).
    - a. **Water Flow Restrictor:** In addition to any fines, the District may install a water flow restrictor device of approximately one gallon per minute capacity for services up to one and one-half inch size and competitively sized restrictors for larger services after written notice of intent to install a restrictor for a minimum of forty-eight (48) hours.

- b. **Termination of Service:** In addition to any fines and the installation of a water flow restrictor, the District may disconnect and/or terminate a customer's water service.
- c. **Cost of Flow Restrictor and Disconnecting Service:** A person or entity that violates this ordinance is responsible for payment of the District's charge for installing and/or removing any flow restricting device and for disconnecting and/or reconnecting service. The charge for installing and/or removing any flow restriction device must be paid before the device is removed. Nonpayment shall be subject to the same schedules as nonpayment of basic water charges.
- d. **Separate Offenses:** Once the District issues a violation for a particular offense, no further notice of violation will be issued for the same offense until such time as the penalty for the offense has been paid or the 10 day period to appeal has expired, whichever occurs first. If an appeal is timely filed after a violation is served, then no further notice of violation for the same offense will be issued until the appeal has been heard and a decision on that appeal rendered.
- e. **Notice of Hearing:**
  - 1. The District shall issue a Notice of Violation by mail or personal delivery at least ten (10) days before taking enforcement action and said notice shall describe the action to be taken. A customer may appeal the Notice of Violation by filing a written notice of appeal with the District no later than the close of business on the day before the date scheduled for enforcement action. Any Notice of Violation not timely appealed shall be final. Upon receipt of a timely appeal, a hearing on the appeal shall be scheduled in a timely manner, and the District shall mail written notice of the hearing to the customer at least ten (10) days before the date of the said hearing.
  - 2. Pending receipt of a written appeal or pending a hearing pursuant to an appeal, the District may take appropriate steps to prevent the unauthorized use of water as appropriate to the nature and extent of the violations and the current declared water Stage condition.

#### **Section IX. Severability**

If any section, subsection, sentence, clause or phrase in this ordinance or the application thereof to any person or circumstance is for any reason held invalid, the validity of the remainder of the ordinance or the application of such provision to other persons or circumstances shall be adopted thereby. The District hereby declares it would have passed this ordinance and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses, or phrases or the application thereof to any person or circumstance be held invalid.

#### **Section X. Effective Date**

This Ordinance is effective upon adoption.

**PASSED, APPROVED AND ADOPTED** this 30<sup>th</sup> day of September 2009.

**AYES:**            **Gillette, Glancy, Orkney, Parks, and Paule**

**NOES:**            **None**

**ABSENT:**        **None**

**(signed)**  
\_\_\_\_\_   
Janna Orkney, Chair

**(signed)**  
\_\_\_\_\_   
Rhonda Catron, Clerk of the Board

(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.

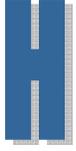
10812. "Agricultural water supplier" has the same meaning as defined in Section 10608.12.

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.



## TSD BMP REPORTS

---

The fields in red are required.



Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

[Link to FAQs](#)

[See the complete MOU:](#) [View MOU](#)

[See the coverage requirements for this BMP:](#)

# 2009

## BMP 1.1 Operations Practices

Comments:

### Conservation Coordinator

Conservation Coordinator    Yes    No

### Contact Information

First Name

Last Name

Title

Phone

Email

Note that the contact information may be the same as the primary contact information at the top of the page. If this is your case, excuse the inconvenience but please enter the information again.

### Water Waste Prevention

Water Agency shall do one or more of the following:

- a. Enact and enforce an ordinance or establish terms of service that prohibit water waste
- b. Enact and enforce an ordinance or establish terms of service for water efficient design in new development
- c. Support legislation or regulations that prohibit water waste
- d. Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures
- e. Support local ordinances that prohibit water waste
- f. Support local ordinances that establish permits requirements for water efficient design in new

To document this BMP, provide the following:

- a. A description of, or electronic link to, any ordinances or terms of service
- b. A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
- c. A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
- d. description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description.

File name(s): Email files to [natalie@cuwcc.org](mailto:natalie@cuwcc.org)

Web address(s) URL: comma-separated list

Enter a description:

The fields in red are required.



Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

[Link to FAQs](#)

[See the complete MOU:](#) [View MOU](#)

[See the coverage requirements for this BMP:](#)

# 2010

## BMP 1.1 Operations Practices

Comments:

### Conservation Coordinator

Conservation Coordinator    Yes    No

### Contact Information

First Name

Last Name

Title

Phone

Email

Note that the contact information may be the same as the primary contact information at the top of the page. If this is your case, excuse the inconvenience but please enter the information again.

### Water Waste Prevention

Water Agency shall do one or more of the following:

- a. Enact and enforce an ordinance or establish terms of service that prohibit water waste
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- d. Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures
- e. Support local ordinances that prohibit water waste
- f. Support local ordinances that establish permits requirements for water efficient design in new

To document this BMP, provide the following:

- a. A description of, or electronic link to, any ordinances or terms of service
- b. A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
- c. A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
- d. description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description.

File name(s): Email files to [natalie@cuwcc.org](mailto:natalie@cuwcc.org)

Web address(s) URL: comma-separated list

Enter a description:

**Final Annual Water Supply Allocation Target Report**  
**Oak Park Water Service**  
 Fiscal Year 2010

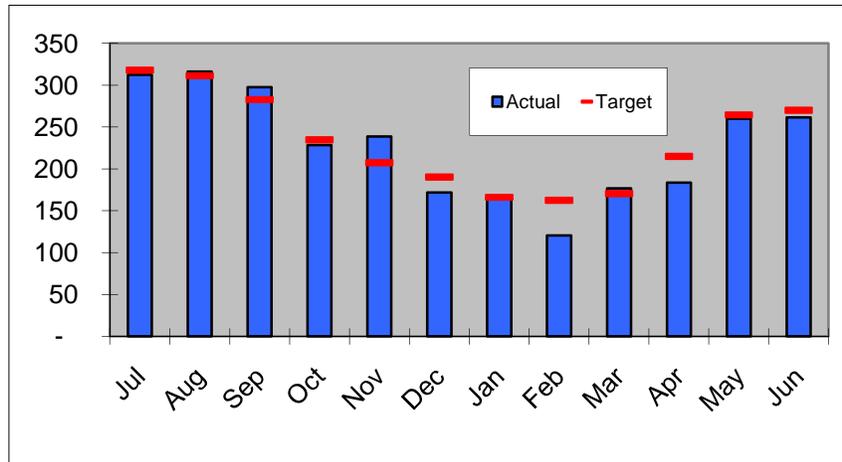
**Summary Through the Month of June**

Total Water Supply Target <sup>1</sup>	2,793
Purchases from CMWD	<u>2,732</u>
Groundwater Production	0
Total Deliveries	<u>2,732</u>
Under (Over) Target	61
Percentage Under (Over) Target	2.2%

<sup>1</sup> ***Please note that the annual allocation has been adjusted to reflect actual FY 2010 groundwater production .***  
*Total Water Supply Target is the sum of actual groundwater production and the allocation for purchases from CMWD based on that production.*

**Comparison of Targets and Actual Purchases From CMWD**

	<u>Actual</u>	<u>Target</u>
Jul	312	318
Aug	316	311
Sep	298	283
Oct	229	235
Nov	239	207
Dec	172	190
Jan	164	166
Feb	121	163
Mar	177	171
Apr	184	215
May	260	265
Jun	262	270
	<u>2,732</u>	<u>2,793</u>





**TRIUNFO  
SANITATION  
DISTRICT**

A PUBLIC AGENCY

## **Oak Park Water Conservation Measures**

**Following are the basic, permanent, community-wide water conservation and water waste reduction measures set forth in the Triunfo Sanitation District/Oak Park Water Service Water Waste Prevention Ordinance (No. TSD-66):**

- **Limits on Watering Hours:** Watering or irrigation of lawn, landscape or other vegetated area with potable water is prohibited between the hours of 9:00 a.m. and 5:00 p.m. on any day except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.
- **Limits on Watering Duration:** Limit irrigation system watering to no more than 15 minutes per day per station. This does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour and weather-based controllers or stream-rotor sprinklers that meet a 70% efficiency standard.
- **No Watering During Rain Events:** Irrigation is not permitted during periods of rain nor in the 24 hours following each rain event in the Oak Park area.
- **No Excessive Water Flow or Run-Off:** Watering or irrigation of any lawn, landscape or other vegetated area in a manner that causes or allows excessive water flow or run-off onto an adjoining sidewalk, driveway, street, alley, gutter or ditch must be repaired within 5 days of observation and/or notification by the District.
- **No Washing Down Hard or Paved Surfaces:** Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios, or alleys is prohibited except when necessary to alleviate safety or sanitary hazards and only by use of a hand-held bucket or similar container, a low-volume, high-pressure cleaning machine equipped to recycle any water used or a low-volume, high-pressure water broom.
- **Obligation to Fix Leaks, Breaks, or Malfunctions:** All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within 5 days of observation and/or notification by the District.
- **Re-Circulating Water Required for Water Fountains and Decorative Water Features:** Operating a water fountain or other decorative water feature that does not use re-circulating water is prohibited.
- **Limits on Washing Vehicles:** Using water to wash or clean a vehicle including but not limited to any automobile, truck, van, bus, motorcycle, boat, or trailer whether motorized or not is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device.
- **Drinking Water Served Upon Request Only:** Restaurants are prohibited from providing drinking water to any person unless expressly requested by that person.

The fields in red are required.



Agency name:  
Reporting unit name  
(District name)  
Reporting unit number:

Primary contact:  
First name:  
Last name:  
Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

[Link to FAQs](#)

[View MOU](#)



# 2009 BMP 1.2 Water Loss Control

Did your agency complete a pre-screening system audit in 2009? **Yes** **No**

If yes, answer the following:

Determine metered sales in AF:

Definition: other accountable uses not included in metered sales, such as unbilled water use, fire suppression, etc.



Determine system verifiable uses AF:

Determine total supply into the system in AF:

Does your agency keep necessary data on file to verify the answers above? **Yes** **No**

Did your agency complete a full-scale system water audit during 2009? **Yes** **No**

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? **Yes** **No**

Did your agency operate a system leak detection program? **Yes** **No**

Comments:

The fields in red are required.



Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

[Link to FAQs](#)

# 2010 BMP 1.2 Water Loss Control

[View MOU](#)



## AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software Yes No  
Email to natalie@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Water Audit Validity Score from AWWA spreadsheet



Agency Completed Training In The AWWA Water Audit Method Yes No   
Agency Completed Training In The Component Analysis Process Yes No

Completed/Updated the Component Analysis (at least every 4 years)? Yes No   
Component Analysis Completed/Updated Date

## Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective Yes No

## Recording Keeping Requirements:

Date/Time Leak Reported	Leak Location
Type of Leaking Pipe Segment or Fitting	Leak Running Time From Report to Repair
Leak Volume Estimate	Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective Yes No  
Type of Program Activities Used to Detect Unreported Leaks

## Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leaks Repaired	Economic Value Of Real Loss	Economic Value Of AppUFYbhLoss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)

Comments:

AWWA WLCC Free Water Audit Software: Reporting Worksheet

Copyright © 2010, American Water Works Association. All Rights Reserved.

WAS v4.2

[Back to Instructions](#)

[?](#) Click to access definition

Water Audit Report for: **Triunfo Sanitation District**  
 Reporting Year: **FY 2010** 7/2009 - 6/2010

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 (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

All volumes to be entered as: ACRE-FEET PER YEAR

**WATER SUPPLIED**

<< Enter grading in column 'E'

Volume from own sources:	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	acre-ft/yr
Master meter error adjustment (enter positive value):	<input type="text" value="7"/>	<input type="text" value="5.000"/>	under-registered acre-ft/yr
Water imported:	<input type="text" value="10"/>	<input type="text" value="2,732.000"/>	acre-ft/yr
Water exported:	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	acre-ft/yr
<b>WATER SUPPLIED:</b>		<b><input type="text" value="2,737.000"/></b>	acre-ft/yr

**AUTHORIZED CONSUMPTION**

Billed metered:	<input type="text" value="7"/>	<input type="text" value="2,461.000"/>	acre-ft/yr
Billed unmetered:	<input type="text" value="n/a"/>	<input type="text" value="0.000"/>	acre-ft/yr
Unbilled metered:	<input type="text" value="9"/>	<input type="text" value="4.400"/>	acre-ft/yr
Unbilled unmetered:	<input type="text" value="7"/>	<input type="text" value="34.213"/>	acre-ft/yr
Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed			
<b>AUTHORIZED CONSUMPTION:</b>		<b><input type="text" value="2,499.613"/></b>	acre-ft/yr

Click here:  for help using option buttons below

Pcnt:  Value:

Use buttons to select percentage of water supplied OR value

**WATER LOSSES (Water Supplied - Authorized Consumption)**

acre-ft/yr

**Apparent Losses**

Unauthorized consumption:	<input type="text" value="7"/>	<input type="text" value="6.843"/>	acre-ft/yr
Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed			
Customer metering inaccuracies:	<input type="text" value="7"/>	<input type="text" value="24.903"/>	acre-ft/yr
Systematic data handling errors:	<input type="text" value="5"/>	<input type="text" value="2.000"/>	acre-ft/yr
Apparent Losses:		<input type="text" value="33.746"/>	

Pcnt:  Value:

Choose this option to enter a percentage of billed metered consumption. This is NOT a default value

**Real Losses (Current Annual Real Losses or CARL)**

Real Losses = Water Losses - Apparent Losses:	<input type="text" value="7"/>	<input type="text" value="203.642"/>	acre-ft/yr
<b>WATER LOSSES:</b>		<b><input type="text" value="237.388"/></b>	acre-ft/yr

**NON-REVENUE WATER**

NON-REVENUE WATER:   acre-ft/yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

**SYSTEM DATA**

Length of mains:	<input type="text" value="5"/>	<input type="text" value="46.0"/>	miles
Number of active AND inactive service connections:	<input type="text" value="7"/>	<input type="text" value="4,610"/>	
Connection density:		<input type="text" value="100"/>	conn./mile main
Average length of customer service line:	<input type="text" value="5"/>	<input type="text" value="28.0"/>	ft (pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	<input type="text" value="7"/>	<input type="text" value="80.0"/>	psi

**COST DATA**

Total annual cost of operating water system:	<input type="text" value="9"/>	<input type="text" value="\$4,396,418"/>	\$/Year
Customer retail unit cost (applied to Apparent Losses):	<input type="text" value="7"/>	<input type="text" value="\$2.95"/>	\$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	<input type="text" value="10"/>	<input type="text" value="\$938.00"/>	\$/acre-ft

**PERFORMANCE INDICATORS**

**Financial Indicators**

Non-revenue water as percent by volume of Water Supplied:	<input type="text" value="10.1%"/>
Non-revenue water as percent by cost of operating system:	<input type="text" value="6.2%"/>
Annual cost of Apparent Losses:	<input type="text" value="\$43,364"/>
Annual cost of Real Losses:	<input type="text" value="\$191,016"/>

**Operational Efficiency Indicators**

Apparent Losses per service connection per day:	<input type="text" value="6.53"/>	gallons/connection/day
Real Losses per service connection per day*:	<input type="text" value="39.44"/>	gallons/connection/day
Real Losses per length of main per day*:	<input type="text" value="N/A"/>	
Real Losses per service connection per day per psi pressure:	<input type="text" value="0.49"/>	gallons/connection/day/psi
<input type="text" value="7"/> Unavoidable Annual Real Losses (UARL):	<input type="text" value="100.70"/>	acre-feet/year
From Above, Real Losses = Current Annual Real Losses (CARL):	<input type="text" value="203.64"/>	acre-feet/year
<input type="text" value="7"/> Infrastructure Leakage Index (ILI) [CARL/UARL]:	<input type="text" value="2.02"/>	

\* only the most applicable of these two indicators will be calculated

**WATER AUDIT DATA VALIDITY SCORE:**

**\*\*\* YOUR SCORE IS: 79 out of 100 \*\*\***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

**PRIORITY AREAS FOR ATTENTION:**

Based on the information provided, audit accuracy can be improved by addressing the following components:

- 1: Master meter error adjustment
- 2: Billed metered
- 3: Unauthorized consumption

[For more information, click here to see the Grading Matrix worksheet](#)

The fields in red are required.

Agency name:  
Reporting unit name  
(District name)  
Reporting unit number:

Primary contact:  
First name:  
Last name:  
Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



# BMP 1.3 Metering with Commodity

[Link to FAQs](#)

See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP:

## Implementation

- Does your agency have any unmetered service connections? Yes No
- If YES, has your agency completed a meter retrofit plan? Yes No
- Enter the number of previously unmetered accounts fitted with meters during reporting year:
- Are all new service connections being metered? Yes No
- Are all new service connections being billed volumetrically? Yes No
- Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes No

### Please Fill Out The Following Matrix

Account Type	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume	Billed by	Billing Frequency Per Year	# of estimated bills/yr
--------------	--------------------	-------------------------	-------------------------------------	-----------	----------------------------	-------------------------

Number of CII Accounts with Mixed-use Meters

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period

## Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? Yes No

### If YES, please fill in the following information:

- A. When was the Feasibility Study conducted
- B. Email or provide a link to the feasibility study (or description of):

**File name(s): Email files to natalie@cuwcc.org**

**Web address(s) URL: comma-separated list**

## General Comments about BMP 1.3:

The fields in red are required.

Agency name:  
Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



# BMP 1.3 Metering with Commodity 2010

[Link to FAQs](#)

See the complete MOU: [View MOU](#)

See the coverage requirements for this BMP:

## Implementation

Does your agency have any unmetered service connections? Yes No

If YES, has your agency completed a meter retrofit plan? Yes No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered? Yes No

Are all new service connections being billed volumetrically? Yes No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes No

### Please Fill Out The Following Matrix

Account Type	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume	Billing Frequency Per Year	# of estimated bills/yr
--------------	--------------------	-------------------------	-------------------------------------	----------------------------	-------------------------

Number of CII Accounts with Mixed-use Meters

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period

## Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? Yes No

### If YES, please fill in the following information:

A. When was the Feasibility Study conducted

B. Describe, upload or provide an electronic link to the Feasibility Study Upload File

**File name(s): Email files to [natalie@cuwcc.org](mailto:natalie@cuwcc.org)**

**Web address(s) URL: comma-separated list**

Comments:

The fields in red are required.

Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



2009

## BMP 1.4 Retail Conservation Pricing

[Link to FAQs](#)

[View MOU](#)

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to [natalie@cuwcc.org](mailto:natalie@cuwcc.org).

### Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)

### Implementation Option (Conservation Pricing Option)

Use Annual Revenue As Reported  
Use Canadian Water & Wastewater Association Rate Design Model

**If CWWA is select, enter the file name and email the spreadsheet to [natalie@cuwcc.org](mailto:natalie@cuwcc.org)**

### Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service Yes No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)

Comments:

The fields in red are required.

Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.



2010

## BMP 1.4 Retail Conservation Pricing

[Link to FAQs](#)

[View MOU](#)

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to [natalie@cuwcc.org](mailto:natalie@cuwcc.org).

### Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)

### Implementation Option (Conservation Pricing Option)

Use Annual Revenue As Reported  
Use Canadian Water & Wastewater Association Rate Design Model

**If CWWA is select, enter the file name and email the spreadsheet to [natalie@cuwcc.org](mailto:natalie@cuwcc.org)**

### Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service  Yes  No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)

Comments:

The fields in red are required.

Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.



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# 2009

## BMP 2.1 Public Outreach - Retail Reporting

### Is a Wholesale Agency Performing Public Outreach?

Are there one or more wholesale agencies performing public outreach which can be counted to help your agency comply with the BMP?

Yes No

Enter the name(s) of the wholesale agency (comma delimited)

### Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

#### Public Information Programs List

Did at least one contact take place during each quarter of the reporting year?

Number of Public Contacts	Public Information Programs

### Contact with the Media

Are there one or more wholesale agencies performing media outreach which can be counted to help your agency comply with the BMP?

Yes No

Enter the name(s) of the wholesale agency (comma delimited)

### OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year?

#### Media Contacts List

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types

### Is a Wholesale Agency Performing Website Updates?

Did one or more CUWCC wholesale agencies agree to assume your agency's responsibility for meeting the requirements of and for CUWCC reporting of this BMP?

Yes No

**Enter the name(s) of the wholesale agency (comma delimited)**

### Is Your Agency Performing Website Updates?

Enter your agency's URL (website address):

Describe a minimum of four water conservation related updates to your agency's website that took place during the year:

Did at least one Website Update take place during each quarter of the reporting year?

Yes No

### Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or break the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount		Personnel Costs Included? <i>If yes, check the box.</i>	Comments	

**Comments:**

The fields in red are required.



Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

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[Link to FAQs](#)

# 2009

## BMP 2.1 Public Outreach Cont'd

[View MOU](#)

### Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to 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.

Expense Category	Expense Amount	Personnel Costs Included?	
If yes, check the check box.			

### Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes No

### Public Outreach Additional Information

Public Information Programs	Importance	

### Social Marketing Programs

#### Branding

Does your agency have a water conservation "brand," "theme" or mascot? Yes No

Describe the brand, theme or mascot.

#### Market Research

Have you sponsored or participated in market research to refine your message? Yes No

Market Research Topic

Brand Message

Brand Mission Statement

### Community Committees

Do you have a community conservation committee? Yes No

Enter the names of the community committees:

### Training

Training Type	# of Trainings	# of Attendees	Description of Other	

### Social Marketing Expenditures

#### Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description	

### Partnering Programs - Partners

Name Type of Program

CLCA?

Green Building Programs?

Master Gardeners?

Cooperative Extension?

Local Colleges?

Other

Retail and wholesale outlet; name(s) and type(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

**Landscape contests or awards**

Describe water wise landscape contest or awards program conducted by your agency

Comments:

The fields in red are required.



Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

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[Link to FAQs](#)

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# 2010

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Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

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Did at least one contact take place during each quarter of the reporting year?

Number of Public Contacts	Public Information Programs

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Are there one or more wholesale agencies performing media outreach which can be counted to help your agency comply with the BMP?

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### OR Retail Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year?

#### Media Contacts List

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types

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Describe a minimum of four water conservation related updates to your agency's website that took place during the year:

Did at least one Website Update take place during each quarter of the reporting year?

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### Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or break the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount		Personnel Costs Included? If yes, check the box.	Comments	

**Comments:**

The fields in red are required.



Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

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[Link to FAQs](#)

# 2010

## BMP 2.1 Public Outreach Cont'd

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### Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to 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.

Expense Category	Expense Amount	Personnel Costs Included?	
If yes, check the check box.			

### Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? Yes No

### Public Outreach Additional Information

Public Information Programs	Importance	

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Does your agency have a water conservation "brand," "theme" or mascot? Yes No

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### Social Marketing Expenditures

#### Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description	

### Partnering Programs - Partners

Name Type of Program

CLCA?

Green Building Programs?

Master Gardeners?

Cooperative Extension?

Local Colleges?

Other

Retail and wholesale outlet; name(s) and type(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

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Describe water conservation gardens at your agency or other high traffic areas or new

**Landscape contests or awards**

Describe water wise landscape contest or awards program conducted by your agency

Comments:

The fields in red are required.



Agency name:

Reporting unit name  
(District name)

Reporting unit number:

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[Link to FAQs](#)

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# 2009

## BMP 2.2 School Education Programs, Retail Agencies

### School Programs

Is a wholesale agency implementing school programs which can be counted to help your agency comply with this BMP?

Yes No

Enter retailer names, separated by commas:

Materials meet state education framework requirements?

Description of Materials

Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students

Number of students reached

Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students

Number of Distribution

Annual budget for school education program

Description of all other water supplier education programs

### School Program Activities

**Classroom presentations:**

Number of presentations

Number of attendees

**Large group assemblies:**

Number of presentations

Number of attendees

**Children's water festivals or other events:**

Number of presentations

Number of attendees

**Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:**

Number of presentations

Number of attendees

**Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):**

Description

Number distributed

**Staffing children's booths at events & festivals:**

Number of booths

Number of attendees

**Water conservation contests such as poster and photo:**

Description

Number distributed

**Offer monetary awards/funding or scholarships to students:**

Number Offered

Total Funding

**Teacher training workshops:**

Number of presentations

Number of attendees

**Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:**

Number of tours or field trips

Number of participants

**College internships in water conservation offered:**

Number of internships

Total funding

**Career fairs/workshops:**

Number of presentations

Number of attendees

**Additional program(s) supported by agency but not mentioned above:**

Description

Number of events (if applicable)

Number of participants

**Total reporting period budget expenditures for school education programs (include all agency costs):**

Comments

The fields in red are required.



Agency name:

Reporting unit name  
(District name)

Reporting unit number:

Primary contact:

First name:

Last name:

Email:

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

[Link to FAQs](#)

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# 2010

## BMP 2.2 School Education Programs, Retail Agencies

### School Programs

Is a wholesale agency implementing school programs which can be counted to help your agency comply with this BMP?

Yes No

Enter Wholesaler Names, separated by commas:

Materials meet state education framework requirements?

Description of Materials

Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students

Number of students reached

Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students

Number of Distribution

Annual budget for school education program

Description of all other water supplier education programs

### School Program Activities

**Classroom presentations:**

Number of presentations

Number of attendees

**Large group assemblies:**

Number of presentations

Number of attendees

**Children's water festivals or other events:**

Number of presentations

Number of attendees

**Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:**

Number of presentations

Number of attendees

**Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):**

Description

Number distributed

**Staffing children's booths at events & festivals:**

Number of booths

Number of attendees

**Water conservation contests such as poster and photo:**

Description

Number distributed

**Offer monetary awards/funding or scholarships to students:**

Number Offered

Total Funding

**Teacher training workshops:**

Number of presentations

Number of attendees

**Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:**

Number of tours or field trips

Number of participants

**College internships in water conservation offered:**

Number of internships

Total funding

**Career fairs/workshops:**

Number of presentations

Number of attendees

**Additional program(s) supported by agency but not mentioned above:**

Description

Number of events (if applicable)

Number of participants

**Total reporting period budget expenditures for school education programs (include all agency costs):**

Comments

The fields in red are required.

Agency name:

Primary contact:

First name:

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Reporting unit name  
(District name)

Last name:

Reporting unit number:

Email:



# Base Year Data

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## Reporting Unit **Base Year**

What is your reporting period?

Base Year

### **BMP 1.3 Metering**

Number of unmetered accounts in Base Year

### **BMP 3.1 & BMP 3.2 & BMP 3.3 Residential Programs**

Number of Single Family Customers in Base Year

Number of Multi Family Units in Base Year

### **BMP 3.4 WaterSense Specification (WSS) Toilets**

Number of Single Family Housing Units constructed prior to 1992

Number of Multi Family Units prior to 1992

Average number of toilets per single family household

Average number of toilets per multi family household

Five year average resale rate of single family households

Five-year average resale rate of multi family households

Average number of persons per single family household

Average number of persons per multi family household

### **BMP 4.0 & BMP 5.0 CII & Landscape**

Total water use (in Acre Feet) by CII accounts

Number of accounts with dedicated irrigation meters

Number of CII accounts without meters or with Mixed Use Meters

Number of CII accounts

Comments:



## COMPLETED DWR CHECKLIST

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## TRIUNFO SANITATION DISTRICT / OAK PARK WATER SERVICE

### Urban Water Management Plan Checklist, Organized by Subject

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
PLAN PREPARATION				
4	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.	10620(d)(2)		Chapter 1, Section 1.4 - Coordination
6	Notify, at least 60 days prior to the public hearing on the plan required by Section 10642, 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. Any city or county receiving the notice may be consulted and provide comments.	10621(b)		Chapter 1, Section 1.4 - Coordination
7	Provide supporting documentation that the UWMP or any amendments to, or changes in, have been adopted as described in Section 10640 et seq.	10621(c)		Chapter 1, Section 1.5 - Plan Adoption, Submittal, and Implementation
54	Provide supporting documentation that the urban water management 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 this urban water management plan.	10635(b)		Chapter 1, Section 1.5 - Plan Adoption, Submittal, and Implementation
55	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.	10642		Chapter 1, Section 1.4 - Coordination
56	Provide supporting documentation that the urban water supplier made the plan available for public inspection and held a public hearing about the plan. For public agencies, the hearing notice is to be provided pursuant to Section 6066 of the Government Code. The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water. Privately-owned water suppliers shall provide an equivalent notice within its service area.	10642		Chapter 1, Section 1.4 - Coordination

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
57	Provide supporting documentation that the plan has been adopted as prepared or modified.	10642		Chapter 1, Section 1.5 - Plan Adoption, Submittal, and Implementation
58	Provide supporting documentation as to how the water supplier plans to implement its plan.	10643		Appendix B Chapter 1, Section 1.5 - Plan Adoption, Submittal, and Implementation
59	Provide supporting documentation that, in addition to submittal to DWR, the urban water supplier has submitted this UWMP to 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. This also includes amendments or changes.	10644(a)		Chapter 1, Section 1.5 - Plan Adoption, Submittal, and Implementation
60	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the urban water supplier has or will make the plan available for public review during normal business hours	10645		Chapter 1, Section 1.5 - Plan Adoption, Submittal, and Implementation
<b>SYSTEM DESCRIPTION</b>				
8	Describe the water supplier service area.	10631(a)		Chapter 2, Section 2.1 - Service Area Physical Description
9	Describe the climate and other demographic factors of the service area of the supplier	10631(a)		Chapter 2, Section 2.2 - Service Area Climate
10	Indicate the current population of the service area	10631(a)	Provide the most recent population data possible. Use the method described in "Baseline Daily Per Capita Water Use." See Section M.	Chapter 2, Section 2.3 - Service Area Population

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
11	Provide population projections for 2015, 2020, 2025, and 2030, based on data from State, regional, or local service area population projections.	10631(a)	2035 and 2040 can also be provided to support consistency with Water Supply Assessments and Written Verification of Water Supply documents.	Chapter 2, Section 2.3 - Service Area Population
12	Describe other demographic factors affecting the supplier's water management planning.	10631(a)		Chapter 2, Section 2.4 - Other Demographic Factors
SYSTEM DEMANDS				
1	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.	10608.20(e)		Chapter 3, Section 3.1 - Water Conservation Bill of 2009 Baselines and Targets
2	<i>Wholesalers:</i> Include an assessment of present and proposed future measures, programs, and policies to help achieve the water use reductions. <i>Retailers:</i> Conduct at least one public hearing that includes general discussion of the urban retail water supplier's implementation plan for complying with the Water Conservation Bill of 2009.	10608.36 10608.26(a)	Retailers and wholesalers have slightly different requirements	Chapter 3, Section 3.4 - Water Use Reduction Plan
3	Report progress in meeting urban water use targets using the standardized form.	10608.40		Chapter 3, Section 3.1 - Water Conservation Bill of 2009 Baselines and Targets
25	Quantify past, current, and projected water use, identifying the uses among water use sectors, for the following: (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, conjunctive use, and (I) agriculture.	10631(e)(1)	Consider 'past' to be 2005, present to be 2010, and projected to be 2015, 2020, 2025, and 2030. Provide numbers for each category for each of these years.	Chapter 3, Section 3.2 - Water Demands

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
33	Provide documentation that either the retail agency provided the wholesale agency with water use projections for at least 20 years, if the UWMP agency is a retail agency, OR, if a wholesale agency, it provided its urban retail customers with future planned and existing water source available to it from the wholesale agency during the required water-year types	10631(k)	Average year, single dry year, multiple dry years for 2015, 2020, 2025, and 2030.	Chapter 3, Section 3.3 - Water Demand Projections
34	Include projected water use for single-family and multifamily residential housing needed for lower income households, as identified in the housing element of any city, county, or city and county in the service area of the supplier.	10631.1(a)		Chapter 3, Section 3.2.6 - Lower Income Housing Projections
<b>SYSTEM SUPPLIES</b>				
13	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, and 2030.	10631(b)	The 'existing' water sources should be for the same year as the "current population" in line 10. 2035 and 2040 can also be provided.	Chapter 4, Section 4.1 - Water Sources
14	Indicate whether groundwater is an existing or planned source of water available to the supplier. If yes, then complete 15 through 21 of the UWMP Checklist. If no, then indicate "not applicable" in lines 15 through 21 under the UWMP location column.	10631(b)	Source classifications are: surface water, groundwater, recycled water, storm water, desalinated sea water, desalinated brackish groundwater, and other.	Chapter 4, Section 4.2 - Groundwater
15	Indicate whether a groundwater management plan 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.	10631(b)(1)		Chapter 4, Section 4.2 - Groundwater
16	Describe the groundwater basin.	10631(b)(2)		Chapter 4, Section 4.2 - Groundwater
17	Indicate whether the groundwater basin is adjudicated? Include a copy of the court order or decree.	10631(b)(2)		Chapter 4, Section 4.2 - Groundwater

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
18	Describe the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. If the basin is not adjudicated, indicate "not applicable" in the UWMP location column.	10631(b)(2)		Not Applicable
19	For groundwater basins that are not adjudicated, provide information as to whether DWR 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. If the basin is adjudicated, indicate "not applicable" in the UWMP location column.	10631(b)(2)		Chapter 4, Section 4.2 - Groundwater
20	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	10631(b)(3)		Chapter 4, Section 4.2 - Groundwater
21	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	10631(b)(4)	Provide projections for 2015, 2020, 2025, and 2030.	Chapter 4, Section 4.2 - Groundwater
24	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	10631(d)		Chapter 4, Section 4.3 - Transfer Opportunities
30	Include a detailed description of all 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, excluding demand management programs addressed in (f)(1). Include specific projects, describe water supply impacts, and provide a timeline for each project.	10631(h)		Chapter 4, Section 4.6 - Future Water Projects
31	Describe desalinated water project opportunities for long-term supply, including, but not limited to, ocean water, brackish water, and groundwater.	10631(i)		Chapter 4, Section 4.4 - Desalinated Water Opportunities
44	Provide information on recycled water and its potential for use as a water source in the service area of the urban water supplier. Coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	10633		Chapter 4, Section 4.5 - Recycled Water Opportunities

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
45	Describe 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.	10633(a)		Chapter 4, Section 4.5 - Recycled Water Opportunities
46	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.	10633(b)		Chapter 4, Section 4.5 - Recycled Water Opportunities
47	Describe the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.	10633(c)		Chapter 4, Section 4.5 - Recycled Water Opportunities
48	Describe and quantify 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.	10633(d)		Chapter 4, Section 4.5 - Recycled Water Opportunities
49	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.	10633(e)		Chapter 4, Section 4.5 - Recycled Water Opportunities
50	Describe the 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.	10633(f)		Chapter 4, Section 4.5 - Recycled Water Opportunities
51	Provide 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.	10633(g)		Chapter 4, Section 4.5 - Recycled Water Opportunities
<b>WATER SHORTAGE RELIABILITY AND WATER SHORTAGE CONTINGENCY PLANNING <sup>b</sup></b>				
5	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	10620(f)		Chapter 5, Section 5.1 - Water Supply Reliability

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
22	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage and provide data for (A) an average water year, (B) a single dry water year, and (C) multiple dry water years.	10631(c)(1)		Chapter 5, Section 5.4 - Drought Planning
23	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.	10631(c)(2)		Chapter 5, Section 5.1 - Water Supply Reliability
35	Provide an urban water shortage contingency analysis that specifies stages of action, including up to a 50-percent water supply reduction, and an outline of specific water supply conditions at each stage	10632(a)		Chapter 5, Section 5.4 - Drought Planning
36	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's water supply.	10632(b)		Chapter 5, Section 5.4 - Drought Planning
37	Identify 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.	10632(c)		Chapter 5, Section 5.2 - Water Shortage Contingency Planning
38	Identify 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.	10632(d)		Chapter 5, Section 5.2 - Water Shortage Contingency Planning
39	Specify 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.	10632(e)		Chapter 5, Section 5.2 - Water Shortage Contingency Planning
40	Indicated penalties or charges for excessive use, where applicable.	10632(f)		Chapter 5, Section 5.2 - Water Shortage Contingency Planning

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
41	Provide an analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), 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.	10632(g)		Chapter 5, Section 5.2 - Water Shortage Contingency Planning
42	Provide a draft water shortage contingency resolution or ordinance.	10632(h)		Chapter 5, Section 5.2 - Water Shortage Contingency Planning  Appendix E
43	Indicate a mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.	10632(i)		Chapter 5, Section 5.4 - Drought Planning
52	Provide information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments, and the manner in which water quality affects water management strategies and supply reliability	10634	For years 2010, 2015, 2020, 2025, and 2030	Chapter 5, Section 5.3 - Water Quality
53	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, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. Base the assessment on the information compiled under Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.	10635(a)		Chapter 5, Section 5.4 - Drought Planning
<b>DEMAND MANAGEMENT MEASURES</b>				
26	Describe how each water demand management measures is being implemented or scheduled for implementation. Use the list provided.	10631(f)(1)	Discuss each DMM, even if it is not currently or planned for implementation. Provide any appropriate schedules.	Chapter 6, Section 6.1 - Demand Management Measurement Implementation

No.	UWMP Requirement <sup>a</sup>	California Water Code Reference	Additional Clarification	UWMP Location
27	Describe the methods the supplier uses to evaluate the effectiveness of DMMs implemented or described in the UWMP.	10631(f)(3)		Chapter 6 Appendix G
28	Provide 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 ability to further reduce demand.	10631(f)(4)		Chapter 6 Appendix G
29	Evaluate each water demand management measure that is not currently being implemented or scheduled for implementation. The evaluation should include economic and non-economic factors, cost-benefit analysis, available funding, and the water suppliers' legal authority to implement the work.	10631(g)	See 10631(g) for additional wording.	Chapter 6, Section 6.1 - Demand Management Measure Implementation
32	Include the annual reports submitted to meet the Section 6.2 requirements, if a member of the CUWCC and signer of the December 10, 2008 MOU.	10631(j)	Signers of the MOU that submit the annual reports are deemed compliant with Items 28 and 29.	Appendix G

<sup>a</sup> The UWMP Requirement descriptions are general summaries of what is provided in the legislation. Urban water suppliers should review the exact legislative wording prior to submitting its UWMP.

<sup>b</sup> The Subject classification is provided for clarification only. It is aligned with the organization presented in Part I of this guidebook. A water supplier is free to address the UWMP Requirement anywhere with its UWMP, but is urged to provide clarification to DWR to facilitate review.