COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 28, 2011

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

9 June 28, 2011

SACHI A. HAMAI
EXECUTIVE OFFICER

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

PUBLIC HEARING FOR THE 2010 URBAN WATER MANAGEMENT PLAN FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU, AND THE MARINA DEL REY WATER SYSTEM, AND THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY (SUPERVISORIAL DISTRICTS 3, 4, AND 5) (3 VOTES)

SUBJECT

This action is to adopt the 2010 Urban Water Management Plan for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System, and the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley for the Los Angeles County Waterworks District No. 40, Antelope Valley.

IT IS RECOMMENDED THAT YOUR BOARD AFTER THE PUBLIC HEARING, AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU, AND THE MARINA DEL REY WATER SYSTEM, AND THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY:

1. Adopt the resolution approving the 2010 Urban Water Management Plan for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System.

2. Adopt the resolution approving the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley for the Los Angeles County Waterworks District No. 40, Antelope Valley.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to adopt the 2010 Urban Water Management Plan for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System, and the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley for the Los Angeles County Waterworks District No. 40, Antelope Valley (collectively "2010 Urban Water Management Plans"), as required by the State Urban Water Management Planning Act.

Implementation of Strategic Plan Goals

The Countywide Strategic Plan directs the provision of Operational Effectiveness (Goal 1) and Community and Municipal Services (Goal 3) by supporting long-term resource planning and to ensure adequate water supplies are available to meet existing and future customer water demands in order to preserve the quality of life for the County of Los Angeles residents. The 2010 Urban Water Management Plans will implement customer feedback to meet the requirements of the Urban Water Management Planning Act and better serve our customers' needs.

FISCAL IMPACT/FINANCING

There will be no impact to the County General Fund.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The Act (California Water Code §10610 through 10657) requires every water supplier with more than 3,000 service connections, or supplying more than 3,000 acre-feet of water annually, to prepare and adopt an Urban Water Management Plan every five years. The Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System have approximately 7,800 service connections; and the Los Angeles County Waterworks District No. 40, Antelope Valley, has approximately 55,000 service connections. A six-month extension was granted by the legislature for submittals of the 2010 Urban Water Management Plans to provide additional time for water suppliers to address Senate Bill X7-7 (Steinberg) requirements, of reducing per capita water use by 20 percent by the year 2020 from a prescribed base period.

Prior to adoption of an Urban Water Management Plan, California Water Code §10642 requires that the water supplier make the plan available for public inspection and hold a public hearing. Notice of the time and place of the hearing must be published pursuant to Government Code §6066, which states that the publication of the notice shall be once a week for two successive weeks with at least five intervening days. The notice must also be provided to any city within which the supplier provides water supplies.

The public hearing is being held pursuant to California Water Code §10642. Notice of the time and place of the hearing was published pursuant to Government Code §6066 and has been provided to the Cities of Malibu, Lancaster, and Palmdale.

County Counsel has reviewed and approved the proposed resolution approving the 2010 Urban Water Management Plan for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System (Enclosure A); the proposed resolution approving the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley for the Los Angeles County Waterworks District No. 40, Antelope Valley (Enclosure B); and Notices of Public Hearing (Enclosures C and D) as to form.

The 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley was prepared in cooperation with all the other retail water agencies in the Antelope Valley. It fulfills the requirements of an Urban Water Management Plan for Los Angeles County Waterworks District No. 40, Antelope Valley; Quartz Hill Water District; and Rosamond Community Services District. The Antelope Valley Region recently received a grant award from the State of California to update the Antelope Valley Integrated Regional Water Management Plan (AVIRWMP) by the end of 2013. Once the update to the AVIRWMP is complete, we will return to your Board to adopt the update and will recommend the inclusion of the Integrated Regional Urban Water Management Plan as an Appendix to the AVIRWMP.

ENVIRONMENTAL DOCUMENTATION

Pursuant to §10652 of the California Water Code, the California Environmental Quality Act does not apply to the preparation and adoption of Urban Water Management Plans.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

There will be no negative impact on current County services or projects.

CONCLUSION

Please return two adopted copies of this letter and two copies of the signed resolutions to the Department of Public Works, Waterworks Division.

Respectfully submitted,

GAIL FARBER
Director of Public Works

GF:AA:cr

Enclosures

c: Chief Executive Office (Rita Robinson)
County Counsel
Executive Office

ENCLOSURE A

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES, CALIFORNIA, APPROVING THE 2010 URBAN WATER MANAGEMENT PLAN FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU, AND THE MARINA DEL REY WATER SYSTEM

WHEREAS, the Urban Water Management Planning Act (Division 6 of the California Water Code) requires each water supplier with more than 3,000 customers (service connections), or annually supplying more than 3,000 acre-feet of water, to prepare and adopt an Urban Water Management Plan; and

WHEREAS, the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System (hereinafter referred to as DISTRICT) is considered one system; and

WHEREAS, the DISTRICT has approximately 7,800 service connections and is therefore required to prepare and adopt an Urban Water Management Plan; and

WHEREAS, the DISTRICT'S 2010 Urban Water Management Plan (Attachment 1) meets the requirements of the Urban Water Management Planning Act.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors of the County of Los Angeles, as the Board of Directors of the DISTRICT, hereby adopts the DISTRICT'S 2010 Urban Water Management Plan.

The foregoing Resolution was on the 20th day of June, 2011, adopted by the Board of Supervisors of the County of Los Angeles as the governing body of the Los Angeles County Waterworks District No. 29, Malibu, and Marina del Rey Water System.

SACHI A. HAMAI
Executive Officer of the
Board of Supervisors of the
County of Los Angeles

By _____
Deputy

APPROVED AS TO FORM:

ANDREA SHERIDAN ORDIN
County Counsel

By _____
Deputy

ATTACHMENT 1

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Waterworks District No. 29, Malibu and the Marina del Rey Water System

2010
URBAN WATER MANAGEMENT PLAN

July 2011

Prepared For:

County of Los Angeles
Department of Public Works
1000 S. Fremont Avenue,
Suite A-9 East, 4th Floor
Alhambra, CA 91803

Prepared By:

Water Resources Unit

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1.0 INTRODUCTION

The 2010 Urban Water Management Plan (UWMP) for Los Angeles County Waterworks District No. 29, Malibu (District 29) and the Marina del Rey Water System (Marina del Rey), referred jointly as "District", was prepared in accordance with the California Urban Water Management Planning Act (APPENDIX A). The Act has been amended several times since its passage, with the most recent amendment in 2010. 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 (AF) of water annually, to prepare and adopt, in accordance with prescribed requirements, an Urban Water Management Plan. Pursuant to Section 10621.a. of the Act, each urban water supplier shall update its plan at least once every five years on or before December 31, in calendar years ending in five and zero, but a 6-month extension, to July 1, 2011, has been granted for submittal of the 2010 UWMPs to provide additional time for water suppliers to address the Water Conservation Act of 2009 or Senate Bill x7-7 also known as 20x2020 (SBx7-7) requirements.

1.1 Formation of Waterworks District 29 and Marina del Rey Water System

The District was formed in accordance with Division 16, Sections 55000-55991 of the State Water Code. The District is governed by the Los Angeles County Board of Supervisors with the Waterworks Division of the County of Los Angeles Department of Public Works (Public Works) providing administration, operation, and maintenance of the District's facilities and infrastructure.

1.2 Public Participation

The 2010 UWMP was adopted by the Board of Supervisors on June 28, 2011 and submitted to the California Department of Water Resources within 30 days of the Board's adoption. A copy of the adopted Resolution is included in APPENDIX B. A public hearing was held to include public review and comments on the 2010 UWMP. Notice of the preparation of the plan and the public hearing was made in the Malibu Times, Surfside News, and Topanga Messenger and a copy of the plan was distributed to interested parties and placed in the local libraries throughout the District.

1.3 Coordination with Other Agencies

The District's staff has coordinated with the County of Los Angeles Department of Regional Planning and consulted the Southern California Association of Governments (SCAG) to determine the estimated population growth in the District's service area.

The District is a retail customer agency within the service area of the West Basin Municipal Water District (West Basin). Staff of the District also coordinated with West Basin's staff to project the supply reliability and describe the various water conservation programs to ensure consistency between the District's and West Basin's plans. In addition, West Basin has elected to use its 2010 UWMP as a regional alliance UWMP

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and the District is a member of the West Basin Regional Alliance. According to DWR's 2010 UWMP guidelines, a regional demand reduction target can be developed by a regional alliance of multiple agencies to show compliance with SBx7-7. More information on SBx7-7 and the District's plan to reach this goal can be found in Section 3.

Table 1.1 indicates the level of coordination with appropriate agencies that participated in the preparation of this plan.

Table 1.1 Coordination with Appropriate Agencies

	Participated in UWMP development	Contacted for Assistance	Received copy of the draft	Sent notice of intention to adopt
West Basin MWD	X	X		X
City of Malibu		X	X	X
County of Los Angeles Department of Regional Planning		X		
Resource Conservation District of the Santa Monica Mountains			X	X
Las Virgenes Municipal Water District				X
Malibu Times				X
Surfside News				X
Topanga Messenger				X
Lloyd Taber Marina del Rey County Library			X	X
Malibu Library			X	X
Southern California Association of Governments		X		

1.4 Purpose of the Urban Water Management Plan

The purpose of the Urban Water Management Plan is to plan for future water supply and demand within the District's service areas. The District recognizes that conservation and efficient use of water are critical and has prepared this UWMP to ensure an appropriate level of reliability in its water service to meet the needs of its customers during normal, single dry and multiple dry years.

1.5 Climate

The District's service area resides along the Pacific Coast. The climate is Mediterranean, characterized by warm, dry summers and wet, cool winters with average precipitation of 12 inches per year. The steady climate and low annual rainfall makes the area a popular vacation destination for tourists. In Table 1.2, the average monthly temperature, rainfall, and evapotranspiration (ETo) rates are displayed. The temperature and precipitation data was collected via the Western Regional Climate Center's website at the Los Angeles WSO Airport weather station. The period of record for the temperature and precipitation is from the year 1944 to 2010. The ETo data was obtained from the California Irrigation Management Information System (CIMIS) at the Santa Monica station for the Los Angeles Region.

Table 1.2 Temperature, Precipitation, and ETo

	Jan	Feb	Mar	Apr	May	Jun
Average Max. Temperature (F)	65.1	65.3	65.3	67.5	69.2	71.9
Average Min. Temperature (F)	47.5	49	50.5	53	56.4	59.7
Average Total Precipitation (in.)	2.7	2.73	1.82	0.77	0.17	0.05
Average ETo	1.79	2.12	3.3	4.49	4.73	5.03

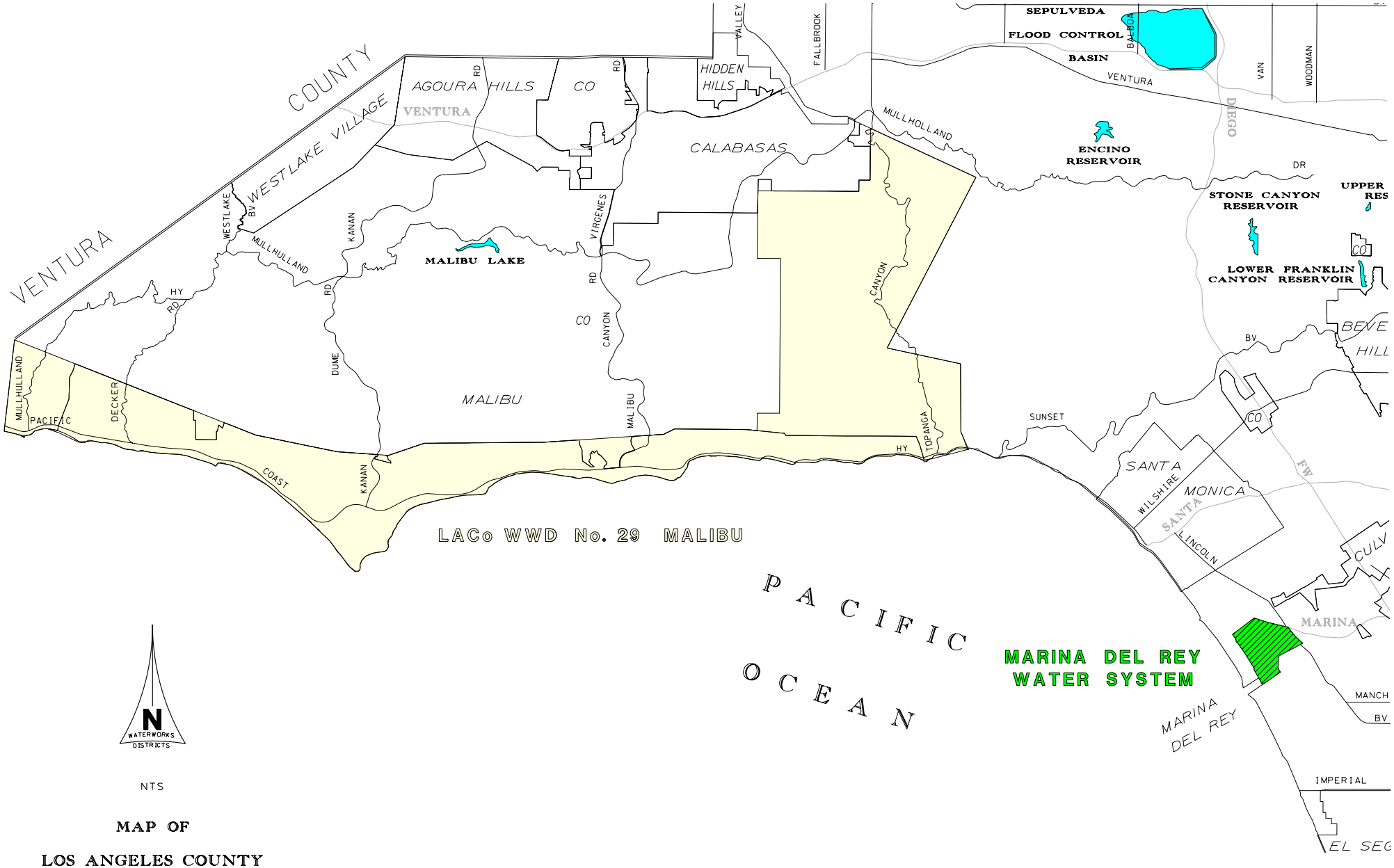
	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	75.2	76.3	76	73.6	70.3	66	70.1
Average Min. Temperature (F)	62.9	63.8	62.6	58.5	52.4	47.9	55.3
Average Total Precipitation (in.)	0.02	0.07	0.16	0.39	1.39	1.84	12.11
Average ETo	5.4	5.38	3.94	3.4	2.42	2.22	3.69

[1] Data taken from the Western Regional Climate Center's website at the Los Angeles WSO Airport Station: http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5114.
[2] ETo data taken from the California Irrigation Management Information System (CIMIS) at the Santa Monica Station: http://www.cimis.water.ca.gov/cimis/welcome.jsp.

1.6 Other Demographic Factors

The District's water service area, as seen in Figure 1-1, includes the City of Malibu, the unincorporated areas of Topanga, as well as Marina del Rey on behalf of Los Angeles County Department of Beaches and Harbors. We serve an estimated population of 27,000 people (based on the 2000 Census data and its average household size estimate) through approximately 7,790 active meters. The majority of these connections serve residential communities with some services to commercial, landscape, fire protection, and other public agencies.

FIGURE 1-1



MAP OF

LOS ANGELES COUNTY
WATERWORKS DISTRICTS

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In 1998, the District conducted a review of its system deficiencies that identified $108.5 million in needed improvements. However, repetitive failures in the existing system have diverted funds to immediate repairs without significant progress on capital improvements.

Malibu (Including Topanga)

The District 29 water service area consists of the City of Malibu and the unincorporated area of Topanga. The City of Malibu is a narrow strip along the coastline, with numerous canyons running northwards. It is bounded on the north by the steep and rugged Santa Monica Mountains, on the east by Topanga Canyon, on the west by Ventura County and on the south by the Pacific Ocean. District 29 occupies an area of about 47 square miles (30,000 acres) and has been in existence since 1959.

District 29's major system facilities include approximately 200 miles of watermain (approximately 5% or 53,600 linear feet are above ground), 32 pump stations and 52 tanks with a storage capacity of approximately 20 million gallons. Currently, District 29 has storage capacity for approximately three days. The original water system facilities were acquired from various small mutual water companies. The transmission watermain was built during the 1960s. Therefore, the condition of the water system, coupled with the unique topography of the region causes the cost for maintenance and operation to be higher than other water districts.

Due to a growing population, natural disasters, and outdated water system facilities in the District 29, several projects have been constructed to improve water service reliability. In the last 5 years, about $9.5 million was spent on pipeline replacement and booster pump station upgrades alone. In the next few years, District 29 anticipates system improvements including additional pipeline replacements, tank retrofits, and additional interconnections with West Basin and Las Virgenes Municipal Water District to allow for local system reliability.

Marina del Rey

The Marina del Rey Water System is a smaller system served directly off the transmission main delivering water to the Malibu System. As shown in Figure 1, Marina del Rey's service area encircles the Marina del Rey Harbor, providing service to businesses, as well as apartment and condominium complexes in the Marina del Rey area through approximately 300 service connections.

An Adequacy Study for Marina del Rey, conducted by the County of Los Angeles Department of Beaches and Harbors, found the existing water system facilities were designed and constructed in 1961/62 to accommodate low density, two-story structure land use. Subsequently, the land use has changed to high density, high rise structures, and the existing water system has not been upgraded to meet the increased demands.

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Twelve million dollars of system improvements for the Marina del Rey area have been recommended to support existing and future growth. They include replacement of transmission mains, metering stations, and other upgrades. Phases I and IA including approximately 6,000 linear feet of 24" water line have been completed. Phase II, including approximately 10,000 linear feet of 18" water line replacement, is scheduled to be completed by 2015.

1.7 Population

The Southern California Association of Governments (SCAG) has developed population projections by census tract and city within the County of Los Angeles. Based on these projections, the population within the census tracts containing the District is estimated to increase five to eight percent every five years. Table 1.3 below displays the population growth projections over the various regions in the District from the year 2005. Projections have been shown through 2035.

Table 1.3 Population Projections

Southern California Association of Governments (SCAG) Based Projections							
	2005	2010	2015	2020	2025	2030	2035
City of Malibu	13,643	14,402	14,991	15,598	16,188	16,761	17,310
Northern Topanga	3,491	3,558	3,682	4,034	4,370	4,703	5,020
Southern Topanga	2,165	2,214	2,304	2,562	2,807	3,050	3,281
Marina Del Rey	9,665	11,055	12,034	13,099	14,137	15,146	16,118
District 29 (Exclude Marina del Rey)	19,299	20,174	20,977	22,194	23,365	24,514	25,611
Total District 29 Population	28,964	31,229	33,011	35,293	37,502	39,660	41,729
Percent (%) Growth over 5 Year Period	-	8%	6%	7%	6%	6%	5%

1.8 Past Drought, Water Demand, and Conservation Information

The District experienced a drought from 1987 to 1991 and the County of Los Angeles made several efforts to reduce water usage and promote water conservation. The County of Los Angeles Board of Supervisors adopted the Phased Water Conservation Plan (PWCP) that identified nine phases to reduce water usage. The Plan established conservation targets for each phase to enable the District to meet the anticipated shortages in water supply (See Section 4 for more information on the PWCP). Following Governor Schwarzenegger's proclamation of a state of emergency in 2009, after California's third consecutive year of drought, the District implemented Phase II of the Phased Water Conservation Plan in June 2009. Additionally in 2009, the state legislature adopted a comprehensive package of bills, including SBx7-7, which requires the state to achieve a 20% reduction in urban per capita water use in California by December 31, 2020. More information on SBx7-7 and the District's goal can be found in Section 3.

2.0 WATER SUPPLY

District 29 purchases imported water from West Basin and Marina del Rey purchases the majority of its water supply from District 29. The District also maintains emergency interconnections with the City of Los Angeles Department of Water and Power and Las Virgenes Municipal Water District. Table 2.1 displays the current and projected water supply available to the District from West Basin. Since the District relies solely on imported water supplies, the reliability of the District's supply is completely dependent on the availability of water from West Basin. APPENDIX C includes a copy of West Basin's 2010 UWMP. Table 3-4 of West Basin's UWMP shows their projected water supplies through 2035.

Table 2.1 Current and Projected Water Supply

Projected Wholesale Water Supply						
Purchases from wholesaler (Acre-feet per year)						
Water Supply Sources	2010	2015	2020	2025	2030	2035
West Basin MWD	8,289	11,293	11,220	11,922	12,608	13,266
City of Los Angeles DWP	Emergency Interconnections Only					
Las Virgenes MWD	Emergency Interconnections Only					

2.1 Imported Water

The District currently has a purchase agreement with West Basin for a maximum of 10,506 acre-feet per year (AFY) (APPENDIX D). District 29 has an interconnection with West Basin in Culver City. A 35-mile transmission watermain along Pacific Coast Highway conveys water from the interconnection with West Basin to the western boundary of District 29. The water is pumped from the transmission watermain into various gravity storage tanks in Malibu and Topanga. District 29 also has four emergency interconnections: two with the City of Los Angeles Department of Water and Power (LADWP) and two with Las Virgenes Municipal Water District.

Marina del Rey is served by District 29 and accounts for 17 percent of the water supplied by West Basin. Water to Marina del Rey comes directly off the transmission watermain. There are no pump stations or storage tanks within the Marina del Rey Water System. Marina del Rey also has two emergency interconnections with LADWP.

Historically, West Basin's primary supply source is imported water from Metropolitan Water District of Southern California (Metropolitan). Metropolitan is a consortium 26 member agencies made up of cities and water districts that provide water to nearly 19 million people all across southern California. Their source of water comes from the Colorado River and northern California via the Colorado River Aqueduct and State Water Project, respectively. The mission of Metropolitan is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

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However, due to concerns over the future reliability of these imported supplies, West Basin has been increasing its development of local supplies to reduce future dependence on imported supplies from Metropolitan. West Basin launched a new program to help meet these challenges, called "Water Reliability 2020" Program. The main goal of this program is to increase local water supplies by doubling recycled water production, doubling water conservation savings and by bringing responsible ocean water desalination on-line. Section 4.1 of West Basin's 2010 UWMP, "West Basin Service Area Water Supply Portfolio," describes how diversification of supplies and increased conservation measures will reduce dependence on imported water from Metropolitan and help ensure future reliability for all of its customers. Despite these plans, West Basin projects that imported supplies from Metropolitan will continue to comprise the largest share of its overall supply portfolio for the next 20 years.

2.2 Groundwater

The District's service area does not overlie a groundwater basin capable of producing an adequate supply of groundwater. Therefore, no supply from groundwater sources will be used for future water supply within the District.

2.3 Water Transfers and Exchanges

Water transfers and exchanges are management tools to address increased water needs in areas of limited supply. Although transfers and exchanges of water do not generate new supply, these management tools distribute water where it is abundant to where it is limited.

Metropolitan has played an active role statewide in securing water transfers and exchanges as part of their planning goals. Although West Basin is a member of Metropolitan, there has not been a compelling reason or opportunity to pursue transfers directly.

Since West Basin anticipates that there will be sufficient supply to meet member agency demands in single and multiple dry years from 2010 through 2035, the District has no plans for water supply transfers or exchanges.

2.4 Recycled Water

Production and use of recycled water is limited in District 29 because the community is predominately on individual septic systems. A portion of the wastewater generated in the area is collected and treated by small private and publicly owned package wastewater treatment plants serving individual developments. Public Works operates and maintains the collection and treatment systems of three publicly owned treatment plants (Malibu Mesa Water Reclamation Plant, Malibu Water Pollution Control Plant and Trancas Water Pollution Control Plant). The total treatment capacity of these plants is approximately 401,000 gallons per day (gpd). Of these plants, only the Malibu Mesa Plant generates recycled water for irrigation use.

The Malibu Mesa Plant treats wastewater for an estimated population of 4,200 persons at Pepperdine University and the Malibu Country Estates. The plant treats wastewater to Title 22 standards for landscape irrigation. The treated wastewater is used by Pepperdine University for landscape irrigation of approximately 139 acres. Public Works does not expect the use of recycled water to increase in the future because significant growth is not projected for the plant's service area. More information on recycled water within the District can be found in Section 7.

Although recycled water is used within the District, contributing towards a reduction in potable water demand, the District does not supply any recycled water. In addition, the District's demand projection does not consider potential increases in recycled water usage to offset existing and future potable demands. However, the expanded use of recycled water in West Basin's service area, outside of the District, will help reduce the demand on imported water.

2.5 Development of Desalinated Water

Since the District is located along the coastline, there is potential for development of ocean water desalination in the future. However, ocean water desalination is not an economically feasible supply alternative for the District at this time. The District anticipates sufficient supply from West Basin to meet projected demands through 2035, and their reliability has been guaranteed by Metropolitan.

West Basin, on the other hand, is planning on increasing the diversity of its water supply portfolio through the further development of alternatives to the more traditional imported water and groundwater supplies. Since 2001, West Basin has been embarking on an effort to explore the development of a full scale ocean-water desalination facility. In early 2009, West Basin began construction of a Demonstration Facility and Education Center, described in Section 10.3 of West Basin's UWMP. West Basin's Ocean Water Desalination Demonstration Facility will test the viability of a future, full-scale facility capable of providing up to 20,000 AFY in the initial phase. In time, potable water produced by the future ocean water desalination facility will help diversify West Basin's supply portfolio and help reduce demand on imported water in the West Basin service area.

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3.0 WATER USE

3.1 Past, Current, and Projected Water Use

Table 3.1 shows the past, current, and projected water use for each water use sector in District 29 and the Marina del Rey Water System. The District began tracking water use by customer type in 2001. Previously, water use data was only available for the District as a whole.

Table 3.1 Past, Current, and Projected Water Use by District Customers and Customers of the Marina del Rey Water System (Acre-Feet)

Water Use Sectors	2005	2010	2015	2020	2025	2030	2035
Single Family Residential	6,770	5,576	7,513	7,464	7,932	8,388	8,826
Multi-Family Residential	688	624	841	835	888	939	988
Commercial	414	383	517	513	545	577	607
Industrial	0	21	29	28	30	32	34
Public/Government Agency	182	189	255	253	269	284	299
Landscape / Irrigation[1]	159	165	222	221	235	248	261
Agriculture	0	0	0	0	0	0	0
Private Fire Protection	25	54	73	73	77	82	86
Other[2]	765	607	817	812	863	913	960
Water Sold	9,002	7,620	10,266	10,200	10,838	11,462	12,060
Water Purchased[3]	9,818	8,289	11,293	11,220	11,922	12,608	13,266
Lower-Income Households[4]	-	-	3,425	3,403	3,616	3,824	4,023

[1] Landscape/Irrigation does not include recycled water use at Pepperdine University
[2] Includes: Temporary, Construction, Combined Domestic & Private, and Other Sectors
[3] Water Purchased accounts for 10% loss of wholesale water due to the condition of the District's distribution system. Since West Basin is the District's sole provider of potable water, this is also the demand projection provided to West Basin
[4] Accounts for 41% of Residential Use

Table 3.2 below displays the actual and projected number of connections by customer type for years 2005 to 2035. Based on these numbers, connections are estimated to increase by approximately 34 percent by the year 2035.

Table 3.2 Number of Connections by Customer Type
(District 29 and Marina del Rey Water System combined)

Connection Type	2005	2010	2015	2020	2025	2030	2035
Single Family Residential	7,074	7,082	7,486	8,004	8,505	8,994	9,463
Multi-Family Residential	92	157	166	178	189	200	210
Commercial	117	161	171	182	194	205	216
Industrial	0	2	2	2	2	2	2
Public/Government Agency	29	52	55	59	63	66	70
Landscape / Irrigation	109	110	116	124	131	139	146
Agriculture	0	0	0	0	0	0	0
Private Fire Protection	111	132	140	150	159	168	177
Other[(1)]	77	93	99	106	112	119	125
Total No. of Meters	7,609	7,790	8,234	8,804	9,355	9,893	10,409

[(1)] Other Connections includes temporary construction and other
Source: County Waterworks Division

3.2 Residential Sector

Single Family and Multi-Family Residential customers account for the majority of water use within the District. Residential customer connections have increased 6 percent since 2000. The average number of persons per household is 2.6 for District 29 and 1.7 for the Marina del Rey Water System based on SCAG estimates for 2005. Over the next 25 years, development in the residential sector will consist of infill growth and conversion of commercial facilities into multi-family residential units.

Lower-Income Households

Effective January 1, 2006, Senate Bill 1087 amended Water Code Section 10631 to require water and sewer providers to grant priority for service allocations to proposed developments that include housing units affordable to lower-income households. “Lower-income households” is defined as households with annual incomes of 80 percent of area median income or lower.

According to the Los Angeles County Housing Element, the median family income for unincorporated areas of Los Angeles County (includes Topanga and Marina del Rey) is $62,169. Since the median family income (2000 census) is $118,489 and $84,390 for Topanga and Marina del Rey respectively, the majority of the lower-income households in unincorporated areas of Los Angeles County lie outside of the District’s service area. However, for water use planning purposes, the District will assume that 41% of the projected residential needs will be for lower-income households as seen in Table 3.3.

Table 3.3 Lower-Income Housing Needs

Projected Housing Needs by 2014				
	Total Housing Units	Lower Income	Very Low Income	% [1]
Los Angeles County (Unincorporated)[2]	57176	9073	14425	41%
Malibu	441	73	115	43%
Total	57617	9146	14540	41%

Data provided by the Housing Element of Los Angeles County and City of Malibu.
[1]Percent of housing units projected for Lower Income (includes very low income)
[2]Includes Topanga and Marina del Rey

3.3 Commercial/Institutional Sector

The District's service area includes a commercial sector ranging from markets and restaurants to shopping centers. The commercial sector is predominately within the Marina Del Rey Water System service area and along the coastline in the City of Malibu. The commercial connections are expected to have minimal growth over the next 25 years due to the built out commercial sector of the District.

The service area has a stable institutional sector within the District, which includes government buildings for the City of Malibu, schools, public facilities, and public hospitals. Growth in this sector is also expected to be minimal for the next 25 years.

3.4 Landscape/Irrigation Sector

Landscape irrigation includes golf courses, residential lawns, parks, and schools. All landscape irrigation uses potable water except for landscape within Pepperdine University. All irrigation water use in Pepperdine is recycled water from the Malibu Mesa Reclamation Plant. The Malibu Mesa Reclamation Plant is operated by Public Work's Sewer Maintenance Division to serve Pepperdine exclusively, so the water used is not included in the District's demand projection.

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3.5 Baseline and Target Demands

Senate Bill x7-7 (SBx7-7) was enacted in November 2009, and amends the Water Code with the intent to require all water suppliers to increase water use efficiency. SBx7-7 requires the state to achieve a 20% reduction in urban per capita water use in California by December 31, 2020. The state is required to make incremental progress towards this goal by reducing per capita water use by at least 10% on or before December 15, 2015. An urban retail water supplier shall include in its urban water management plan, due July 2011, the baseline daily per capita water use (Baseline), urban water use target, and interim urban water use target. Future UWMPs due 2015 and 2020 will also require the District to report compliance daily per capita water use to measure actual use in relation to the targets.

10-year baseline daily per capita water use - the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day (gpcd) and calculated over a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010, per Section 10608.20.

Base daily per capita water use (2000-2009) = 321 gpcd

5-year baseline daily per capita water use – since the 10-year baseline is greater than 100 gpcd, the 5-year baseline is necessary to determine whether the 2020 per capita water use target meets the legislation's minimum water use reduction requirement. The continuous 5-year period must end no earlier than December 31, 2007, and no later than December 31, 2010, per Section 10608.22.

Base daily per capita water use (2003-2007) = 333 gpcd

2020 urban water use target - the urban retail water supplier's targeted future daily per capita water use (Given the multiple methods a supplier can choose to calculate a water use target, the District has chosen to take 80% of the water supplier's 10-year base daily per capita water use.)

2020 Urban water use target = 257 gpcd

Minimum water use reduction requirement - The 2020 per capita water use target cannot exceed 95% of the 5-year baseline. As evidenced below, the District's 2020 target complies with the minimum use reduction requirement so no further adjustment to the 2020 urban water use target is required.

Minimum water use reduction requirement = 316 gpcd

2020 Urban water use target < Minimum water use reduction requirement
257 gpcd < 316 gpcd √

2015 interim urban water use target - 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. The District's interim target is the midpoint between the 10-year baseline, 321 gpcd, and the 2020 urban water use target, 257 gpcd.

2015 Interim urban water use target = 289 gpcd

In summary, it is most beneficial to the District to use calendar years 2000-2009 to calculate its 10-year base period. This sets the District's Baseline at 321 gpcd, with an interim urban water use target of 289 gpcd by 2015 and an urban water use target of 257 gpcd by 2020.

Figure 3-1 Base & Target Use Summary

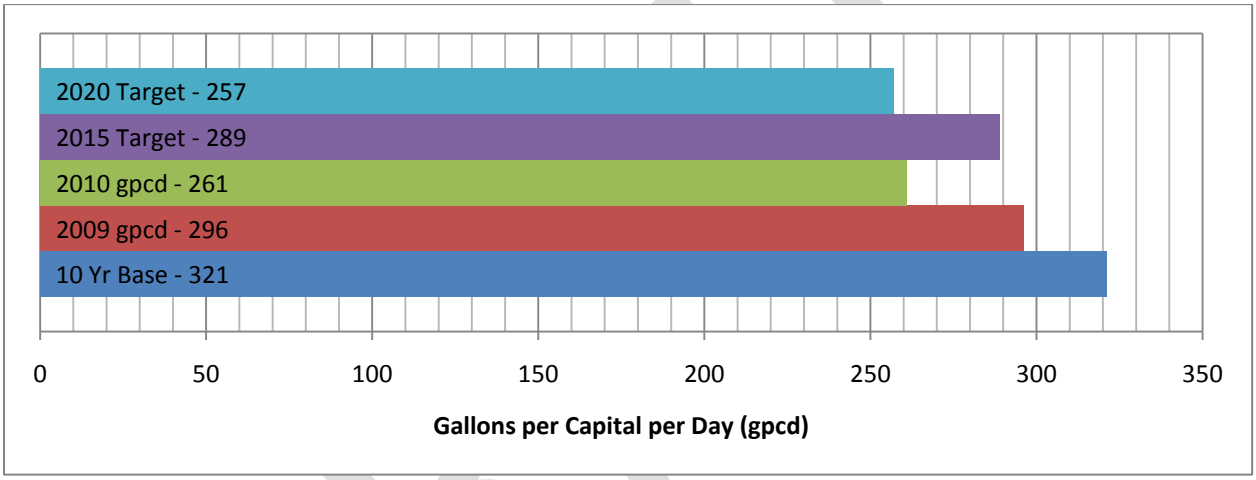

Table 3.4 Base Period Ranges

Base	Parameter	Value	Units
10-year base period	2008 total water deliveries	10,388	*AF/Year*
	2008 total volume of delivered recycled water	133.5	*AF/Year*
	2008 recycled water as a percent of total deliveries	1.3	percent
	Number of years in base period	10	years
	Year beginning base period range	2000	
	Year ending base period range	2009	
5-year base period	Number of years in base period	5	years
	Year beginning base period range	2003	
	Year ending base period range	2007	

Note: If an urban retail water supplier met at least 10% of their 2008 demand with recycled water, they may extend their base period to up to 15 years.

The population is estimated by using a persons-per-connection of 2.7 multiplied by the average number of accounts for the year. The 2.7 multiplier was derived by SCAG's estimate of 19,139 people for the District, excluding Marina del Rey, in 2000 divided by the 7,036 accounts at the time. The number of accounts in Marina del Rey has little change, so the Census population of 8,176 is used.

Table 3.5 Base daily per capita water use — 10-year range

Base period year		Distribution System Population	Daily system gross water use (mgd)	Annual daily per capita water use (gpcd)
Sequence Year	Calendar Year			
Year 1	2000	27,165	7.17	264
Year 2	2001	27,310	8.69	318
Year 3	2002	27,438	9.28	338
Year 4	2003	27,486	9.20	335
Year 5	2004	27,859	9.57	343
Year 6	2005	27,931	8.77	314
Year 7	2006	28,028	9.14	326
Year 8	2007	28,166	9.79	348
Year 9	2008	28,224	9.27	329
Year 10	2009	28,274	8.36	296
			Base Daily Per Capita Water Use	321

Table 3.6 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	Calendar Year			
Year 1	2003	27,486	9.20	335
Year 2	2004	27,859	9.57	343
Year 3	2005	27,931	8.77	314
Year 4	2006	28,028	9.14	326
Year 5	2007	28,166	9.79	348
			Base Daily Per Capita Water Use	333

Note: Due to the fact that the District has additional usage from the emergency interconnections with other wholesale agencies, the baseline numbers here are higher than that found in West Basin's 2010 UWMP.

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4.0 SUPPLY AND DEMAND COMPARISON

The District relies entirely on imported water to meet service area demands and receives 100% of its water supply from West Basin. Since West Basin is the sole provider for the District, the available supply from West Basin must be able to accommodate the anticipated water demands in the District in order for the District's supply to be 100% reliable for its customers. A majority of West Basin's supply is water imported by Metropolitan. West Basin outlines the many factors affecting the reliability of Metropolitan's imported supplies in Section 5.1.1, "Imported Water Reliability," of its 2010 UWMP. Consequently, the District is exposed to the same legal, environmental, water quality, and climatic factors resulting in inconsistency of supply as West Basin, shown in Table 4.1. More on the District's plan for reliability and water shortage contingency can be found in Section 5.

Table 4.1 Supply Reliability Factors

Water Supply Sources	Legal	Environmental	Water Quality	Climatic
Imported Water	X	X	X	X

4.1 Projected Supply and Demand Comparison

For the purposes of this UWMP, the District will employ the same approach as West Basin, called out in Table 4.2, to determine the basis of representative water year data for single dry year and multiple dry years, and make similar assumptions with respect to impacts on overall demand in the District's service area under the single dry year and multiple dry year projections.

Table 4.2 Basis of Water Year Data

	Normal Water Year	Single Dry Water Year	Multiple Dry Water Years		
			Year 1	Year 2	Year 3
Basis of Water Year	1999	2001	2001	2002	2003
Percent of Normal Year	100%	104%	104%	104.5%	105%

The normal year supply projections for the District are shown in Table 4.3. Accordingly, West Basin foresees a sufficient supply to meet the projected water demands of the District in normal water years for the next 25 years, through 2035.

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Table 4.3 Supply and Demand Comparison: Current and Projected (AF)

Projected Normal Water Year	2010	2015	2020	2025	2030	2035
West Basin's Projected Retail Water Supply[1]	8,289	11,293	11,220	11,922	12,608	13,266
District's Projected Imported Water Demand[2]	8,289	11,293	11,220	11,922	12,608	13,266
Difference	0	0	0	0	0	0

[1] West Basin draft 2010 UWMP, Table 3-4: Projected Retail Water Demand by West Basin Customer Agency (AFY)
[2] Table 3.1: Water Purchased

Table 4.4 shows the average normal year supply and demand projections for the District over a 25 year planning horizon, from 2010 to 2035. The supply totals required to meet projected demand were determined using population projections from SCAG for the District's service area multiplied by the District's SBx7-7 per capita demand targets. West Basin confirms these supply totals in its draft 2010 UWMP, Table 3-4: "Projected Retail Water Demand by West Basin Customer Agency (AFY)."

Table 4.4 Projected Normal Year Water Supply and Demand (AF)

Projected Normal Water Year	2010	2015	2020	2025	2030	2035
Supply total	8,289	11,293	11,220	11,922	12,608	13,266
Demand total	7,620	10,266	10,200	10,838	11,462	12,060
Difference	669	1,027	1,020	1,084	1,146	1,206
Difference as % of Supply	8.1%	9.1%	9.1%	9.1%	9.1%	9.1%
Difference as % of Demand	8.8%	10.0%	10.0%	10.0%	10.0%	10.0%

4.2 Projected Supply Reliability during Single Dry and Multiple Dry Year(s)

During a single dry year, the overall demand is estimated to increase by 4% over normal year demand to account for anticipated increases in irrigation needs. Table 4.5 presents the projected water supply needs of the District to meet projected demands during a single dry year. According to West Basin, the increased retail water demand from West Basin Customer Agencies can be met with increases to imported water purchases from Metropolitan. Since West Basin is gradually decreasing its dependence on imported supplies from Metropolitan, they should have enough imported water allocations in reserve to meet any slight increases in demand during a single dry year. In the event that water supplies during drought periods are insufficient to meet projected demands, the District will implement its Phased Water Conservation Plan to allocate supplies as described in Section 5.4.

Table 4.5 Single Dry Water Year Demands

Projected Single Dry Water Year	2010	2015	2020	2025	2030	2035
Supply Total	8,621	11,745	11,669	12,399	13,112	13,797
Demand Total	7,923	10,677	10,608	11,272	11,920	12,542
% of Normal Year Demand	104%	104%	104%	104%	104%	104%
Difference	697	1,068	1,061	1,127	1,192	1,254
Difference as % of Supply	8.1%	9.1%	9.1%	9.1%	9.1%	9.1%
Difference as % of Demand	8.8%	10.0%	10.0%	10.0%	10.0%	10.0%

During multiple dry year periods, the overall demand is estimated to increase by 4% over normal year demand during the first year, 4.5% over normal year demand during the second year, and 5% over normal year demand during the third year to account for anticipated progressive increases in irrigation needs during each multiple dry year period. Tables 4.6 through 4.10 show the supply reliability projections for multiple dry year conditions, using a three year period, for each five year increment between 2010 and 2035. Again, West Basin is confident that increases in demand can be met with increased imported purchases from Metropolitan. Therefore, the tables show that there are no anticipated shortages under any of the multiple dry year scenarios and the District will be able to provide reliable water supplies.

Table 4.6 Multiple Dry-Year (2013-2015) Water Supply & Demand (AF)

Projected Multiple-Dry Water Years	2013	2014	2015
Supply Total	10,495	11,173	11,858
Demand Total	9,541	10,158	10,780
% of Normal Year Demand	104%	104.5%	105%
Difference	954	1,016	1,078
Difference as % of Supply	9.1%	9.1%	9.1%
Difference as % of Demand	10.0%	10.0%	10.0%

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Table 4.7 Multiple Dry-Year (2018-2020) Water Supply & Demand (AF)

Projected Multiple-Dry Water Years	2018	2019	2020
Supply Total	11,699	11,740	11,781
Demand Total	10,636	10,673	10,710
% of Normal Year Demand	104%	104.5%	105%
Difference	1,064	1,067	1,071
Difference as % of Supply	9.1%	9.1%	9.1%
Difference as % of Demand	10.0%	10.0%	10.0%

Table 4.8 Multiple Dry-Year (2023-2025) Water Supply & Demand (AF)

Projected Multiple-Dry Water Years	2023	2024	2025
Supply Total	12,107	12,312	12,518
Demand Total	11,006	11,193	11,380
% of Normal Year Demand	104%	104.5%	105%
Difference	1,101	1,119	1,138
Difference as % of Supply	9.1%	9.1%	9.1%
Difference as % of Demand	10.0%	10.0%	10.0%

Table 4.9 Multiple Dry-Year (2028-2030) Water Supply & Demand (AF)

Projected Multiple-Dry Water Years	2028	2029	2030
Supply Total	12,827	13,032	13,238
Demand Total	11,661	11,847	12,035
% of Normal Year Demand	104%	104.5%	105%
Difference	1,166	1,185	1,203
Difference as % of Supply	9.1%	9.1%	9.1%
Difference as % of Demand	10.0%	10.0%	10.0%

Table 4.10 Multiple Dry-Year (2033-2035) Water Supply & Demand (AF)

Projected Multiple-Dry Water Years	2033	2034	2035
Supply Total	13,523	13,725	13,929
Demand Total	12,294	12,478	12,663
% of Normal Year Demand	104%	104.5%	105%
Difference	1,229	1,248	1,266
Difference as % of Supply	9.1%	9.1%	9.1%
Difference as % of Demand	10.0%	10.0%	10.0%

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5.0 WATER RELIABILITY

5.1 Reliability

Reliability is a measure of a water system's expected success in managing water shortages. Reliability planning requires information about the following: (1) expected frequency and severity of shortages; (2) how additional water management is likely to affect the frequency and severity of shortages; and (3) how available contingency measures can reduce the impact of shortages when they occur.

With the experience of the droughts of 1977-78 and 1987-91, Metropolitan undertook a number of planning initiatives to ensure supply reliability. These efforts included the Integrated Resources Plan (IRP), the Water Surplus and Drought Management Plan (WSDM Plan) and other local resource investments. Together, these initiatives have provided the policy framework for Metropolitan and its member agencies to manage their water resources to meet the needs of a growing population even under recurrences of the worst historical hydrologic conditions locally and in the key watersheds that supply water to southern California. Metropolitan's 2010 Regional UWMP reports that supply capabilities are sufficient to meet expected retail demands from 2015 through 2035 under the average normal, single dry-year and multiple dry-year conditions.

West Basin, a Metropolitan member agency, projects a 100% reliable water supply for all retail agencies it serves through 2035. As the sole provider for the District, West Basin's supply reliability is directly linked to the District's supply reliability. More information on West Basin's supply reliability is attached as APPENDIX C, Section 5.

5.2 History of Drought and Supply Shortages

The District experienced a drought between 1987 and 1991. During this period, supply in Southern California decreased and in 1990, Metropolitan requested a voluntary conservation effort by its member agencies to reduce its water consumption by 10 percent. As a member agency, West Basin passed this request down to the District and to meet these reductions, the County of Los Angeles adopted three ordinances in 1991 to reduce water usage and promote water conservation.

The first was Ordinance No. 91-0046U attached as APPENDIX E, which called for a water waste prohibition for the unincorporated areas of Los Angeles County. The water saving measures included limiting car washes, preventing excessive landscape watering, and prohibiting washing paved surfaces. Any failures to comply with these provisions resulted in a fine.

The second and most significant measure adopted by the County of Los Angeles Board of Supervisors (BOS) was Ordinance No. 91-0075M, which created the Phased Water Conservation Plan (PWCP) attached as APPENDIX F. Through nine phases, the BOS may use the PWCP to impose phases of voluntary and mandatory reductions of water

use of up to 50% in order to stretch limited water supplies. The objective of the PWCP is to effectively manage the impacts of a water shortage on the District's customers.

In 1991, the BOS declared a "Phase Three" shortage with a goal to reduce water consumption in the District by 20%. Any customers that exceeded this target quantity were assessed a conservation surcharge on their bill.

On June 27, 1991, the County adopted Ordinance No. 91-0097U, which amended the plumbing code by requiring the installation of ultra low flow toilets and urinals in all new buildings.

During the four-month duration of the request (June through September of 1990), the District reduced its monthly water consumption by 12%. The District's wholesaler, West Basin, reported that during the four-month conservation effort, the District saved more than 273 acre-feet (AF) of water. All these measures, including efforts by the community to conserve water, resulted in a 21 percent reduction in water use in District 29 and a 15 percent reduction in water use in Marina del Rey between May 1991 and April 1992.

On April 11, 1996, the District became a signatory to the California Urban Water Conservation Council's (CUWCC) Memorandum of Understanding Regarding Urban Water Conservation in California. This is described in greater detail in Section 6.

In February 2009, Governor Schwarzenegger proclaimed a state of emergency due to drought. As a result of projected imported water supply shortages, Metropolitan implemented its Water Supply Allocation Plan which provides a standardized methodology for allocating supplies during times of shortage. In response, West Basin implemented their Water Shortage Allocation Plan. West Basin's Water Shortage Allocation Plan is only implemented after Metropolitan reaches the appropriate stage. West Basin set the District's allocation for 2009/10 at 9,290 AFY based on a 15% reduction using 2004-2006 as a base period.

As a result of West Basin's allocation, the District implemented "Phase Two" of the PWCP in June 2009 (requirements of the PWCP, including "Phase Two," can be found in Table 5.2). The District met the allocation in 2009/10 with an annual use of 8,750 AF. Through conservation and public relations efforts, the District was able to realize a savings of 540 AF, 6% under the allocation. For 2010/11, West Basin increased the allocation slightly to 9,380 AFY since the District does not use local supplies. Through the end of December 2010, the District's cumulative allocation was 5,140 AF. The District met the allocation goal by using 4,400 AF over the first half of FY 10/11, equating to a savings of 740 AF, 14% under the allocation. The District will continue to monitor progress and work with customers to remain under West Basin's Stage 2 allocation limit.

Additionally, SBx7-7 requires the state to achieve a 20% reduction in urban per capita water use in California by December 31, 2020.

5.3 "No Waste" Ordinance

On March 21, 1991, the BOS adopted the "No Waste" Ordinance No. 91-0046U that specified a number of water saving measures that applied only to unincorporated areas of the County. Updated in 2008 and shown in APPENDIX E, this Ordinance includes the following prohibitions:

Table 5.1 Mandatory Prohibitions

Mandatory Prohibitions
Washing down paved surfaces unless required for health or safety
Landscape watering between 10:00 a.m. and 5:00 p.m.
Excessive landscape watering that results in runoff into adjoining streets, parking lots or alleys
Washing of vehicles except at a commercial carwash or with a hand-held bucket or hose equipped with an automatic shutoff nozzle
Serving drinking water at public eating places unless requested by customers

In addition, the following requirements are in effect at all times:

- Water used in decorative fountains must flow through a recycling system
- Plumbing leaks must be repaired as soon as practical

Any customer that violates the regulations and restrictions on water use set forth in the "No Waste" Ordinance shall be penalized. In the event a customer violates the provisions in the No Waste Ordinance, a progressive fine will be issued for infractions.

5.4 Phased Water Conservation Plan (PWCP)

The BOS adopted the PWCP on May 23, 1991. The PWCP is comprised of nine phases that are designed to minimize the impact of water supply shortages on customers during a water shortage emergency through conservation surcharges for usage above prescribed targets. The PWCP was first implemented in 1991 and again in 2009.

Prior to implementation of a phase of the PWCP, the BOS must determine the projected water shortage in the County. However, a public hearing must be held prior to the implementation of a phase for the purposes of determining whether a shortage exists in the District and which phase should be implemented. The determination can be influenced by the District's water supplier, West Basin or by the regional supplier, Metropolitan.

In the event that a conservation phase is declared by the BOS, Table 5.2 shows the various reduction stages of the PWCP as well as the water conservation measures as water shortages increase.

Table 5.2 Phased Water Conservation Plan

Phased Water Conservation Plan Water Conservation Measures in Phases						
Phase	**Anticipated shortage in water supply**	**Conservation Target as a Percent of Baseline Use**	**Landscape Watering Restrictions**	**Construction Meter Restrictions**	**Other Restrictions**	**Type of Rationing Program**
I	10%	90%	None	None	None	Voluntary
II	15%	85%	None	None	None	Mandatory
III	20%	80%	None	No New Construction Meters	Issuance Of "Will Serve" Letter Discontinued*	Mandatory
IV	25%	75%	Every Other Day	No New Construction Meters	Issuance Of "Will Serve" Letter Discontinued*	Mandatory
V	30%	70%	Every Other Day	No New Construction Meters	Issuance Of "Will Serve" Letter Discontinued*	Mandatory
VI	35%	65%	Every Third Day	No New Construction Meters	Issuance Of "Will Serve" Letter Discontinued*	Mandatory
VII	40%	60%	Trees and Shrubs only by Bucket	Remove All Construction Meters	Issuance Of "Will Serve" Letter and Installation of all New Permanent Meters Discontinued*	Mandatory
VIII	45%	55%	Trees and Shrubs only by Bucket	Remove All Construction Meters	Issuance Of "Will Serve" Letter and Installation of all New Permanent Meters Discontinued*	Mandatory
IX	50%	50%	Trees and Shrubs only by Bucket	Remove All Construction Meters	Issuance Of "Will Serve" Letter and Installation of all New Permanent Meters Discontinued*	Mandatory

Source: Los Angeles County Ordinance No. 91-0075M and Part 5 of the Rules and Regulation of the Los Angeles County Waterworks Districts.
"Will Serve" letters will be issued that will allow recordation of final maps; however, permanent metered service to the newly created lots will not be authorized until the current drought is over (mandatory rationing discontinued).

Reduction Measuring Mechanism in Water Use

The base quantity of a customer with a meter size of one and one-half (1-1/2) inches or larger shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the District. For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the District.

Data on the District's water supply and demand is collected and analyzed on a bi-monthly basis. Water meters are read bi-monthly and readings are compiled into yearly summaries. Excessive water use is reported on the customer's bi-monthly bills and is compared to target conservation goals.

Excessive Use Penalties

Any customer that violates the regulations and restrictions on water use set forth in the Phased Water Conservation Plan shall be penalized. According to the Phased Water Conservation Plan, a customer that uses water in excess of the target quantity will be assessed a conservation surcharge for the billing period. In addition, the District may disconnect a customer's water service if their water use continues to be excessive during drought periods.

For all customers within the District, an additional conservation surcharge of 1.0 times the established normal use rate will be assessed for water use in excess of the target quantity, up to 115 percent of the target quantity and an additional conservation surcharge of 2.0 times the established normal use rate will be assessed for water use in excess of 115 percent of the target quantity.

Revenue and Expenditure Impacts and Measures to Overcome Impacts

The implementation of the PWCP could result in a significant short-term reduction in the District's revenue. The District's sources of funding are structured into four categories: Service Charge, Facility Surcharge, Water Quantity Charge, and Standby Charge. The Service Charge is a fixed connection charge based on the size of the meter. The Facility Surcharge and Water Quantity Charge are based on the actual quantity of water used. The Standby Charge is assessed on all properties and is included on the property owner's tax bill. A reduction in water sales will affect only the revenues from the Water Quantity Charge and Facility Surcharge. The District's Service Charge and Standby Charge are intended to provide adequate revenue for the District to ensure continuous operations and maintenance functions regardless of reductions in water sales. If the District's wholesale water cost increases beyond the amounts that can be offset and collected through the District's retail rates, then the District is authorized to revise the rates in amounts necessary to offset the cost to purchase the water.

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In summary, if water sales do affect the operation and maintenance revenues, the District has the following measures to reduce such an impact:

- Extra revenues contributed by the conservation surcharge. During the 1991 and 2009 droughts, the revenues collected from the conservation surcharge generated funds which were used to offset a portion of the operation and maintenance costs.

- Delayed capital improvement projects. If necessary, the BOS can authorize the transfer of funds for capital improvement projects from the District's Accumulative Capital Outlay (ACO) Fund to the District's General Fund.

- Increased water rates. The BOS could increase water rates to meet operational needs.

5.5 Other Plans to Assure a Reliable Water Supply

According to West Basin's 2010 UWMP, West Basin and Metropolitan have taken important steps to reduce the vulnerability of supplies to extended droughts or other potential threats to reliability. These efforts have included using more recycled water for non-potable uses, expanding the use of local groundwater resources through conjunctive use programs, developing ocean water desalination, and searching for potential water transfers and exchanges for imported water sources other than those already available to Metropolitan.

Metropolitan's Integrated Resources Plan (IRP)

In 2010, Metropolitan adopted an updated IRP that assessed potential future regional demand projection as well as conservation potential. The IRP includes regional supply strategies and implementation plans to better manage resources, meet anticipated demand, and increase overall system reliability. Metropolitan's 2010 IRP establishes water supply targets for southern California through 2035, specifically a conservation target of 1.7 MAF. This target represents Metropolitan's goal of achieving a 20% reduction in per capita water use across its service area.

Metropolitan's Water Surplus and Drought Management Plan (WSDM)

In April of 1999, Metropolitan's Board of Directors adopted the WSDM to guide the management of regional water supplies to achieve the reliability goals of their IRP which provides a long-term conservation plan for their service area. Through the effective management of its water supply, Metropolitan expects to be able to meet demand for the next 25 years.

The guiding principle of the WSDM is to minimize the adverse impacts of water shortages to retail customers. From this guiding principle come the following supporting principles:

- Encourage efficient water use and economical local water resource programs.
- Coordinate operations with member agencies to make as much surplus water as possible available for use in dry years.
- Pursue innovative transfer and banking programs to secure more imported water for use in dry years.
- Increase public awareness about water supply issues.

The WSDM further defines five surplus management stages and seven shortage management stages to guide resource management activities. Each year, Metropolitan will consider the level of supplies available and existing levels of water in storage to determine the management actions designed to 1) avoid an extreme shortage to the maximum extent possible, and 2) minimize adverse impact to retail customers should an extreme shortage occur. The current sequencing outlined in the WSDM reflects anticipated responses based on detailed modeling of Metropolitan's existing and expected resource mix. This sequencing may change as the resource mix evolves.

The ten-year WSDM will be used to direct Metropolitan's resources to help attain the region's 100% reliability goal. The plan outlines Metropolitan's strategy to store water during periods of surplus and work with Member Agencies, such as West Basin, to minimize the impacts of water shortages on the region's retail customers. The overall objective of the WSDM Plan is to ensure that shortage allocation of Metropolitan's imported water supplies is not required.

Metropolitan's Water Supply Allocation Plan

The Water Supply Allocation Plan includes the specific formula for calculating member agency supply allocations and the key implementation elements needed for administering the allocation. When Metropolitan must make net withdrawals from storage to meet demands, it is considered to be in a shortage condition. Under most of these stages, it is still able to meet all end-use demands for water. For shortage stages 1 through 4, Metropolitan will meet demands by withdrawing water from storage. At shortage stages 5 through 7, Metropolitan may undertake additional shortage management steps, including issuing public calls for extraordinary conservation, considering curtailment of Interim Agricultural Water Program deliveries in accordance with their discounted rates, exercising water transfer options, or purchasing water on the open market.

West Basin's Water Shortage Allocation Plan

The purpose of West Basins' Water Shortage Allocation Plan is to provide a method for determining allocations for its member agencies relative to the amount of supplies available when Metropolitan has implemented its Water Supply Allocation Plan to determine West Basin's imported supply allocation. More information can be found in West Basin's UWMP Section 5.3.2 (APPENDIX C).

West Basin points to Metropolitan's WSDM and its strategy for managing supply and demand, including surplus storage withdrawals and contingency planning under Metropolitan's Water Supply Allocation Plan. In addition, West Basin will be doing its part to gradually decrease dependence on imported supplies from Metropolitan by developing drought-resistant local resources, such as recycled water and ocean-water desalination.

5.6 Water Quality of West Basin's Water Supplies

West Basin's imported water supply comes from the SWP and Colorado River via Metropolitan pipelines and aqueducts. In coordination with its Member Agencies, Metropolitan added new security measures in 2001 and continues to upgrade and refine procedures, including an increase in the number of water quality tests conducted each year. Metropolitan tests its water for microbial, organic, inorganic, and radioactive contaminants as well as for pesticides and herbicides. Metropolitan has a strong record of identifying water quality issues early on to minimize their impact on water supplies.

Metropolitan also has one of the most advanced laboratories in the country where water quality staff collects data, performs tests, reviews results, prepares reports, and researches other treatment technologies. Although not required, Metropolitan monitors and samples constituents in its water supplies that are not currently regulated but have captured scientific and/or public interest. Part of Metropolitan's strategy is to support programs that address water quality concerns related to both the SWP and Colorado River supplies. Some of the programs and activities include:

• **CALFED Program** – This program coordinates several SWP water feasibility studies and projects that include:

1. A feasibility study on water quality improvement in the California Aqueduct.
2. The conclusion of feasibility studies and demonstration projects under the Southern California-San Joaquin Regional Water Quality Exchange Project.
3. DWR's Municipal Water Quality Investigations Program and the Sacramento River Watershed Program. Both of these programs address water quality problems in the Bay-Delta and Sacramento River watershed.

• **Delta Improvement Package** – Metropolitan, in conjunction with DWR and the U.S. Geologic Survey, has completed modeling efforts of the San Francisco Bay Delta to determine if levee modifications at Franks Tract would reduce ocean salinity concentrations in water exported from the Delta. Currently, tidal flows trap high saline water in this tract. By constructing levee breach openings and flow control structures, it is believed saline intrusion can be reduced. This would significantly reduce total dissolved solids and bromide concentrations in water that is diverted from the Delta into the California Aqueduct.

5.7 Increasing District Demands

The District's water demand is projected to increase at a steady rate. The wholesale supply of potable water available to the District from West Basin is also projected to increase. Due to West Basin's commitment to diversifying their water supply portfolio, including the expanded use of recycled water by other West Basin customers and development of ocean water desalination, West Basin should be able to meet the District's future imported water demands.

5.8 Planned Water Supply Projects and Programs

Due to the fact that the District has adequate existing supplies to meet current and future demands, the District has no new water supply projects or programs planned for the future at this time. However, the District will continue to support West Basin's efforts to diversify their water supply.

5.9 Catastrophic Water Supply Interruption

In the event of a catastrophe (earthquake, regional power outage, or any other emergency that results in a water supply interruption), the District will take the following measures to prevent water shortages: (1) utilize the emergency interconnections with Las Virgenes Municipal Water District and Los Angeles Department of Water and Power, (2) implement the PWCP, and (3) enforce the "No Waste" Ordinance. The District has also prepared a 2010 update to the Emergency Response Procedures (ERP) that include response procedures for any foreseeable emergency. A copy of the table of contents for the ERP is included in APPENDIX G.

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6.0 WATER DEMAND MANAGEMENT MEASURES

On April 11, 1996, the District became signatory to the Memorandum of Understanding Regarding Urban Water Conservation in California and a member of the California Urban Water Conservation Council (CUWCC). Pursuant to Section 10631.h. of the Urban Water Management Plan Act (UWMPA), urban water suppliers that are members of the CUWCC may submit annual reports identifying water demand management measures. These reports identify Best Management Practices (BMPs) that are currently being implemented, or scheduled for implementation, which satisfy the requirements of Section 10631.f. of the UWMPA.

Please refer to APPENDIX H for the District's 2010 Best Management Practices Annual Report to the CUWCC.

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7.0 RECYCLED WATER

7.1 Wastewater Collection and Treatment

The production and use of recycled water is limited in District 29 because a majority of the residences are on individual septic systems. Homeowners are required to connect to an existing sewer system, if available, in the event that their septic system fails. The wastewater generated in the area is collected and treated by small private and publicly owned package wastewater treatment plants serving individual developments.

Public Works' Sewer Maintenance Division operates and maintains the collection and treatment systems of three publicly-owned treatment plants (Malibu Mesa Water Reclamation Plant, Malibu Water Pollution Control Plant, and Trancas Water Pollution Control Plant) serving the area. The wastewater collection system consists of a network of approximately 5.66 miles of local sewer lines and trunk sewers. The wastewater is transported primarily by gravity and augmented with two pump stations due to mountainous terrain. The total treatment capacity of these facilities is approximately 401,000 gallons per day (gpd).

The Malibu Mesa Water Reclamation Plant provides preliminary, secondary and tertiary treatment, with disinfection by an ultraviolet system. Tertiary treatment is provided by coagulation, rapid mix, flocculation and sand filtration. Both the Malibu Water Pollution and the Trancas Water Pollution Control Plant provide preliminary and secondary treatment with sand filters and chlorine disinfection. Table 7.1 shows the treatment plants' average and maximum flow rates for 2010 and wastewater collection and treatment averages and capacities for all three facilities.

Table 7.1 Wastewater Treatment

Wastewater Treatment (in gallons per day)					
Treatment Plant Name	**Location (City)**	**Average Daily Volume (2010)**	**Maximum Daily Volume (2010)**	**Year of Planned Build-out**	**Maximum Daily Volume**
Malibu Mesa Water Reclamation Plant	Malibu	131,800	185,000	Build-out Complete	200,000
Malibu Water Pollution Control Plant	Malibu	26,800	35,300	Build-out Complete	51,000
Trancas Water Pollution Control Plant	Malibu	47,600	83,700	Build-out Complete	150,000
Total		206,200	304,000		401,000

Source: Los Angeles County Sewer Maintenance Districts

7.2 Wastewater Disposal Methods

The effluent produced from the wastewater treatment plants is disposed using a seepage pit system, leach field disposal system, or recycled and used for irrigation. Table 7.2 shows the current and estimated wastewater disposal and recycled water use within District 29.

On November 5, 2009, the Los Angeles Regional Water Quality Control Board banned septic tanks in the Malibu Civic Center area and required the City of Malibu to construct a waste water treatment plant by 2015. Design plans and flow projections are not available for the city's proposed wastewater treatment plant at this time and not included in the future estimations.

Table 7.2 Wastewater Disposal & Recycled Water Use

Estimated Wastewater Disposal & Recycled Water Use (MG - million gallons)									
Facility	Destination	Treatment Level	2005 Projection for 2010	2010	2015	2020	2025	2030	2035
N/A	Rivers/Stream	Tertiary	0	0	0	0	0	0	0
Malibu Mesa WRP	Landscape	Tertiary	45.5	48.1	48.1	48.1	48.1	48.1	48.1
Malibu WPCP	Leachfield	Secondary	25.3	17.4	17.4	17.4	17.4	17.4	17.4
Trancas WPCP	Seepage Pit	Secondary	9.9	9.8	9.8	9.8	9.8	9.8	9.8
Total			80.7	75.3	75.3	75.3	75.3	75.3	75.3

Source: Los Angeles County Sewer Maintenance Districts

7.3 Recycled Water Currently Being Used

The Malibu Mesa Plant serves an estimated population of 250 at Malibu Country Estates and 3,952 at Pepperdine University. The wastewater is treated to Title 22 standards for landscape irrigation. Pepperdine University uses the treated wastewater to irrigate approximately 139 acres. In 2010, 100% of the 48.1 million gallons of wastewater treated at the Malibu Mesa Plant was used for landscape irrigation purposes.

Recycled water is the cornerstone of West Basin's efforts to increase water reliability by augmenting local supplies and reducing dependence on imported water. Since planning and constructing its recycled water system in the early 1990s, West Basin has become an industry leader in water reuse. In fiscal year 2009-10, West Basin delivered about 30,400 AF of recycled water to sites inside and outside its service area, saving enough potable water to serve roughly 61,000 households. Within West Basin's service area, municipal and industrial recycled water use totaled about 15,500 AF and the seawater barrier accounted for 7,796 AF, which is about 13 percent of West Basin's current total water supplies. It is projected that recycled water sales could represent 27 percent of West Basin's total water supplies by 2035.

At this time, the District does not receive recycled water from West Basin because the conveyance and transmission facilities do not exist to serve the District. Although the program does not service the District with recycled water, it does provide an indirect benefit. West Basin's recycled water program reduces demand for potable water and, therefore, increases the availability of imported water for all of West Basin's customers, including the District. More information about recycled water in the West Basin service area can be found in Section 9 of their UWMP attached as APPENDIX C.

7.4 Potential Uses of Recycled Water

Potential uses of recycled water in the District are minimal due to significant investments in infrastructure necessary to serve comparatively small demands. Within District 29, the wastewater collection volume within the service area is not likely to increase more than the current plant capacities.

Additionally, there would need to be a significant investment in recycled water conveyance infrastructure throughout the District to serve the limited potential landscape irrigation areas, such as parks, schools, and commercial centers. Therefore, development of a recycled water system within the District is not feasible for the foreseeable future.

7.5 Plans For Optimizing the Use of Recycled Water

In 2009, West Basin completed a Capital Implementation Master Program (CIMP). The CIMP includes all of the planned projects for recycled water and desalination through the year 2030. It also identifies and prioritizes areas where recycled water has the potential to expand based upon potential future customers. These projects are expected to result in at least an additional 40,900 AFY of use within West Basin's service area by 2035. Details of West Basin's plan on recycled water expansion can be found in Section 9 of their UWMP attached as APPENDIX C.

In addition, Metropolitan invites public and private water utilities within Metropolitan's service area to apply for development of water recycling and groundwater recovery projects under the Local Resources Program also known as LRP. The LRP provides funding for the development of water recycling and groundwater recovery supplies that replace an existing demand or prevent a new demand on Metropolitan's imported water supplies either through direct replacement of potable water or increased regional groundwater production. Financial incentives between $0 and $250 per acre-foot produced over 25 year terms are recalculated annually based on eligible project costs incurred each year and Metropolitan's applicable water rates. Metropolitan seeks development of 174,000 AFY of yield to meet a regional goal of 779,000 AFY by year 2025.

On the local level, it is the District's policy that recycled water, when determined to be available pursuant to Section 13550 of the California Water Code, shall be used for non-potable uses wherever its use is financially and technically feasible and consistent with legal requirements. In the event that an existing potable water service customer is required by the District to convert to recycled water service, the customer will pay the reasonable capital costs of retrofitting the onsite water service facilities and the District will provide the offsite facilities necessary to deliver recycled water to the meter. Should an existing customer refuse, the District will assess the applicable Outside of District Rate Schedules and Water Service Charges for the customer's potable water service. A copy of the District's rules and regulations pertaining to recycled water is attached in APPENDIX J.

Use of recycled water could be optimized by instituting financial incentives, such as lower rates for recycled water than potable water if adequate supplies of recycled water and the necessary infrastructure were available. However, there are no projects planned at this time to increase the amount of recycled water used within the District. Instead, the District is working closely with West Basin and Metropolitan to encourage the increased use of recycled water for non-potable uses outside the District, which increases the reliability of imported water for the District.

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8.0 REFERENCES

Los Angeles County Department of Public Works. 2005 Urban Water Management Plan, District No. 29 and Marina Del Rey Water System

Metropolitan Water District of Southern California. The Regional Urban Water Management Plan, November 2010

West Basin Municipal Water District's 2010 *Urban Water Management Plan (Final Draft)*

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APPENDIX A

California Urban Water Management Planning Act

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

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

CHAPTER 1.	GENERAL DECLARATION AND POLICY	10610-10610.4
CHAPTER 2.	DEFINITIONS	10611-10617
CHAPTER 3.	URBAN WATER MANAGEMENT PLANS	
Article 1.	General Provisions	10620-10621
Article 2.	Contents of Plans	10630-10634
Article 2.5.	Water Service Reliability	10635
Article 3.	Adoption and Implementation of Plans	10640-10645
CHAPTER 4.	MISCELLANEOUS PROVISIONS	10650-10656

WATER CODE
SECTION 10610-10610.4

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

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

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

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

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

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

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

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

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

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

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

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

10610.4. The Legislature finds and declares that it is the policy of the state as follows:
(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.
(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.
(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

WATER CODE
SECTION 10611-10617

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

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

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

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

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

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

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

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

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

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

WATER CODE
SECTION 10620-10621

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

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

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

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

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

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

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

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

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days prior to the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water

supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

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

WATER CODE
SECTION 10630-10634

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

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

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

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

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

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

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

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

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

(A) An average water year.

(B) A single dry water year.

(C) Multiple dry water years.

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

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

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

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

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

(I) Agricultural.

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

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

(1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:

(A) Water survey programs for single-family residential and multifamily residential customers.

(B) Residential plumbing retrofit.

(C) System water audits, leak detection, and repair.

(D) Metering with commodity rates for all new connections and retrofit of existing connections.

(E) Large landscape conservation programs and incentives.

(F) High-efficiency washing machine rebate programs.

(G) Public information programs.

(H) School education programs.

(I) Conservation programs for commercial, industrial, and institutional accounts.

(J) Wholesale agency programs.
(K) Conservation pricing.
(L) Water conservation coordinator.
(M) Water waste prohibition.
(N) Residential ultra-low-flush toilet replacement programs.
(2) A schedule of implementation for all water demand management measures proposed or described in the plan.
(3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.
(4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.
(g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following:
(1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors.
(2) Include a cost-benefit analysis, identifying total benefits and total costs.
(3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.
(4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.
(h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
(i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
(j) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivisions (f) and (g) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California,"

dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.

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

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

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

10631.5. (a) (1) Beginning January 1, 2009, the terms of, and eligibility for, a water management grant or loan made to an urban water supplier and awarded or administered by the department, state board, or California Bay-Delta Authority or its successor agency shall be conditioned on the implementation of the water demand management measures described in Section 10631, as determined by the department pursuant to subdivision (b).

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

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

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

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

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

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

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

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

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

(i) Compliance on an individual basis.

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

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

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

the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.

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

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

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

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

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

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

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

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

sequence for the agency's water supply.
(3) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.
(4) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.
(5) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.
(6) Penalties or charges for excessive use, where applicable.
(7) An analysis of the impacts of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.
(8) A draft water shortage contingency resolution or ordinance.
(9) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.
(b) Commencing with the urban water management plan update due December 31, 2015, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:
(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.
(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.
(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.
(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.
(e) The projected use of recycled water within the supplier's

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

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

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

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

WATER CODE SECTION 10635

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

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

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

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

WATER CODE
SECTION 10640-10645

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

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

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

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

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

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

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

(c) (1) For the purpose of identifying the exemplary elements of the individual plans, the department shall identify in the report those water demand management measures adopted and implemented by specific urban water suppliers, and identified pursuant to Section

10631, that achieve water savings significantly above the levels established by the department to meet the requirements of Section 10631.5.

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

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

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

WATER CODE
SECTION 10650-10656

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

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

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

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

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

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

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

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

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

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

APPENDIX B

Adopted Resolution

(Final copy to DWR will include the adopted resolution)

APPENDIX C

West Basin Municipal Water District's
2010 Urban Water Management Plan

Electronic copy can be found on West Basin's website:

http://www.westbasin.org/water-reliability-2020/planning/water-resources-planning

(Final copy to DWR will include the actual plan)

APPENDIX D

Purchase Agreement with West Basin Municipal Water District

AMENDMENT NO. 3
TO
AGREEMENT NO.W1922

PURCHASE AGREEMENT FOR IMPORTED WATER
TO BE PROVIDED BY
WEST BASIN MUNICIPAL WATER DISTRICT

PURCHASER: **Los Angeles County Waterworks District #29 & Marina del Rey**

TIER 1 ANNUAL MAXIMUM: **10,506** acre-feet

PURCHASE COMMITMENT: **31,518** acre-feet

INITIAL TERM: 5 Years - January 1, 2003 through December 31, 2007

SECOND TERM: 5 Years – January 1, 2008 through December 31, 2012

EFFECTIVE DATE OF THIS AMENDMENT: January 1, 2008

THIS AMENDMENT TO THE PURCHASE AGREEMENT FOR IMPORTED WATER TO BE PROVIDED BY WEST BASIN MUNICIPAL WATER DISTRICT is entered into on January 15, 2008 between West Basin Municipal Water District and Los Angeles County Waterworks District #29 & Marina del Rey.

It is mutually agreed that the following changes and additions are hereby made to the Agreement:

A. Base Allocation has been eliminated.

B. Tier 1 Annual Maximum is increased from 10,428 acre-feet to 10,506 acre-feet, as shown above under "TIER 1 ANNUAL MAXIMUM".

C. Purchase Commitment is decreased from 34,380 acre-feet to 31,518 acre-feet, as shown above under "PURCHASE COMMITMENT".

D. Initial Term is five (5) years commencing on January 1, 2003 and concluding December 31, 2007, as indicated by "INITIAL TERM" above, and reflects the original term of this agreement.

E. Second Term is five (5) years commencing on January 1, 2008 and concluding December 31, 2012, as indicated by "SECOND TERM" above, and reflects the extension of term incorporated by this amendment.

F. Effective date of the modifications to the Tier 1 Annual Maximum and Purchase Commitment is January 1, 2008, as shown above under "EFFECTIVE DATE OF THIS AMENDMENT".

G. For administrative purposes, an agreement number has been assigned to this agreement as indicated above by "AGREEMENT NO.".

WEST BASIN MUNICIPAL
WATER DISTRICT

By: _____
Richard Nagel
General Manager

Date: 1/15/08

LOS ANGELES COUNTY WATERWORKS
DISTRICT # 29 AND MARINA DEL REY

By: _____

Title: PRINCIPAL ENGINEER

Date: 01/07/08

Exhibit 1
Imported Water Purchase Agreement
DEFINITIONS

"Imported Water" means imported water supplied by Metropolitan and sold by the District to Purchaser. Imported Water does not include Long-Term Seasonal Storage Service and other surplus categories of supplies.

"Purchaser" means a customer of the District that has entered into a Purchase Agreement with the District.

"Purchase Commitment" means the amount of Imported Water that Purchaser agrees to purchase from District. Deliveries of surplus imported water supplies, including but not limited to Long-Term Seasonal Storage Service, will not count towards the Purchase Commitment.

"Initial Term" reflects the original term of this agreement.

"Second Term" reflects the extension of term incorporated by this amendment.

"Tier 1 Annual Maximum" means the allowable purchase of Imported Water in a given year at the Tier 1 Rate.

"Tier 1 Rate" means the price charged by the District for deliveries of Imported Water to Purchaser in an amount up to the Tier 1 Annual Maximum. The initial Tier 1 Rate is $606 per acre-foot. Tier 1 Rates are subject to change on an annual basis.

"Tier 2 Rate" means the price charged by the District for deliveries of Imported Water to Purchaser in an amount greater than the Tier 1 Annual Maximum. The initial Tier 2 Rate is $704 per acre-foot. Tier 2 Rates are subject to change on an annual basis.

"Tier 1 Supply Rate" means Metropolitan's per acre-foot Tier 1 Supply Rate, as determined from time to time by Metropolitan's Board of Directors. The initial Tier 1 Supply Rate is $73 per acre-foot. Tier 1 Supply Rates are subject to change on an annual basis.

"Tier 2 Supply Rate" means Metropolitan's per acre-foot Tier 2 Supply Rate, as determined from time to time by Metropolitan's Board of Directors. The initial Tier 2 Supply Rate is $171 per acre-foot. Tier 2 Supply Rates are subject to change on an annual basis.

APPENDIX E

Water Conservation Requirements for the Unincorporated Los Angeles County Area

County Ordinance No. 91 - 0046U

ORDINANCE NO. 91-0046U

An urgency ordinance amending Title 11 - Health and Safety of the Los Angeles County Code, relating to water conservation requirements for the Unincorporated Los Angeles County Area.

The Board of Supervisors of the County of Los Angeles ordains as follows:

SECTION 1. Chapter 11.38, Part 4, is hereby readopted as amended to read as follows:

Part 4. Water Conservation Requirements for the Unincorporated Los Angeles County Area

11.38.620 Hose watering prohibition.

No person shall hose water or wash down any sidewalks, walkways, driveways, parking areas or other paved surfaces, except as is required for the benefit of public health and safety. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of $100.00 for each subsequent violation.

11.38.630 Watering of lawns and landscaping.

A. No person shall water or cause to be watered any lawn or landscaping between the hours of 10:00 a.m. and 5:00 p.m.

B. No person shall water or cause to be watered any lawn or landscaping more than once a day.

C. No person shall water or cause to be watered any lawn or landscaping to such an extent that runoff into adjoining streets, parking lots or alleys

occurs due to incorrectly directed or maintained sprinklers or excessive watering.

D. It shall be the duty of all persons to inspect all hoses, faucets and sprinkling systems for leaks, and to cause all leaks to be repaired as soon as is reasonably practicable.

E. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of $100.00 for each subsequent violation.

11.38.640 Indoor plumbing and fixtures.

A. It shall be the duty of all persons to inspect all accessible indoor plumbing and faucets for leaks, and to cause all leaks to be repaired as soon as is reasonably practicable.

B. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of $100.00 for each subsequent violation.

11.38.650 Washing vehicles.

No motor vehicle, boat, trailer, or other type of mobile equipment may be washed, except at a commercial carwash or with reclaimed water, unless such vehicle is washed by using a hand-held bucket or a water-hose equipped with an automatic shutoff nozzle. No person shall leave a water hose running while washing a vehicle or at any other time. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a

fine of $100.00 for each subsequent violation.

11.38.660 Public eating places.

No restaurant, hotel, cafeteria, caf, or other public place where food is sold or served shall serve drinking water to any customer unless specifically requested to do so by such customer. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of $100.00 for each subsequent violation.

11.38.670 Decorative fountains.

No person shall use water to clean, fill, or maintain levels in decorative fountains, ponds, lakes, or other similar aesthetic structures unless such water flows through a recycling system. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of $100.00 for each subsequent violation.

11.38.680 Procedural requirements.

The Director of Public Works, with input and concurrence from the Director of Public Health, shall periodically review the provisions of this Part and recommend necessary updates to the Board of Supervisor. The review of the provisions and preparation of resulting recommendations, if any shall be performed, at a minimum, every two years following the first review, which shall to be completed by December 31, 2010.

SECTION 2. Due to the severity of the drought in the State of California, there is an immediate need to prohibit the wasting of water in the Los Angeles County unincorporated area to better utilize the available water supplies. This ordinance is urgently needed for the preservation of the public health, safety, and general welfare, and shall take effect immediately.

APPENDIX F

Phased Water Conservation Plan

(Part 5 of the LA County Waterworks Rules and Regulations)

PART 5 - PHASED WATER CONSERVATION PLAN

SECTION A - STATEMENT OF POLICY AND DECLARATION OF PURPOSE

5-A-1 STATEMENT OF POLICY AND DECLARATION OF PURPOSE:

Because of the water supply conditions prevailing in any or all of the County Waterworks Districts and/or in the area from which any or all of the Districts obtain all or a portion of their supply, the general welfare requires that the water resources available to any or all of the Districts be put to the maximum beneficial use to the extent to which they are capable, and that the unreasonable use, or unreasonable method of use of water be discouraged and that the conservation of such water be practiced with a view to the reasonable and beneficial use thereof in the interest of the people of any or all of the Districts and for the public welfare. The purpose of this Phased Water Conservation Plan is to minimize the effect of a shortage of water supplies on the customers of any or all of the Districts during a water shortage emergency.

SECTION B - AUTHORIZATION TO IMPLEMENT WATER CONSERVATION

5-B-1 AUTHORIZATION TO IMPLEMENT WATER CONSERVATION:

5-B-1a The Board of Directors of the Waterworks Districts may implement the applicable provisions of this conservation plan, following the public hearing required by Rule 5-B-1b, upon its determination that such implementation is necessary to protect the public welfare and safety.

5-B-1b The Board of Directors of the Waterworks Districts shall hold a public hearing for the purpose of determining whether a shortage exists in any or all of the Districts and which measures provided by this ordinance should be implemented. Notice of the time and place of the public hearing shall be published not less than ten (10) days before the hearing in a newspaper of general circulation within the affected District or Districts.

5-B-1c The Board of Directors shall issue its determination of shortage and corrective measures by resolution published in a daily newspaper of general circulation within the affected District or Districts. Conservation surcharges assessed per Rule 5-0-1 shall become effective no sooner than the first full billing period commencing on or after the date of such publication.

Part 5	Added 5/23/91 Ordenance No. 91-0075M
5-A-1	Rev. 7/25/91
5-B-1	Rev. 7/25/91

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)

SECTION C - GENERAL PROHIBITION

5-C-1 GENERAL PROHIBITION:

5-C-1a No customer of the District or Districts shall make, cause, use, or permit the use of water from the District or Districts in a manner contrary to any provision of this ordinance.

5-C-1b In the area of District No. 34 Desert View Highlands known as Ritter Ranch, as defined in Agreement No. 66407 as amended between the District and Ritter Park Associates, the water use limitations contained in Agreement No. 66407 as amended shall be implemented in addition to those required by this Part of these rules.

SECTION D - PHASE I SHORTAGE

5-D-1 PHASE I SHORTAGE:

5-D-1a A Phase I Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a ten percent (10□) shortage in its water supplies.

5-D-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of ninety percent (90□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-D-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of ninety percent (90□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)

SECTION E - PHASE II SHORTAGE

5-E-1 PHASE II SHORTAGE:

5-E-1a A Phase II Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between ten percent (10□) and fifteen percent (15□) in its water supplies.

5-E-1b A customer with a meter size of one and one-half (1 1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty-five percent (85□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-E-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty-five percent (85□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

SECTION F - PHASE III SHORTAGE

5-F-1 PHASE III SHORTAGE:

5-F-1a A Phase III Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between fifteen percent (15□) and twenty percent (20□) in its water supplies.

5-E-1c Rev. 7/24/91
5-F-1c Rev. 7/91,Rev. 1/09

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)

SECTION F □PHASE III SHORTAGE (continued)

5-F-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty percent (80□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-F-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty percent (80□) of the base quantity. All water used in excess of the target quantity shall be subject to a surcharge per Rule 5-0-1.

5-F-1d New meters to provide construction water service shall not be issued.

5-F-1e Water service ("Will Serve") letters will be issued, but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

SECTION G - PHASE IV SHORTAGE

5-G-1 PHASE IV SHORTAGE:

5-G-1a A Phase IV Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between twenty percent (20□) and twenty-five percent (25□) in its water supplies.

5-G-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy-five percent (75□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-G-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy-five percent (75□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-G-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be limited to not more than every other day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-G-1e New meters to provide construction water service shall not be issued.

5-G-1f Water Service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION H - PHASE V SHORTAGE

5-H-1 PHASE V SHORTAGE:

5-H-1a A Phase V Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between twenty-five (25□) and thirty percent (30□) in its water supplies.

5-H-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy percent (70□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Supervisors.

5-H-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy percent (70□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-H-d The watering of lawn, landscape or other turf area with water supplied by the district shall be limited to not more than every other day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-H-1e New meters to provide construction water service shall not be issued.

5-H-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-H-1c Rev. 7/91, Rev.1/09

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION I - PHASE VI SHORTAGE

5-I-1 PHASE VI SHORTAGE:

5-I-1a A Phase VI Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between thirty (30□) and thirty-five percent (35□) in its water supplies.

5-I-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty-five percent (65□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-I-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty-five percent (65□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-I-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be limited to not more than every third day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-I-1e New meters to provide construction water service shall not be issued.

5-I-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

Part 5 Added 5/23/91 Ordinance No. 91-0075M, Rev. 1/09

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION J - PHASE VII SHORTAGE

5-J-1 PHASE VII SHORTAGE:

5-J-1a A Phase VII Shortage shall be declared whenever the Board of Directors determined that it is likely that the District will suffer a shortage of between thirty-five (35□) and forty percent (40□) in its water supplies.

5-J-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty percent (60□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-J-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty percent (60□) of the base quantity. All water used in excess of the target quantity shall be subject to a surcharge per Rule 6-0-1.

5-J-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be prohibited, except that trees and shrubs may be watered at any time by bucket.

5-J-1e All meters to provide construction water shall be removed.

5-J-1f Water service ("Will Serve") letters will be issued, but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-J-1g No new permanent meters shall be installed.

Part 5 Added 5/23/91 Ordinance No. 91

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION K - PHASE VIII SHORTAGE

5-K-1 PHASE VIII SHORTAGE

5-K-1a A Phase VIII Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between forty percent (40□) and forty-five percent (45□) in its water supplies.

5-K-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of fifty-five percent (55□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-K-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to fifty-five percent (55□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-K-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be prohibited except that trees and shrubs may be watered at any time by bucket.

5-K-1e All meters to provide construction water shall be removed.

5-K-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-K-1g No new permanent meters shall be installed.

Part 5 Added 5/23/91 Ordinance No. 91-0075M

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION L - PHASE IX SHORTAGE

5-L-1 PHASE IX SHORTAGE

5-L-1a A Phase IX Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between forty-five (45□) and fifty percent (50□) in its water supplies.

5-L-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of fifty percent (50□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-L-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of fifty percent (50□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-L-1d The watering of lawn, landscape or other turf area including trees and shrubs, with water supplied by the District shall be prohibited.

5-L-1e All meters to provide construction water shall be removed.

5-L-1f Water service ("Will Serve") letters will be issued, but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-L-1g No new permanent meters shall be installed.

Part 5 Added 5/23/91 Ordinance No. 91-0075M

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION M - RELIEF FROM COMPLIANCE

5-M-1 RELIEF FROM COMPLIANCE:

5-M-1a A customer may file an application for relief from any provisions of this ordinance. The Director of Public Works shall develop such procedures as he or she considers necessary to resolve such applications and shall, upon the filling by a customer of an application for relief, take such steps as he or she deems reasonable to resolve the application for relief. The decision of the Director of Public Works shall be final. The Director of Public Works may delegate his or her duties and responsibilities under this Rule as appropriate.

5-M-1b The application for relief may include a request that the customer be relieved, in whole or in part, from the conservation surcharge provisions of Rules 5-D-1b, 5-D-1c, 5-E-1b, 5-E-1c, 5-F-1b, 5-F-1c, 5-G-1b, 5-G-1c, 5-H-1b, 5-H-1c, 5-I-1b, 5-I-1c, 5-J-1b, 5-J-1c, 5-K-1b, 5-K-1c, 5-L-1b, and 5-L-1c.

5-M-1c In determining whether to grant relief, and the nature of any relief, the Director of Public Works shall take into consideration all relevant factors including, but not limited to:

1. Whether any additional reduction in water consumption will result in unemployment;

2. Whether additional members have been added to the household;

3. Whether any additional landscaped property has been added to the property since the corresponding billing period of the base year;

4. Changes in vacancy factors in multi-family housing;

5. Increased number of employees in commercial, industrial, and governmental offices;

6. Increased production requiring increased process water;

7. Water uses during new construction;

8. Adjustments to water use caused by emergency health or safety hazards;

9. First filling of a permit-constructed swimming pool; and

10. Water use necessary for reasons related to family illness or health.

Part 5 Added 5/23/91 Ordinance No. 91-0075M

11. Whether the basic period for billing should be adjusted due to the unique circumstances of the type of facility, such as a boat, which results in irregular, intermittent periods of consumption.

5-M-1d In order to be considered, an application for relief must be filed with the District within twenty (20) days from the date the provision from which relief is sought becomes applicable to the applicant. No relief shall be granted unless the customer shows that he or she has achieved the maximum practical reduction in water consumption other than in the specific areas in which relief is being sought. No relief shall be granted to any customer who, when requested by the Director of Public Works or designee, fails to provide any information necessary for resolution of the customer's application for relief. The decision shall be issued within twenty (20) days and provided to the customer.

SECTION N - NOTIFICATION OF CUSTOMERS

5-N-1 NOTIFICATION OF CUSTOMERS:

5-N-1a Each customer will be notified on his or her bill as to what the target quantity and the base quantity will be for the applicable billing period.

SECTION O - CONSERVATION SURCHARGES

5-O-1 CONSERVATION SURCHARGES:

5-O-1a Water use up to the target quantities specified in Rules 5-D-1b, 5-D-1c, 5-E-1b, 5-E-1c, 5-F-1b, 5-F-1c, 5-G-1b, 5-G-1c, 5-H-1b, 5-H-1c, 5-I-1b, 5-I-1c, 5-J-1b, 5-J-1c, 5-K-1b, 5-K-1c, 5-L-1b, and 5-L-1c shall be billed at the established QUANTITY CHARGE or NORMAL USE CHARGE. Water use in excess of the aforementioned target quantities shall be subject to the following conservation surcharges in addition to the established QUANTITY CHARGE or NORMAL USE CHARGE:

1. For all customers within Los Angeles County Waterworks Districts and Marina Del Rey Water System, an additional conservation surcharge of 1.0 times the established QUANTITY CHARGE or NORMAL USE CHARGE will be assessed for water use in excess of the target quantity, up to 115 percent of the target quantity.

2. For all customers within Los Angeles County Waterworks Districts and Marina Del Rey Water System, an additional conservation surcharge of 2.0 times the established QUALITY CHARGE or NORMAL USE CHARGE will be assessed for water use in excess of 115 percent of the target quantity.

3. If cost of purchased water obtained from the water wholesalers that sell water to the Los Angeles County Waterworks Districts increases beyond the amounts that can be offset and collected through the rates set in 1 and 2 of this provision, then the District Engineer is hereby authorized to revise the rates set in 1 and 2 of this provision in amounts necessary to offset the cost to purchase the water.

5-O-1b Violation by any customer of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d, and 5-L-1d shall be penalized as follows:

1. First violation. The Director of Public Works or designee shall issue a written notice of the fact of a first violation to the customer.

2. Second violation. For a second violation during any one water shortage emergency, the Director of Public Works or designee shall issue a written notice of the fact of a second violation to the customer.

3. Third and subsequent violations. For a third and each subsequent violation during any one water shortage emergency, the Director of Public Works or designee may install a flow-restricting device or the service of the customer at the premises at which the violation occurred for installing and for removing the flow-restricting devices and for restoration of normal service. The charge shall be paid before normal service can be restored.

5-O-1c All monies collected by a District pursuant to this ordinance shall be deposited in that District's General Fund as reimbursement for the District's costs and expenses of administering this conservation plan.

5-O-1d The District shall give notice to customer of water conservation surcharges or of water usage violations as follows:

a. Notice of water conservation surcharges or of first and second violations of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d, and 5-L-1d shall be given to the customer in person or by regular mail.

b. If the customer is absent from or unavailable at the premises at which the violation occurred, by leaving a copy with some person of suitable age and discretion at the premises and sending a copy through the regular mail to the address at which the customer is normally billed; or

c. If a person of suitable age or discretion cannot be found, then by affixing a copy in a conspicuous place at the premises at which the violation occurred and also sending a copy through the regular mail to the address at which the customer is normally billed.

5-O-1e The notice of a violation of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d, and 5-L-1d shall contain a description of the facts of the violation, a statement of the possible penalties for each violation and a statement informing the customer of his right to a hearing on the merits of the violation pursuant to Rule 5-P-1.

5-O-1f Nothing in these regulations shall prohibit any customer from either installing sub-meters or from pro-rating and collecting from the ultimate users any conservation surcharges assessed when the customer's master meter measures consumption of water for multiple tenancy facilities. However, unless the sub-meters are subsequently billed directly by the District, the customer responsible for the master meter shall continue to be responsible directly to the District for all payments including conservation surcharges.

SECTION P - HEARING REGARDING VIOLATIONS

5-P-1 HEARING REGARDING VIOLATIONS:

5-P-1a Any customer receiving notice of a third or subsequent violations of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d or 5-L-1d shall have a right to a hearing by the Director of Public Works or his designee within fifteen (15) days of a mailing or other delivery of the notice of violation.

5-P-1b The customer's written request for a hearing must be received within ten (10) days of the issuance of the notice of violation. This request shall stay installation of a flow-restricting device on the customer's premises and the assessment of any surcharge until the Director of Public Works or designee renders his or her decision. The decision shall be issued within ten (10) days of the hearing, a copy of which shall be provided to the customer.

5-P-1c The decision of the Director of Public Works shall be final except for judicial review.

PART 5 PHASED WATER CONSERVATION PLAN (CONTINUED)

SECTION Q - ADDITIONAL WATER SHORTAGE MEASURES

5-Q-1 ADDITIONAL WATER SHORTAGE MEASURES:

The Board of Directors may order implementation of water conservation measures in addition to those set forth in Rules 5-D-1, 5-E-1, 5-F-1, 5-G-1, 5-H-1, 5-I-1, 5-J-1, 5-K-1, and 5-L-1. Such additional water conservation measures shall be implemented in the manner provided in Rule 5-B-1.

SECTION R - PUBLIC HEALTH AND SAFETY NOT TO BE AFFECTED

5-R-1 PUBLIC HEALTH AND SAFETY NOT TO BE AFFECTED:

Nothing in this ordinance shall be construed to require the District to curtail the supply of water to any customer when such water is required by that customer to maintain an adequate level of public health and safety.

SECTION S - SEVERABILITY

5-S-1 SEVERABILITY:

If any part of this ordinance or the application thereof to any person or circumstances is for any reason held invalid or unconstitutional by a decision of any court of competent jurisdiction, the validity of the remainder of the ordinance or the application of such provision to other persons or circumstances shall not be affected. The Board of Directors of the District or Districts declares that it would have adopted this ordinance and all provisions hereof irrespective of the fact that any one or more of the provisions be declared invalid or unconstitutional.

Part 5 Added 5/23/91 Ordinance No. 91-0075

APPENDIX G

Emergency Response Procedures

(Table of Contents only)

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

LOS ANGELES COUNTY WATERWORKS DISTRICTS

EMERGENCY RESPONSE PROCEDURES

Adam Ariki
Assistant Deputy Director

January 2010

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Demand Management Measures (DMMs)

also known as

Water Conservation Best Management Practices (BMPs)

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name) Los Angeles County Waterworks Dist

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Base Year Data

Link to FAQs

Reporting Unit Base Year

Base Year 2008

What is your reporting period? Calendar

BMP 1.3 Metering

Number of unmetered accounts in Base Year 0

BMP 3.1 & BMP 3.2 & BMP 3.3 Residential Programs

Number of Single Family Customers in Base Year 7,170

Number of Multi Family Units in Base Year 111

BMP 3.4 WaterSense Specification (WSS) Toilets

Number of Single Family Housing Units constructed prior to 1992 5000

Number of Multi Family Units prior to 1992 Unknown

Average number of toilets per single family household 2.5

Average number of toilets per multi family household 1.5

Five year average resale rate of single family households Unknown

Five-year average resale rate of multi family households Unknown

Average number of persons per single family household 3.0

Average number of persons per multi family household Unknown

BMP 4.0 & BMP 5.0 CII & Landscape

Total water use (in Acre Feet) by CII accounts 200.21

Number of accounts with dedicated irrigation meters 107

Number of CII accounts without meters or with Mixed Use Meters 38

Number of CII accounts 154

Comments:

Number of CII accounts with mixed use meters is an estimate.

he fields in red are required.

Agency name: Los Angeles County Waterworks

Division name (Reporting unit): Los Angeles County Waterworks

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

CUWCC

WATER SOURCES

Service Area Population: 27,874

2009

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
West Basin Municipal Water District	9,346.10	Surface	
Los Angeles DWP	22.36	Surface	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Exported Water Name	AF/YEAR	Where Exported?

The fields in red are required.

Agency name: Los Angeles County Waterworks

Division name (Reporting unit): Los Angeles County Waterworks

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

CUWCC

Water Uses 2009

Potable Water Billed

Make sure to enter numbers in AF/Year.

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Single-Family	7,173.00	6,816.36			
Multi-Family	112.00	527.55			
Commercial	126.00	407.07			
Dedicated Irrigation	109.00	147.15			
Other	254.00	795.97			
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

Potable Water Un-Billed

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name) Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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

2009

See the complete MOU: View MOU

See the coverage requirements for this BMP:

BMP 1.1 Operations Practices

Comments:

Conservation Coordinator

Conservation Coordinator (•) Yes ( ) No

Contact Information

First Name	Virginia
Last Name	Maloles-Fowler
Title	Water Conservation Coordinator
Phone	626-300-3362
Email	vmfowler@dpw.lacounty.gov

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

Web address(s) URL: comma-separated list http://search.municode.com/html/16274/_DATA/TITLE11/Chapter_11_38_WATER_AND_SEWERS.html,

Enter a description: Los Angeles County, Title 11 - Health and Safety of the Los Angeles County Code, Ordinance No. 91-00466U, Section 1, Chapter 11.38, Part 4; City of Malibu Ordinance No. 243, Section 13.04, Chaper 13.04 of the Malibu Municipal Code; LA County Waterworks Rules and Regulations Part 5 Phase Water Conservation

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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: 8,694.10

Definition: other accountable uses not included in metered sales, such as unbilled water use, fire suppression, etc. → **Determine system verifiable uses AF:** 0.00

Determine total supply into the system in AF: 9,368.46

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.

CUWCC

Link to FAQs

View MOU

2009 BMP 1.2 Water Loss Control

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

Leak Detection Contract

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 Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)

Comments:

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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	Billing Frequency Per Year	# of estimated bills/yr
Single-Family	7,173	7,173	7,173	Bi-monthly	43,038
Multi-Family	112	112	112	Bi-monthly	672
Commericial	126	126	126	Bi-monthly	756
Dedicated Irrigatic	109	109	109	Bi-monthly	654
Other	254	254	254	Bi-monthly	1,524
Other				Other	
Other				Other	
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters: 48

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period: 0

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 Feasiblity Study conducted

B. Email or provide a link to the feasibility study (or description of):

File name(s): Email files to natalie@cuwcc.org Enter the file name here e.g. WaterWastePreventionOrdinance

Web address(s) URL: comma-separated list Enter the URL to your documentation.

General Comments about BMP 1.3:

Other Account Type includes: Fire, Public/Gov Agency, Temporary, Domestic/Private

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

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BMP 1.4 Retail Conservation Pricing

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.

2009

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)
Increasing Block Se	Single-Family	14,671,678.46	3,260,926.61
Increasing Block Se	Multi-Family	766,339.77	163,212.32
Increasing Block Se	Commercial	520,374.11	82,533.11
Increasing Block Se	Dedicated Irrigation	258,309.34	36,277.33
Increasing Block Se	Other	3,009,714.80	458,007.90
Select a Rate Struc	Other		
Select a Rate Struc	Other		

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

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)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Comments:

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

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): West Basin Municipal Water District

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
2	Newsletter articles on conservation
2	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets
2	Landscape water conservation media campaigns
2	General water conservation information
1	Website

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): West Basin Municipal Water District

OR Retail Agency (Contacts with the Media)

Media Contacts List

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

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types
2		Articles or stories resulting from outreach
2		News releases
5		Newspaper contacts
4		Radio contacts
2		Television contacts
		Select a type of media contact

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): http://www.lacwaterworks.org/

Describe a minimum of four water conservation related updates to your agency's website that took place during the year: Schedule of events, Water Conservation tips, Quarterly Splash Newsletter, Rebate information and eligible lists

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 brake 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
Total Budget	$255,825		✓	

Comments:

The Public Outreach Annual Budget Amount is the total budget for all 5 Waterworks Districts.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

2009

BMP 2.1 Public Outreach Cont'd

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?
Media Relations	$22,790	✓
Community Events	$20,089	✓
Advertising	$167,910	✓
Project Management	$45,038	✓

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
Community Events	$1

Social Marketing Programs

Branding

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

Describe the brand, theme or mascot.

Theme: Three Easy Ways
Brand: Water Drop
Macot: Little girl

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: Malibu Water Conservation Partners

Training

Training Type	# of Trainings	# of Attendees	Description of Other
Irrigation & Water Ma	$1	$16	Irrigation and Water Management Strategy Workshop

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description
Advertising	$167,910	TV, Radio, Billboard, Newspaper Ads, Google AdWords

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

None

Conservation Gardens

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

None

Landscape contests or awards

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

None

Comments:

The Public Outreach and Social Marketing Expense Amounts are for all 5 Waterworks Districts.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

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 Wholesaler Names, separated by commas: West Basin Municipal Water District

☐ 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: 2

Number of attendees: 100

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

Water Conservation is included in the Countywide Environmental Defender and Generation Earth Program which provides Int

The fields in red are required.

Agency name: Los Angeles County Waterworks Districts

Reporting unit name (District name): Los Angeles County Waterworks District 29 - M

Reporting unit number: 5,026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

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View MOU

2009

BMP 3 Residential

⊙ **Traditional (Sections A - D)** ○ **Flex Track (All Sections)**

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.
You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in form which are necessary to show that the measure was implemented as described.

A) Residential Assistance / Leak Detection

Traditional

Flex Track

	Single Family	Multi Family	Total Water Savings AF/YR	Measured Water Savings AF/YR
Total Number of Accounts	7,173.00	112.00		
Total Number of Participants Overall	49.00	0.00		
Total Number of Leak Det Surveys	49.00	0.00		
Total Number of Showerheads	83.00	0.00		
Total Number of Faucet Aerators	180.00	0.00		
Total Number of Landscape Water Survey	49.00	0.00		

Number of Other Components

Description of Other Components Distributed

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

B) High Efficiency Clothes Washers (HECWs)

Traditional

Flex Track

Number of incentives for HECWs with an AVERAGE Water Factor of 5.0: 27.00

Are Financial incentives provided for HECWs ? ⊙ Yes ○ No

Has your Agency completed a HECW Market Penetration Study
(this question does not impack your coverage report, purely informational) ○ Yes ⊙ No

HECW Market Penetration Study Documents (Enter the file name and Email file to Natalie@cuwcc.org)

Measured water savings (AF/Year)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

C) WaterSense Specification (WSS) Toilets

(Agency must complete information for at least one coverage option (For Traditional 1, 2, or 3; For Flex Tarck 1, 2, 3, or 4).
You are encouraged to include information on other coverage options, as available.
If seeking credit for additional water savings, you must select Flex Track option)

Traditional

1. Retrofiton Resale Ordinance is in Place ○ Yes ⊙ No

If Yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org)

2. A 75% Market Saturation Achieved ○ Yes ⊙ No

If yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org)

3. WSS Toilets Installed

	Single Family	Multi Family
Number of WSS Toilets Installed	42.00	0.00
Measured Water Savings AF/YR		

Flex Track

4. Non-WSS Toilets

Type of Toilets	Single Family Number of Toilets	Single Family Water Savings	Multi Family Number of Toilets	Multi Family Water Savings
Select an Option				

Description of Other Non-WSS Type of Toilets

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

D) WSS for New Residential Development

(Agency must complete information for at least one coverage option.You are encouraged to include information on other coverageoptions, as available. If seeking credit for additional water savings you must select the Flex Track option)

Traditional

	Single Family	Multi Family
Residential development Rebates	Yes ⊙ No ○	Yes ⊙ No ○
Recognition Programs	Yes ○ No ⊙	Yes ○ No ⊙
Reduced connection Fees	Yes ○ No ⊙	Yes ○ No ⊙
Ordinances	Yes ○ No ⊙	Yes ○ No ⊙

New Development Ordinance
(Enter the file name and Email file to Natalie@cuwcc.org)

Number of new Single Family Units built in Service Area

Number of new Multi Family Units built in Service Area

Flex Track

In the following table, enter one row for each incentive typr program you offer

List of Incentive Amount

Incentive Type	Incentive Amount	Number of WSS fixtures installed	Number of Participating Single Family	Number of Participating Multi Family	Measured Water Savings Single Family	Measured Water Savings Multi Family
HE Toilet	150.00	42.00	27.00	0.00		
HE Clothes	150.00	27.00	27.00	0.00		

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

For Traditional Option, Stop Here, do not go further.
For Flex Track Option, please continue...

Flex Track Menu Options

In addition to the measures on the BMP List, the Flex Track menu options may be implemented to meet the savings goal for this BMP. Fill in the water savings measures that your agency has implemented.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Dis

Reporting unit number: 5,026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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

Link to FAQs

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BMP 4 CII

Traditional ⊙ (Section A - L)

Flex Track ○ (All Sections)

For Traditional Track please answer the fields within the traditional boxes.

For Flex Track option, please answer the fileds within the flex track boxes.

You must enter all measured water savings manually in the summary cells on the right. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings was measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in the flex track data entry form which are necessary to show that the measure was implemented as described.

CII Type of measure implemented

Traditional

A) High - Efficiency Toilets.

Number

Type of program: Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.041748 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

B) High - Efficiency Urinals (0.5 gpf)

Flex Track

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.069086 AF per device

If not, Please provide the following

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

C) Ultra Low Volume Urinals (0.125 gpf)

Flex Track

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.080603 AF per device

If not, Please provide the following

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

D) Zero Consumption Urinals (0.0 gpf)

Flex Track

Traditional

Number 4

Type of program Incentive

Other type of program

Measured water savings (AF/Year)

Do you accept the Council's default savings number for this measure? ○Yes ○ No

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

Council's Annual Water Savings 0.0921146 AF per device

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

E) Commercial High - Efficiency Single Load Clothes Washers

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Counsil's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.116618 AF per device

If not , Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

F) Cooling Tower Conductivity Controllers.

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 1.032250 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

G) Cooling Tower pH Controllers

Traditional

Number

Type of program: Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 3.981543 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

H) Connectionless Food Steamers.

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.25 AF per Steamer Compartment

mIf not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

I) Medical Equipment Steam Sterilizers

Flax Track

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 1.538 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

J) Water - Efficient Ice Machines.

Traditional

Number

Type of program: Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.0834507 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

K) Pressurized Water Brooms.

Traditional

Number

Type of program: Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.1534 AF per device

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

L) Dry Vacuum Pumps.

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.064 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

Traditional Reporting Stop Here, Do not continue

Flex Track Reporing Please Continue...

M) Industrial Process Water Use Reduction.

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Type of Process Water Reduced

If re-using water, what was the secondary use of the water? (such as pre-rince cycle or landscaping)

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5,206

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

2009

BMP 5 Landscape

Link to FAQs

View MOU

◉ **Traditional** ○ **Flex Track**

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.
You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data point salso requested in form which are necessary to show that the measure was implemented as described.

Accounts with Dedicated Irrigation Meters

Traditional

Number of dedicated irrigation meter accounts	109.00
Number of dedicated irrigation meter accounts with water budgets	0.00
Aggregate water use for dedicated non-recreational landscape accounts with budgets	0.00
Aggregate acreage assigned water budgets for dedicated non-recreational landscape accounts with budgets	0.00
Preserved water use records and budgets for customers with dedicated landscape irrigation accounts for at least four years	◉ Yes ○ No

Flex Track

Water Savings from Accounts with dedicated irrigation meters with water budgets (Acre Feet)

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Technical Assistance

Traditional

Number of Accounts 20% over-budget	0.00
Number of accounts 20% over-budget offered technical assistance	0.00
Number of accounts 20% over-budget accepting technical assistance	0.00

Measured water savings (AF/Year)

Flex Track

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Irrigation Water Use Surveys for Mixed-use and Un-metered Accounts

Traditional

Number of mixed use and un-metered accounts	48.00
Number of irrigation water use surveys offered (cumulative, all years)	109.00
Number of irrigation water use surveys accepted (cumulative)	3.00
Can your Agency estimate the amount of landscape acreage for mixed use and Un-metered accounts	○ Yes ⊙ No
If Yes, Aggregate acreage for mixed use and Un-metered accounts	

Measured water savings (AF/Year)

Flex Track

Esrimated water demand from acreage for mixed use and Un-metered accounts	
Annual water savings by customers receiving irrigation water savings surveys and implementing recomendations	

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Financial Incentives

Traditional

Have you implemented and maintained an irrigation equipment retrofit incentive program? ⊙ Yes ○ No

Number of incentives	Dollar value of incentives	Incentive Types	Measured Water Savings (AF/YR)
372.00	4.00	Rotating Sprinkler Nozzles	
3,352.00	0.30	Synthetic Turf	

Flex Track

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Traditional Reporting Stop Here, Do not continue
Flex Track Reporing Please Continue...

The fields in red are required.

Agency name: Los Angeles County Waterworks

Division name (Reporting unit): Los Angeles County Waterworks

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

CUWCC

WATER SOURCES

Service Area Population: 25,585

2010

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
West Basin Municipal Water District	8,265.00	Surface	
Los Angeles DWP	24.29	Surface	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Exported Water Name	AF/YEAR	Where Exported?

he fields in red are required.

Agency name: Los Angeles County Waterworks

Division name (Reporting unit): Los Angeles County Waterworks

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

CUWCC

Water Uses 2010

Potable Water Billed

Make sure to enter numbers in AF/Year.

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Single-Family	7,082.00	5,576.21			
Multi-Family	157.00	624.06			
Commercial	161.00	383.38			
Industrial	2.00	21.20			
Dedicated Irrigation	110.00	164.93			
Other	278.00	849.87			
Other					
Other					
Other					
Other					
Other					
Other					
Other					

Potable Water Un-Billed

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles CountyWaterworks Dist

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

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Link to FAQs

2010

See the complete MOU: View MOU

See the coverage requirements for this BMP:

BMP 1.1 Operations Practices

Comments:

Conservation Coordinator

Conservation Coordinator (•) Yes ( ) No

Contact Information

First Name	Virginia
Last Name	Maloles-Fowler
Title	Water Conservation Coordinator
Phone	626-300-3362
Email	vmfowler@dpw.lacounty.gov

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

Web address(s) URL: comma-separated list http://search.municode.com/html/16274/_DATA/TITLE11/Chapter_11_38_WATER_AND_SEWERS.html,

Enter a description: Los Angeles County, Title 11 - Health and Safety of the Los Angeles County Code, Ordinance No. 91-00466U, Section 1, Chapter 11.38, Part 4; City of Malibu Ordinance No. 243, Section 13.04, Chaper 13.04 of the Malibu Municipal Code; LA County Waterworks Rules and Regulations Part 5 Phase Water Conservation

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

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2010 BMP 1.2 Water Loss Control

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

Leak Detection Contract

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 Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)

Comments:

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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
Single-Family	7,082	7,082	7,082	Bi-monthly	42,492
Multi-Family	157	157	157	Bi-monthly	942
Commericial	161	161	161	Bi-monthly	966
Industrial	2	2	2	Bi-monthly	12
Dedicated Irrigatic	110	110	110	Bi-monthly	660
Other	278	278	278	Monthly	1,668
Other				Other	
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters: 64

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period: 0

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 Feasiblity 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

Web address(s) URL: comma-separated list

Comments:

Other Account Type includes: Fire, Public/Gov Agency, Temporary, Domestic/Private

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

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.

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)
Increasing Block Se	Single-Family	14,470,729.01	3,468,753.04
Increasing Block Se	Multi-Family	1,034,775.32	223,675.61
Increasing Block Se	Commercial	995,793.66	124,953.75
Increasing Block Se	Industrial	60,697.27	1,545.60
Increasing Block Se	Dedicated Irrigation	292,169.90	41,142.52
Increasing Block Se	Other	2,618,637.51	528,813.09
Select a Rate Struc	Other		

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

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)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Comments:

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

2010 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): West Basin Municipal Water District

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
2	Newsletter articles on conservation
2	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets
1	Landscape water conservation media campaigns
1	General water conservation information
3	Website

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): West Basin Municipal Water District

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
4		News releases
4		Newspaper contacts
		Select a type of media contact
		Select a type of media contact
		Select a type of media contact
		Select a type of media contact

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): http://www.lacwaterworks.org/

Describe a minimum of four water conservation related updates to your agency's website that took place during the year: Schedule of events, Water Conservation tips, Quarterly Splash Newsletter, Rebate information and eligible lists, Cash for Grass

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 brake 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	
Total Budget	$255,825		✓		

Comments:

The Public Outreach Annual Budget Amount is the total budget for all 5 Waterworks Districts.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

2010

BMP 2.1 Public Outreach Cont'd

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?
Media Relations	$23,661	✓
Community Events	$7,853	✓
Advertising	$134,879	✓
Website Development	$32,614	✓

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
Community Events	$1

Social Marketing Programs

Branding

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

Describe the brand, theme or mascot.

Theme: Three Easy Ways
Brand: Water Drop
Macot: Little girl

Market Research

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

Market Research Topic	Focus group to assess customer awareness and perception of water supplu and conservation to determine best ways to convey water conservation messages
Brand Message	Three easy ways
Brand Mission Statement	

Community Committees

Do you have a community conservation committee? ⊙ Yes ○ No

Enter the names of the community committees: Malibu Water Conservation Partners

Training

Training Type	# of Trainings	# of Attendees	Description of Other

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description
Advertising	$134,878.85	TV, Radio, Billboard, Newspaper, Movie Theater Ads, Google AdWords

Partnering Programs - Partners

Name	Type of Program
☐ CLCA?	
☐ Green Building Programs?	
☐ Master Gardeners?	
☐ Cooperative Extension?	
☐ Local Colleges?	
☑ Other	Promoting Ocean Friendly Workshops of WBMWD

☐ 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

None

Conservation Gardens

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

None

Landscape contests or awards

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

None

Comments:

The Public Outreach and Social Marketing Expense Amounts are for all 5 Waterworks Districts.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

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: West Basin Municipal Water District

☐ 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: 1

Number of attendees: 113

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

Water Conservation is included in the Countywide Environmental Defender and Generation Earth Program which provides Int

The fields in red are required.

Agency name: Los Angeles County Waterworks Districts

Reporting unit name (District name): Los Angeles County Waterworks District 29 - M

Reporting unit number: 5,026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

2010 BMP 3 Residential

⊙ **Traditional (Sections A - D)** ○ **Flex Track (All Sections)**

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.
You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in form which are necessary to show that the measure was implemented as described.

A) Residential Assistance / Leak Detection

Flex Track

Traditional

	Single Family	Multi Family	Total Water Savings AF/YR	Measured Water Savings AF/YR
Total Number of Accounts	7,082.00	157.00		
Total Number of Participants Overall	54.00	2.00		
Total Number of Leak Det Surveys	54.00	2.00		
Total Number of Showerheads	78.00	11.00		
Total Number of Faucet Aerators	143.00	16.00		
Total Number of Landscape Water Survey	54.00	1.00		

Number of Other Components

Description of Other Components Distributed

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

B) High Efficiency Clothes Washers (HECWs)

Flex Track

Traditional

Number of incentives for HECWs with an AVERAGE Water Factor of 5.0: 27.00

Are Financial incentives provided for HECWs ? ⊙ Yes ○ No

Has your Agency completed a HECW Market Penetration Study
(this question does not impack your coverage report, purely informational) ○ Yes ⊙ No

HECW Market Penetration Study Documents (Enter the file name and Email file to Natalie@cuwcc.org)

Measured water savings (AF/Year)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

C) WaterSense Specification (WSS) Toilets

(Agency must complete information for at least one coverage option (For Traditional 1, 2, or 3; For Flex Tarck 1, 2, 3, or 4).
You are encouraged to include information on other coverage options, as available.
If seeking credit for additional water savings, you must select Flex Track option)

Traditional

1. Retrofiton Resale Ordinance is in Place ○ Yes ⊙ No

If Yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org)

2. A 75% Market Saturation Achieved ○ Yes ⊙ No

If yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org)

3. WSS Toilets Installed

	Single Family	Multi Family
Number of WSS Toilets Installed	17.00	0.00
Measured Water Savings AF/YR		

Flex Track

4. Non-WSS Toilets

Type of Toilets	Single Family Number of Toilets	Single Family Water Savings	Multi Family Number of Toilets	Multi Family Water Savings
Select an Option				

Description of Other Non-WSS Type of Toilets

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

D) WSS for New Residential Development

(Agency must complete information for at least one coverage option.You are encouraged to include information on other coverageoptions, as available. If seeking credit for additional water savings you must select the Flex Track option)

Traditional

	Single Family	Multi Family
Residential development Rebates	Yes ⊙ No ○	Yes ⊙ No ○
Recognition Programs	Yes ○ No ⊙	Yes ○ No ⊙
Reduced connection Fees	Yes ○ No ⊙	Yes ○ No ⊙
Ordinances	Yes ○ No ⊙	Yes ○ No ⊙

New Development Ordinance
(Enter the file name and Email file to Natalie@cuwcc.org)

Number of new Single Family Units built in Service Area

Number of new Multi Family Units built in Service Area

In the following table, enter one row for each incentive typr program you offer

List of Incentive Amount

Flex Track

Incentive Type	Incentive Amount	Number of WSS fixtures installed	Number of Participating Single Family	Number of Participating Multi Family	Measured Water Savings Single Family	Measured Water Savings Multi Family
HE Toiler	150.00	17.00	11.00	0.00		
HE Clothes Washer	150.00	27.00	27.00	27.00		

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

For Traditional Option, Stop Here, do not go further.
For Flex Track Option, please continue...

Flex Track Menu Options

In addition to the measures on the BMP List, the Flex Track menu options may be implemented to meet the savings goal for this BMP. Fill in the water savings measures that your agency has implemented.

E) High bill contact with single-family and multi-family customers

Measured water savings (AF/Year)

Select the Types of Contact:

☐ Email ☐ Phone ☐ Letter ☐ Others (describe)

Upload sample of contact contents (email, letter, etc.)
– if applicable; enter the file name and email file to Natalie@cuwcc.org

Who initiated the contact: (Please Specify customer, agencies, or both)

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)

(Enter the file name and Email file to Natalie@cuwcc.org)

F) Educate residential customers about the behavioral aspects of water conservation

Measured water savings (AF/Year)

Select types of educational methods used:	**# Events**	**# Customers Reached**
☐ Workshop		
☐ Community Event		
☐ Letter		
☐ On-Site Visit		
☐ Phone Call		
☐ Water Survey		
☐ Website Hit		
☐ Door Hanger		
☐ Other (Describe)		

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

G) Notify residential customers of leaks on the customer's side of the meter

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Dis

Reporting unit number: 5,026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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

Link to FAQs

View MOU

BMP 4 CII

Traditional ⊙ (Section A - L)

Flex Track ○ (All Sections)

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.

You must enter all measured water savings manually in the summary cells on the right. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings was measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in the flex track data entry form which are necessary to show that the measure was implemented as described.

CII Type of measure implemented

Traditional

A) High - Efficiency Toilets.

Number: 382

Type of program: Incentive

Other type of program:

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.041748 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

B) High -Efficiency Urinals (0.5 gpf)

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.069086 AF per device

If not, Please provide the following

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

C) Ultra Low Volume Urinals (0.125 gpf)

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.080603 AF per device

If not, Please provide the following

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

D) Zero Consumption Urinals (0.0 gpf)

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes ○ No

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

Council's Annual Water Savings 0.0921146 AF per device

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

E) Commercial High - Efficiency Single Load Clothes Washers

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Counsil's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.116618 AF per device

If not , Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

F) Cooling Tower Conductivity Controllers.

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 1.032250 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

G) Cooling Tower pH Controllers

Traditional

Number

Type of program: Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 3.981543 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

H) Connectionless Food Steamers.

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.25 AF per Steamer Compartment

mIf not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

I) Medical Equipment Steam Sterilizers

Flax Track

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 1.538 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

J) Water - Efficient Ice Machines.

Traditional

Number

Type of program: Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.0834507 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

K) Pressurized Water Brooms.

Traditional

Number

Type of program: Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.1534 AF per device

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

L) Dry Vacuum Pumps.

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.064 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

Traditional Reporting Stop Here, Do not continue

Flex Track Reporing Please Continue...

M) Industrial Process Water Use Reduction.

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Type of Process Water Reduced

If re-using water, what was the secondary use of the water? (such as pre-rince cycle or landscaping)

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5,026

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

2010

BMP 5 Landscape

Link to FAQs

View MOU

◉ **Traditional** ○ **Flex Track**

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.
You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data point salso requested in form which are necessary to show that the measure was implemented as described.

Accounts with Dedicated Irrigation Meters

Traditional

Number of dedicated irrigation meter accounts	110.00
Number of dedicated irrigation meter accounts with water budgets	0.00
Aggregate water use for dedicated non-recreational landscape accounts with budgets	0.00
Aggregate acreage assigned water budgets for dedicated non-recreational landscape accounts with budgets	0.00
Preserved water use records and budgets for customers with dedicated landscape irrigation accounts for at least four years	◉ Yes ○ No

Flex Track

Water Savings from Accounts with dedicated irrigation meters with water budgets (Acre Feet)

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)

(Enter the file name and Email file to Natalie@cuwcc.org)

Technical Assistance

Traditional

Number of Accounts 20% over-budget	0.00
Number of accounts 20% over-budget offered technical assistance	0.00
Number of accounts 20% over-budget accepting technical assistance	0.00

Measured water savings (AF/Year)

Flex Track

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)

(Enter the file name and Email file to Natalie@cuwcc.org)

Irrigation Water Use Surveys for Mixed-use and Un-metered Accounts

Traditional

Number of mixed use and un-metered accounts	64.00
Number of irrigation water use surveys offered (cumulative, all years)	110.00
Number of irrigation water use surveys accepted (cumulative)	4.00
Can your Agency estimate the amount of landscape acreage for mixed use and Un-metered accounts	○ Yes ◉ No
If Yes, Aggregate acreage for mixed use and Un-metered accounts	

Measured water savings (AF/Year)

Flex Track

Esrimated water demand from acreage for mixed use and Un-metered accounts	
Annual water savings by customers receiving irrigation water savings surveys and implementing recomendations	

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Financial Incentives

Traditional

Have you implemented and maintained an irrigation equipment retrofit incentive program? ○ Yes ○ No

Number of incentives	Dollar value of incentives	Incentive Types	Measured Water Savings (AF/YR)

Flex Track

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Traditional Reporting Stop Here, Do not continue
Flex Track Reporing Please Continue...

APPENDIX J

Water Recycling

(Part 6 of the LA County Waterworks Rules and Regulations)

PART 6 - WATER RECYCLING

SECTION A STATEMENT OF POLICY AND DECLARATION OF PURPOSE

6-A-1 STATEMENT OF POLICY: It is the policy of the Districts that recycled water determined to be available pursuant to Section 13550 of the California Water Code shall be used for nonpotable uses within the Districts wherever its use is financially and technically feasible and consistent with legal requirements.

6-A-2 DECLARATION OF PURPOSE: The purpose of this chapter is to define the rules for the use of recycled water within the Districts' service areas and the procedure to establish new recycled water services or convert existing potable water services to recycled water services.

SECTION B- DEFINITIONS

6-B-1 DEFINITIONS: The following terms are defined for purposes this chapter:

6-B-2 "Agricultural purposes" includes the growing of field and nursery crops, row crops, trees, and vines, and the feeding of fowl and livestock.

6-B-3 "Artificial Lake" means a human-made lake, pond, lagoon, or other body of water that is used wholly or partly for landscape, scenic, or noncontact recreational purposes.

6-B-4 "Commercial office building" means any building for office or commercial uses with water requirements, which include, but are not limited to, landscape irrigation, toilets, urinals and decorative fountains.

6-B-5 "Districts" means the Los Angeles County Waterworks District No. 21, Kagel Canyon; Los Angeles County Waterworks District No. 29, Malibu; Los Angeles County Waterworks District No. 36, Val Verde; Los Angeles County Waterworks District No. 37, Acton; and Los Angeles County Waterworks District No. 40, Antelope Valley.

6-B-6 "Greenbelt areas" means an expanse of landscape, including, but not limited to buffer zones, greenbelts, parks, golf courses, cemeteries, road medians, and road shoulders.

PART 6 - WATER RECYCLING (CONTINUED)

SECTION B-DEFINITIONS (CONTINUED)

6-B-7 "Industrial process water" means water used by any industrial facility with process water requirements that include, but are not limited to, rinsing, washing, cooling, and circulation, or construction, including any facility regulated by the industrial waste discharge ordinance of the city.

6-B-8 "Off-site facilities" means water facilities from the source of supply to the point of connection with the on-site facilities, including the water meter.

6-B-9 "On-site facilities" means water facilities under the control of the owner, downstream from the water meter.

6-B-10 "Potable water" means water that conforms to the federal, state and local standards for human consumption. (See California Code of Regulations, Section 64400.)

6-B-11 "Recycled water" means water that, as a result of tertiary treatment of wastewater, is suitable for a direct beneficial use or controlled use that would not otherwise occur. (See Water Code Section 13050(n).)

6-B-12 "Recycled water distribution system" means a piping system intended for the delivery of recycled water only and which is separate from any potable water distribution system. Recycled water systems are identified by the use of purple piping and signage as required by California Code of Regulations, Section 60310.

SECTION C USE OF RECYCLED WATER

6-C-1 FEASIBLE AND AUTHORIZED USES -In accordance with the provisions of Section A, the uses of recycled water may include, but not be limited to, landscape irrigation, agricultural irrigation, natural treatment system irrigation, construction water, industrial process water, cooling tower water, water for flushing toilets and urinals, trap primers in dual-plumbed buildings, and public and private recreational impoundment. Each such use must be considered for approval by the Districts on a case-by-case basis, and the Districts may determine whether it is feasible to furnish recycled water for the specific use involved.

Prior to approving such uses, the Districts may set forth specific requirements as conditions to providing such services and/or require specific prior approval from the appropriate regulatory agencies. The Districts determination of feasibility will be based on the following factors:

6-C-1a Whether recycled water is available, or may be made available in a reasonable time period, for the intended use;

6-C-1b Whether recycled water use is in accordance with the standards of treatment and water quality requirements set forth in Title 22, Division 4, of the California Code of Regulations and all other applicable federal, state and local laws and regulations;

6-C-1c Whether the use of recycled water can be done in a manner not detrimental to public health;

6-C-1d Whether the cost of on-site facilities of a recycled water distribution system is reasonable under the circumstances;

6-C-1e Whether the cost of the recycled water is reasonable. Recycled water charges equal to or less than 100 of potable water charges are prima facie evidence of reasonableness.

6-C-2 REQUIREMENT TO USE RECYCLED WATER

6-C-2a For all new construction that leads to an application for new potable water service hook-up, the applicant is required to seek a determination of recycled water feasibility by the Districts Area Engineer in sufficient time to incorporate on-site facilities of a recycled water distribution system into the project construction. If use of recycled water is determined by the Districts to be feasible, on-site facilities of a recycled water distribution system shall be required as a condition of issuance of a will-serve letter or water service application.

6-C-2b The Districts' Area Engineers will also review applications for new potable water service to existing service connections to determine the feasibility of providing recycled water service to these applicants. If recycled water service is determined by the Districts Area Engineer to be feasible, applicants for new water service shall be required to install onsite facilities to accommodate both potable

water and recycled water service in accordance with these Rules and Regulations.

6-C-2c The Districts will identify existing customers capable of receiving service from the Districts recycled water systems and will determine the feasibility of providing recycled water service to these customers. The Districts may also require existing customers to retrofit existing onsite water service facilities to accommodate recycled water service.

6-C-2d If the Districts do not require the use of recycled water service, a customer may still obtain recycled water service if the Districts determine that recycled water service to the customer is for an authorized use and it is feasible for the Districts to provide recycled water to the requesting customer.

SECTION D - PROCEDURES

6-D-1 REGULATIONS APPLIED TO APPLICANTS FOR NEW WATER SERVICE

6-D-1a Conditions: Upon application by a developer, owner or water service customer (herein referred to as applicant) for a new industrial, commercial, or residential subdivision(s) located within a District for which a tentative map or parcel map is required pursuant to California Code of Regulations Section 66426, the Districts Area Engineer shall review the application and make a preliminary determination whether the current or proposed use of the subject property could be served with recycled water or include facilities designed to accommodate the use of recycled water in the future. Based upon such determination, use of recycled water and provision of recycled water distribution systems or other facilities for the use of recycled water, and application for a permit for such use may be required as a condition of approval of any such application or will-serve letter, in addition to any other conditions of approval.

6-D-1b Alterations and Remodeling: Upon application for a permit for the alteration or remodeling of multi-family, commercial or industrial structures (including, for example, commercial office buildings), the Districts Area Engineer shall review on a case-by case basis the application and make a preliminary determination whether the

subject property shall be required to be served with recycled water or to include facilities designed to accommodate the use of recycled water in the future. Based upon such determination, use of recycled water and provision of recycled water distribution systems or other facilities for the use of recycled water, and application for a permit for such use, may be required as a condition of approval of the application.

6-D-1c Notice of Determination - A notice of the basis for the preliminary determination, proposed conditions of approval and schedule for compliance shall be provided to the applicant prior to approval of the development application.

6-D-1d Costs - Applicants for new or expanded water service, shall be responsible for the full capital cost of onsite recycled water facilities and applicant-furnished offsite distribution facilities required as a condition of service.

6-D-2 REGULATIONS APPLIED TO NEW CUSTOMERS AT EXISTING POTABLE WATER SERVICES

6-D-2a Conditions: Upon application by a new water service customer for an existing potable water service connection located within a District, the Districts Area Engineer shall review the application and make a preliminary determination whether the current or proposed use of the subject property could be served with recycled water or include facilities designed to accommodate the use of recycled water in the future. Based upon such determination, use of recycled water and provision of recycled water distribution systems or other facilities for the use of recycled water, and application for a permit for such use may be required as a condition of approval of any such application, in addition to any other conditions of approval.

6-D-2b Notice of Determination - A notice of the basis for the preliminary determination, proposed conditions of approval and schedule for compliance shall be provided to the applicant prior to approval of the water service application or will-serve letter.

6-D-2c Costs New customers for existing or expanded potable water service will pay the reasonable capital costs of retrofitting the onsite

water service facilities and the Districts will provide the offsite facilities necessary to deliver recycled water to the meter.

6-D-3 REGULATIONS FOR EXISTING POTABLE WATER SERVICE CUSTOMER

6-D-3a Preliminary Determination: During the design of new recycled water facilities, the Districts shall make preliminary determinations as to which existing potable water services shall be converted to use recycled water. Each customer for these potable water services shall be notified of the basis for a determination that conversion to recycled water service will be required, as well as the proposed conditions and schedule for conversion.

6-D-3b Notice: The notice of the preliminary determination, including the proposed conditions and time schedule for compliance, and a recycled water permit application shall be provided to the water service customer.

6-D-3c Costs: Except as otherwise provided herein, when an existing potable water service customer is required by the Districts to convert to recycled water service, the customer will pay the reasonable capital costs of retrofitting the onsite water service facilities and the Districts will provide the offsite facilities necessary to deliver recycled water to the meter.

6-D-3ce Applicability of Outside of District Rates: If an existing customer is required by the Districts to convert all or a portion of their potable water service to recycled water service and refuses, the District will assess the applicable Outside of District Rate Schedules and Water Service Charges (see Part 2, Section 2-A-25a) for the customer's potable water service.

6-D-4 REQUESTED SERVICE - On a case by case basis, upon application for a permit to use recycled water on a property not covered by subsections 6-D-1, 6-D-2, and 6-D-3 above, the Districts shall review the application and make a determination whether the subject property shall be served with recycled water. Based upon such determination, the application for the permit shall be accepted and processed subject to Section E below.

SECTION D PROCEDURES (CONTINUED)

6-D-5 OBJECTIONS AND APPEALS: A water service customer or applicant for water service may file a notice of objection within (30) days after any notice of determination to comply is delivered or mailed to the customer, and may request reconsideration of the determination or modification of the proposed conditions or schedule for conversion. The objection must be in writing and specify the reasons for the objection. The preliminary determination shall be final if a customer does not file a timely objection. The District Engineer shall review the objection and shall confirm, modify, or abandon the preliminary determination.

SECTION E- RECYCLED WATER PERMIT FROM THE DISTRICTS

6-E-1 PROCESS - Upon a final determination by the Districts that a property shall be served with recycled water, or adoption of a condition of development approval requiring use or accommodation of the use of recycled water, the water service customer, owner or applicant shall obtain a recycled water permit.

6-E-2 CONDITIONS - The permit shall specify the design and operational requirements for the applicant's water distribution facilities and schedule for compliance, and shall require compliance with both the California Department of Public Health Wastewater Recycling Criteria (see California Code of Regulations, Title 22), and requirements of the applicable regional water quality control board.

6-E-3 PLAN APPROVAL - Plans for the recycled and non recycled water distribution systems for the parcel shall be reviewed by the Districts, and a field inspection shall be conducted before the permit is granted.

6-E-4 PERMIT ISSUANCE - Upon approval of plans, the permit shall be issued. Recycled water shall not be supplied to a property until an inspection by the Districts determines that the applicant is in compliance with the permit conditions. Recycled water service shall not commence within any area of the Districts except in accordance with the written agreement between the recycled water producer and the Districts.

PART 6 **WATER RECYCLING (CONTINUED)**

SECTION E RECYCLED WATER PERMIT FROM THE DISTRICTS (CONTINUED)

6-E-5 TEMPORARY USE OF POTABLE WATER - At the discretion of the Districts, potable water may be made available on a temporary basis, until recycled water is available. Before the applicant receives temporary potable water, a water recycling permit, as described in this Section, must be obtained for new on-site distribution facilities. Prior to commencement of recycled water service, an inspection of the on-site facilities will be conducted to verify that the facilities have been maintained and are in compliance with the recycled water permit and current requirements for service. Upon verification of compliance, recycled water shall be served to the parcel for the intended use. If the facilities are not in compliance, the applicant shall be notified of the corrective actions necessary and shall have at least thirty (30) days to take such actions prior to initiation of enforcement proceedings.

6-E-6 RECYCLED WATER RATE - The rate charged for recycled water shall be established by resolution of the Districts. Water rates shall be adjusted annually for inflationary factors using the Los Angeles Area Construction Price Index (CPI) as published by the U.S. Department of Labor.

SECTION F - SANCTIONS

6-F-1 PUBLIC NUISANCE - Discharge of wastes or the use of recycled water in any manner in violation of this chapter or of any permit issued hereunder is hereby declared a public nuisance and shall be corrected or abated as directed by the Districts. Any person creating such a public nuisance is guilty of a misdemeanor.

6-F-2 INJUNCTION - Whenever a discharge of wastes or use of recycled water is in violation of this chapter or otherwise causes or threatens to cause a condition of nuisance, the Districts may seek injunctive relief as may be appropriate to enjoin such discharge or use.

6-F-3 PERMIT REVOCATION - In addition to any other statute or rule authorizing termination of water service, the Districts may revoke a permit issued hereunder if a violation of any provision of this chapter is found to exist or if a discharge of wastes or use of recycled water causes or threatens to cause a nuisance.

PART 6 **WATER RECYCLING (CONTINUED)**

SECTION F - SANCTIONS (CONTINUED)

6-F-4 PENALTY - Any owner and/or operator who violates this chapter shall, for each day of violation, or portion thereof, be subject to a fine not exceeding one thousand dollars ($1,000.00). In addition, water service to the property may be discontinued.

SECTION G - VALIDITY

6-G-1 If any provision of this chapter or the application thereof to any person or circumstance is held invalid, the remainder of the ordinance codified in this chapter and the application of such provisions to other persons or circumstances shall not be affected thereby.

APPENDIX K

Notification to City of Malibu

(Final Copy to DWR will include the city notification per Section 10621(b) of the California Water Code)

APPENDIX L

Notice of Public Hearing

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU AND THE MARINA DEL REY WATER SYSTEM NOTICE OF PUBLIC HEARING FOR ADOPTION OF THE 2010 URBAN WATER MANAGEMENT PLAN

The County of Los Angeles Board of Supervisors, as the governing body of the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System, will hold a public hearing on June 28, 2011, at 9:30 a.m., in Room 381, Kenneth Hahn Hall of Administration, 500 West Temple Street, Los Angeles, California 90012, in the matter of adopting the Urban Water Management Plan (Plan) for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System.

The Plan has been prepared in compliance with the Urban Water Management Planning Act. The Plan includes a water-shortage contingency plan, projection of future water demands, an identification of sufficient water supplies to meet projected water demands, and an explanation of existing and future water conservation practices to meet the reduction of 20 percent per capita use by the year 2020 based on the Legislative Senate Bill X7-7.

Copies of the Plan are available for public review at the Lloyd Taber Marina del Rey County Library, Malibu Library, City of Malibu, Resource Conservation District of the Santa Monica Mountains, and at the Waterworks field office located at 23533 West Civic Center Way in Malibu.

The Board of Supervisors will consider and may approve the Plan as recommended by the Director of Public Works. For further information regarding this matter, please call (626) 300-3315.

ENCLOSURE B

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES, CALIFORNIA, APPROVING THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY

WHEREAS, the Urban Water Management Planning Act (Division 6 of the California Water Code) requires each water supplier with more than 3,000 customers (service connections), or annually supplying more than 3,000 acre-feet of water, to prepare and adopt an Urban Water Management Plan; and

WHEREAS, Los Angeles County Waterworks District No. 40, Antelope Valley (hereinafter referred to as DISTRICT), has approximately 55,000 service connections, and is therefore required to prepare and adopt an Urban Water Management Plan; and

WHEREAS, the DISTRICT'S 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley (Attachment 2) meets the requirements of the Urban Water Management Planning Act.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors of the County of Los Angeles, as the Board of Directors of the DISTRICT hereby adopts the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley.

The foregoing Resolution was on the 28th day of June, 2011, adopted by the Board of Supervisors of the County of Los Angeles as the governing body of the Los Angeles County Waterworks District No. 40, Antelope Valley.

SACHI A. HAMAI
Executive Officer of the
Board of Supervisors of the
County of Los Angeles

By _____
Deputy

APPROVED AS TO FORM:

ANDREA SHERIDAN ORDIN
County Counsel

By _____
Deputy

ATTACHMENT 2

2010 Integrated Regional Urban Water Management Plan for the Antelope Valley

May 25, 2011

Los Angeles County, Department of Public Works
Waterworks District No. 40
900 South Fremont Avenue
Alhambra, CA 91803

Rosamond Community Services District
3179 35th Street West
Rosamond, CA 93560

Quartz Hill Water District
42141 50th Street West
Quartz Hill, CA 93536

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Section 1

Introduction & Summary

Section 1: Introduction & Summary

The 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley (UWMP) has been prepared as an Appendix to the Antelope Valley Integrated Regional Water Management Plan in cooperation with all the other retail water agencies in the Antelope Valley. It fulfills the requirements of an Urban Water Management Plan for Los Angeles County Waterworks District No. 40, Antelope Valley, Quartz Hill Water District, and Rosamond Community Services District.

The adjudication process has begun for the Antelope Valley Groundwater Basin; however it has not been defined. Nothing in this UWMP shall be interpreted to interfere in any way with the adjudication or settlement process. All tables in Section 7 reflect the projected groundwater pumping provided by each of the water purveyors. The groundwater pumping projections do not reflect agreed upon values by all the water purveyors, and each water purveyor understands these projections are subject to change under the pending adjudication process. These values also do not necessarily reflect the maximum pumping capacity of each water purveyor.

This Section presents a brief description of the provisions of the Urban Water Management Planning Act (UWMPA), provides a description of the participating water agencies and their service area characteristics, including population, climate, water demand, water supply, water conservation, water recycling, and reliability planning. The Study Area description is also addressed in the 2007 Antelope Valley Integrated Regional Water Management Plan (AVIRWMP) (pages 2-1, 2-3, 2-22 through 2-25). The 2007 AVIRWMP can be found at http://www.avwaterplan.org. The contents of this plan are provided in this section.

1.1 The Urban Water Management Plan

In 1983, the California Legislature enacted the UWMPA (Assembly Bill (AB) 797; Water Code, Division 6, Part 2.6, Section 10610-10656). This UWMPA requires water suppliers serving more than 3,000 customers or water suppliers providing more than 3,000 acre-feet (AF) of water annually to prepare an Urban Water Management Plan (UWMP) to promote water demand management and efficient water use. The UWMPA also requires water suppliers to develop, adopt, and file an UWMP (or update) every five years. A six-month extension was granted by the legislature for submittals of the 2010 Urban Water Management Plans to provide additional time for the water suppliers to address Senate Bill X7-7 (SB X7-7), which requires water retailers to reduce per capita water use by 20 percent by the year 2020 with an interim target of 10 percent reduction by 2015.

Recent changes approved in 2002 and 2004 include SB 1348, SB 1384, SB 1518, AB 105, and AB 318. SB 1348 requires that the Department of Water Resources (DWR) consider the demand management activities of urban water supplier in the grant and loan application evaluation. SB 1384 requires that urban water supplier to submit a copy of their UWMP to their wholesale supplier. This bill encourages coordination between the wholesale and retail agencies. SB 1518 requires additional information regarding the use of recycled water including a comparison of previously projected use to actual use to determine the effectiveness of recycled water initiatives. AB 105 requires an urban water supplier to submit a copy of their UWMP to the California State Library. AB 318 requires urban water suppliers to provide a discussion of the desalination opportunities available to them. This includes ocean water, brackish water, and groundwater desalination for use as a long-term supply. AB 1420 passed in 2007, which addresses funding eligibility requirements of Section 10631.5 of the Water Code.

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In order for an urban water purveyor to be eligible for grant funding, the water purveyor must show implementation of water use efficiency demand management measures.

A copy of the current UWMPA is provided in Appendix A.

1.1.1 Purpose of the Plan

An UWMP is designed to provide an effective management and planning tool for water agencies throughout California. It allows for a succinct summary of an agency's water supplies, demands, and plans to ensure future reliability. It also encourages the efficient management of water supplies by requiring a discussion of potential water transfers and exchanges, desalination, and recycled water opportunities.

In addition to meeting the requirements of the UWMPA, this plan will also meet the requirements of a regional water management plan. Detailed discussions of current and future water supply will be provided in conjunction with water supply strategies for the Antelope Valley to ensure a reliable future water supply. Figure 1-1 provides a vicinity map of the Antelope Valley.

FIGURE 1- 1: ANTELOPE VALLEY VICINITY MAP

1.1.2 Regional Approach in Preparation of the Plan

In an effort to improve coordination and facilitate inter-agency planning to maximize resources within the Antelope Valley, the Los Angeles County Waterworks District No. 40 (District No. 40) is acting as the lead agency for this Integrated Regional UWMP. All agencies located within the Antelope Valley were given the opportunity to participate in this joint effort of Plan preparation. As such, this plan has been prepared for District No. 40, Rosamond Community Services District (RCSD) and Quartz Hill Water District (QHWD). These three agencies are required by

the UWMPA to prepare an UWMP. This plan was also prepared in conjunction with efforts of other agencies within the Antelope Valley that have chosen to not participate in this joint effort. Table 1-1 provides a summary of the Agency Coordination for this Plan.

TABLE 1-1: AGENCY COORDINATION

	Participated in developing the plan	Commented on the draft	Attended public meeting	Was contacted for assistance	Was sent a copy of the draft plan	Intention to adopt
District No. 40	X	X		X	X	X
RCSD	X	X		X	X	X
QHWD	X	X		X	X	X
PWD	X	X		X	X	
AVEK	X	X		X	X	
City of Palmdale	X	X		X	X	
City of Lancaster	X	X		X	X	
Littlerock Creek Irrigation District				X	X	
Los Angeles County Regional Planning	X	X		X	X	
Los Angeles County Sanitation Districts		X		X	X	

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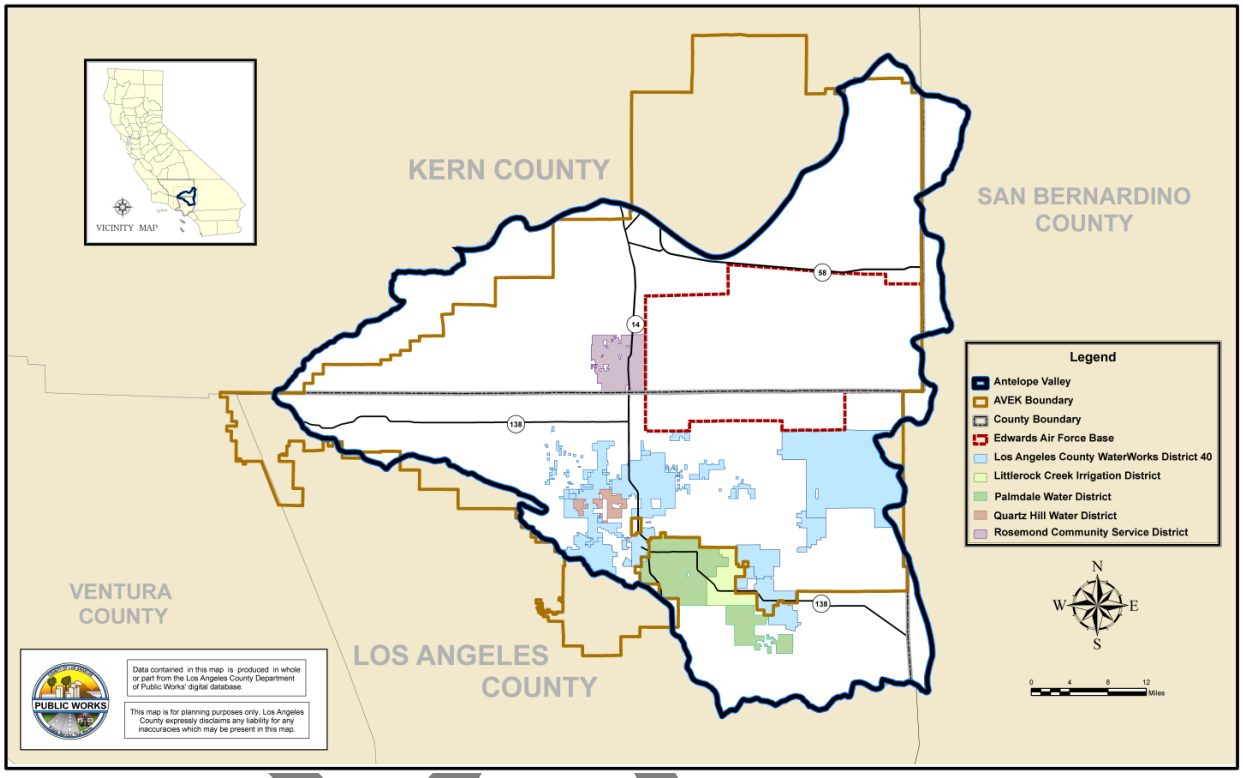
A 60-day notification was released to Cities of Lancaster and Palmdale prior to the public hearing. Prior to adoption, the UWMP was made available to the public for inspection and a public hearing was held on May 31, 2011 at the City of Lancaster. The UWMP was adopted by the Districts' Boards, and is subject to California Government Code pertaining to legal public noticing. The UWMP must be submitted to DWR, State Library, and city/county that received water from supplier within 30 days after adoption. A copy of the notice for a public hearing and the resolutions of adoption are included in Appendix B.

1.2 The Water Purveyors of the Antelope Valley

As discussed previously, this plan has been prepared as part of a joint effort between District No. 40, RCSD and QHWD. A brief discussion of each water purveyor follows. Figure 1-2 provides a map of the water purveyors' service areas.

FIGURE 1-2: STUDY AREA BOUNDARIES



1.2.1 District No. 40

District No. 40 was formed in accordance with Division 16 Sections 55000 through 55991 of the State Water Code to supply water for urban use throughout the Antelope Valley. It is governed by the Los Angeles County Board of Supervisors with the Waterworks Division of the County Department of Public Works providing administration, operation and maintenance of District No. 40's facilities. District No. 40 is comprised of eight regions serving customers in the cities of Lancaster and Palmdale (Regions 4 and 34), Pearblossom (Region 24), Littlerock (Region 27), Sun Village (Region 33), Rock Creek (Region 39), Northeast Los Angeles County (Region 35), and Lake Los Angeles (Region 38). Regions 4 and 34 are integrated and are operated as one system. Similarly, Regions 24, 27, and 33 are also integrated and operated as one system. The various regions were consolidated into a single district on November 2, 1993. District No. 40 encompasses approximately 554 square miles.

1.2.2 RCSD

RCSD was formed in 1966 under the Community Services District Law, Division 3, 61000 of Title 6 of the Government code of the State of California. It provides water, sewer, lighting service, and public park maintenance services to residential, commercial, industrial, and agricultural customers, and for environmental and fire protection uses. RCSD's service area boundary encompasses approximately 31 square miles of unincorporated residential, industrial,

and undeveloped land in Kern County. The majority of the land located within the RCSD's service area is undeveloped. The developed property focuses around central Rosamond, with additional developed areas in the Tropico Hills.

1.2.3 QHWD

QHWD is located in the southwest end of the Antelope Valley. It is 65 miles northwest of Los Angeles on the Antelope Valley Highway 14 and west of both Palmdale and Lancaster. QHWD occupies an area of about 6 square miles located in the City of Lancaster and unincorporated portions of the County of Los Angeles. Incorporation of QHWD occurred in May 1954 and water service is provided to all residential, commercial, industrial, and agricultural customers, and for environmental and fire protection uses.

1.3 Service Area Characteristics

The Antelope Valley Study Area (Study Area), as defined for the purposes of this report, encompasses the service areas of the three water purveyors described above: District No. 40, RCSD and QHWD. The Study Area is generally in the southern portion of the Antelope Valley.

1.3.1 Climate

Comprising the southwestern portion of the Mojave Desert, Antelope Valley ranges in elevation from approximately 2,300 feet to 3,500 feet above sea level. Vegetation native to the Antelope Valley are typical of the high desert and include Joshua trees, saltbush, mesquite, sagebrush, and creosote bush. The climate is characterized by hot summer days, cool summer nights, cool winter days and cool winter nights. Typical of a semiarid region, mean daily summer temperatures range from 63°F to 93°F, and mean daily winter temperatures range from 34°F to 57°F. The growing season is primarily from April to October. Precipitation ranges from 5 inches per year along the northern boundary to 10 inches per year along the southern boundary.

TABLE 1-2: ANTELOPE VALLEY CLIMATE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Standard Monthly Average ET_0 (inches)	2.02	2.61	4.55	6.19	7.3	8.85	9.77	8.99	6.52	4.66	2.68	2.05	66.19
Average Rainfall (inches)	1.52	1.65	1.28	0.46	0.13	0.04	0.05	0.18	0.20	0.32	0.68	1.39	7.9
Average Max Temperature (°F)	58.3	62.1	67.2	73.9	81.7	90.1	95.5	96.9	91.3	80.3	67.1	58.7	77.1
Average Min Temperature (°F)	32.4	35.6	39.0	43.7	50.6	57.7	64.9	63.7	57.4	48.0	37.9	32.6	47.0

Source: CIMIS data for Palmdale #197 station and Western Regional Climate Center, Palmdale Station.

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1.3.1.1 Effects of Global Warming

In the recent draft update of DWR's Water Plan, an assessment of the impacts of global warming on the State's water supply was conducted using a series of computer models that were based on decades of scientific research. Model results indicate increased temperature, reduction in Sierra snow depth, early snow melt, and a raise in sea level. These changing hydrological conditions could affect future planning efforts which are typically based on historic conditions. Difficulties that may arise include:

- hydrological conditions, variability, and extremes that are different than current water systems were designed to manage
- changes occurring too rapidly to allow sufficient time and information to permit managers to respond appropriately
- requiring special efforts or plans to protect against surprises and uncertainties.

As such, DWR will continue to provide updated results from these models as further research is conducted.

1.3.2 Other Demographic Factors

Historically, land uses within the Antelope Valley have focused primarily on agriculture; however, the Valley is in transition from predominately agricultural uses to predominately residential and industrial uses. As this transition continues, water demand is expected to increase.

Growth in the Antelope Valley proceeded at a slow pace until 1985. However, between 1985 and 1990, the growth rate increased approximately 1,000 percent from the average growth rate between the years 1956 to 1985. Current and projected population for the Study Area is shown in Table 1-3. Approximately 798,000 people will reside in the Study Area by 2035. This represents an increase of nearly 200 percent from the current population.

TABLE 1-3 POPULATION PROJECTION

	2010	2015	2020	2025	2030	2035
District No. 40	261,800	309,200	355,800	401,500	445,200	493,900
RCSD	17,700	22,600	26,200	30,400	35,200	40,800
QHWD	17,500	20,800	23,900	27,000	29,900	33,000
Study Area	**297,000**	**352,600**	**405,900**	**458,900**	**510,300**	**567,700**

Source: District No. 40 and QHWD projections were based on land use maps and General Plans for the Cities of Palmdale and Lancaster. RCSD used growth rate projections based on Kern County data.

1.4 Resources Maximization

The 2005 Integrated UWMP, 2007 Antelope Valley Integrated Regional Water Management Plan (AVIRWMP) and this UWMP were developed to allow the Study Area to maximize the use of available resources and minimize the use of imported water. Section 2 of this UWMP describes the water resources available to the Study Area for a 25-year period.

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1.5 Contents of this Plan

The organization of this report and a brief description of the respective sections are outlined below.

Section 1: Introduction and Summary
This section provides a brief introduction and summary of the Integrated UWMP, describes the planning process for this Integrated UWMP, provides an overview of this Integrated UWMP's Study Area, and summarizes the key elements of this Integrated UWMP.

Section 2: Current and Future Water Supply Resources
This section describes the existing and planned water supplies available to the Study Area. Supplies include groundwater, imported water, and recycled water. Projected supplies by source are presented over the next 25 years, in 5-year increments.

Section 3: Water Supply Strategy/Opportunities
This section provides a discussion and evaluation of the various alternative water management strategies and supplies available to the Study Area. Based on the evaluation a recommended water supply strategy is presented to ensure a reliable source of supply for all water purveyors in the Study Area to meet the projected demand.

Section 4: Water Use Provisions
This section on water demand describes historic, current, and projected water usage within the Study Areas. Historic water usage patterns and future water demand are determined by population and land use. In addition, the effects of weather and water conservation on historic water usage are discussed.

Section 5: Demand Management Measures
This section addresses the 14 water conservation measures called Demand Management Measures (DMMs), specified in the latest revision of the UWMPA, and describes current and future implementation of these water conservation measures within the agencies' service areas. The measures range from public information and education programs to physical solutions, such as residential plumbing retrofit, as well as policy/financial incentives, such as rebate programs and pricing policies. Many of the conservation measures are already being implemented in the Study Area.

The DMMs are the same as the 14 urban Best Management Practices (BMPs) developed by the California Urban Water Conservation Council (CUWCC).

Section 6: Recycled Water Plan

Section 7: Water Service Reliability Planning
This section presents the water reliability assessment for the Study Area by water purveyor. It compares the total projected water demand with the expected water supply over the next 25 years, in 5-year increments (i.e., 2015, 2020, 2025, 2030, and 2035). Assessments are also presented for a single dry year and multiple dry years (i.e., droughts). The purpose of this analysis is to determine whether there is a reasonable likelihood of meeting projected future demands with the mix of resources currently under consideration. The conclusion of this section is that, if projected imported and local supplies are developed as indicated, no water shortages are anticipated in the Study Area during the UWMP period and beyond.

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Section 8: Per Capita Water Use Targets

Section 9: Water Use Projections and Low Income Housing

Section 10: Water Shortage Contingency Analysis
This section presents the activities to be utilized in the event of a catastrophic water supply interruption, such as an earthquake or a drought. Stages of action are described, including levels of rationing and reduction goals, priorities of use, water shortage stages and triggering mechanisms, water allotment methods, mandatory prohibitions on water use, and excessive use penalties.

1.6 List of Abbreviations and Acronyms

AF	Acre-feet
AFY	Acre-feet per year
Study Area	Antelope Valley Study Area
AVTTP	Antelope Valley Tertiary Treatment Plant
AVEK	Antelope Valley-East Kern Water District
ASR	Aquifer Storage and Recovery
BMPs	Best Management Practices
SWP	California State Water Project
CUWCC	California Urban Water Conservation Council
CVP	Central Valley Project
CII	Commercial/industrial/institutional
cfs	Cubic feet per second
DMM	Demand Management Measure
DWR	Department of Water Resources
DAWN	Domestic-Agricultural Water Network
ERPs	Emergency Response Procedures
gpcd	Gallons per capita per day
gpd	Gallons per day
gpm	Gallons per minute
GIS	Geographical Information System
hcf	Hundred cubic feet
LWRP	Lancaster Water Reclamation Plant
LAFCO	Los Angeles County Local Agency Formation Committee
LACSD	Los Angeles County Sanitation District
District No. 40	Los Angeles County Waterworks District No. 40
MCL	Maximum Contamination Level
MOU	Memorandum of Understanding
MWD	Metropolitan Water District
mg/L	Milligrams per liter
mgd	Million gallons per day
M&I	Municipal and Industrial
NACWA	National Association of Clean Water Agencies
PWRP	Palmdale Water Reclamation Plant
ppb	Parts per billion

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PWCP	Phased Water Conservation Plan
PWD	Palmdale Water District
QHWD	Quartz Hill Water District
RCSD	Rosamond Community Services District
RWWTP	Rosamond Wastewater Treatment Plant
SCAG	Southern California Association of Governments
SIC	Standard Industrial Classification
TOC	Total Organic Carbon
THM	Trihalomethane
ULFT	Ultra low flush toilets
USGS	United States Geological Society
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Planning Act
WCC	Water conservation coordinator
WET	Water Education for Teachers
WEL	Water Efficiency Landscape
WSCP	Water Shortage Contingency Plan

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Section 2

Current and Future Water Supply Resources

Section 2: Current and Future Water Supply Resources

This Section provides a detailed discussion of the existing and planned water supplies available to the Study Area. The Antelope Valley anticipates receiving water from local groundwater, imported water, and other sources. The projected supply by source is presented over the next 25 years, in 5-year increments.

2.1 Local Groundwater Supplies

The Antelope Valley Integrated Regional Water Management Plan (IRWMP) meets the AB 3030 requirements and acts as the region's groundwater management plan. Further discussion on groundwater can be found in the 2007 AVIRWMP (pages 1-24 through 1-25 and 2-10 through 2-16). In 1995, RCSD also developed a groundwater management plan in accordance with AB 3030. Although the groundwater basin is not currently adjudicated, an adjudication process has begun. However, water rights may be assigned as part of the adjudication process.

A summary of the historic pumping by each water purveyor is provided in Table 2-1.

TABLE 2-1: GROUNDWATER PUMPING HISTORY (AF)

	2005	2006	2007	2008	2009
District No. 40	19,769	12,371	19,523	24,901	18,265
Percent of Total Supply	35	21	33	46	37
RCSD	1,701	2,213	2,483	2,857	2,856
Percent of Total Supply	55	63	66	76	90
QHWD	1,245	1,405	2,073	2,854	2,431
Percent of Total Supply	23	25	31	44	44
Study Area	22,715	15,989	24,079	30,612	23,552
Percent of Total Supply	39	30	35	47	39

2.1.1 Source Characteristics

The Antelope Valley Groundwater Basin is comprised of two primary aquifers: (1) the principal aquifer and (2) the deep aquifer. The principal aquifer is an unconfined aquifer. Separated from the principal aquifer by clay layers, the deep aquifer is generally considered to be confined. In general, the principal aquifer is thickest in the southern portion of the Valley near the San Gabriel Mountains, while the deep aquifer is thickest in the vicinity of the dry lakes on Edwards Air Force Base. The Antelope Valley Groundwater Basin is divided into twelve subunits. The subunits are Finger Buttes, West Antelope, Neenach, Willow Springs, Gloster, Chaffee, Oak Creek, Pearland, Buttes, Lancaster, North Muroc, and Peerless. The groundwater basin is principally recharged by deep percolation of precipitation and runoff from the surrounding mountains and hills. In the 2007 AVIRWMP, Figure 2-10 depicts the Antelope Valley groundwater basin subunit boundaries.

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2.1.2 Availability of Supply

Groundwater extractions between 1926 and 1972 resulted in the overdraft of the aquifer that caused groundwater levels to drop significantly. The implementation of the State Water Project in the 1970s resulted in stabilization of groundwater levels in some areas of the Antelope Valley, although groundwater levels in general have continued to fall to the present. From the 1990s to the present, agricultural uses have significantly increased groundwater production and exacerbated the drop in groundwater levels across the Antelope Valley Groundwater Basin. In 1999, agricultural interests filed litigation seeking to determine rights to groundwater. Subsequently, the litigation was modified into a groundwater adjudication for the Groundwater Basin (Adjudication). Three phases of trial have been completed in the Adjudication which resulted in the Court determining, inter alia, the basin boundaries, that the safe yield of the Basin is 110,000 AFY, and that the Basin has been in a state of overdraft for over 50 years. Later phases of trial are expected to result in rulings regarding rights to groundwater, including the prescriptive rights of the purveyors, and a physical solution. Although District 40 has an entitlement claim for over 32,000 AFY year of the safe yield, District 40's present settlement position involves sharing the native safe yield along a 15%-85% split between Municipal and Industrial, and the Overlying Landowners. District 40 has reached settlements consistent with this split which have been approved by District 40's governing body, the Los Angeles County Board of Supervisors (e.g. Willis Class, Wood Class, Antelope Valley High School District). District 40 is currently in the process of negotiating settlements with other parties based on this same proposed split. This proposed split will result in less groundwater to District 40 than their entitlement claim. Nonetheless, to be consistent with the settlements reached and being contemplated, District 40 is utilizing the proposed settlement pumping amounts for purposes of projections in this Plan. However this amount can be, and will be, revised upwards, up to the maximum available entitlement claim if the settlement negotiations are unsuccessful and the matter proceeds to trial with a Court finding on prescriptive rights. Table 2-3 provides the projected groundwater pumping provided by each of the water purveyors. The groundwater pumping projections do not reflect agreed upon values by all the water purveyors, and each water purveyor understands these projections are subject to change under the pending adjudication process as stated above. These values also do not necessarily reflect the maximum pumping capacity of each water purveyor. Percentage of total supply assumes delivery of average year Table A Amounts. Nothing in this Plan shall be interpreted to interfere in any way with the Adjudication action, settlement process, or rulings of the Court.

TABLE 2-2: GROUNDWATER EXTRACTION CAPACITY (AFY)

	2015	2020	2025	2030	2035
District No. 40	35,000	35,000	35,000	35,000	35,000
RCSD	4,600	4,600	4,600	4,600	4,600
QHWD	4,000	4,000	4,000	4,500	5,000
Study Area	43,600	43,600	43,600	44,100	44,600

Note: All numbers are rounded to the nearest 100 AF.

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TABLE 2-3: ADJUDICATION PREDICTION OF GROUNDWATER PUMPING (AFY)

	2015	2020	2025	2030	2035
District No. 40	23,200	23,200	23,200	23,200	23,200
Percent of Total Supply	28	28	28	28	28
RCSD	1,100	1,100	1,100	1,100	1,100
Percent of Total Supply	39	39	39	39	39
QHWD	2,500	2,500	2,500	2,500	2,500
Percent of Total Supply	27	27	27	27	27
Study Area	26,800	26,800	26,800	26,800	26,800
Percent of Total Supply	28	28	28	27	27

Note: All numbers are rounded to the nearest 100 AF.

2.1.2.1 District No. 40

Currently District No. 40 has 49 active wells with 5 new wells currently under construction.

2.1.2.2 RCSD

RCSD currently operates three wells for a total maximum pumping capacity of 2,825 gpm. One new well with an 800 to 1,000 gpm capacity is planned to come on-line in 2011 for a maximum pumping capacity of 3825 gpm. According to RCSD records, the water table continued to decline an average of two to three feet per year until 1995. With the increased usage of surface water sources and decreasing deep well usage, the water table has been rising an average of two to three feet per year.

2.1.2.3 QHWD

QHWD currently operates nine wells at an average water level depth of 250 to 300 feet for a total maximum pumping capacity of 4,681 gpm. Two new wells with 500 gpm capacity each are currently being designed/constructed and are expected to be on-line by the end of 2011 for a future maximum pumping capacity of 5,681 gpm.

Copies of each water purveyor's Consumer Confidence Report are provided as Appendix C.

2.2 Wholesale (Imported) Water Supplies

The only imported water supply for the Study Area is SWP water contracted through the AVEK. Water imported to the Study Area through the SWP first became available in 1978. The SWP is the nation's largest state-built water and power development and conveyance system. It includes pumping and power plants, reservoirs, lakes, storage tanks, canals, tunnels and pipelines that capture, store, and convey water to 29 contract water agencies.

The SWP is operated by DWR for the benefit of SWP contractors. The SWP includes 660 miles of aqueduct and conveyance facilities, from Lake Oroville in the north to Lake Perris in the south. The SWP is contracted to deliver a maximum 4.17 million AFY of Table A water to the 29 contracting agencies. Table A water is a reference to the amount of water listed in "Table A" of the contract between the SWP and the contracting agencies and represents the maximum amount of water an agency may request each year.

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AVEK, the third largest SWP contractor, has a current contractual Table A Amount of 141,400 AFY. AVEK provides this water for both agricultural and M&I use. AVEK's three largest M&I customer agencies are District No. 40, RCSD and QHWD. Table 2-4 provides a summary of the historic and current imported water volumes for the Study Area.

TABLE 2-4: HISTORIC IMPORTS FROM SWP (AF)

	2005	2006	2007	2008	2009
District No. 40	35,935	46,946	40,212	29,286	30,611
Percent of Total Supply	65	79	67	54	63
RCSD	1,375	1,302	1,255	893	307
Percent of Total Supply	45	37	34	24	10
QHWD	4,154	4,322	4,539	3,645	3,146
Percent of Total Supply	77	75	67	56	56
Study Area	41,464	52,570	46,006	33,824	34,064
Percent of Total Supply	61	70	65	53	61

Each year by October 1st, the SWP contractors provide DWR with a request for water delivery up to their full Table A Amount. Actual delivery from DWR may vary from the request due to variances in supply availability resulting from hydrology, storage availability, regulatory or operating constraints, etc. When supply is limited, a reduction of the requested amount is determined per the water allocation rules governing the SWP.

Besides fluctuations in the availability of SWP water, due to periods of drought-related or regulatory supply interruptions within the State, sufficient infrastructure has been constructed so that there are no restrictions on the ability of District No. 40, RCSD and QHWD to use SWP water from AVEK to meet all water demands in the Study Area even during peak summer demand periods. It is estimated that approximately 82% of AVEK's allocation each year will be available to serve District No. 40 (72%), RCSD (2%) and QHWD (8%). This percentage was taken from AVEK's 2008 UWMP and is based on the amount of property taxes paid by customers of AVEK and the historic amount of water each retailer has purchased from AVEK. The percentage is subject to change dependent on the development and usage patterns in the Antelope Valley in the future but represents the best available estimate for planning purposes.

Table 2-5 provides a summary of the SWP water available to the individual water purveyors assuming an average water year allocation.

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TABLE 2-5: RETAIL DEMAND PROJECTIONS FOR IMPORTED WATER (AF)

	2015	2020	2025	2030	2035
District No. 40 (AVEK)	61,000	61,000	61,000	61,000	61,000
RCSD (AVEK)	1,900	2,000	2,600	3,400	4,300
QHWD (AVEK)	6,800	6,800	6,800	6,800	6,800
Study Area	**69,700**	**69,800**	**70,400**	**71,200**	**72,100**
Percent of Total Supply	**72**	**72**	**72**	**73**	**73**

Note: All numbers are rounded to the nearest 100 AF.

2.2.1 Source Characteristics

The SWP's watershed encompasses the mountains and waterways around the Feather River. Rain and melting snow run off mountainsides and into waterways that lead into Lake Oroville. The lake in Butte County is the SWP's official start and a part of a complex that includes three power plants, a forebay, and an afterbay. One of the power plants, Hyatt Powerplant, is the largest and was built in the bedrock under the lake.

When water is needed, it is released from Lake Oroville into the Feather River. It travels down the river to where the river converges with the Sacramento River, the state's largest waterway. Water flows down the Sacramento River into the Sacramento-San Joaquin Delta. From the Delta, water is pumped into the California Aqueduct. The Antelope Valley is served by the East Branch of the California Aqueduct.

2.2.2 Reliability of Supply

DWR reports in their 2009 State Water Project Delivery Reliability Report (Reliability Report) that existing SWP facilities will on average receive 60 percent of their full Table A Amount for current demand conditions and 60 percent of their full Table A Amount for 2029 demand conditions.

Availability of SWP water varies from year to year, depending on precipitation, regulatory restrictions, legislative restrictions, and operational conditions, and is especially unreliable during dry years. The DWR Reliability Report anticipates a minimum delivery of 7 percent for a single dry year for current conditions and an 11 percent for a single dry year during 2029 demand conditions. Over multiple-year dry periods, average annual Table A deliveries vary from 34 percent to 36 percent of the maximum Table A Amount.

Tables 2-6 and 2-8 provide a summary of the availability of wholesale water for average, single dry, and multi-dry water years.

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TABLE 2-6: WHOLESALER IDENTIFIED AND QUANTIFIED EXISTING AND PLANNED SOURCES OF WATER AVAILABLE TO THE STUDY AREA FOR AVERAGE/NORMAL WATER YEARS

Wholesaler (Supply Source)	2010	2015	2020	2025	2030	2035
AVEK (SWP)	141,400	141,400	141,400	141,400	141,400	141,400
Table A Supply (AF)[(a)]	58,000	69,600	69,600	69,600	69,600	69,600
Percent of Table A Amount	40	50	50	50	50	50

Note:
(a) The percentages of Table A Amount projected to be available are from Table B.2 of DWR's 2009 State Water Project Delivery Reliability Report (August 2010). Supplies are calculated by multiplying AVEK's (141,400 AF) Table A Amounts available to the Study Area by these percentages.

TABLE 2-7: WHOLESALER WATER RELIABILITY

AVEK (SWP Supply)		Single Dry Year	Multiple Dry Years			
			Year 1	Year 2	Year 3	Year 4
2010	Table A Supply (AF)[(a)]	8,300	43,000	43,000	41,700	40,500
	Percent of Table A Amount	7	36	36	35	34
2029	Table A Supply (AF)[(a)]	13,100	45,300	45,300	43,000	41,700
	Percent of Table A Amount	11	38	38	36	35

Note:
(a) The percentages of Table A Amount projected to be available are from Table B.2 of DWR's 2009 State Water Project Delivery Reliability Report (August 2010). Supplies are calculated by multiplying AVEK's (141,400 AF) Table A Amounts available to the Study Area by these percentages.

TABLE 2-8: BASIS OF WATER YEAR DATA

Water Year Type	Basis of Data	Similar Historic Year
Average Water Year	Average water year is based on 60 percent of AVEK's Table A amount less AVEK's other demand outside the Study Area. Base years for the Average, Single-Dry and Multiple-Dry Water Years were determined from the analyses presented in the DWR's 2009 SWP Delivery Reliability Report (August 2010).	1922-2003
Single Dry Year		1977
Multi-Dry Years		1931-1934

The Study Area has no inconsistent sources of supply.

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2.2.3 Water Quality

2.2.3.1 AVEK

SWP water is treated by four AVEK facilities prior to delivery to the water purveyors. The Quartz Hill Water Treatment Plant was the first plant built by the AVEK. The treatment plant receives water by gravity from the California Aqueduct. Screening and metering are provided at the head of the plant, followed by treatment chemical addition, flash mixing, tapered energy flocculation, clarification utilizing plate settlers and sediment removal, dual media filters, and ozone/chlorine disinfection. Treated water is stored in two 9.2 million-gallon reservoirs which supply water by gravity into the distribution system. Decanted water from the solids removal process is returned to the plant influent and recycled. After the completion of the third expansion in 2010, the Quartz Hill Water Treatment Plant became capable of producing 90 mgd, enough to serve the needs of 388,000 people. AVEK is planning a conversion of their disinfection systems from chlorine to chloramines or Granular Activated Carbon (GAC). This conversion will significantly reduce the levels of Trihalomethanes (THMs) from the treated water.

Expansion of the Eastside Water Treatment Plant located between Littlerock and Pearblossom to 10 mgd was completed in late 1988. It can now serve the needs of about 44,000 consumers.

The 14 mgd Rosamond Water Treatment Plant was established to support the needs of consumers in southeastern Kern County, an area that includes Rosamond, Mojave, California City, Edwards Air Force Base and Boron. Rosamond Water Treatment Plant is capable of providing water for 60,000 people.

The 4 mgd Acton Water Treatment Plant was completed in 1989. Water is pumped from the plant site near Barrell Springs Road, on Sierra Highway, to Vincent Hill Summit. From there it is pumped into a District No. 40 pipeline for transport to the Acton area. The plant's capacity is sufficient to supply the needs of 17,000 consumers.

The treated water is generally considered to be of excellent quality. Appendix C contains the Consumer Confidence Reports for AVEK deliveries in Kern County and Los Angeles County.

2.3 Summary of Supplies

Table 2-9 provides a summary of existing and planned water supply sources from each water purveyor during an average water year over a 25-year planning period, in 5-year increments.

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TABLE 2-9: CURRENT AND PLANNED WATER SUPPLIES (AFY)

Water Supply Sources	2010	2015	2020	2025	2030	2035
District No. 40						
Groundwater[(a)]	7,600	23,200	23,200	23,200	23,200	23,200
SWP[(b)]	39,200	61,000	61,000	61,000	61,000	61,000
Recycled Water[(c)]	0	5,400	8,200	10,900	13,600	16,300
Groundwater Banking[(d)]	0	0	0	0	0	0
Anticipated New Supply[(d)]	0	2,300	4,100	12,900	21,600	30,300
Total	**46,800**	**91,900**	**96,500**	**108,000**	**119,400**	**130,800**
RCSD						
Groundwater[(a)]	2,800	1,100	1,100	1,100	1,100	1,100
SWP[(b)]	300	1,900	2,000	2,600	3,400	4,300
Recycled Water[(c)]	1000	1000	1000	1000	1000	1000
Groundwater Banking[(d)]	0	0	0	0	0	0
Anticipated New Supply[(d)]	0	0	0	0	0	0
Total	**4,100**	**4,000**	**4,100**	**4,700**	**5,500**	**6,400**
QHWD						
Groundwater[(a)]	1,900	2,500	2,500	2,500	2,500	2,500
SWP[(b)]	3,500	6,800	6,800	6,800	6,800	6,800
Recycled Water[(c)]	0	0	0	0	0	0
Groundwater Banking[(d)]	0	0	0	0	0	0
Anticipated New Supply[(d)]	0	0	0	0	0	900
Total	**5,400**	**9,300**	**9,300**	**9,300**	**9,300**	**10,200**
Study Area						
Groundwater[(a)]	12,300	26,800	26,800	26,800	26,800	26,800
SWP[(b)]	43,000	69,700	69,800	70,400	71,200	72,100
Recycled Water[(c)]	1,000	6,400	9,200	11,900	14,600	17,300
Groundwater Banking[(d)]	0	0	0	0	0	0
Anticipated New Supply[(d)]	0	2,300	4,100	12,900	21,600	31,200
Total	**56,300**	**105,200**	**109,900**	**122,000**	**134,200**	**147,400**

Note: All numbers are rounded to the nearest 100 AF.
(a) Assumes groundwater available at the existing pumping rate.
(b) SWP water delivery at 60 percent of Table A Amount available to the Study Area.
(c) Recycled Water is discussed in Section 6.
(d) Transfers, Groundwater Banking and Anticipated New Supplies are discussed in Section 3.

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2.4 Economic Analysis of Supplies

This subsection provides an economic evaluation of the existing supplies available to the Study Area. Further, these sources are ranked based on this analysis and consideration of source reliability. Table 2-10 provides a summary of the unit costs for each of the supplies available to the Study Area. As shown in this table, groundwater is the most cost effective source available to the Antelope Valley, however, due to the uncertainty of this supply as the adjudication process continues, there is no guarantee of its reliability.

TABLE 2-10: ECONOMIC SUMMARY OF THE EXISTING SUPPLIES FOR THE STUDY AREA

	Cost per AF	Reliability Factor[(a)]	Ranking
District No. 40			
Groundwater	$120	90	1
Imported Water	$296 ($367 Summer)	60	2
RCSD			
Groundwater	$110	90	1
Imported Water	$296	60	2
QHWD			
Groundwater	$120	90	1
Imported Water	$296 ($367 Summer)	60	2

Note:
(a) Reliability factor for imported water is based on 2009 DWR Reliability Report; reliability factor for groundwater is based on the assumption that adjudications currently in progress will likely reduce the available groundwater below current pumping levels unless replenishment occurs.

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Section 3

Water Supply Strategy/Opportunities

Section 3: Water Supply Strategy/Opportunities

3.1 Transfer and Exchange Opportunities

As will be shown in Section 4, the projected water demands for the Study Area will exceed the existing available water supply in the foreseeable future. As such the Antelope Valley water purveyors are evaluating various transfer and exchange opportunities as they arise.

The water retailers in the Study Area all receive their imported water supply from the AVEK. Any transfer or exchange of water rights will likely be moved into the Study Area via the SWP and will therefore have to be facilitated by AVEK.

3.2 Planned Water Supply Projects and Programs

Based on projected growth from population and land use build-out, supply needs for the Study Area are expected to increase approximately 38 percent from 2010 to 2035. The main driver for these needs is presumed to be single family residential development. However, projected future needs, particularly those in the near-term, will continue to be monitored and adjusted in response to changes in the rate of housing development as well as major new industrial customers such as solar and other power facilities. Water management strategies are also discussed in the 2007 AVIRWMP (pages 5-7 through 5-33).

The Study Area will require new projects that provide additional supply in order to meet the projected demand, but at this time, no specific projects have been selected. Future water supply project plans will focus on the following:

- Take steps to limit dependence on imported water by maximizing use of recycled water
- Expand conservation efforts
- Acquire and/or develop new imported supplies by introducing the New Water Supply (Developer Fee)
- Create a combination of local surface spreading facilities to percolate untreated SWP water and Aquifer Storage and Recovery (ASR) wells to inject potable water
- Add additional groundwater extraction capacity in order to recover stored water
- Pursue an exchange program with agriculture interests to replace their groundwater use with recycled water thereby providing additional potable groundwater for municipal use
- Construct new infrastructure to deliver recycled water for non-potable uses
- Conduct further project development to use recycled water to replenish the groundwater basin

3.3 Acquisition of New Water Supply

Even with the demand management measures addressed in Section 5, and the increased use of recycled water to reduce existing potable water demands discussed in Section 6, the existing and committed demands and existing water supplies are approximately equal and additional water supplies will have to be acquired and imported into the Antelope Valley in order to meet the demands associated with the level of growth projected for the Study Area. In order to acquire these additional water supplies, District No. 40, RCSD and QHWD are working with AVEK to establish a New Water Supply (Developer Fee) on new developments that will be used to acquire additional imported water supplies. AVEK is currently working with its retailers and

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the development community to design the fee and an operational procedure for assessing it. The proposed framework for assessing this fee is as follows:

1. Developer requests a will-serve letter from retailer for project
2. Retailer informs developer of the volume of new water supply needed to serve project
3. Developer pays the New Water Supply (Developer Fee) to AVEK for the volume of new water supply
4. AVEK provides developer with a letter of commitment to retailer for the new water supply
5. AVEK acquires new water supply
6. AVEK designates new water supply for development to the retailer serving the development over and above the retailer's allocation of AVEK's supplies
7. AVEK adjusts the fee annually based on the current market rate for permanent water transfers
8. Retailer ensures reliability of the new water supply

3.4 Stormwater and Desalination

Potential water supply alternatives that are available to the Antelope Valley besides those mentioned above include stormwater reuse and desalination. Because the Antelope Valley is a closed hydrologic system, all stormwater entering the basin either infiltrates into the groundwater basin or evaporates. The agencies in the Study Area will continue to support onsite reuse of stormwater by customers. In addition, the Antelope Valley region was awarded grant funds from Proposition 84 to update the AVIRWMP to include a regional flood management plan. A major component of the regional flood management plan will be identifying regional areas that can be used for large scale stormwater retention and groundwater basin recharge in order to increase the amount of annual returns flows to the groundwater basin.

The UWMPA also requires water agencies to consider options for desalination. The Antelope Valley is located a considerable distance from the Pacific Ocean so constructing a transmission main to move either sea water or desalinated water directly to the Antelope Valley is cost prohibitive at this time. However, one option that AVEK can consider when acquiring new water supplies is partnering with a SWP contractor situated in close proximity to the Ocean. Under such an arrangement, AVEK could use funds collected from the New Water Supply (Developer Fee) to contribute financially to the construction of a desalination facility, and in turn, the partnering agency would transfer portion of their SWP water rights to AVEK.

3.5 Aquifer Storage and Recovery

District No. 40's Aquifer Storage and Recovery Program (ASR) includes the use of twenty existing wells for direct injection of treated SWP water into the aquifer. The purpose of this program is to augment natural recharge of the groundwater basin through injection of treated SWP water into the groundwater basin of the Antelope Valley when sufficient supplies are available. The injected water is then recovered during periods of lower SWP allocation such as in dry years to meet demand. On October 14, 2010, the Lahontan Regional Water Quality Control Board (Regional Board) approved a five-year Conditional Waiver of Waste Discharge Requirements (Waiver) for this project.

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3.5.1 Aquifer Characteristics

The Antelope Valley is a closed basin in the western part of the Mojave Desert, and is divided by fault zones and other physical boundaries to water movement into twelve sub-basins (Bloyd, 1967). The majority of the District No. 40's customers, and the District No. 40's ASR Program, are located within the Lancaster sub-basin. The Lancaster sub-basin is alluvial and lacustrine in nature, and is characterized by unconfined (upper) and confined (lower) aquifers that are separated by a clay layer that is between 200 and 300 feet thick. The upper aquifer is a primary source of potable water for District No. 40 due to water quality issues contained in the lower aquifer.

3.5.2 ASR Wells

District No. 40's existing extraction wells are used for direct injection of treated drinking water into the groundwater basin. Slight modifications of the well equipment were required, including flow control valves that regulate the rate at which the water is injected. These flow control valves are typically located at ground surface near the well head. Some of District No. 40's wells are equipped with down-hole flow control valves that regulate the flow using a nitrogen inflated bladder. As part of typical injection operations, the pumps are energized regularly to backflush the aquifer thereby maintaining injection flow rates.

3.5.3 Availability of Supply

The Antelope Valley groundwater basin is estimated to have 68 million AF of storage, of which 20 million AF is currently available. Approximately 55 million AF of groundwater was estimated to remain in storage as of 1975. This stored water, however, may not be entirely accessible due to (1) uneconomical pumping depths, (2) distance between high production areas of the basin and current users, (3) water quality issues, and (4) the potential for causing land subsidence.

The principal source of recharge of the groundwater basin is runoff from the San Gabriel Mountains to the south of the Antelope Valley, and is typically recharged in the soft creek beds of ephemeral streams near the mountains. Numerous studies have been conducted to estimate the natural recharge since 1924, some based on little data. The most recent studies estimate natural recharge at 31,200 to 59,100 AFY. (USGS, 1993)

As a condition of the Waiver, District No. 40 must show that the injected water remains within the radii of influence of the ASR wells, which is on the order of 1,200 feet. This requires monthly water quality monitoring of wells within a quarter mile of the injection sites, and semi-annual monitoring of select wells between a quarter mile and three quarters of a mile from injection sites to demonstrate that the injected water is effectively contained near the ASR wells. The Waiver allows for injection up to 6,843 AFY. District No. 40 plans to use a total of 17 wells for injection when surplus SWP water is available.

3.5.4 Water Quality

District No. 40's ASR Program utilizes water imported by the SWP for injection into the groundwater basin. The water is treated prior to injection through conventional treatment, which includes free chlorine disinfection. Conventional treatment causes the formation of disinfection byproducts (DBP) such as trihalomethanes (THMs) and haloacetic acids (HAA5). These DBPs are not naturally occurring in the groundwater basin, and are therefore considered a discharge by the Regional Board. In addition, these particular DBPs continue to form and increase in concentration as the water moves further from the treatment plant due. In order to prevent the further formation of DBPs due to the availability of free chlorine, the water is de-chlorinated prior

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to injection. As a condition of the Waiver, weekly sampling of the injection water for DBPs is required, and District No. 40 must enact contingency plans in the event that water quality monitoring indicates that the levels of DBPs exceed limits established in the Waiver. In addition, monthly and semi-annual water quality monitoring of nearby wells is required to show that these DBPs are not moving outside the radius of influence of the ASR wells. The upcoming conversion of AVEK's treatment plant from conventional treatment to Granular Activated Carbon or Chloramines is anticipated to reduce or eliminate DBP formation within the treatment plant and distribution system.

3.6 Water Banking Opportunities

As indicated in more detail in Section 7, water banking is a crucial strategy that will be used by all the retailers to help navigate the uncertainties in the availability of water supplies for the Study Area. Water banking involves storing water when it is readily available in wet years or low demand periods and subsequently recovering it in periods of drought or high demand. The three methods of banking contemplated for the Study Area are in-lieu groundwater basin recharge, groundwater basin recharge through surface percolation, and ASR. These opportunities are located inside and outside of the Antelope Valley. Generally, water banking within the Antelope Valley is preferred over those outside because risks of disruption due to conveyance interruptions are minimized. However, potential water banking opportunities within the Antelope Valley require additional development.

In evaluating water banking requirements, there are two characteristics that must be established: the required volume of water in storage and the required pumpback capacity for the most severe three-year delivery projection. The three-year drought sequence is commonly utilized for water supply planning in California and in UWMPs. The requirements are calculated by comparing projected demand to the sum of available groundwater and SWP supplies during a worst-case three year drought scenario comprised of a 7 percent SWP allocation followed by two 35 percent SWP allocations.

In the event that the annual SWP allocation is less than demand, water that has been stored through in-lieu groundwater basin recharge will typically be used first to make up the difference between demand and SWP supply. If maximum groundwater extraction capacity is insufficient to make up the difference, additional banking methods such as storage of carry-over water in SWP reservoirs or groundwater basin recharge through surface percolation are required.

In order to meet the banked water supply targets in the future, the retailers in the Study Area will store sufficient quantities of available supplies in years where supply conditions permit. These targets therefore dictate how the present-year's water resources are utilized. The supply targets increase with demand, and therefore must be recalculated annually. In a similar manner, present year operations must be modified annually to account for the recalculated targets. Upon adjudication of the groundwater basin, it is anticipated that each retailer will be able to save credits for not fully utilizing its adjudicated groundwater right in a given year, thus saving unused groundwater for use when SWP supply is limited or interrupted.

SWP reservoir storage is crucial to meeting the carry-over and banked supply targets. In the event that a retailer does not use its full entitlement of SWP water in a given year, AVEK can store the remainder in San Luis Reservoir. Unfortunately, in the event of a high allocation the following year, that quantity of carry-over water may be lost due to limited reservoir capacity. In this case, this carry-over supply can be moved to a water bank for future use. Conversely, if the next year's SWP allocation is insufficient to meet demand, the carry-over supply can be moved into the Study Area. Banked supply will be utilized in the event that demand is greater than the

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sum of the current year SWP allocation, available carryover and maximum groundwater extraction capacity.

3.6.1.1 Antelope Valley Water Bank

The Antelope Valley Water Bank (AVWB) encompasses an 18-square mile area totaling roughly 13,440 acres, of which 1,482 acres would be dedicated for spreading basins. More specifically, there would be 11 spreading basins, each approximately 160 acres in size except for one 40-acre basin, and up to 40 new recovery wells. At full build-out, the AVWB will be a water banking facility capable of 100,000 AFY of recharge, 100,000 AFY of recovery, and 500,000 AF of total storage capacity within the underlying aquifer. Accordingly, the AVWB would contribute to accomplishing the goal of making more water available, through recharge and recovery, to meet existing and future water requirements in the Antelope Valley and other regions in Southern California during periods when surface water supplies are deficient.

3.6.1.2 AVEK's Water Supply Stabilization Project No. 2

AVEK has analyzed locations and methods for water storage in the Region. The Water Supply Stabilization Project No. 2 (WSSP2) is a groundwater basin banking project that was selected based on studies performed by the USGS. Based on USGS's work, it is expected that the percolation rate of raw water placed in the recharge area will average about a half a foot per day on 400 of the 1,400 acre site. Raw water will be delivered to the site through three existing turnouts that are capable of delivering up to 30,000 AF of water during a proposed recharge cycle. Allowing for earthen berms between the several recharge basins that will be constructed, total recharge is expected to be approximately 190 AF per day.

3.6.1.3 Semitropic Water Storage Bank

The Semitropic Water Storage District (Semitropic) is located in the San Joaquin Valley in north-central Kern County, about 20 miles northwest of Bakersfield and immediately east of the California Aqueduct. Semitropic was originally formed in 1958 with the expectation of receiving water from the SWP and surplus water from the Kern River.

In 1995, Semitropic began implementation of the Semitropic Groundwater Banking and Exchange Program by utilizing a portion of the available immense groundwater storage capacity (approximately 1 million AF out of over 3 million AF). This long-term water storage program was designed to recharge groundwater and reduce overdraft, increase operational reliability and flexibility, and optimize the distribution and use of available water resources between Semitropic and the banking partners. The existing Semitropic water bank has a storage capacity of 1 million AF; a recharge capacity of 90,500 AFY; a firm extraction capacity of 90,000 AFY through the pumpback and physical return of groundwater to the SWP facilities; and the ability to return up to 133,000 AFY through exchange of Table A SWP entitlement. Approximately 700,000 AF are currently in storage. This program is currently fully operational and is a proven and working water bank.

Semitropic is in the process of a second phase of the groundwater banking program called the Stored Water Recovery Unit (SWRU). The SWRU will increase storage by 650,000 AF to a maximum of 1.65 million AF and increase recovery capacity by 200,000 AFY for a total guaranteed or pumpback capacity of 290,000 AFY. This means that the Semitropic Water Storage Bank, including its entitlement exchange capability of up to 133,000 AFY, will be able to deliver up to 423,000 AFY of dry year yield to the California Aqueduct.

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Section 4

Water Use Provisions

Section 4: Water Use Provisions

This Section describes historic/current water usage and the methodology used to project future demands within the water purveyors' service areas. Water usage is divided into sectors such as: residential, industrial, institutional/governmental, landscape/recreational, agricultural, and other purposes.

4.1 Historic/Current Water Use

This subsection will present the historic and current water use for each of water purveyors in the Study Area.

4.1.1 District No. 40

District No. 40 began keeping records of water use and number of meters by customer class in 2001. Past and current water use is based on the billing records of District No. 40 and is presented in Table 4-1.

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TABLE 4-1: DISTRICT NO. 40 HISTORIC AND CURRENT WATER USE

Customer Category	2005		2006		2007		2008		2009	
	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters
Single Family	34,751	46,139	38,562	49,647	40,629	49,793	36,664	49,849	33,548	50,532
Multi-Family (duplex)	269	277	256	281	255	274	223	267	198	257
Multi-Family complex	3,839	706	3,833	697	4,036	686	3,730	678	3,398	683
Commerical	4,200	1,441	4,092	1,513	4,200	1,513	3,929	1,581	3,707	1,581
Industrical/ Manufacturing	123	36	113	36	97	34	98	35	81	35
Private Fire Protection	4	381	2	426	48	463	1	501	28	509
Landscape Irrigation	2,464	638	3,039	706	3,782	770	3,560	806	3,486	818
Public / Government Agency	3,818	204	3,326	208	3,537	205	3,192	209	2,847	215
Other Districts	0	0	0	0	0	0	0	0	0	0
Outside District	96	1	0	1	0	1	0	1	1	3
Temporary Construction Meter	1,714	206	2,130	172	895	162	319	86	120	55
Domestic/ Private	284	12	311	12	299	12	279	12	260	12
Other	7	1	9	1	7	1	32	7	27	7
Firefighting, flushing, theft and leaks	3,921	n/a	3,507	n/a	1,885	n/a	2,073	n/a	1,489	n/a
Total	55,490	50,042	59,180	53,700	59,670	53,914	54,100	54,032	49,190	54,707

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4.1.2 RCSD

RCSD currently serves 5,680 connections of which approximately 96 percent are residential. Commercial connections account for approximately two percent, landscape irrigation and non-potable connections account for less than one percent, and industrial and other connections account for the remaining connections. Table 4-2 provides a summary of the RCSD historic and existing service connections. The reduction in water usage from 2005 to 2009 is most likely a direct result of the implementation of a tiered water rate structure in 2002.

TABLE 4-2: RCSD HISTORIC AND CURRENT WATER USAGE

Customer Category	2005		2006		2007		2008		2009	
	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters
Single Family	2,478	4,118	2,848	3,944	2613	4,207	2,460	4,099	2,444	4,166
Multi-Family	254	79	488	70	270	107	442	97	273	104
Commerical	130	97	256	95	689	99	194	83	142	94
Industrical/ Manufacturing	3	0	2	11	0	28	0	0	0	0
Landscape Irrigation	72	23	211	22	96	27	83	26	66	32
Other	0	1	160	22	66	29	29	28	21	28
Total	2,937	4,318	3,965	4,164	3,734	4,497	3,208	4,333	2,946	4,424

4.1.3 QHWD

QHWD does not have the ability to breakdown water usage by sector. However, QHWD currently serves 5,563 connections. Of the 5,563 connections, approximately 98 percent are residential. Commercial connections account for approximately one percent, landscape irrigation and non-potable connections account for less than one percent, and other connections account for the remaining number of connections. Table 4-3 provides a summary of the QHWD's historic and existing service connections.

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TABLE 4-3: QHWD HISTORIC AND CURRENT WATER USAGE

Customer Category	2005		2006		2007		2008		2009	
	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters	Water Use (AF)	Meters
Single Family	n/a	n/a	n/a	5,288	n/a	5,350	n/a	5,315	n/a	5,350
Multi-Family	n/a	n/a	n/a	24	n/a	28	n/a	26	n/a	25
Commerical	n/a	n/a	n/a	66	n/a	68	n/a	74	n/a	76
Industrical/ Manufacturing	n/a	n/a	n/a	n/a	0	0	n/a	n/a	0	0
Landscape Irrigation	n/a	n/a	n/a	56	n/a	66	n/a	62	n/a	63
Other	n/a	n/a	n/a	9	n/a	n/a	n/a	3	n/a	n/a
Total	5,398	5,443	5,532	5,443	6,613	5,512	6,498	5,480	5,441	5,514

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4.2 Other Factors Affecting Water Usage

Two major factors that affect water usage are weather and water conservation. Historically, when the weather is hot and dry, water usage increases. The amount of increase varies according to the number of consecutive years of hot dry weather and the conservation activities imposed. During cool-wet years, water usage decreases due to less irrigation demand for external landscaping. Water conservation measures employed within the Study Area have a direct long-term effect on water usage. Both of these factors are discussed below in detail.

4.2.1 Weather Effects on Historical Water Usage

Historically, both agricultural and urban usage have increased in dry weather. However, in recent years, conservation efforts have limited increases in demand due to higher temperatures and often have resulted in reduced overall demand. Further effects due to global warming may also begin to influence future water usage and planning efforts as previously discussed in Section 1.

4.2.2 Conservation Effects on Water Usage

In recent years, water conservation has become an increasingly important factor in water supply planning in California. The California plumbing code has instituted requirements for new construction that mandate the installation of ultra low-flow toilets and low-flow showerheads. As a signatory to the CUWCC MOU, District No. 40 has participated in water conservation measures that include public information and education programs and the implementation of water efficient operations and maintenance practices. As retail customers of AVEK, QHWD and RCSD have also implemented DMMs as described in Section 5. In November 2009, SB X7-7 was enacted requiring all water suppliers to increase water use efficiency. The legislation

sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. The State shall make incremental progress towards this goal by reducing per capita water use by at least 10 percent by December 31, 2015.

4.3 Projected Water Use

4.3.1 Population and Water Demand Projections

The population projections for the Study Area are shown in Table 2-3 of the 2007 AVIRWMP. This table projects population increases for the incorporated cities, communities and unincorporated county areas. However, jurisdictional boundaries in the Study Area are not aligned with water district boundaries, particularly in the portion of the Study Area in Los Angeles County. In order to estimate the future populations that will be served by each water district in Los Angeles County, each census tract in the Los Angeles County portion of the Study Area was projected to be served by a particular water district and included in a designated jurisdiction. Table 4-4 identifies the actual or projected water purveyor and jurisdiction for each census tract within Los Angeles County in the Study Area.

TABLE 4-4: ACTUAL/PROJECTED WATER PURVEYOR AND JURISDICTION

Census Tract	Water District	Jurisdiction
37900501	District No. 40	Lancaster
37900502	District No. 40	Lancaster
37900503	District No. 40	Lancaster
37900504	District No. 40	Lancaster
37900602	District No. 40	Lancaster
37900604	District No. 40	Lancaster
37900605	District No. 40	Lancaster
37900606	District No. 40	Lancaster
37900607	District No. 40	Lancaster
37900701	District No. 40	Lancaster
37900703	District No. 40	Lancaster
37900704	District No. 40	Lancaster
37900705	District No. 40	Lancaster
37900803	District No. 40	Lancaster
37900804	District No. 40	Lancaster
37900805	District No. 40	Lancaster
37900806	District No. 40	Lancaster
37900900	District No. 40	Lancaster
37901003	District No. 40	Lancaster
37901004	District No. 40	Lancaster
37901005	District No. 40	Lancaster
37901006	District No. 40	Lancaster
37901007	District No. 40	Lancaster
37901205	District No. 40	Lancaster
37901101	QHWD	Lancaster
37901102	QHWD	Lancaster

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37910301	QHWD	Lancaster
37900200	District No. 40	Palmdale
37910201	District No. 40	Palmdale
37910203	District No. 40	Palmdale
37910204	District No. 40	Palmdale
37910206	District No. 40	Palmdale
37910302	District No. 40	Palmdale
37910401	District No. 40	Palmdale
37910706	Littlerock Creek ID	Palmdale
37910000	PWD	Palmdale
37910402	PWD	Palmdale
37910403	PWD	Palmdale
37910404	PWD	Palmdale
37910501	PWD	Palmdale
37910502	PWD	Palmdale
37910503	PWD	Palmdale
37910601	PWD	Palmdale
37910602	PWD	Palmdale
37910603	PWD	Palmdale
37910604	PWD	Palmdale
37910703	PWD	Palmdale
37910704	PWD	Palmdale
37910705	PWD	Palmdale
37910707	PWD	Palmdale
37910708	PWD	Palmdale
37910709	PWD	Palmdale
37910710	PWD	Palmdale
37910100	PWD	Unic. LA County
37901203	Tejon	Unic. LA County
37901207	Cal Water	Unic. LA County
37900101	District No. 40	Unic. LA County
37900102	District No. 40	Unic. LA County
37900300	District No. 40	Unic. LA County
37910902	District No. 40	Unic. LA County
37910202	Mutuals	Unic. LA County
37910205	PWD	Unic. LA County
37910901	PWD	Unic. LA County
37911000	PWD	Unic. LA County

Based on the breakdown of census tracts, Table 4-5 indicates the population projections for each water purveyor in the Study Area.

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TABLE 4-5: POPULATION PROJECTIONS BY WATER DISTRICT

	2010	2015	2020	2025	2030	2035
District No. 40	**261,800**	**309,200**	**355,800**	**401,500**	**445,200**	**493,900**
in Lancaster	167,400	192,400	217,100	241,000	263,900	288,900
in Palmdale	53,100	68,700	84,200	100,500	116,100	134,200
in LA County	41,300	48,000	54,500	60,000	65,200	70,800
RCSD	**17,700**	**22,600**	**26,200**	**30,400**	**35,200**	**40,800**
QHWD	**17,500**	**20,800**	**23,900**	**27,000**	**29,900**	**33,000**
PWD	123,100	146,200	169,000	189,400	209,000	230,700
in Palmdale	113,800	135,500	156,900	176,100	194,500	214,900
in LA County	9,300	10,700	12,100	13,300	14,500	15,800
Mutuals	4,600	6,000	7,400	8,700	9,900	11,300
LCID	6,500	10,000	13,600	16,600	19,500	22,900
Cal Water	4,100	5,200	6,200	7,300	8,300	9,400
Tejon	2,900	3,300	3,700	1,200	4,100	4,400
Plant 42	2,600	3,400	4,100	1,300	4,900	5,700
Cal City		12,000	20,000	25,000	30,000	35,000
Mohave		9,000	10,500	12,000	13,000	14,000
Edwards		10,000	11,500	13,000	14,500	16,000
Boron		3,000	3,500	4,000	4,500	5,000
Unic Kern		29,000	52,000	70,000	85,000	103,000
Antelope Valley Area Total	**440,800**	**589,700**	**707,400**	**807,400**	**913,000**	**1,025,100**

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Population projections are often used to determine future demand by utilizing an average water demand (typically based on historic water use). However, they often mask economic trends, changes in land use, and non-population based water demands. In order to more accurately predict the water demand projections for the Study Area particularly in Los Angeles County, and to distribute this demand to the water purveyors, the land use maps and General Plans of the Cities of Palmdale and Lancaster were used.

The land use and zoning maps for the Cities of Lancaster and Palmdale were divided up by census tract and water demand factors were assigned to each land use type. The water demand factors used were based on average water use by existing customers within each land use type and reflect reductions in water use necessary to meet per capita water use targets by 2015 and 2020. Table 4-6 indicates the per acre water use demand in AF for each land use type. If each land use sector continues to use water at the rate of these factors, the Study Area would meet the demand reduction targets mandated in SB X7-7. However, future demands until 2020 are projected to return to the normal levels that were observed in the Study Area prior

to the recent drought due to the unusual level of water conservation that occurred in the Study Area between 2008 and 2010. Therefore, the tables in Section 7 do not project demands based on these factors until 2020 when the water purveyors are required to comply with SB X7-7. Using land use data to project demand is a more accurate method to estimate water demand both by jurisdiction and water district.

TABLE 4-6: WATER USE FACTORS IN ACRE-FEET PER ACRE BY LAND USE TYPE

Type	Single Family Residential	Multi-Family Residential	Commercial	Heavy Industry	Light Industry	Mixed Use	Non-Urban Residential	Public Areas	Healthcare
AF/ acre	3.9	2.5	2.25	0.3	1.1	2.5	1.9	2.6	5

For the portion of the Study Area in Kern County, the water purveyor boundaries are very similar to jurisdictional boundaries, so the water demand projections in Table 3-9 of the 2007 AVIRWMP were used. Tables 4-7 through 4-9 break down these projections by land use type for each water purveyor. Table 4-10 indicates the actual and project total water demand for each water purveyor in the Study Area and the remaining water retailers in the Antelope Valley. As shown, the retailers in the Study Area serve 55 percent of the 2010 retail demand in the Antelope Valley and are projected to serve 52 percent by 2035. However, it should be noted that much of the increased demand projected by 2035 will occur outside of the existing service areas of any water retailer. The new demands assumed to be served by retailers outside of the Study Area could in fact be served by District No. 40, RCSD, and QHWD.

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TABLE 4-7: DISTRICT NO. 40 DEMAND PER LAND USE TYPE

	Water Demand Factor	2010 Demand	2015 Demand	2020 Demand	2025 Demand	2030 Demand	2035 Demand	Total acres
	(AF/acre)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	
Single Family Residential	**3.9**	**30,900**	**39,900**	**48,900**	**58,000**	**68,000**	**76,700**	**19,660**
Lancaster Capital (1)	*N/A*	-	-	*2,100*	*2,100*	*2,100*	*2,100*	*480*
Tentative tracts 60610 & 60620 (1)	*N/A*	-	-	*980*	*980*	*980*	*980*	*220*
Tentative tracts 62758 & 62759 (1)	*N/A*	-	-	*890*	*890*	*890*	*890*	*190*
Tentative tract 62757 (3)	*N/A*	-	-	*780*	*780*	*780*	*780*	*160*
Will-Serve Letter Commitments (a)(1)	*N/A*	-	*7,450*	*7,450*	*7,450*	*7,450*	*7,450*	*N/A*
Commitment to the City of Lancaster (a)(1)	*N/A*	-	*1,000*	*1,000*	*1,000*	*1,000*	*1,000*	*N/A*
Commitment to the City of Palmdale (a)(1)	*N/A*	-	*400*	*400*	*400*	*400*	*400*	*N/A*
Commitment to the County of LA (a)(1)	*N/A*	-	*100*	*100*	*100*	*100*	*100*	*N/A*
Multi Family Residential	**2.5**	**3,400**	**3,970**	**4,200**	**4,400**	**4,700**	**4,980**	**1,990**
Commercial	**2.3**	**3,707**	**5,600**	**7,600**	**9,600**	**11,000**	**13,370**	**6,020**
Amargosa Creek Specific Plan (1)	*N/A*	-	-	*270*	*270*	*270*	*270*	*150*
Downtown Lancaster Specific Plan (3)	*N/A*	-	-	*1,990*	*1,990*	*1,990*	*1,990*	*100*
Heavy Industry	**-**	**-**	**100**	**200**	**300**	**500**	**600**	**2,130**
Light Industry	**1.1**	**81**	**1,200**	**3,200**	**5,100**	**6,450**	**8,790**	**7,720**
Mixed Use	**2.5**	**2,647**	**3,000**	**3,100**	**3,400**	**3,500**	**3,600**	**1,480**
Non-Urban Residential	**1.9**	**1,641**	**2,000**	**2,500**	**2,900**	**3,300**	**3,750**	**780**
Public Areas	**2.6**	**3,124**	**3,700**	**4,000**	**4,200**	**4,500**	**4,750**	**1,830**
Healthcare	**5.0**	**-**	**230**	**300**	**500**	**600**	**700**	**140**
Open Space	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**940**
Specific Plans	**-**	**13,560**	**13,560**	**13,560**	**13,560**	**13,560**	**13,560**	**9,920**
City Ranch-Phase 1 Constructed	*N/A*	*1,240*	*1,240*	*1,240*	*1,240*	*1,240*	*1,240*	*380*
City Ranch Ph 1 Remaining (2)	*N/A*	*370*	*370*	*370*	*370*	*370*	*370*	*110*
City Ranch Ph 2-4	*N/A*	*4,390*	*4,390*	*4,390*	*4,390*	*4,390*	*4,390*	*1,310*
Antelope Valley Business Park	*N/A*	*560*	*560*	*560*	*560*	*560*	*560*	*120*
Ritter Ranch (1)	*N/A*	*7,000*	*7,000*	*7,000*	*7,000*	*7,000*	*7,000*	*8,000*
TOTAL	**N/A**	**59,060**	**73,260**	**87,560**	**101,960**	**116,110**	**130,800**	**52,610**

Note:
(a)These demands are not necessarily included in a specific land use type.
(1)These demands are included in the categories they are listed under and are demands District No. 40 has committed to serve.
(2)This committed demand represents the remaining 320 homes District No. 40 has committed to serve
(3)These demands are for developments for which the requested Water Supply Assessment indicated there was inconclusive information to determine whether sufficient supplies existed to serve them.

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TABLE 4-8: RCSD DEMAND PER LAND USE TYPE

	Water Demand Factor	2010 Demand	2015 Demand	2020 Demand	2025 Demand	2030 Demand	2035 Demand	Total acres
	(AF/acre)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	
Single Family Residential	3.9	2,230	2,490	3,070	3,500	4,070	4,700	1,204
Multi Family Residential	2.5	200	250	290	350	380	500	182
Commercial	2.25	160	170	200	240	280	300	145
Heavy Industry	0.3	-	-	-	-	-	-	-
Light Industry	1.1	-	-	-	-	-	-	-
Mixed Use	2.5	-	-	-	-	-	-	-
Non-Urban Residential	1.9	400	450	500	600	710	800	436
Public Areas	2.6	20	30	30	40	50	60	20
Healthcare	5	-	-	-	-	-	-	-
Open Space	-	-	-	-	-	-	-	-
Total	N/A	3,010	3,390	4,090	4,730	5,490	6,360	1,987

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TABLE 4-9: QHWD DEMAND PER LAND USE TYPE

	Water Demand Factor	2010 Demand	2015 Demand	2020 Demand	2025 Demand	2030 Demand	2035 Demand	Total acres
	(AF/acre)	(AF)	(AF)	(AF)	(AF)	(AF)	(AF)	
Single Family Residential	3.9	4,558	4,955	5,830	6,615	7,440	8,440	2,163
Multi Family Residential	2.5	25	40	50	70	90	110	44
Commercial	2.25	76	100	160	200	250	330	148
Heavy Industry	0.3	-	-	-	-	-	-	-
Light Industry	1.1	-	5	10	15	20	20	16
Mixed Use	2.5	-	-	-	-	-	-	-
Non-Urban Residential	1.9	841	900	950	1,100	1,200	1,320	694
Public Areas	2.6	-	-	-	-	-	-	-
Healthcare	5	-	-	-	-	-	-	-
Open Space	-	-	-	-	-	-	-	18
Total	N/A	5,500	6,000	7,000	8,000	9,000	10,220	3,083

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TABLE 4-10: LAND USE OR POPULATION BASED WATER DEMAND PROJECTIONS (AF)

	2015	2020	2025	2030	2035
District No. 40	**91,900**	**96,500**	**108,000**	**119,400**	**130,800**
RCSD	**3,390**	**4,090**	**4,730**	**5,490**	**6,360**
QHWD	**6,000**	**7,000**	**8,000**	**9,000**	**10,220**
PWD	28,000	36,000	44,000	52,000	60,000
Mutuals*	6,000	6,800	7,600	8,200	8,660
LCID*	2,500	3,000	4,000	5,000	5,680
Cal Water*	2,000	4,000	5,000	6,000	7,570
Tejon	1,500	4,000	6,400	7,500	8,000
Plant 42*	2,300	2,600	2,900	3,200	3,660
Cal City	3,000	4,000	4,000	5,000	6,000
Mohave	2,000	3,000	3,000	3,000	4,000
Edwards	3,000	3,000	3,000	4,000	4,000
Boron	1,000	1,000	1,000	1,000	1,000
Unic Kern	8,000	11,000	15,000	20,000	28,000
Antelope Valley Area	**160,590**	**185,990**	**216,630**	**248,790**	**283,950**

*Water projections for the service areas of the various mutual water companies, Littlerock Creek Irrigation District, California Water Service Company, and Plant 42 reflect the land use projections for the census tracts assumed to be served by these entities. However, the demand could potentially be served by other water purveyors in the immediate vicinity.

The water use projections assume full development per the cities' General Plans by 2035.

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Section 5

Water Demand Management Measures

Section 5: Water Demand Management Measures

This Section will discuss the existing and planned DMMs implemented by each of the water purveyors.

5.1 Water Demand Management Measures

As outlined below, the UWMPA requires water suppliers implement "demand management" in their UWMP through a five step process. "Demand management," as applied to water conservation, refers to the use of measures, practices, or incentives implemented by water utilities to permanently reduce the level or change the pattern of demand. Per California Water Code (CWC) §10631(f) and (g), UWMPs must include:

1. A description of each water demand management measure being implemented, or scheduled for implementation:

   DMM 1. Water survey programs for single-family residential and multifamily residential customers.

   DMM 2. Residential plumbing retrofit.

   DMM 3. System water audits, lead detection, and repair.

   DMM 4. Metering with commodity rates for all new connections and retrofit of existing connections.

   DMM 5. Large landscape conservation programs and incentives.

   DMM 6. High-efficiency washing machine rebate programs.

   DMM 7. Public information programs.

   DMM 8. School education programs.

   DMM 9. Conservation programs for commercial, industrial, and institutional accounts.

   DMM 10. Wholesale agency programs.

   DMM 11. Conservation pricing.

   DMM 12. Water conservation coordinator.

   DMM 13. Water waste prohibition.

   DMM 14. Residential ultra-low-flush toilet replacement programs.

2. A schedule of implementation for all water DMMs proposed or described in the water supplier's UWMP.

3. A description of the methods, if any, the water supplier will use to evaluate the effectiveness of the DMMs implemented or described under the UWMP.

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

5. An evaluation of each DMM not being implemented or scheduled for implementation, which shall include cost-benefit, funding availability, and legal authority analyses.

The UWMPA allows one of two ways for water utilities to provide DMM information so as to meet the respective requirements of CWC §10631(f) and (g):

- Signatory. A water supplier who is a member of the California Urban Water Conservation Council[1] (CUWCC) and signatory of the *Memorandum of Understanding Regarding Urban Water Conservation in California* (MOU) may submit their Best Management Practice (BMP) Activity Reports (Annual Reports). Signatories pledge to develop and implement the 14 BMPs that are intended to reduce long-term urban water demands. These BMPs are functionally-equivalent to the DMMs in CWC §10631(f)(1).

  It should be noted that exemptions are available for BMPs that cannot be implemented; certain criteria must be met regarding cost-effectiveness, budgetary constraints, or legal issues that prohibit the implementation of any BMP for a signatory.

- Non-signatory. A water supplier who is not a member of CUWCC, or who is a member of CUWCC, but chooses not to submit the Annual Reports, must discuss all 14 DMMs, along with any additional measures the supplier is implementing or has scheduled for implementation in their UWMP submittal.

5.2 Implementation Levels of DMM's/BMP's

The DMMs which were implemented, or scheduled to be implemented, by District No. 40, RCSD, and QHWD are outlined the respective sections below. Included in the discussions are the five descriptive "demand management" elements as per the UWMPA .

5.2.1 District No. 40

District No. 40 has been a signatory to the CUWCC MOU since April 1996 and, as such, is a member of CUWCC. Copies of District No. 40's Best Management Practices Activity Reports for 2009 are provided in Appendix D. These reports contain all the necessary information to meet with the UWMPA requirements.

District No. 40 is in the beginning stages of developing a budget based billing rate structure that assesses indoor and outdoor budgets for each customer. The indoor budget is calculated based on the number of people per household, while the outdoor budget is based on the irrigated area and historical evapotranspiration data. The development of this budget based billing structure will promote efficient use of water, promote conservation to meet the SB X7-7, and provide appropriate revenues for District No. 40's operations.

[1] CUWCC, a non-governmental agency, was formed to increase water use efficiency statewide through partnerships among urban water agencies, public interest organizations, and private entities. CUWCC's goal is to integrate urban water conservation BMPs into the planning and management of California's water resources.

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5.2.2 RCSD

RCSD is not a signatory to the CUWCC MOU and is not a member of CUWCC; however RCSD is dedicated to expeditiously implementing as many reasonable water conservation measures in urban areas and to establish appropriate assumptions for use in calculating estimates of reliable future water conservation savings.

RCSD regularly evaluates the implementation of their conservation programs on an annual basis and as budgets allow is able to implement programs accordingly. A brief description of RCSD's activities with respect to each DMM is provided below.

5.2.2.1 DMM 1: Water Survey Programs for Single Family and Multi-Family Residential Customers

RCSD began offering free residential water use surveys to single-family and multi-family customers in 2006. These surveys focus on the top 20 percent of water users in each sector, but are offered to any customer by request. The top 20 percent of users, as determined from RCSD's existing database of billing records, receive a letter offering the free survey. If the users remain on the top 20 percent list the following year, up to three letters will be mailed offering an additional incentive to conduct the survey.

Interior single family audits may take two hours and are conducted by trained RCSD staff.
An interior water audit generally includes the following elements:

- Identify types of water usage
- Estimate the amount of water used for each device or fixture
- Recommend fixture repair options if necessary
- Identify alternative water usage device or fixture possibilities
- Instruct customer on proper installation and use of plumbing retrofit kits
- Inform customer on how to read their own water meter
- Inform and educate residents to use and conserve water efficiently

RCSD also has a landscape ordinance in place which pertains to new and existing single family homes, and an active landscape conservation program. RCSD has a Water Efficiency Landscape
(WEL)/firescape demonstration garden and works with Kern County and others to promote efficient landscaping practices. RCSD is also considering a financial incentive program to help homeowners convert to more water efficient landscapes (which may include landscape materials, irrigation conversions, automatic controllers, soil moisture sensors, gray water, etc.).

In addition to the interior water audits, the survey team also conducts the landscape or exterior water survey at the residence. Exterior water audits may include one of two types - routine and detailed.
A routine exterior water audit generally includes the following elements:

- Estimate the size of landscaped area
- Assess in-ground irrigation systems for leaks and broken sprinklers
- Measure precipitation rate of irrigation system
- Evaluate the automatic control settings
- Develop suggested irrigation schedules
- Provide customer with public education materials

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Residents are generally provided with recommendations for improvements, plumbing retrofit kits and water conservation literature. Examples of public education materials titles include:

- "Low Water Using Plants,"
- "For Your Xeriscape Garden (Low Water Using Plants),"
- "Ground Covers for Your Xeriscape Garden",
- "Making Your Garden Grow,"
- "Drought Survival Guide for Home and Garden"

Detailed exterior audits include all of the elements of the routine audit in addition to irrigation uniformity audits and soil assessments.

Institutional and governmental customers have also been offered water use surveys. All publicly-owned facilities including the Rosamond library, fire stations, RCSD's corporation yard facilities, and public restrooms have been surveyed for recommended retrofitting. Surveys have been conducted by consultants in the past.

Interior water savings achieved as the result of common water audits is difficult to predict, however savings of 10 to 30 percent have been reported (Deoreo, 2001; Bruvold, 1993; Nelson, 1992). However, an additional water savings ranging from 10 to 57 percent may be generated via detailed exterior audits (CUWCC, 2000; Hawn, 1997). In 2004 average daily demand for residential connections was approximately 0.784 AF per connection. Thus, the combination of interior and exterior audits could generate a minimum water savings of 20 percent per connection surveyed or 0.157 AF per survey.

In order to measure the methods effectiveness, RCSD will utilize a database system. For each dwelling unit the survey team will complete a customer data form (including number of people per household, number of bathrooms, age of appliances, and lot and landscaped area square footage). This data is used to analyze the customer's water use, evaluate the effectiveness of the measure refine the program.

RCSD staff reviews the surveyed customers' water use records, and compares historic use with current use for one year after the survey. If the reduction in water use is not in line with DMM water savings estimates, staff will flag the customer's account and offer a follow up survey.

<u>Implementation Schedule</u>
• Program Start: January 2006
• Program Status: On-going. Offers made annually to single-family and multi-family residential customers. Program advertised using bill inserts and water conservation newsletter and website.

<u>Budgetary Schedule</u>
RCSD has allotted a budget of $30,000 for interior audits and $15,000 for exterior audits to implement this DMM.

5.2.2.2 DMM 2: Residential Plumbing Retrofit

Under this program, water-conserving devices such as high-quality low-flow showerheads, toilet-displacement devices, toilet flappers and faucet aerators are distributed to customers.

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The plumping retrofit DMM was implemented in 2000. Through National Association of Clean Water Agencies (NACWA), RCSD participates in the distribution of retrofit kits during Water Awareness Month. Residential plumbing retrofit programs include distributing retrofit kits that may include high quality low-flow showerhead, faucet aerator/restrictor, toilet displacement device, toilet leak detection tablets, garden hose nozzle, hose washers, and hose repair kits. Retrofit kits include instructions on the proper installation and benefits of the low-flow devices. In addition, each of the kits includes printed materials promoting interior and exterior conservation practices. Retrofit programs may also include a water survey as described above or toilet replacement with ultra low flush toilets (ULFT, see Section 5.2.2.14).

Conservative estimates of interior water savings achieved due to retrofit with only the showerhead and faucet restrictor for single-family and multi-family homes ranges from approximately 48 to 114 gpd per housing unit (Deoreo, 2001; Bruvold, 1993; Nelson, 1992; Maddaus, 1987). Significant additional savings may be generated due to fixture leakage reduction and installation of toilet dams or replacement. Installation of retrofit fixtures in older single-family homes tend to produce more savings, while newer multi-family homes tend to produce less savings per housing unit.

Implementation Schedule

- RCSD will continue to implement this DMM at a targeted rate of 10 percent of pre-1992 single and multi-family customers every two years.
- This measure will be evaluated for effectiveness as described for DMM 1.

Budgetary Schedule:
The cost for this DMM is combined with the overall annual cost for DMM 1.

5.2.2.3 DMM 3: System Water Audits, Leak Detection and Repair

RCSD has conducted monthly water audits, leak detection, and repair on their distribution system since 1997. Because RCSD is located in an earthquake zone, it has permanently incorporated the system water audit and leak detection, and meter calibration (production and customer meters) programs into its utility operations, on a three-year rotation schedule. On average, RCSD water department crews spend about 35 days surveying approximately 100 miles of main and laterals per year. The RCSD also participates in the NACWA-sponsored annual valve exercise program, established in 1991, to ensure that interconnections with adjacent utilities actually work.

No major line replacements were necessary from 2005 to 2010.

Implementation Schedule
• Program Start: January 1997
• Program Status: On-going. Effectiveness of this DMM is measured through the reduction in number of leaks detected and unaccounted for water losses in comparison to past years. RCSD utilizes an annual review of the data records to confirm that the unaccounted for water losses stay under 6 percent.

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Budgetary Schedule:
Approximately $6,000 has been allocated for this DMM as part of the operation and maintenance budget.

5.2.2.4 DMM 4: Metering with Commodity Rates for all New Connections and Retrofit of Existing Connections

RCSD is fully metered for all customer sectors, including separate meters for single-family residential, commercial, large landscapes, and all institutional/governmental facilities. Since 1990, RCSD policy has been to separately meter each dwelling unit in multi-family complexes. There are approximately 110 multi-family complexes, with 3,753 single family dwelling units in the service area.

RCSD's building department coordinates the implementation of this DMM with Kern County. RCSD is working with the Kern County Building and Safety Department when it reviews the building plans to determine the water use efficiency before a permit is issued to the new commercial/industrial/institutional customers. Additionally, all customers are metered with landscape meters for landscape areas other than residential lawn areas. Cost for meter installation is covered through service connection fees.

This DMM will be measured for effectiveness through the measures illustrated in DMM 1. Commercial water reduction achieved is estimated at 12 to 15 percent. RCSD is also evaluating an expansion in their recycled water facilities, and a further reduction in potable water demand will result once recycled water becomes available.

Implementation Schedule:
- Program Status: On-going. Started in 1990.

Budgetary Schedule:
- TBD

5.2.2.5 DMM 5: Large Landscape Conservation Programs and Incentives

In 1992, motivated by the drought, RCSD established a landscape ordinance. It has since been amended to include firescaping guidelines and to conform to California Water Code Section 65590 et seq. (AB325).

RCSD continues to work in partnership with the local fire department, local nurseries, landscape designers, contractors and the local floriculture growers to help educate landowners in regards to WEL. In cooperation with AVEK a proposed information pamphlet has been developed to explain evapotranspiration and procedures involved in developing irrigation schedules.

Additionally, RCSD co-authored a "Landscape Plants for the California High Desert" booklet that has been provided to customers, Kern County Planning and local nurseries. RCSD has used WEL at all median strips in conjunction with the County and developers. The potential benefits will be:

(1) Allowing the public to see attractive low-water using landscapes;
(2) Demonstrating RCSD's commitment to improved efficiencies in public water uses;

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(3) Improving safety records due to the reduced exposure in maintaining median strip landscaping; and
(4) Providing cost savings associated with lower water bills, reduced median strip maintenance, and fewer street and gutter repairs.

Furthermore, RCSD conducts irrigation surveys for all large landscape customers (currently defined as three acres or greater). RCSD also began an inventory of landscaped areas over one acre, based on the County's and the DWRs' Geographical Information System (GIS), in 2000.

A landscape water audit generally includes the following elements:

- Estimate size of landscaped area
- Define soil characteristics
- Assess in-ground irrigation systems for leaks and broken sprinklers
- Measure irrigation system uniformity rate
- Evaluate automatic control settings
- Develop suggested irrigation schedules
- Provide customer with public education materials.

During the survey, a trained RCSD team determines a water budget for the site, which defines the amount of water allotted for the site based on the size of the landscape and the climate. Water use is monitored on a monthly basis and any water use over the water budget is billed at a higher rate. If the water budget is exceeded for three consecutive months, the customer is offered technical assistance. On-site follow-up evaluations are recommended for customers whose annual water use exceeds their water budget.

RCSD has considered a financial incentive program to encourage high water users to convert to more water efficient landscapes. Types of financial incentives considered include: irrigation system conversions, automatic controllers, soil moisture sensors, automated CIMIS scheduling, and plants and other landscape materials.

In 2004, landscape irrigation use averaged 8,812 gpd per connection (38.6 million gallons a year/12 connections/365 days a year). Thus a 15 percent reduction could result in a water savings of 17.8 AFY (15 percent' 8,812 gpd per connection' 12 connections' 365 days/325,075 gallons per AF), assuming water budgets are developed just for the existing landscape/irrigation connections. Additional savings could be achieved for commercial/institutional connections with large landscaped areas.

Its effectiveness will be measured through cost savings, the attendance to the WEL demonstration garden, and the number of WEL materials distributed. RCSD will report annually on the landscape water savings associated with this DMM to the Board of Directors.

Implementation Schedule:
Program Ongoing. This DMM has been permanently incorporated into RCSD's ordinances.

Budgetary Schedule:
An annual budget of $965 for water audits and $5,800 for conservation efforts. It is anticipated that this DMM will provide a 15 percent reduction in landscape water use.

5.2.2.6 DMM 6: High-Efficiency Washing Machine Rebate Programs

High-efficiency washing machines use about 50 percent less water than conventional machines,

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using only 20 to 30 gallons of water per load, compared to 40 to 45 gallons for conventional toploading washers. The estimated annual savings for a typical household is about 5,000 gallons per year.

RCSD does not currently have its own residential rebate program, however, customers in the RCSD's water service area may be eligible for rebates from either the area's electric utility, or gas utility. Water and energy savings vary with the new models, however mean water savings of approximately 14 gallons per household per day would be expected. High efficiency models cost from $600 to $1,100 (compared to $300 to $700 for conventional units) which may reduce the rate of participation. Examples of customers that would derive maximum benefit from this program include multifamily residential units and Laundromats with multiple washing machines per location.

The Los Angeles Department of Water and Power (LADWP), in partnership with member agencies, offer rebates which normally range between $85 and $150. Rebates are based on the projected combined water and energy savings. Examples of other agencies which have cosponsored programs with MWD include Kern County, LADWP, San Diego County Water Authority, and Southern California Edison (SCE) (http://www.sce.com/residential/rebates-savings/appliance/appliance.htm).

Implementation Schedule:
- LADWP Program: On-going
- SCE Program: On-going
- Kern County Program: On-going
- RCSD Program: Not implemented

Budgetary Schedule:
TBD

5.2.2.7 DMM 7: Public Information Programs

RCSD promotes water conservation and other resource efficiencies in coordination with NACWA and the energy utilities. It also distributes public information through bill inserts, brochures, community speakers, paid advertising, and many special events every year. Special events include the William Ketchum Armed Forces Day Parade, an annual water conservation fair, and a display case and Small Change Theatre at the Kern County Public Library.

RCSD has formed a Citizens' Advisory Committee to assist in developing new ways to communicate with the public and the media about water conservation and other resource issues. Due to arid conditions of the region, it also has become a priority to develop conservation materials focused on the short term residents and visitors though working with restaurants, hotels, and real estate offices. RCSD also has a dedicated section on their home page which includes information on water conservation, recycling, and other resource issues. RCSD will continue to provide public information services and materials to remind the public about water and other resource issues.

Implementation Schedule:
- Program Ongoing. RCSD will track the commentary regarding the information provided.

Budgetary Schedule:

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- RCSD has a proposed annual budget of $10,000, (from public affairs office budget) for staff and materials for this activity.

5.2.2.8 DMM 8: School Education Programs

RCSD continues to work with NACWA and the local school districts to promote water conservation and other resource efficiencies at school facilities and to educate students about these issues. They are currently studying the retrofitting of school playground irrigation systems. RCSD contacts local school boards and principals about implementing DMM 8. RCSD will provide educational materials for several grade levels, State and County water system maps, posters, workbooks, interactive computer software, videos, tours, and sponsors Water Education for Teachers (WET) training, science fairs, and water conservation contests. Specific events include the Small Change Theatre for Kindergarten through third grade, Dr. Wilderness for third grade through sixth grade, and Resource Action Programs and Saving Water One Student at a Time for fifth grade.

Implementation Schedule:

- Program Ongoing. To measure the effectiveness of this DMM, RCSD will continue to survey the institutions and educators on the number of programs, materials and attendance at water conservation activities.

Budgetary Schedule:

- The proposed annual budget for this DMM is $10,000 for labor expense and materials.

5.2.2.9 DMM 9: Conservation Programs for Commercial, Industrial and Institutional Accounts

RCSD continues to provide water use audits to any commercial/ industrial/institutional (CII) customer who so requested. RCSD utilizes a database program to identify the top 10 percent of the commercial customers and the top 20 percent of the industrial and institutional customers. These high demand customers are contacted by letter and with follow up telephone calls to offer audits.

RCSD has developed a billing insert which includes water survey information. This insert along with the October 1994 DWR publication Water Efficiency Guide for Business Managers and Facility Engineers will continue to be distributed. Staff will also complete a program to identify CII customers by Standard Industrial Classification (SIC) codes.

<u>Implementation Schedule:</u>

- Program Ongoing. RCSD will continue to implement this DMM at the annual target rate for at least the next five years.

<u>Budgetary Schedule:</u>

- RCSD has allotted an annual budget of $5,720 for water audits. An additional annual budget of $10,680 has been allotted for commercial/industrial/institutional (CII) conservation programs.

5.2.2.10 DMM 10: Wholesale Agency Programs

RCSD is not a wholesale agency and thus this DMM is not applicable.

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5.2.2.11 DMM 11: Conservation Pricing

RCSD converted their flat rate structure to a tiered rate structure in 2002. The current rate structure is provided in Table 5-1

TABLE 5-1: PROPOSED RATES FOR MONTHLY WATER METER CHARGE ($/METER SIZE)

Meter Size	Effective Oct. 1, 2009	Effective Oct. 1, 2010	Effective Oct. 1, 2011	Effective Oct. 1, 2012	Effective Oct. 1, 2013
0.63	$16.00	$17.00	$18.00	$19.00	$20.00
0.75	$16.68	$17.68	$18.68	$19.68	$20.68
1.00	$24.53	$26.20	$27.86	$29.53	$31.20
1.50	$37.83	$41.16	$44.50	$47.83	$51.16
2.00	$61.16	$66.49	$71.83	$77.16	$82.49
3.00	$143.79	$160.46	$177.12	$193.79	$210.46
4.00	$158.42	$175.09	$191.75	$208.42	$225.09
6.00	$183.68	$199.68	$215.68	$231.68	$247.68

TABLE 5-2: PROPOSED RATES FOR MONTHLY WATER HCF CHARGE ($/HCF)

Current Tier	Effective Oct. 1, 2009	Effective Oct. 1, 2010	Effective Oct. 1, 2011	Effective Oct. 1, 2012	Effective Oct. 1, 2013
1	$1.30	$1.60	$1.97	$2.17	$2.24
2	$1.43	$1.73	$2.10	$2.30	$2.37
3	$1.61	$1.91	$2.28	$2.48	$2.55
4	$1.80	$2.10	$2.47	$2.67	$2.74

<u>Implementation Schedule:</u>

- Program Ongoing

<u>Budgetary Schedule:</u>

- TBD

5.2.2.12 DMM 12: Water Conservation Coordinator

As of 2010, RCSD retains a designated one part-time water conservation coordinator (WCC). Due to budgetary restrictions the WCC does not currently have support staff to aid in this effort. RCSD will continue to survey the institutions and educators on the number of programs, materials, and attendance at water conservation activities in order to measure the DMM's effectiveness.

<u>Implementation Schedule:</u>

- Program Ongoing

Budgetary Schedule:

- The proposed annual budget is $46,400 for water conservation staff costs

5.2.2.13 DMM 13: Water Waste Prohibitions

RCSD has enacted a "No Waste" ordinance. Enforcement includes the "gutter flooder" patrol to educate customers, and if necessary, issue warnings and citations for violations. See Appendix E for the "No Waste" Ordinance and information on regulations, restrictions and enforcement. As a method to measure efficiency, RCSD will monitor the number of annual violations.

Implementation Schedule:

- Program Ongoing

Budgetary Schedule:

- RCSD has allotted an annual budget of $2,000 for this DMM.

5.2.2.14 DMM 14: Residential Ultra-Low Flush Toilet Replacement Programs

RCSD established a high visibility ultra-low flush toilet replacement program in 2001. ULFT commonly use 1.5 gallons per flush. However, some types use as little as 0.5 gallon per flush and require a supply of compressed air to assist the flushing action. Higher savings are found in high-density housing and commercial/industrial settings. Savings also persist over the entire lifespan of the toilet (approximately 25 years). RCSD plans to continue the DMM until at least 80 percent of all non-conserving and low-flush model toilets have been replaced. Since 2001, the Board of Directors homes, RCSD offices, and toilets at Rosamond High School have been converted to ultra-low flush models. Rebates up to $75 per toilet were offered.

Alternative methods to rebate offers for promoting toilet replacement include: (1) implementing a retrofit on resale ordinance where homes are required to retrofit to low flow fixtures upon a resale, and (2) direct distribution programs. Retrofit on resale ordinances are relatively inexpensive since costs are shifted to the home seller/purchaser. These ordinances tend to be unpopular with the real estate community and home sellers, since it may impede a sale due to timing and may require replacing floor coverings around the toilet. Communities in California which have a retrofit on resale ordinance include the Monterey Peninsula Water Management District, North Marin Water District, City of San Diego, City of San Francisco, and City of Santa Monica (DWR website). Direct distribution programs consist of providing a ULFT (1.6 gallons/flush) in exchange for a customer provided toilet (generally 3.5 to 7 gallons/flush).

This alternative is generally effective but may have an increased administrative cost due to the need for staffing the distribution center and also for disposal of the retired toilets. However, RCSD has helped establish the East Kern County recycling policy, which will direct that recycled toilets (and other locally generated waste materials such as sludge from the RCSD treatment plant) should be used by government in its own operations. Thus one possible mode of disposal for the retired toilets could be use as crushed aggregate road base in both the County and as rip-rap for ponds.

In coordination with East Kern County, RCSD plans to offer rebates to customers, will establish a referral installation program, and will provide commercial sources for toilets and urinals for installation at public facilities including schools, libraries, and fire department facilities. Projected

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total annual water savings from toilet retrofits at full implementation has yet to be determined, however water conserved in ULFT replacement programs have been shown to be 1.9 to 5.4 gallons of water savings per flush per toilet which equates to 12 to 45 gallons per replacement per day. Assuming 240 replacements a year, the minimum annual water savings from this DMM is approximately 3.2 AFY (240' 12 gpd '365 days/325,828 gallons per AF).

To measure effectiveness, RCSD will calculate annual ULFT replacement program water savings to confirm the savings are within 10 percent of calculated retrofit-on-resale water savings, using the CUWCC MOU Exhibit 6 methodology and water savings estimates. Exhibit 6 has become an industry standard for evaluation of ULFT replacement programs.

Implementation Schedule:

- Program Ongoing

Budgetary Schedule:

- TBD

5.2.3 QHWD

QHWD is not a signatory to the CUWCC MOU and is not a member of CUWCC. As such, a description of all 14 DMMs is provided below with a discussion of the proposed methods to measure efficiency.

5.2.3.1 DMM 1: Water survey programs for single-family residential and multifamily residential customers

Since 1996, QHWD began offering free residential water use surveys to all QHWD customers. This service is advertised on our Website and has been featured in our quarterly newsletter several times. In 2008 QHWD implemented a conservation rate structure that has helped show customers if their usage is normal or not. Since the implementation of this rate structure water surveys has significantly increased.

QHWD utilizes a similar program to one described for RCSD above. State Certified staff conduct both interior and exterior audits at the customers home, and complete a report that is made available to the customer(s) with suggestions for water conservation and a list of the currently offered rebate program. In 2007 average annual demand was approximately 1.17 AFY per connection (6,612 AF/5,674 connections). However in 2010 after doing these audits teamed with conservation billing for two years the average annual demand was .92 AFY per connection (5,441 AF/5,937 connections). Thus, QHWD has shown that the audits and the conservation billing have reduced the annual water consumption per connection by 21 percent.

5.2.3.2 DMM 2: Plumbing Retrofit

Since 2008, QHWD has participated in the distribution of information of suppliers for showerheads, aerators, and toilet tank leak detection tablets during Water Awareness Month and emphasizes water use surveys and ultra-low flush toilet replacement programs. In early 2008, a toilet replacement rebate was started where QHWD offers a fifty dollar rebate on all ultra low-flush toilets. This program has been funded by the overage charges from the conservation rate structure.

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5.2.3.3 DMM 3: System Water Audits, Leak Detection and Repair

QHWD has conducted water audits and leak detection and repair checks on an "as-needed" basis since its formation in 1955. QHWD began preventative audits and leak detections in 2002, since 2008 QHWD has sent letters to high residential user (top 10 percent), and continues to perform water audits by our staff, as well as monitor high bills for possible leaks.

As with RCSD, QHWD is located in an earthquake zone, and as such has permanently incorporated the system water audit and leak detection, and meter calibration (production and customer meters) programs into its utility operations. On average, QHWD crews spend about 20 days surveying approximately 40 miles of main and laterals per year. QHWD also participates in an annual valve exercise program to ensure that all connections operate as required. Broken or poorly operating valves are scheduled for repair or replacement.

Effectiveness of this DMM is measured through the reduction in number of leaks detected and unaccounted for water losses in comparison to past years. Typically unaccounted for water loss is less than 5 percent. QHWD utilizes an annual review of the data records to confirm that the unaccounted for water losses stay under 6 percent.

5.2.3.4 DMM 4: Metering with Commodity Rates

QHWD is fully metered for all customer sectors, including separate meters for single-family residential, commercial, large landscapes, and all institutional/governmental facilities. Since 2008 QHWD has created a conservation based rate structure. The inside water is calculated in the following fashion, 4,200 gallons a month is allotted for up to three occupants after that each additional occupant is granted an additional 1000 gallons. The outside allotment is calculated by the overall foot print of the lot, for the first 5,000 square foot a customer receives 19 gallons per square foot to be allocated throughout the year. For lots larger than 5,000 square feet the first 5,000 are still calculated at 19 gallons per square foot and area above the 5,000 is calculated at 17 gallons per a square foot till 14,000 square feet then the calculations changes again for all area over the first 14,000 square foot to that of 14 gallons per square foot. Detailed rate information for a one month billing cycle is provided in Table 5-3.

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TABLE 5-3: QHWD TIERED RATE STRUCTURE

2011 **Winter rates** will apply to water used in the months of **October through May** as follows:			
Tier Name	**% of Water Budget**	**Multiply by Unit (100cf)**	**Multiply by Gallon**
Conservation	0 – 75%	$0.66	0.00088235
Base Rate	0 – 100%	$0.70	0.00093583
Inefficient	101 – 150%	$1.05	0.00140374
Excessive	151 – 200%	$1.75	0.00233957
Wasteful	Greater than 200%	$2.45	0.0032754
2011 **Summer rates** will apply to water used in the months of **June through September** as follows:			
Tier Name	**% of Water Budget**	**Multiply by Unit (100cf)**	**Multiply by Gallon**
Conservation	0 – 75%	$0.81	0.00108289
Base Rate	0 – 100%	$0.86	0.00114973
Inefficient	101 – 150%	$1.29	0.0017246
Excessive	151 – 200%	$2.15	0.00287433
Wasteful	Greater than 200%	$3.01	0.00402406

QHWD's building department coordinates the implementation of this DMM. Project designers must demonstrate the use of water saving devices in their designs. A staff member reviews the building plans to determine the water use efficiency before a permit is issued to the new customer.

This DMM will be measured for effectiveness through the measures illustrated in DMM 1. Commercial water reduction achieved is estimated at 12 to 15 percent. At this time, no additional budget has been allotted for this DMM.

5.2.3.5 DMM 5: Large Landscape Conservation Programs and Incentives

In 1992, QHWD established a landscape ordinance similar to the one described for RCSD above.

This DMM has been permanently incorporated into QHWD ordinances. It is anticipated that the survey could result in 10 percent reduction in water use and the conservation measures an additional 15 percent reduction in water use. Landscape/irrigation average daily demand in 2004 was approximately 5.4 AF per connection. Assuming budgets are created for only the landscape/irrigation meters (41 meters total) over the next five years and a combined water savings of 25 percent, an annual water savings of 58 AFY could be achieved by 2010. However, at this time no additional budget has been allotted for this DMM.

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Its effectiveness will be measured through cost savings, the attendance to the WEL demonstration garden, and the number of WEL materials distributed. An annual report on the landscape water savings associated with this DMM will be submitted to the Board of Directors.

5.2.3.6 DMM 6: High Efficiency Washing Machine Rebate Programs

QHWD does not currently implement or plan on implementing this DMM because, as with RCSD, this DMM would not be economically viable due to the high cost of washing machines, high program costs (i.e., rebates), and low cumulative water savings compared to other DMMs.

The cost to benefit analysis is the same as for RCSD.

5.2.3.7 DMM 7: Public Information Programs

QHWD also promotes water conservation and other resource efficiencies in coordination with NACWA and the energy utilities. It also distributes public information through bill inserts, brochures, community speakers, paid advertising, and many special events every year.

It has formed a Citizens' Advisory Committee to assist in developing new ways to communicate with the public and the media about water conservation and other resource issues. Due to arid conditions of the region, it also has become a priority to develop conservation materials focused on the short term residents and visitors though working with restaurants, hotels, and real estate offices. QHWD has established a World Wide Web Home Page, which includes information on water conservation, recycling, and other resource issues.

QHWD will continue to provide public information services and materials to remind the public about water and other resource issues. QHWD will track the commentary regarding the information provided. QHWD has a proposed budget of $5,000 for public relations purposes.

5.2.3.8 DMM 8: School Education

QHWD continues to work with the school districts to promote water conservation and other resource efficiencies at school facilities and to educate students about these issues. As part of the commercial/industrial/institutional water conservation programs, all new public school toilets, urinals, showerheads, and faucet aerators will utilize ultra-low flow models. QHWD continually works with the school districts to complete retrofits of school and facilities and playground irrigation systems and provides educational materials for several grade levels, State and County water system maps, posters, workbooks, interactive computer software, videos, tours, and sponsors WET training, science fairs, and water conservation contests. To date, QHWD has not presented to any classes.

To measure the effectiveness of this DMM, QHWD will continue to survey the institutions and educators on the number of programs, materials and attendance at water conservation activities. No additional budget has been allotted for this DMM.

5.2.3.9 DMM 9: Conservation programs for commercial, industrial, and institutional account

For the last several years, QHWD has provided water use audits to any customer who so requested. QHWD utilizes a database program to identify the top 10 percent of the commercial customers and the top 20 percent of the industrial and institutional customers. These high demand customers are contacted by letter and with follow up telephone calls to offer audits.

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QHWD will continue to implement this DMM at the annual target rate for at least the next five years. At this time, additional budget has been allotted for this DMM.

5.2.3.10 DMM 10: Wholesale Agency Programs

QHWD is not a wholesale agency and thus this DMM is not applicable.

5.2.3.11 DMM 11: Conservation Pricing

In 2008 QHWD introduced conservation rate structures for all residential accounts, as detailed in DMM 4. Since implementing this system QHWD has seen a decrease in water usage, the staff at QHWD is trying to see if the rate structure is correlated in any way

QHWD will continue to monitor the number of violators who use water in excess of their established allotment. The incentive of this DMM is to decrease the customers' water costs for those that conserve and create a price incentive to conserve.

5.2.3.12 DMM 12: Water Conservation Coordinator

QHWD has designated one full-time WCC in 2002. One staff person (who works 30 percent on water conservation) and part time staff who coordinate the landscape programs provide additional support to the WCC.

QHWD will continue to survey the institutions and educators on the number of programs, materials and attendance at water conservation activities in order to measure the DMM's effectiveness.

5.2.3.13 DMM 13: Water Waste Prohibition

QHWD has enacted a "No Waste" ordinance. Enforcement includes the "gutter flooder" patrol to educate customers, and if necessary, issue warnings and citations for violations. See Appendix F for the "No Waste" Ordinance and information on regulations, restrictions and enforcement.

As a method to measure efficiency, QHWD will monitor the number of annual violations.

5.2.3.14 DMM 14: Ultra low-flush toilets replacement program

QHWD established a high visibility ultra-low flush toilet replacement program in 2001and plans to continue the DMM until at least 80 percent of all non-conserving and low-flush model toilets have been replaced. QHWD has continued to offer this rebate to all of their customers that adds up to $50.00 per toilet.

All public facilities in the QHWD will also eventually have ULFTs, urinals, showerheads, and self-closing faucets. Funding for replacement programs will come in part from the Demand Offset Program, where new development provides funds to improve the water use efficiency of existing customers.

QHWD will continue to offer rebates to customers, will establish a direct installation program, and will provide rebates for toilets and urinals for installation at public facilities including schools, libraries, and fire department facilities.

Projected total annual water savings from toilet retrofits at full implementation has yet to be determined, however water conserved in ULFT replacement programs have been shown to be 1.9 to 5.4 gallons of water savings per flush per toilet which equates to 12 to 45 gallons per

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replacement per day. Assuming 20 replacements a year, the minimum annual water savings from this DMM is approximately 0.27 AFY (20 * 12 gpd *365 days/325,075 gals per AF).

To measure effectiveness, QHWD will calculate annual ULFT replacement program water savings to confirm the savings are within 10 percent of calculated retrofit-on-resale water savings, using the CUWCC MOU Exhibit 6 methodology and water savings estimates. Exhibit 6 has become an industry standard for evaluation of ULFT replacement programs.

5.3 Summary of Conservation

Through the implementation of the existing DMMs and SB X7-7 requiring all water suppliers to reduce per capita urban water use, a reduction of approximately 10 percent in average water use is expected by 2015 and 20 percent by 2020 for the Study Area. However, it is difficult to determine actual water savings since most conservation measures are voluntary. Typically when a shortage occurs, water customers increase their awareness of water usage and voluntarily reduce water demand even more to avoid water rationing. The 20 percent reduction target from the proposed baseline has already been achieved within the Study Area, as shown in Section 8.

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Section 6

Recycled Water Plan

Section 6: Recycled Water Plan

6.1 Recycled Water Supplies

The Antelope Valley is faced with significant challenges with respect to management of water resources in the region. Recycled water helps address the Antelope Valley's need for increased water supplies by offsetting existing potable demands and promoting beneficial reuse of treated wastewater, such as using recycled water for groundwater replenishment. Efforts are currently underway to develop a regional recycled water distribution system in the Antelope Valley, also known as the AV Backbone. Due to the size and scope of the project, it is a multi-agency, multi-jurisdictional project that will be implemented collectively to serve the Study Area. Recycled water supplies are also addressed in the 2007 AVIRWMP (pages 3-17 through 3-20).

6.1.1 Source Characteristics and Quality

Lancaster Water Reclamation Plant (LWRP), Palmdale Water Reclamation Plant (PWRP) and Rosamond Wastewater Treatment Plant (RWWTP) are the wastewater treatment plants serving the Study Area. These three plants currently provide primarily secondary[2] treated recycled water. A small percentage of wastewater is treated to a tertiary[3] level at the LWRP through two additional onsite facilities, known as the Antelope Valley Tertiary Treatment Plant (AVTTP) and the Membrane Bioreactor (MBR) Plant, which provides the only tertiary treated recycled water currently available in the Study Area. However, on-going construction at each of the three treatment plants will allow for additional tertiary treated recycled water to be produced. A description of each of the three treatment plants that may provide recycled water to the Study Area is provided below.

6.1.1.1 LWRP

The LWRP, built in 1959, is located north of the City of Lancaster and is owned and operated by the County Sanitation District No. 14 of Los Angeles County (Sanitation District No. 14). The plant's service area includes most of the City of Lancaster, parts of the neighboring City of Palmdale, and unincorporated areas of Los Angeles County. The LWRP currently has a design capacity to treat 17 mgd of wastewater to a secondary level. Approximately 0.6 mgd of secondary effluent may undergo further tertiary treatment at the Antelope Valley Tertiary Treatment Plant (AVTTP) and approximately 1 mgd of primary effluent may receive secondary and tertiary treatment at the Membrane Bioreactor (MBR) Plant. In 2010, LWRP produced an average of 10.4 mgd of secondary treated recycled water and 1.1 mgd of tertiary treated recycled water. Uses of the recycled water produced at the LWRP include: various municipal and industrial uses, agricultural irrigation, recreational impoundments at Apollo Community Regional Park, maintenance of marsh-like habitat at Piute Ponds on Edwards Air Force Base, and in-plant uses. Sanitation District No. 14 is currently upgrading the existing LWRP to have a secondary and tertiary treatment capacity of 18 mgd.

6.1.1.2 PWRP

The PWRP, built in 1953 and located on two sites adjacent to the City of Palmdale, is owned, operated, and maintained by the County Sanitation District No. 20 of Los Angeles County

[2] Secondary treatment means recycled water that meets secondary standards, including water quality, as defined in Water Code Title 22 regulations.
[3] Tertiary treatment means recycled water that meets tertiary standards, including water quality, as defined in Water Code Title 22 regulations.

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(Sanitation District No. 20). PWRP, which has a secondary treatment capacity of 15 mgd, produced 8.3 mgd of secondary treated recycled water in 2010. Uses of the recycled water produced at the PWRP include agricultural and landscape irrigation and in-plant uses.

The Regional Water Quality Control Board—Lahontan Region (Regional Board) has required that Sanitation District No. 20 prevent the discharge of nitrogenous compounds to the groundwater at levels that violate the water quality objectives identified in the 1994 Water Quality Control Plan for the Lahontan Region (1994 Basin Plan). In response, Sanitation District 20 is currently upgrading the PWRP to include nitrification-denitrification process treatment for a tertiary treatment capacity of 12 mgd. The tertiary treated recycled water produced at the PWRP after completion of these upgrades will be used for various municipal and industrial uses, agricultural irrigation, and in-plant uses.

6.1.1.3 RWWTP

RWWTP, located in the community of Rosamond, is owned, operated, and maintained by the RCSD. RWWTP, which has a permitted capacity of 2.0 mgd, treated an average flow of 1.5 mgd to undisinfected secondary standards for landscape irrigation on-site.

RCSD plans to increase the capacity to 2.5 mgd in 2012 through the addition of 0.5 mgd tertiary treatment facility.

Design for the proposed treatment plant improvements is complete and has been approved by the State of California. Once constructed, the plant would provide tertiary treated recycled water for landscape irrigation at median strips, parks, schools, senior complexes and new home developments.

6.1.2 Availability of Supply

For the purpose of this study, historic recycled water flows were provided by Sanitation District Nos. 14 and 20 and RCSD to predict the amount of recycled water anticipated in the Study Area. These projections are for tertiary treated water only and are determined from the applicable recycled water producer's Annual Monitoring Report. These projections take into consideration the recycled water that has been committed to users outside of the Study Area (e.g., Piute Ponds and Apollo Community Regional Park). Table 6-1 provides a summary of the projected available recycled water to the Study Area through 2035. However, the volume of recycled water produced at the LWRP, PWRP and RWWTP will be dependent on the level of growth that occurs in the Study Area. If the population and land use projections provided by the Cities of Lancaster and Palmdale and RCSD materialize, the amount of recycled water available will be significantly greater than the numbers presented in Table 6-1.

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TABLE 6-1: RECYCLED WATER AVAILABILITY TO STUDY AREA 2010 – 2035

	2010	2015	2020	2025	2030	2035
LWRP[(a)] (mgd)	9.0	11.5	12.9	14.0	15.3	16.7
PWRP[(b)] (mgd)	9.5	10.1	10.5	10.9	11.2	11.6
RWWTP[(c)] (mgd)	0.0	1.0	1.0	1.0	1.0	1.0
Study Area (mgd)	**18.5**	**22.6**	**24.4**	**25.9**	**27.5**	**29.3**
Study Area (AFY)	**20,700**	**25,300**	**27,300**	**29,000**	**30,800**	**32,800**

Note:
(a) Extrapolated using historical flows from 2000 to 2010 listed in LWRP Annual Monitoring Reports and excludes estimated demand at the Piute Ponds and Apollo Regional Community Park.
(b) Extrapolated using historical flows from 2000 to 2010 listed in PWRP Annual Monitoring Reports.
(c) Provided by RCSD.

Note that the total recycled water produced in the Antelope Valley area in 2010 was 20,700 AF. Table 4-10 projects that the water demand in the Study Area in 2035 could be 147,380 AF. Given this demand, it is conservative to assume 20 percent of the potable supply could potentially be treated and reused as recycled water. This is a conservative estimate since most likely a larger percentage of new development will connect to a regional sewer system.

Although Table 6-1 provides the projected volumes of recycled water available, actual delivery of recycled water by the purveyors to reuse sites will be limited to demand and implementation of the AV Backbone. Table 6-2 provides the projections of recycled water demand for an average water year. The projections are based on a recycled water market assessment and are generally for M&I recycled water uses. District No. 40 recycled water demands were determined with the inclusion of the City of Lancaster and City of Palmdale demands, as detailed in the 2006 report, "Final Facilities Planning Report, Antelope Valley Recycled Water Project" (2006 Recycled Water Facilities Plan) prepared for District No. 40. Although no specific users have been identified for QHWD, the agency plans on connecting to the backbone system in the future and using recycled water in-lieu of groundwater pumping. Use of recycled water would be encouraged through the use of financial incentives (i.e., recycled water would be available at a lower cost than the existing potable water supply). Table 6-3 indicates what was projected in the 2005 UWMP for recycled water to be utilized in 2010 compared to the actual recycled water used.

TABLE 6-2: PROJECTED FUTURE USE OF RECYCLED WATER IN THE STUDY AREA (AFY) BASED ON THE FACILITIES PLANNING REPORT

	2015	2020	2025	2030	2035
District No. 40	5,400	8,200	10,900	13,600	16,300
RCSD	-	-	-	-	-
QHWD	-	-	-	-	-
Study Area Total Recycled Water Demand	**5,400**	**8,200**	**10,900**	**13,600**	**16,300**

Note:
These projections are based on the 2006 Facilities Planning Report and do not include the new projected demand associated with the proposed lands uses for the Sturdy Area as shown in Table 6-4.

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TABLE 6-3: 2005 UWMP RECYCLED WATER USE COMPARED TO 2010 ACTUAL IN THE STUDY AREA (AFY)

Water Purveyor	2010 Actual Use	2005 Projection for 2010
District No. 40	-	2,700
RCSD	-	1,000
QHWD	-	-
Study Area Total Recycled Water Demand	**-**	**3,700**

In addition to the demands identified in the Facilities Planning Report, a significant portion of the projected demands for the Study Area based on the land use projections and General Plans of the Cities of Lancaster and Palmdale could potentially be served by recycled water. As the potable water demand increases in the Antelope Valley, the amount of wastewater produced is also anticipated to increase. When this occurs, a significant portion of the industrial development within both cities is projected to occur near the alignment of the AV Backbone Recycled Water System (AV Backbone). Table 6-4 identifies the amount of new demand associated with industrial development and beyond what is projected in Section 4 of the UWMP that could be served by recycled water if it is available. In general, the report assumes that 60 percent of the water demand at new industrial areas near the AV Backbone could be met with recycled water. However, if sufficient recycled water is not available to serve these industrial developments, additional potable supplies would have to be acquired in order for these developments to occur.

TABLE 6-4: RECYCLED WATER – POTENTIAL FUTURE USES

	2015	2020	2025	2030	2035
Agricultural Irrigation	-	-	-	-	-
Landscape Irrigation	-	-	-	-	-
Commercial Irrigation	-	-	-	-	-
Golf Course Irrigation	-	-	-	-	-
Industrial Reuse*	19,300	22,300	25,300	27,800	31,000
Groundwater Recharge	-	-	-	-	-
Indirect Potable Reuse	-	-	-	-	-
Wildlife Habitat	-	-	-	-	-
Total	**19,300**	**22,300**	**25,300**	**27,800**	**31,000**

Note:

*Based on the new projected demand associated with the proposed land uses for the Antelope Valley area for recycled water, if the AV Backbone is available to deliver recycled water to all reuse sites.

6.1.3 AV Backbone Recycled Water Facilities

The AV Backbone will provide the necessary distribution infrastructure to convey recycled water to users and thereby offset potable water demands in the Antelope Valley. The AV Backbone will be constructed in phases to serve the Cities of Palmdale and Lancaster and the surrounding

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unincorporated communities of Los Angeles County, as shown in Figure 6-1. Future phases of the AV Backbone are subject to modification and will be developed in accordance with regional goals as demand and funding are identified. In 2009, the City of Lancaster completed the first phase of the AV Backbone, constructing a recycled water pipeline along Division Street, from Avenue E to Lancaster Boulevard, with funding assistance from District No. 40. The City of Lancaster is currently working with the Army Corps of Engineers to extend the pipeline of AV Backbone further south along Division Street to Avenue K; along Avenue K from Division Street to 10th Street West; and along Sierra Highway from Avenue K to Avenue M. In addition, District No. 40 is working with the City of Palmdale to design and construct a portion of the pipeline, including storage and pumping facilities, to connect the PWRP with Lancaster's pipeline at Sierra Highway and Avenue M. Once these AV Backbone phases and recycled water deliveries are implemented, monies, from a settlement agreement between Sanitation District Nos. 14 and 20 and the Regional Board, will be available to partly reimburse these efforts. As future funding sources are identified, the AV Backbone will be connected to the LWRP. Once the northern and southern portions of the AV Backbone are linked and the LWRP and the PWRP are both connected to the system, the AV Backbone will have the redundancy necessary to ensure a reliable source of supply, so that the recycled water service area can expand to serve additional recycled water demands.

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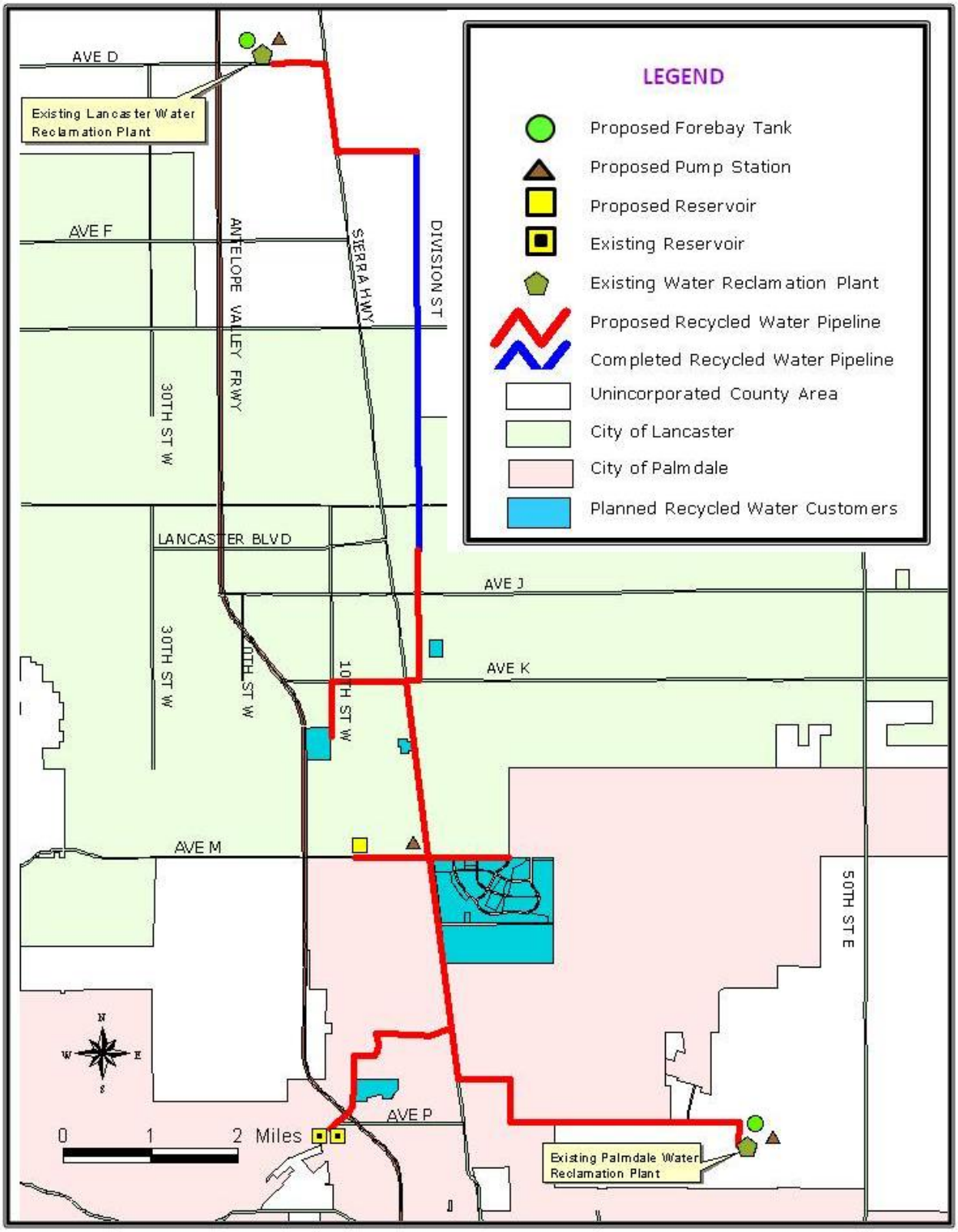
FIGURE 6-1: PROPOSED RECYCLED WATER BACKBONE SYSTEM



Section 7

Water Service Reliability Planning

Section 7: Water Service Reliability Planning

This Section provides a discussion of the reliability of the water supply within the Antelope Valley. A comparison between the water supply and demand for an average water year, single dry water year, and multi-dry water years is also provided. Water supply reliability is also discussed in the 2007 AVIRWMP (Chapter 3). The adjudication process has begun for the Antelope Valley Groundwater Basin; however it has not been defined. Nothing in this plan shall be interpreted to interfere in any way with the adjudication or settlement process. All tables in Section 7 reflect the projected groundwater pumping provided by each of the water purveyors. The groundwater pumping projections do not reflect agreed upon values by all the water purveyors, and each water purveyor understands these projections are subject to change under the pending adjudication process. These values also do not necessarily reflect the maximum pumping capacity of each water purveyor.

7.1 Reliability

Reliability is "how much one can count on a certain amount of water being delivered to a specific place at a specific time" and depends on the availability of water from the source, availability of the means of conveyance and level and pattern of water demand at the place of delivery.

Reliability criteria define the maximum acceptable level of supply shortage an agency is willing to sustain during a drought. For this study, a reliability criterion has been used to evaluate water supply plans. This criterion requires water supply to be sufficient to meet projected demands 90 percent of the time. In the remaining 10 percent of the time, it is assumed that the maximum allowable supply shortage will be 10 percent of the demand. This level is chosen because a 10 percent water demand reduction is anticipated to be attainable by voluntary conservation. Typically when a shortage occurs, water customers increase their awareness of water usage and voluntarily reduce water demands, avoiding water rationing.

7.2 Water Quality Impacts on Availability of Supply

Groundwater quality and imported water quality has been addressed in the 2007 AVIRWMP (pages 2-15, 3-42 through 3-45). Any change in water supply is not dependent on water quality, but on the SWP deliveries and local drought conditions. Therefore, there is no water quality impacts projected.

7.3 Reliability Comparison

As required by the UWMPA, a comparison of water supply and demand for an average water year, single dry water year, and multi-dry water years should be present from 2015 to 2035 in five-year increments.

7.3.1 Average Water Year Assessment

Table 7-1 provides a summary of the average water year reliability for each of the water purveyors in the Study Area as a whole. As discussed in Section 2, the overall delivery of SWP water was estimated to be 60 percent of AVEK's and PWD's Table A Amount available to the Study Area. Deliveries to the individual water purveyors were determined based on percent population for the given year. Assuming the availability of groundwater remains the same as it is today, Table 7-1 indicates District No. 40 requires new water supplies in order to meet any of

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its new projected demand. These supplies are anticipated to be acquired using the New Water Supply Fee (Developer Fee) described in Section 3.3. Although the existing supplies for District No. 40 are shown to be slightly higher than the existing and committed demand, District No. 40 has already received requests to serve proposed developments that require more than the small surplus of supply.

RCSD will need to implement planned water supplies by 2035 in order to meet demand. QHWD will have sufficient supply to meet 2035 demand during an average water year by continuing to with existing water supply strategies, assuming the availability of groundwater remains the same as indicated in the tables. PWD will implement a water resource development fee by 2015 to meet demand. Demand estimates are based on the land use or population projection developed in Section 4. The sufficiency of each water purveyor's supplies to meet demand is dependent on the final results of the adjudication process.

7.3.2 Single Dry Year Water Assessment

Table 7-2 provides a summary of the single dry water year reliability for each of the water purveyors and the Study Area as a whole. Overall SWP water delivery was estimated to be available at 7 to 11 percent (as determined by DWR's 2009 SWP Delivery Reliability Report) of AVEK's Table A Amount available to the Study Area. Demand estimates are based on the land use or population projection developed in Section 4.

As shown by the comparison, all of the water purveyors will have sufficient supply to meet the increasing demand through 2035 with implementation of the new planned water supplies and assuming the availability of groundwater remains the same as indicated in the tables. However, historically it has been the practice of the water purveyors to conserve groundwater use during average water years for additional pumping and availability in dry years to make up for the losses in SWP. Tables 7-1 through 7-7 reflects this additional groundwater pumping as well as the new planned water supplies as identified and discussed in Section 2 and 3, respectively.

7.3.3 Multi-Dry Year Assessment

Tables 7-3 through 7-7 provide a summary of the multi dry water year reliability for each of the water purveyors and the Study Area as a whole. Each table presents a five year period of supply and demand (e.g., Table 7-3 presents data for years 2011 to 2015, Table 7-4 presents data for years 2016 to 2020, etc.) For all cases, overall delivery of SWP water was estimated to be available at 34 to 36 percent (as determined by DWR's 2009 SWP Delivery Reliability Report) of AVEK's Table A Amount available to the Study Area. Demand estimates are based on the land use or population projection developed in Section 4.

As shown by the comparison, all of the water purveyors will have sufficient supply to the increasing demand through 2035 with the implementation of the new planned water supplies, assuming the availability of groundwater remains the same as indicated in the tables.

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TABLE 7-1: AVERAGE WATER YEAR ASSESSMENT

District No. 40	**2015**	**2020[1]**	**2025**	**2030**	**2035**
Demand					
Existing Demand	59,800	53,000	53,000	53,000	53,000
Committed Demand	20,600	20,600	20,600	20,600	20,600
Projected Demand	11,500	22,900	34,400	45,800	57,200
Total Demand	91,900	96,500	108,000	119,400	130,800
Existing Water Supplies					
Groundwater	23,200	23,200	23,200	23,200	23,200
Imported water	61,000	61,000	61,000	61,000	61,000
Total Existing Supply	84,200	84,200	84,200	84,200	84,200
Difference (supply minus demand)	(7,700)	(12,300)	(23,800)	(35,200)	(46,600)
Difference as Percent of Supply	(9)	(15)	(28)	(42)	(55)
Difference as Percent of Demand	(8)	(13)	(22)	(29)	(36)
Planned Water Supplies					
Groundwater Banking	-	-	-	-	-
Anticipated New Supplies (Developer Fee)	2,300	4,100	12,900	21,600	30,300
Recycled Water	5,400	8,200	10,900	13,600	16,300
Total Planned Supply	7,700	12,300	23,800	35,200	46,600
Total Existing and Planned Supplies	91,900	96,500	108,000	119,400	130,800
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

RCSD	**2015**	**2020[1]**	**2025**	**2030**	**2035**
Demand	4,000	4,100	4,700	5,500	6,400
Existing Water Supplies					
Groundwater	1,100	1,100	1,100	1,100	1,100
Imported water[2]	1,900	2,000	2,600	3,400	4,300
Total Existing Supply	3,000	3,100	3,700	4,500	5,400
Difference (supply minus demand)	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Difference as Percent of Supply	(33)	(32)	(27)	(22)	(19)
Difference as Percent of Demand	(25)	(24)	(21)	(18)	(16)
Planned Water Supplies					
Groundwater Banking	-	-	-	-	-
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	1,000	1,000	1,000	1,000	1,000
Total Planned Supply	1,000	1,000	1,000	1,000	1,000
Total Existing and Planned Supplies	4,000	4,100	4,700	5,500	6,400
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Note:
(1) Demand projections beginning in 2020 reflect the SB X7-7 mandates
(2) Reflects a larger use of imported water than identified in Section 2.2 due to RCSD anticipated use of Article 21, transfers, and other imported water supplies.

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QHWD	2015	2020[1]	2025	2030	2035
Demand	6,500	7,400	8,300	9,300	10,200
Existing Water Supplies					
Groundwater	2,500	2,500	2,500	2,500	2,500
Imported water	6,800	6,800	6,800	6,800	6,800
Total Existing Supply	9,300	9,300	9,300	9,300	9,300
Difference (supply minus demand)	2,800	1,900	1,000	0	(900)
Difference as Percent of Supply	30	20	11	0	(10)
Difference as Percent of Demand	43	26	12	0	(9)
Planned Water Supplies					
Groundwater Banking	-	-	-	-	-
Anticipated New Supplies (Developer Fee)	-	-	-	-	900
Recycled Water	-	-	-	-	-
Total Planned Supply	-	-	-	-	900
Total Existing and Planned Supplies	9,300	9,300	9,300	9,300	10,200
Difference (supply minus demand)	2,800	1,900	1,000	0	0
Difference as Percent of Supply	30	20	11	0	0
Difference as Percent of Demand	43	26	12	0	0

Study Area	2015	2020[1]	2025	2030	2035
Demand	102,400	108,000	121,000	134,200	147,400
Existing Water Supplies					
Groundwater	26,800	26,800	26,800	26,800	26,800
Imported water	69,700	69,800	70,400	71,200	72,100
Total Existing Supply	96,500	96,600	97,200	98,000	98,900
Difference (supply minus demand)	(5,900)	(11,400)	(23,800)	(36,200)	(48,500)
Difference as Percent of Supply	(6)	(12)	(24)	(37)	(49)
Difference as Percent of Demand	(6)	(11)	(20)	(27)	(33)
Planned Water Supplies					
Groundwater Banking	-	-	-	-	-
Anticipated New Supplies (Developer Fee)	2,300	4,100	12,900	21,600	31,200
Recycled Water	6,400	9,200	11,900	14,600	17,300
Total Planned Supply	8,700	13,300	24,800	36,200	48,500
Total Existing and Planned Supplies	105,200	109,900	122,000	134,200	147,400
Difference (supply minus demand)	2,800	1,900	1,000	0	0
Difference as Percent of Supply	3	2	1	0	0
Difference as Percent of Demand	3	2	1	0	0

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TABLE 7-2: SINGLE DRY WATER YEAR ASSESSMENT

District No. 40	**2015**	**2020 (1)**	**2025**	**2030**	**2035**
Demand					
Existing Demand	59,800	53,000	53,000	53,000	53,000
Committed Demand	20,600	20,600	20,600	20,600	20,600
Projected Demand	11,500	22,900	34,400	45,800	57,200
Total Demand	91,900	96,500	108,000	119,400	130,800
Existing Water Supplies					
Groundwater	23,200	23,200	23,200	23,200	23,200
Imported water	8,200	9,200	10,200	11,200	11,200
Total Existing Supply	31,400	32,400	33,400	34,400	34,400
Difference (supply minus demand)	(60,500)	(64,100)	(74,600)	(85,000)	(96,400)
Difference as Percent of Supply	(193)	(198)	(223)	(247)	(280)
Difference as Percent of Demand	(66)	(66)	(69)	(71)	(74)
Planned Water Supplies					
Groundwater Banking	54,800	55,300	61,500	67,400	74,500
Anticipated New Supplies (Developer Fee)	300	600	2,200	4,000	5,600
Recycled Water	5,400	8,200	10,900	13,600	16,300
Total Planned Supply	60,500	64,100	74,600	85,000	96,400
Total Existing and Planned Supplies	91,900	96,500	108,000	119,400	130,800
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

RCSD	**2015**	**2020 (1)**	**2025**	**2030**	**2035**
Demand	3,900	4,100	4,700	5,500	6,400
Existing Water Supplies					
Groundwater	1,100	1,100	1,100	1,100	1,100
Imported water (2)	200	300	400	600	800
Total Existing Supply	1,300	1,400	1,500	1,700	1,900
Difference (supply minus demand)	(2,600)	(2,700)	(3,200)	(3,800)	(4,500)
Difference as Percent of Supply	(200)	(193)	(213)	(224)	(237)
Difference as Percent of Demand	(67)	(66)	(68)	(69)	(70)
Planned Water Supplies					
Groundwater Banking	1,600	1,700	2,200	2,800	3,500
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	1,000	1,000	1,000	1,000	1,000
Total Planned Supply	2,600	2,700	3,200	3,800	4,500
Total Existing and Planned Supplies	3,900	4,100	4,700	5,500	6,400
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Note:

(1) Demand projections beginning in 2020 reflect the SB X7-7 mandates
(2) Reflects a larger use of imported water than identified in Section 2.2 due to RCSD anticipated use of Article 21, transfers, and other imported water supplies.

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QHWD	2015	2020[1]	2025	2030	2035
Demand	6,500	7,400	8,000	9,300	10,000
Existing Water Supplies					
Groundwater	2,500	2,500	2,500	2,500	2,500
Imported water	900	1,000	1,100	1,300	1,300
Total Existing Supply	3,400	3,500	3,600	3,800	3,800
Difference (supply minus demand)	(3,100)	(3,900)	(4,400)	(5,500)	(6,200)
Difference as Percent of Supply	(91)	(111)	(122)	(145)	(163)
Difference as Percent of Demand	(48)	(53)	(55)	(59)	(62)
Planned Water Supplies					
Groundwater Banking	3,100	3,900	4,400	5,200	5,400
Anticipated New Supplies (Developer Fee)	-	-	-	-	200
Recycled Water	-	-	-	300	600
Total Planned Supply	3,100	3,900	4,400	5,500	6,200
Total Existing and Planned Supplies	6,500	7,400	8,000	9,300	10,000
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Study Area	2015	2020[1]	2025	2030	2035
Demand	102,300	108,000	120,700	134,200	147,200
Existing Water Supplies					
Groundwater	26,800	26,800	26,800	26,800	26,800
Imported water	9,300	10,500	11,700	13,100	13,300
Total Existing Supply	36,100	37,300	38,500	39,900	40,100
Difference (supply minus demand)	(66,200)	(70,700)	(82,200)	(94,300)	(107,100)
Difference as Percent of Supply	(183)	(190)	(214)	(236)	(267)
Difference as Percent of Demand	(65)	(65)	(68)	(70)	(73)
Planned Water Supplies					
Groundwater Banking	59,500	60,900	68,100	75,400	83,400
Anticipated New Supplies (Developer Fee)	300	600	2,200	4,000	5,800
Recycled Water	6,400	9,200	11,900	14,900	17,900
Total Planned Supply	66,200	70,700	82,200	94,300	107,100
Total Existing and Planned Supplies	102,300	108,000	120,700	134,200	147,200
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

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TABLE 7-3: MULTI-DRY WATER YEAR ASSESSMENT 2011-2015

District No. 40	**2011**	**2012**	**2013**	**2014**	**2015**
Demand					
Existing Demand	59,800	59,800	59,800	59,800	59,800
Committed Demand	20,600	20,600	20,600	20,600	20,600
Projected Demand	2,300	4,600	6,900	9,200	11,500
Total Demand	82,700	85,000	87,300	89,600	91,900
Existing Water Supplies					
Groundwater	23,200	23,200	23,200	23,200	23,200
Imported water	34,600	34,600	34,600	34,600	35,600
Total Existing Supply	57,800	57,800	57,800	57,800	58,800
Difference (supply minus demand)	(24,900)	(27,200)	(29,500)	(31,800)	(33,100)
Difference as Percent of Supply	(43)	(47)	(51)	(55)	(56)
Difference as Percent of Demand	(30)	(32)	(34)	(35)	(36)
Planned Water Supplies					
Groundwater Banking	23,600	25,900	28,200	30,500	26,400
Anticipated New Supplies (Developer Fee)	1,300	1,300	1,300	1,300	1,300
Recycled Water	-	-	-	-	5,400
Total Planned Supply	24,900	27,200	29,500	31,800	33,100
Total Existing and Planned Supplies	82,700	85,000	87,300	89,600	91,900
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

RCSD	**2011**	**2012**	**2013**	**2014**	**2015**
Demand	3,500	3,600	3,800	3,900	4,000
Existing Water Supplies					
Groundwater	1,100	1,100	1,100	1,100	1,100
Imported water(2)	1,100	1,100	1,100	1,100	1,100
Total Existing Supply	2,200	2,200	2,200	2,200	2,200
Difference (supply minus demand)	(1,300)	(1,400)	(1,600)	(1,700)	(1,800)
Difference as Percent of Supply	(59)	(64)	(73)	(77)	(82)
Difference as Percent of Demand	(37)	(39)	(42)	(44)	(45)
Planned Water Supplies					
Groundwater Banking	1,300	400	600	700	800
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	-	1,000	1,000	1,000	1,000
Total Planned Supply	1,300	1,400	1,600	1,700	1,800
Total Existing and Planned Supplies	3,500	3,600	3,800	3,900	4,000
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

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Note:
(2) Reflects a larger use of imported water than identified in Section 2.2 due to RCSD anticipated use of Article 21, transfers, and other imported water supplies.

QHWD	2011	2012	2013	2014	2015
Demand	5,700	5,900	6,000	6,300	6,500
Existing Water Supplies					
Groundwater	2,500	2,500	2,500	2,500	2,500
Imported water	3,900	3,900	3,900	3,900	3,900
Total Existing Supply	6,400	6,400	6,400	6,400	6,400
Difference (supply minus demand)	700	500	400	100	(100)
Difference as Percent of Supply	11	8	6	2	(2)
Difference as Percent of Demand	12	8	7	2	(2)
Planned Water Supplies					
Groundwater Banking	-	-	-	-	100
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	-	-	-	-	-
Total Planned Supply	-	-	-	-	100
Total Existing and Planned Supplies	6,400	6,400	6,400	6,400	6,500
Difference (supply minus demand)	700	500	400	100	0
Difference as Percent of Supply	11	8	6	2	0
Difference as Percent of Demand	12	8	7	2	0

Study Area	2011	2012	2013	2014	2015
Demand	91,900	94,500	97,100	99,800	102,400
Existing Water Supplies					
Groundwater	26,800	26,800	26,800	26,800	26,800
Imported water	39,600	39,600	39,600	39,600	40,600
Total Existing Supply	66,400	66,400	66,400	66,400	67,400
Difference (supply minus demand)	(25,500)	(28,100)	(30,700)	(33,400)	(35,000)
Difference as Percent of Supply	(38)	(42)	(46)	(50)	(52)
Difference as Percent of Demand	(28)	(30)	(32)	(33)	(34)
Planned Water Supplies					
Groundwater Banking	24,900	26,300	28,800	31,200	27,300
Anticipated New Supplies (Developer Fee)	1,300	1,300	1,300	1,300	1,300
Recycled Water	-	1,000	1,000	1,000	6,400
Total Planned Supply	26,200	28,600	31,100	33,500	35,000
Total Existing and Planned Supplies	92,600	95,000	97,500	99,900	102,400
Difference (supply minus demand)	700	500	400	100	0
Difference as Percent of Supply	1	1	0	0	0
Difference as Percent of Demand	1	1	0	0	0

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TABLE 7-4: MULTI-DRY WATER YEAR ASSESSMENT 2016-2020

District No. 40	**2016**	**2017**	**2018**	**2019**	**2020[1]**
Demand					
Existing Demand	59,800	59,800	59,800	59,800	53,000
Committed Demand	20,600	20,600	20,600	20,600	20,600
Projected Demand	13,800	16,000	18,300	20,600	22,900
Total Demand	94,200	96,400	98,700	101,000	96,500
Existing Water Supplies					
Groundwater	23,200	23,200	23,200	23,200	23,200
Imported water	35,600	35,600	35,600	35,600	35,600
Total Existing Supply	58,800	58,800	58,800	58,800	58,800
Difference (supply minus demand)	(35,400)	(37,600)	(39,900)	(42,200)	(37,700)
Difference as Percent of Supply	(60)	(64)	(68)	(72)	(64)
Difference as Percent of Demand	(38)	(39)	(40)	(42)	(39)
Planned Water Supplies					
Groundwater Banking	27,800	29,300	30,800	32,400	27,100
Anticipated New Supplies (Developer Fee)	1,600	1,800	2,000	2,200	2,400
Recycled Water	6,000	6,500	7,100	7,600	8,200
Total Planned Supply	35,400	37,600	39,900	42,200	37,700
Total Existing and Planned Supplies	94,200	96,400	98,700	101,000	96,500
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

RCSD	**2016**	**2017**	**2018**	**2019**	**2020[1]**
Demand	4,000	4,000	4,000	4,100	4,100
Existing Water Supplies					
Groundwater	1,100	1,100	1,100	1,100	1,100
Imported water[2]	1,100	1,100	1,100	1,100	1,200
Total Existing Supply	2,200	2,200	2,200	2,200	2,300
Difference (supply minus demand)	(1,800)	(1,800)	(1,800)	(1,900)	(1,800)
Difference as Percent of Supply	(82)	(82)	(82)	(86)	(78)
Difference as Percent of Demand	(45)	(45)	(45)	(46)	(44)
Planned Water Supplies					
Groundwater Banking	800	800	800	900	800
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	1,000	1,000	1,000	1,000	1,000
Total Planned Supply	1,800	1,800	1,800	1,900	1,800
Total Existing and Planned Supplies	4,000	4,000	4,000	4,100	4,100
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Note:

(1) Demand projections beginning in 2020 reflect the SB X7-7 mandates
(2) Reflects a larger use of imported water than identified in Section 2.2 due to RCSD anticipated use of Article 21, transfers, and other imported water supplies.

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QHWD	2016	2017	2018	2019	2020[1]
Demand	6,600	6,800	7,000	7,200	7,400
Existing Water Supplies					
Groundwater	2,500	2,500	2,500	2,500	2,500
Imported water	3,900	3,900	3,900	4,000	4,000
Total Existing Supply	6,400	6,400	6,400	6,500	6,500
Difference (supply minus demand)	(200)	(400)	(600)	(700)	(900)
Difference as Percent of Supply	(3)	(6)	(9)	(11)	(14)
Difference as Percent of Demand	(3)	(6)	(9)	(10)	(12)
Planned Water Supplies					
Groundwater Banking	200	400	600	700	900
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	-	-	-	-	-
Total Planned Supply	200	400	600	700	900
Total Existing and Planned Supplies	6,600	6,800	7,000	7,200	7,400
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Study Area	2016	2017	2018	2019	2020[1]
Demand	104,800	107,200	109,700	112,300	108,000
Existing Water Supplies					
Groundwater	26,800	26,800	26,800	26,800	26,800
Imported water	40,600	40,600	40,600	40,700	40,800
Total Existing Supply	67,400	67,400	67,400	67,500	67,600
Difference (supply minus demand)	(37,400)	(39,800)	(42,300)	(44,800)	(40,400)
Difference as Percent of Supply	(55)	(59)	(63)	(66)	(60)
Difference as Percent of Demand	(36)	(37)	(39)	(40)	(37)
Planned Water Supplies					
Groundwater Banking	28,800	30,500	32,200	34,000	28,800
Anticipated New Supplies (Developer Fee)	1,600	1,800	2,000	2,200	2,400
Recycled Water	7,000	7,500	8,100	8,600	9,200
Total Planned Supply	37,400	39,800	42,300	44,800	40,400
Total Existing and Planned Supplies	104,800	107,200	109,700	112,300	108,000
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

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TABLE 7-5: MULTI-DRY WATER YEAR ASSESSMENT 2021-2025

District No. 40	**2021**	**2022**	**2023**	**2024**	**2025**
Demand					
Existing Demand	53,000	53,000	53,000	53,000	53,000
Committed Demand	20,600	20,600	20,600	20,600	20,600
Projected Demand	25,200	27,500	29,800	32,100	34,400
Total Demand	98,800	101,100	103,400	105,700	108,000
Existing Water Supplies					
Groundwater	23,200	23,200	23,200	23,200	23,200
Imported water	35,600	35,600	35,600	36,700	36,700
Total Existing Supply	58,800	58,800	58,800	59,900	59,900
Difference (supply minus demand)	(40,000)	(42,300)	(44,600)	(45,800)	(48,100)
Difference as Percent of Supply	(68)	(72)	(76)	(76)	(80)
Difference as Percent of Demand	(40)	(42)	(43)	(43)	(45)
Planned Water Supplies					
Groundwater Banking	27,900	28,600	29,300	28,800	29,500
Anticipated New Supplies (Developer Fee)	3,400	4,500	5,500	6,700	7,700
Recycled Water	8,700	9,200	9,800	10,300	10,900
Total Planned Supply	40,000	42,300	44,600	45,800	48,100
Total Existing and Planned Supplies	98,800	101,100	103,400	105,700	108,000
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

RCSD	**2021**	**2022**	**2023**	**2024**	**2025**
Demand	4,200	4,300	4,500	4,600	4,700
Existing Water Supplies					
Groundwater	1,100	1,100	1,100	1,100	1,100
Imported water(2)	1,200	1,300	1,400	1,500	1,600
Total Existing Supply	2,300	2,400	2,500	2,600	2,700
Difference (supply minus demand)	(1,900)	(1,900)	(2,000)	(2,000)	(2,000)
Difference as Percent of Supply	(83)	(79)	(80)	(77)	(74)
Difference as Percent of Demand	(45)	(44)	(44)	(43)	(43)
Planned Water Supplies					
Groundwater Banking	900	900	1,000	1,000	1,000
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	1,000	1,000	1,000	1,000	1,000
Total Planned Supply	1,900	1,900	2,000	2,000	2,000
Total Existing and Planned Supplies	4,200	4,300	4,500	4,600	4,700
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Note:
(2) Reflects a larger use of imported water than identified in Section 2.2 due to RCSD anticipated use of Article 21, transfers, and other imported water supplies.

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QHWD	2021	2022	2023	2024	2025
Demand	7,600	7,800	8,000	8,100	8,300
Existing Water Supplies					
Groundwater	2,500	2,500	2,500	2,500	2,500
Imported water	4,000	4,000	4,000	4,000	4,000
Total Existing Supply	6,500	6,500	6,500	6,500	6,500
Difference (supply minus demand)	(1,100)	(1,300)	(1,500)	(1,600)	(1,800)
Difference as Percent of Supply	(17)	(20)	(23)	(25)	(28)
Difference as Percent of Demand	(14)	(17)	(19)	(20)	(22)
Planned Water Supplies					
Groundwater Banking	1,100	1,300	1,500	1,600	1,800
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	-	-	-	-	-
Total Planned Supply	1,100	1,300	1,500	1,600	1,800
Total Existing and Planned Supplies	7,600	7,800	8,000	8,100	8,300
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Study Area	2021	2022	2023	2024	2025
Demand	110,600	113,200	115,900	118,400	121,000
Existing Water Supplies					
Groundwater	26,800	26,800	26,800	26,800	26,800
Imported water	40,800	40,900	41,000	42,200	42,300
Total Existing Supply	67,600	67,700	67,800	69,000	69,100
Difference (supply minus demand)	(43,000)	(45,500)	(48,100)	(49,400)	(51,900)
Difference as Percent of Supply	(64)	(67)	(71)	(72)	(75)
Difference as Percent of Demand	(39)	(40)	(42)	(42)	(43)
Planned Water Supplies					
Groundwater Banking	29,900	30,800	31,800	31,400	32,300
Anticipated New Supplies (Developer Fee)	3,400	4,500	5,500	6,700	7,700
Recycled Water	9,700	10,200	10,800	11,300	11,900
Total Planned Supply	43,000	45,500	48,100	49,400	51,900
Total Existing and Planned Supplies	110,600	113,200	115,900	118,400	121,000
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

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TABLE 7-6:MULTI-DRY WATER YEAR ASSESSMENT 2026-2030

District No. 40	**2026**	**2027**	**2028**	**2029**	**2030**
Demand					
Existing Demand	53,000	53,000	53,000	53,000	53,000
Committed Demand	20,600	20,600	20,600	20,600	20,600
Projected Demand	36,600	38,900	41,200	43,500	45,800
Total Demand	110,200	112,500	114,800	117,100	119,400
Existing Water Supplies					
Groundwater	23,200	23,200	23,200	23,200	23,200
Imported water	36,700	36,700	36,700	36,700	36,700
Total Existing Supply	59,900	59,900	59,900	59,900	59,900
Difference (supply minus demand)	(50,300)	(52,600)	(54,900)	(57,200)	(59,500)
Difference as Percent of Supply	(84)	(88)	(92)	(95)	(99)
Difference as Percent of Demand	(46)	(47)	(48)	(49)	(50)
Planned Water Supplies					
Groundwater Banking	30,100	30,800	31,500	32,200	32,900
Anticipated New Supplies (Developer Fee)	8,800	9,800	10,900	11,900	13,000
Recycled Water	11,400	12,000	12,500	13,100	13,600
Total Planned Supply	50,300	52,600	54,900	57,200	59,500
Total Existing and Planned Supplies	110,200	112,500	114,800	117,100	119,400
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

RCSD	**2026**	**2027**	**2028**	**2029**	**2030**
Demand	4,900	5,000	5,200	5,300	5,500
Existing Water Supplies					
Groundwater	1,100	1,100	1,100	1,100	1,100
Imported water(2)	1,700	1,800	1,800	1,900	2,000
Total Existing Supply	2,800	2,900	2,900	3,000	3,100
Difference (supply minus demand)	(2,100)	(2,100)	(2,300)	(2,300)	(2,400)
Difference as Percent of Supply	(75)	(72)	(79)	(77)	(77)
Difference as Percent of Demand	(43)	(42)	(44)	(43)	(44)
Planned Water Supplies					
Groundwater Banking	1,100	1,100	1,300	1,300	1,400
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	1,000	1,000	1,000	1,000	1,000
Total Planned Supply	2,100	2,100	2,300	2,300	2,400
Total Existing and Planned Supplies	4,900	5,000	5,200	5,300	5,500
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Note:
(2) Reflects a larger use of imported water than identified in Section 2.2 due to RCSD anticipated use of Article 21, transfers, and other imported water supplies.

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QHWD	2026	2027	2028	2029	2030
Demand	8,500	8,700	8,900	9,000	9,300
Existing Water Supplies					
Groundwater	2,500	2,500	2,500	2,500	2,500
Imported water	4,000	4,100	4,100	4,100	4,100
Total Existing Supply	6,500	6,600	6,600	6,600	6,600
Difference (supply minus demand)	(2,000)	(2,100)	(2,300)	(2,400)	(2,700)
Difference as Percent of Supply	(31)	(32)	(35)	(36)	(41)
Difference as Percent of Demand	(24)	(24)	(26)	(27)	(29)
Planned Water Supplies					
Groundwater Banking	2,000	2,100	2,300	2,400	2,400
Anticipated New Supplies (Developer Fee)			-	-	-
Recycled Water	-	-	-	-	300
Total Planned Supply	2,000	2,100	2,300	2,400	2,700
Total Existing and Planned Supplies	8,500	8,700	8,900	9,000	9,300
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Study Area	2026	2027	2028	2029	2030
Demand	123,600	126,200	128,900	131,400	134,200
Existing Water Supplies					
Groundwater	26,800	26,800	26,800	26,800	26,800
Imported water	42,400	42,600	42,600	42,700	42,800
Total Existing Supply	69,200	69,400	69,400	69,500	69,600
Difference (supply minus demand)	(54,400)	(56,800)	(59,500)	(61,900)	(64,600)
Difference as Percent of Supply	(79)	(82)	(86)	(89)	(93)
Difference as Percent of Demand	(44)	(45)	(46)	(47)	(48)
Planned Water Supplies					
Groundwater Banking	33,200	34,000	35,100	35,900	36,700
Anticipated New Supplies (Developer Fee)	8,800	9,800	10,900	11,900	13,000
Recycled Water	12,400	13,000	13,500	14,100	14,900
Total Planned Supply	54,400	56,800	59,500	61,900	64,600
Total Existing and Planned Supplies	123,600	126,200	128,900	131,400	134,200
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

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TABLE 7-7: MULTI-DRY WATER YEAR ASSESSMENT 2031-2035

District No. 40	**2031**	**2032**	**2033**	**2034**	**2035**
Demand					
Existing Demand	53,000	53,000	53,000	53,000	53,000
Committed Demand	20,600	20,600	20,600	20,600	20,600
Projected Demand	48,100	50,400	52,700	55,000	57,200
Total Demand	121,700	124,000	126,300	128,600	130,800
Existing Water Supplies					
Groundwater	23,200	23,200	23,200	23,200	23,200
Imported water	36,700	36,700	36,700	36,700	36,700
Total Existing Supply	59,900	59,900	59,900	59,900	59,900
Difference (supply minus demand)	(61,800)	(64,100)	(66,400)	(68,700)	(70,900)
Difference as Percent of Supply	(103)	(107)	(111)	(115)	(118)
Difference as Percent of Demand	(51)	(52)	(53)	(53)	(54)
Planned Water Supplies					
Groundwater Banking	33,600	34,400	35,000	35,800	36,300
Anticipated New Supplies (Developer Fee)	14,000	15,000	16,100	17,100	18,200
Recycled Water	14,200	14,700	15,300	15,800	16,400
Total Planned Supply	61,800	64,100	66,400	68,700	70,900
Total Existing and Planned Supplies	121,700	124,000	126,300	128,600	130,800
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

RCSD	**2031**	**2032**	**2033**	**2034**	**2035**
Demand	5,600	5,800	6,000	6,200	6,400
Existing Water Supplies					
Groundwater	1,100	1,100	1,100	1,100	1,100
Imported water(2)	2,100	2,200	2,300	2,400	2,600
Total Existing Supply	3,200	3,300	3,400	3,500	3,700
Difference (supply minus demand)	(2,400)	(2,500)	(2,600)	(2,700)	(2,700)
Difference as Percent of Supply	(75)	(76)	(76)	(77)	(73)
Difference as Percent of Demand	(43)	(43)	(43)	(44)	(42)
Planned Water Supplies					
Groundwater Banking	1,400	1,500	1,600	1,700	1,700
Anticipated New Supplies (Developer Fee)	-	-	-	-	-
Recycled Water	1,000	1,000	1,000	1,000	1,000
Total Planned Supply	2,400	2,500	2,600	2,700	2,700
Total Existing and Planned Supplies	5,600	5,800	6,000	6,200	6,400
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Note:
(2) Reflects a larger use of imported water than identified in Section 2.2 due to RCSD anticipated use of Article 21, transfers, and other imported water supplies.

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QHWD	2031	2032	2033	2034	2035
Demand	9,500	9,700	9,800	10,000	10,300
Existing Water Supplies					
Groundwater	2,500	2,500	2,500	2,500	2,500
Imported water	4,100	4,100	4,100	4,100	4,100
Total Existing Supply	6,600	6,600	6,600	6,600	6,600
Difference (supply minus demand)	(2,900)	(3,100)	(3,200)	(3,400)	(3,700)
Difference as Percent of Supply	(44)	(47)	(48)	(52)	(56)
Difference as Percent of Demand	(31)	(32)	(33)	(34)	(36)
Planned Water Supplies					
Groundwater Banking	2,500	2,300	2,300	2,400	2,600
Anticipated New Supplies (Developer Fee)	100	200	300	400	500
Recycled Water	300	600	600	600	600
Total Planned Supply	2,900	3,100	3,200	3,400	3,700
Total Existing and Planned Supplies	9,500	9,700	9,800	10,000	10,300
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

Study Area	2031	2032	2033	2034	2035
Demand	136,800	139,500	142,100	144,800	147,500
Existing Water Supplies					
Groundwater	26,800	26,800	26,800	26,800	26,800
Imported water	42,900	43,000	43,100	43,200	43,400
Total Existing Supply	69,700	69,800	69,900	70,000	70,200
Difference (supply minus demand)	(67,100)	(69,700)	(72,200)	(74,800)	(77,300)
Difference as Percent of Supply	(96)	(100)	(103)	(107)	(110)
Difference as Percent of Demand	(49)	(50)	(51)	(52)	(52)
Planned Water Supplies					
Groundwater Banking	37,500	38,200	38,900	39,900	40,600
Anticipated New Supplies (Developer Fee)	14,100	15,200	16,400	17,500	18,700
Recycled Water	15,500	16,300	16,900	17,400	18,000
Total Planned Supply	67,100	69,700	72,200	74,800	77,300
Total Existing and Planned Supplies	136,800	139,500	142,100	144,800	147,500
Difference (supply minus demand)	0	0	0	0	0
Difference as Percent of Supply	0	0	0	0	0
Difference as Percent of Demand	0	0	0	0	0

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Section 8

Per Capita Water Use Targets

Section 8: Per Capita Water Use Targets

8.1 Per Capita Water Use Target for SB X7-7 Reduction

The SB X7-7 is a legislative mandate that requires the state to achieve a 20 percent reduction in urban per capita water use in California by December 31, 2020, with an interim target of 10 percent reduction by December 31, 2015. The legislation requires every urban water purveyor to develop: 1) baseline daily per capita water use; 2) urban water use target; 3) interim urban water use target; and 4) compliance daily per capita water use.

8.1.1 Base Period Ranges

Tables 8-1 through 8-3 provides the base period ranges used to calculate base daily capita water use for each of the water purveyors. Each water purveyor identified their demand reduction targets for years 2015 and 2020 by utilizing DWR's Methodology 1. Methodology 1 is based on calculating 80 percent of the water purveyor's baseline per capita water use (i.e., a 20 percent reduction).

8.1.1.1 District No. 40

TABLE 8-1: DISTRICT NO. 40 BASE PERIOD RANGES (AF)

Base	Parameter	Value	Units
10 to 15-year base period	2008 total water deliveries	52,000	AF
	2008 total volume of delivered recycled water	0	AF
	2008 recycled water as a percent of total deliveries	0	percent
	Number of years in base period[1]	10	years
	Year beginning base period range	1995	
	Year ending base period range[2]	2005	

Note:

[1] If the 2008 recycled water percent is less than 10 percent, then the first base period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first year base period is a continuous 10- to 15-year period.

[2] The ending year must be between December 31, 2004 and December 31, 2010.

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8.1.1.2 RCSD

TABLE 8-2: RCSD BASE PERIOD RANGES (AF)

Base	Parameter	Value	Units
10 to 15-year base period	2008 total water deliveries	0	AF
	2008 total volume of delivered recycled water	0	AF
	2008 recycled water as a percent of total deliveries	0	percent
	Number of years in base period[1]	10	years
	Year beginning base period range	2001	
	Year ending base period range[2]	2010	

Note:

[1] If the 2008 recycled water percent is less than 10 percent, then the first base period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first year base period is a continuous 10- to 15-year period.

[2] The ending year must be between December 31, 2004 and December 31, 2010.

8.1.1.3 QHWD

TABLE 8-3: QHWD BASE PERIOD RANGES (AF)

Base	Parameter	Value	Units
10 to 15-year base period	2008 total water deliveries	6,498	AF
	2008 total volume of delivered recycled water	0	AF
	2008 recycled water as a percent of total deliveries	0	percent
	Number of years in base period[1]	10	years
	Year beginning base period range	1995	
	Year ending base period range[2]	2004	

Note:

[1] If the 2008 recycled water percent is less than 10 percent, then the first base period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first year base period is a continuous 10- to 15-year period.

[2] The ending year must be between December 31, 2004 and December 31, 2010.

8.1.2 Base Daily Per Capita Water Use

Tables 8-4 through 8-9 provide the base daily capita water use for a 10-year range and 5-year range for each of the water purveyors. The calculation is used to determine whether the water supplier's 2015 and 2020 per capita water use targets meet the legislation's minimum water use reductions. The target has to be either 80 percent of the 10-year baseline (ending no earlier than December 31, 2004, and no later than December 31, 2010) or 95 percent of the 5-year baseline (ending no earlier than December 31, 2007, and no later than December 31, 2010), whichever is more conservative. Each water purveyor already meets the proposed 20 percent reduction by 2020 based on their selected baseline periods. Water conservation methods will still be practiced as discussed in Section 5.

8.1.2.1 District No. 40

District No. 40 used Methodology 1 (10-year base period) to determine the urban water use target baseline of 353 gpcd. The urban water use 2020 target (20 percent reduction) is 282

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gpcd. The interim (10 percent reduction) urban water use for the 2015 target is 318 gpcd. The annual average water use in 2009 was 262 gpcd, thus meeting the 2020 target.

TABLE 8-4: DISTRICT NO. 40 BASE DAILY PER CAPITA WATER USE – 10-YEAR RANGE

Base period year*		Distribution system population	Daily system gross water use (mgd)	Annual daily per capita water use (gpcd)
Sequence Year	Calendar Year			
1	1995	117,947	37	314
2	1996	118,633	41	349
3	1997	119,109	43	358
4	1998	120,188	38	314
5	1999	123,735	44	355
6	2000	126,566	47	372
7	2001	129,372	49	377
8	2002	132,830	49	367
9	2003	137,003	51	375
10	2004	141,775	49	347
Base Daily Capita Water Use[1]				353
80% of Baseline				282

Note:
[1]Add values in the column and divide by the number of rows.
*Most recent year in base period must end no earlier than December 31, 2004, and no later than December 31, 2010.

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TABLE 8-5: DISTRICT NO. 40 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	Calendar Year			
1	2003	137,003	48.46	354
2	2004	141,775	51.39	363
3	2005	148,634	49.17	331
4	2006	163,665	52.85	323
5	2007	168,518	53.25	316
			Base Daily Capita Water Use[1]	337
			95% of Baseline	320

Note:
[1]Add values in the column and divide by the number of rows.
*Most recent year in base period must end no earlier than December 31, 2007, and no later than December 31, 2010.

8.1.2.2 RCSD

RCSD used Methodology 1 (10-year base period) to determine the urban water use target baseline of 174 gpcd. The urban water use 2020 target (20 percent reduction) is 139 gpcd. The interim (10 percent reduction) urban water use for the 2015 target is 157 gpcd.

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TABLE 8-6: RCSD BASE DAILY PER CAPITA WATER USE – 10-YEAR RANGE

Base period year*		Distribution system population	Daily system gross water use (mgd)	Annual daily per capita water use (gpcd)
Sequence Year	Calendar year			
1	2001	14,600	2.8	192
2	2002	14,900	2.9	195
3	2003	15,300	2.7	176
4	2004	15,400	2.8	182
5	2005	17,300	2.7	156
6	2006	16,700	3.1	185
7	2007	17,900	3.3	184
8	2008	17,300	3.3	191
9	2009	17,700	2.8	158
10	2010	17,700	2.7	152
Base Daily Capita Water Use[1]				174
80% of Baseline				139

Note:
[1]Add values in the column and divide by the number of rows.
*Most recent year in base period must end no earlier than December 31, 2004, and no later than December 31, 2010.

TABLE 8-7: RCSD 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	Calendar Year			
1	2003	15,300	3	176
2	2004	15,400	3	182
3	2005	17,300	3	156
4	2006	16,700	3	185
5	2007	17,900	3	184
Base Daily Capita Water Use[1]				177
95% of Baseline				168

Note:
[1]Add values in the column and divide by the number of rows.
*Most recent year in base period must end no earlier than December 31, 2007, and no later than December 31, 2010.

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8.1.2.3 QHWD

QHWD used Methodology 1 (10-year base period) to determine the urban water use target baseline of 373 gpcd. The urban water use 2020 target (20 percent reduction) is 298 gpcd. The interim (10 percent reduction) urban water use for the 2015 target is 336 gpcd.

TABLE 8-8: QHWD BASE DAILY PER CAPITA WATER USE – 10-YEAR RANGE

Base period year*		Distribution system population	Daily system gross water use (mgd)	Annual daily per capita water use (gpcd)
Sequence Year	Calendar Year			
1	1995	10,250	4	391
2	1996	10,250	4	394
3	1997	10,500	4.3	413
4	1998	10,600	4.4	417
5	1999	10,600	4.4	412
6	2000	11,000	4.3	387
7	2001	12,000	4.3	362
8	2002	15,000	4.8	323
9	2003	15,000	4.7	313
10	2004	15,500	4.9	314
			Base Daily Capita Water Use[1]	373
			80% of Baseline	298

Note:
[1]Add values in the column and divide by the number of rows.
*Most recent year in base period must end no earlier than December 31, 2004, and no later than December 31, 2010.

TABLE 8-9: QHWD 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	Calendar year			
1	2003	15,000	4.7	313
2	2004	15,000	4.9	324
3	2005	15,500	4.8	311
4	2006	15,500	5.1	319
5	2007	16,000	5.9	369
			Base Daily Capita Water Use[1]	327
			95% of Baseline	311

Note:
[1]Add values in the column and divide by the number of rows.
*Most recent year in base period must end no earlier than December 31, 2007, and no later than December 31, 2010.

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Section 9

Water Use Projections and Low Income Housing

Section 9: Water Use Projections and Low Income Housing

9.1 Low Income Housing

Section 10631.1 of the California Water Code requires 2010 UWMPs to include the projected water use for lower income single-family and multi-family residential households as identified in the housing element of any city, county, or city and county in the service area of the water purveyor. Lower income is established by the state as 80 percent of area median income.

The projections are meant to assist water purveyors in complying with the requirements of the Government Code Section 65589.7, which requires water purveyors to "grant a priority for the provision of water and sewer services to proposed developments that include housing units affordable to lower income households.

Table 9-1 shows the estimated low income projected water demands for the Study Area. The low income water demand projections were based on 36 percent of demand for the Study Area from the Housing Needs Assessment Populations and Household Income Maps that identified the projected low income housing units for the Study Area.

TABLE 9-1: LOW INCOME PROJECTED WATER DEMANDS (AF)

Low Income Water Demands	2015	2020	2025	2030	2035
District No. 40 service area	33,100	34,700	38,900	43,000	47,100
RCSD service area	1,200	1,500	1,700	2,000	2,300
QHWD service area	2,200	2,500	2,900	3,200	3,700
Study Area Total	36,500	38,700	43,500	48,200	53,100

Note: All numbers are rounded to the nearest 100 AF.

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Section 10

Water Shortage Contingency Analysis

Section 10: Water Shortage Contingency Analysis

This water shortage contingency analysis is based on water shortages that arise not only from drought, but shortages resulting from earthquakes, fires, system failures, and water quality contamination as well. Recent drought-related water management experiences for water agencies in California have revealed the complexity of coping with a water supply shortage. These experiences are well-documented and ready for implementation in the future by most agencies. Various water shortage scenarios may require similar drought-related actions, but may involve different complications that must be taken into account to address the shortage.

10.1 Minimum Water Supply

As such, each water purveyor's three-year minimum water supply is provided in Table 10-1. The average normal water year was set as 2010. Three-year minimum supply was determined to occur for the base years 2011, 2012 and 2013. As shown, each water purveyor currently has a sufficient water supply portfolio to meet their current demands over the next 3 years given a worst case water supply scenario. Because the SWP allocation has already been set at 80 percent of Table A amounts for 2011, the water purveyors will be able to use their respective surplus supplies to help meet the demands in 2012 and 2013 even if the SWP allocations were 35 percent and 7 percent, respectively, of Table A amounts.

TABLE 10-1: THREE-YEAR MINIMUM WATER SUPPLY (AF)

Area	Source	2011	2012	2013	Normal[c]
District No. 40	Groundwater	23,200	23,200	23,200	7,600
	Imported Water[a]	*35,600	35,600	7,100	39,200
	Carry Over/ Banked Water [b]	0	0	29,900	0
	Recycled Water	0	0	0	0
	Total	**58,800**	**58,800**	**60,200**	**46,800**
RCSD	Groundwater	1,100	1,100	1,100	1,100
	Imported Water[a]	2,300	1,100	200	300
	Recycled Water	0	1,000	1,000	0
	Total	**3,400**	**3,200**	**2,300**	**1,400**
QHWD	Groundwater	2,500	2,500	2,500	1,900
	Imported Water[a]	*4000	4,000	800	3,500
	Carry Over/ Banked Water [b]	0	0	5,000	0
	Recycled Water	0	0	0	0
	Total	**6,500**	**6,500**	**8,300**	**5,400**
Study Area	Groundwater	26,800	26,800	26,800	10,600
	Imported Water[a]	41,900	40,700	8,100	43,000
	Carry Over/ Banked Water [b]	0	0	34,900	0
	Recycled Water	0	1,000	1,000	0
	Total	**68,700**	**68,500**	**70,800**	**53,600**

Notes: All numbers are rounded to the nearest 100 AF.

(a) A 35-35-7 percent delivery reliability was assumed for the SWP as determined for a three-year dry period (worst case water supply scenario).

(b) Carryover/banked water supply available as a result of unused allocation of 2011 imported water supply and banking efforts.

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(c) 2010 actuals were used for the normal base year.
* Due to an 80 percent allocation of Table A imported supplies in 2011, excess available water will either be banked or stored as carryover in San Luis Reservoir.

10.2 Coordinated Planning

Coordination among the four water purveyors and other purveyors within the Antelope Valley is essential when planning for a loss of supply. This is especially true since three of the water purveyors share the same water sources and will be equally affected when a loss occurs. It is also essential for planning to be coordinated with AVEK, the wholesale water supplier, since AVEK will need to take similar actions for each water purveyor in the time of need.

10.3 Drought Conditions

Being located within an arid region of Southern California, the Antelope Valley is highly susceptible to drought conditions. Thus it is important for the water purveyors to have a plan in place to ease the impacts to the water supply during times of drought. The DMMs discussed in Section 5 will play an essential role in limiting water use during drought times, but further measures are often incorporated in a Water Shortage Contingency Plan (WSCP).

10.4 Earthquakes or Other Natural Disaster

The Antelope Valley is located in an earthquake zone. In the event of an earthquake or natural disaster, the Antelope Valley has the potential of losing its SWP supply. According to the California Division of Mines and Geology, a displacement along the San Andreas Fault could rupture the two aqueduct systems importing water to southern California, resulting in a potential delay of three to six weeks in SWP water delivery. Additional delays may occur due to damage to pumping facilities. DWR estimates a four month delay if a major break should occur.

If such a delay occurs, each water purveyor could temporarily increase its groundwater production and utilize its emergency storage to meet water demands until the aqueduct was repaired. In the event of a prolonged absence of SWP water, the water purveyors could implement their established "No Waste" Ordinances and WSCP Stages to substantially reduce demands until SWP supply is restored.

10.4.1 SWP Emergency Outage Scenarios

Following is a discussion of three possible scenarios for an outage of SWP water due to earthquake, power outage, or other event. In past years, slippage of side panels, flood events, and subsidence repairs were handled by DWR without interruption in delivery. This is mainly due to a key design feature of the aqueduct which allows isolation of various sections. Thus DWR can repair the damaged section without interrupting operation of another. However, three potential scenarios that would result in a loss of delivery to the Study Area are described below. They include a levee breach near the Sacramento-San Joaquin Delta, loss of the San Joaquin Valley transverse due to flood or earthquake, and loss of the East Branch due to earthquake. The water purveyors' ability to meet demands during the worst of these scenarios is also presented.

10.4.1.1 Levee Breach near Banks Pumping Plant

The Delta plays an essential role in the SWP operation. Water from the Delta is diverted to the SWP's main pumping facility, the Banks Pumping Plant located in the southern Delta, into the California Aqueduct. If a major levee breach were to occur near this facility, the freshwater in the Delta may become displaced with saltwater rushing in from the San Francisco Bay.

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Pumping from the Delta would cease until the water quality was restored. Depending on the time of the breach, the necessary fresh water inflows required to restore the Delta may not be available.

Historically levee breaks, such as the Jones Tract break, may take several months to completely restore. Assuming that the Banks Pumping Plant was down for six months, DWR could utilize water stored in the San Luis Reservoir to continue delivery of some SWP water to southern California. However, availability of supply will vary depending on the time of the breach. An occurrence in late summer early fall, would result in minimal delivery due to the typically low levels in San Luis Reservoir during this period. In addition to supply from San Luis Reservoir, the water purveyors could utilize storage from their facilities or temporarily pump additional groundwater until the Delta is restored. The water purveyors could also utilize any water previously stored in groundwater banks.

10.4.1.2 Complete Disruption of the California Aqueduct in the San Joaquin Valley

As demonstrated by the past flood event at Arroyo Pasajero, which resulted in the temporary loss of the Edmund G Pat Brown portion of the California Aqueduct, the SWP facilities are vulnerable to flood. If a similar incident were to occur due to flood or earthquake, loss of deliveries from the San Luis Reservoir could result. DWR anticipates an outage of up to four months should a loss in this portion of the California Aqueduct occur. If delivery were prevented from the San Luis Reservoir, the water purveyors could receive water through the DAWN facilities or temporarily pump additional groundwater until the supply is restored. Additionally, the water purveyors could utilize any water previously banked.

10.4.1.3 Complete Disruption of the East Branch of the California Aqueduct

The East Branch of the California Aqueduct begins at a bifurcation of the aqueduct south of the Edmonston Pumping Plant. The East Branch conveys water through the Alamo Power Plant to the Pearblossom Pumping plant, which pumps the water 540 feet uphill. The water is then conveyed in an open cannel into the Mojave Siphon Powerplant and into Lake Silverwood. When needed, water is discharged to the Devil's Canyon Powerplant and its two afterbays. The Santa Ana Pipeline then conveys the water 28 miles underground to the Aqueduct's terminus at Lake Perris.

If a portion of the East Branch were damaged due to a major earthquake, deliveries to the water purveyors could be interrupted depending on the location of the break. It is assumed that a single-location break occurred north of the Pearblossom Pumping Plant and prevented delivery of water stored in the DAWN facilities. The water purveyors could temporarily pump additional groundwater or utilize water stored in groundwater banks until SWP delivery resumed.

Of the three scenarios, the disruption of the East Branch of the California Aqueduct would result in the worst-case scenario for the water purveyors of the Antelope Valley since it would prevent any delivery of SWP. In this case, the water purveyors would rely on local groundwater and water stored in groundwater banks. An assessment of water supply and demand for a six-month SWP interruption are presented in Table 10-2. Water Supplies are assumed to be one half of the volumes available in a single dry-year with the exception of recycled water.

Table 10-2 shows that with predicted adjudication groundwater pumping and utilization of banked water within the Antelope Valley, an additional 50 percent water conservation is required to meet projected demand. According to Table 10-2, District No. 40 would have to implement Phase 9 of the Phased Water Conservation Plan (PWCP) described in Section 10.7.1. RCSD and QHWD would implement Phase 4 of their WSCP described in Section 10.7.2.

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TABLE 10-2: PROJECTED SUPPLIES AND DEMAND DURING A SIX-MONTH DISRUPTION IN IMPORTED SUPPLY

	2015	2020	2025	2030	2035
Study Area Existing Supply					
Groundwater	13,400	13,400	13,400	13,400	13,400
Imported Water	4,700	5,300	5,900	6,600	6,600
Total Existing Supply	18,100	18,700	19,300	20,000	20,000
Study Area Planned Supply					
Groundwater Banking/New Supply	29,800	30,500	34,100	37,800	41,700
Recycled Water	6,400	9,200	11,900	14,900	17,900
Total Planned Supply	36,200	39,700	46,000	52,700	59,600
Total Existing and Planned Supply	**54,300**	**58,400**	**65,300**	**72,700**	**79,600**
Study Area Demand	**102,300**	**108,000**	**120,700**	**134,200**	**147,200**
Additional Conservation Required	48,000	49,600	55,400	61,500	67,600
Additional Conservation as a Percent of Demand	0.47	0.46	0.46	0.46	0.46

10.5 Power Outages

In the event of a power outage, the water purveyors would follow their established Emergency Response Procedures (ERPs). ERPs for a power outage include ensuring back-up power supply for all water supply facilities to continue supplying water to customers, communicating with the power company, activating emergency connections with adjacent water systems, continuing water quality monitoring, and issuing boil water advisories as necessary.

10.6 Contamination

Contamination of water supply can result from a number of different events including, a reduction in water supply, water main break, cross-connection condition, water source pollution or covert action. Water supplies for the Study Area are generally of good quality and no foreseeable permanent contamination issues are anticipated. In the event of a toxic spill or major contamination, the water purveyors would follow their ERPs to isolate the problem and reduce the impact to the water supply. Once the problem has been isolated, the contamination would be cleaned up using the outlined chlorination or other necessary procedures and the water supply returned to service as soon as possible. In the meantime, emergency storage or

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alternative supply would be used to meet demand. Implementation of additional DMMs could also be utilized if the outage is anticipated to be of longer consequence.

10.7 Stages of Action

All four water purveyors have adopted individual WSCPs for their service areas. Each of these is described in more detail below and copies are provided in Appendix F.

10.7.1 District No. 40

District No. 40 has implemented a PWCP comprised of nine stages or "Phases" that call for the reduction in water use in order to meet a conservation target. Table 10-3 summarizes the shortage stages and conditions. Implementation of a Phase requires determination of a shortage from the County of Los Angeles Board of Supervisors. Water shortages could result from reduced availability of AVEK water, main breaks, natural disasters, or earthquakes. Once a shortage is determined, a public hearing is held to determine which Phase should be implemented.

TABLE 10-3: DISTRICT NO. 40 STAGES OF ACTION

Phase	1	2	3	4	5	6	7	8	9
Anticipated Shortage that Triggers Phase	10%	15%	20%	25%	30%	35%	40%	45%	50%
Conservation Target	90%	85%	80%	75%	70%	65%	60%	55%	50%
Type of Rationing	Voluntary	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory

In addition to the PWCP, District No. 40 has recently developed an internal WSCP. The WSCP, in contrast to the PWCP, does not specifically state the measures that will take effect in a given stage. Instead, it will assist District No. 40 in the decision making process and identify the necessary actions to be taken prior to a recommendation to the Board of Supervisors.

10.7.1.1 Prohibitions, Consumption Reduction Methods and Penalties

An urgency ordinance amending Title 11 – Health and Safety of the Los Angeles County code, relating to water conservation requirements for the Unincorporated Los Angeles Area took effect on October 7, 2008. The ordinance prohibits hose watering paved area, landscape watering between 10 am to 5 pm or causing runoff, usage of decorative fountains, washing vehicles at a non-commercial carwash and providing drinking water without customers' request etc. The link to the entire ordinance can be found at the following link:

http://dpw.lacounty.gov/wwd/web/docs/Water%20Wasting%20Ordinance%20final.pdf.

However, District No. 40's Phased Conservation Plan and WSCP incorporate prohibitions similar to those normally outlined in such an ordinance. Table 10-4 through 10-6 provides a summary of the mandatory prohibitions, consumption reduction methods and the stages in which they would take effect.

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TABLE 10-4: MANDATORY PROHIBITIONS

Prohibition	Stage When Prohibition Becomes Mandatory
Repair all leaks	always required
No runoff from lawns	always required
Restaurants serve water to customers upon request only	always required
Landscape watering between 10 a.m. and 5 p.m.	always required
No construction meters will be issued	3
No new permanent meters will be installed	7

TABLE 10-5: DISTRICT NO. 40 CONSUMPTION REDUCTION METHODS

Consumption Reduction Methods	Stages Method Takes Effect
Demand reduction program	All stages
Restrict building permits	3,4,5,6,7,8,9
Use prohibitions	All Stages
Water shortage pricing	All stages
Voluntary rationing	1
Mandatory rationing	2,3,4,5,6,7,8,9
Education program	All stages
Percentage reduction by customer type	All Stages

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TABLE 10-6: CONSUMPTION REDUCTION METHODS

Consumption Reduction Methods	Stage When Method Takes Effect	Projected Reduction (%)
Voluntary Rationing	1	2.5%
Demand reduction program	All	2.5%
Restrict building permits	3	5%-10%

Use prohibitions	All	5%-10%
Water shortage pricing	All	2.5%
Mandatory rationing	2	5%-10%
Percentage reduction by customer type	All	2.5%

Penalties imposed for the various stages are as described in the Phasing Plan. The conservation target is a percentage of the quantity used during a "base" billing period set by the Board of Supervisors. Water use up to the target quantities shall be billed at the established quantity charge or normal charge. Water use in excess of aforementioned target quantities shall be subject to the following conservation surcharges in addition to the established quantity charge or normal charge:

1. For all customers within Los Angeles County Waterworks Districts, an additional conservation surcharge of 1.0 times the established quantity charge or normal charge will be assessed for water use in excess of the target quantity, up to 115 percent of the target quantity.

2. For all customers within Los Angeles County Waterworks Districts, an additional conservation surcharge of 2.0 times the established quantity charge or normal charge will be assessed for water use in excess of 115 percent of the target quantity.

3. If cost of purchased water obtained from the water wholesalers that sell water to the Los Angeles County Waterworks Districts increases beyond the amounts that can be offset and collected through the rates set in 1 and 2 of the provision, then the District Engineer is hereby authorized to revise the rates set in 1 and 2 of this provision in amounts necessary to offset the cost to purchase water.

10.7.1.2 Revenue and Expenditure Impacts

The implementation of the Phased Plan could potentially result in revenue losses ranging between 10 and 50 percent. There are four sources of funding availability to District No. 40 to cover these losses: service charge, facility surcharge, water quantity charge, and standby charges. The service charge is a fixed connection charge based on the size of the meter. The facility surcharge and water quantity charge are based on the actual quantity of water used each month. Standby charges are assessed on all property. Thus a reduction in water use will only affect the facility surcharge and water quantity charges. In order to reduce the impact of these losses, District No. 40 can utilize the following measures: use extra revenues contributed by the conservation surcharge, delay capital improvement projects, and increase water rates.

10.7.1.3 Reduction Measuring Mechanism

In order to monitor the reduction in water use during a water shortage stage, supply and demand data is reported on a monthly basis with excess use violations reported to the County and to the customer. Bi-monthly water meter readings are collected and compiled to determine if the water usage meets the target goal.

10.7.2 RCSD and QHWD

RCSD and QHWD have both adopted a four stage WSCP which is summarized in Table 10-7. The Stages were designed to provide a minimum of 50 percent of normal supply during a water shortage event. Table 10-8 provides a description of the triggers for the rationing stages.

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TABLE 10-7: RCSD/QHWD STAGES OF ACTION

Phase	1	2	3	4
Anticipated Shortage that Triggers Phase	Up to 15%	15 to 25%	25 to 35%	35 to 50%
Conservation Target	85%	75%	65%	50%
Type of Rationing	Voluntary	Mandatory	Mandatory	Mandatory

TABLE 10-8: RCSD/QHWD TRIGGERING MECHANISMS

Phase	1	2	3	4
Current Supply	85 to 90% of normal supply	75 to 85% of normal supply	65 to 75% of normal supply	Less than 65% of normal supply
Future Supply	Insufficient supply to provide 80% for next two years	Insufficient supply to provide 75% for next two years	Insufficient supply to provide 65% for next two years	Insufficient supply to provide 50% for next two years
Groundwater	No excess groundwater pumped	First year excess groundwater pumped	Second year excess groundwater pumped	No excess groundwater available
Water Quality	Loss of 10% from contamination	Loss of 20% from contamination	Loss of 30% from contamination	
Disaster Loss				Disaster Loss

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10.7.2.1 Prohibitions, Consumption Reduction Methods and Penalties

The "No Waste" Ordinance adopted by both water purveyors outlines the mandatory prohibition on water wasting and describes the excessive use penalties enforced by both districts. A copy of the ordinance is provided in Appendix F. Table 10-9 provides a summary of the consumption methods and the stages in which they take effect.

TABLE 10-9: RCSD/QHWD CONSUMPTION REDUCTION METHODS

Consumption Reduction Methods	Stages Method Takes Effect
Demand reduction program	All stages
Flow restriction	4

Consumption Reduction Methods	Stages Method Takes Effect
Restrict building permits	2, 3, 4
Use prohibitions	All stages
Water shortage pricing	All stages
Voluntary rationing	1
Mandatory rationing	2, 3, 4
Education program	All stages
Percentage reduction by customer type	2, 3, 4

10.7.2.2 Revenue and Expenditure Impacts

Both water purveyors use all surplus revenues collected during the stages to fund a Rate Stabilization Fund, conservation, recycling, and capital improvements. The fund will be maintained at 75 percent of the normal water revenue and will be used to stabilize rates during periods of water shortage or disaster to minimize the need to adjust rates during the shortage. However, during prolonged shortages, rates may need to be increased. The water purveyors estimate the following percent increases for the given phases:

Stage 1: No increase
Stage 2: 25 percent increase
Stage 3: 50 percent increase
Stage 4: 100 percent increase

After a shortage ends, rates will be increased by 15 percent of the pre-shortage rate for one-year.

10.7.2.3 Reduction Measuring Mechanism

In order to monitor the reduction in water use during a water shortage stage, daily production figures are recorded. During Stage 1 and 2, weekly production will be compared to the target weekly production. These weekly reports will be forwarded to the General Manager and Water Shortage Response Team. If goals are not met, the Board of Directors is notified so corrective action can be taken. During Stage 3 and 4, the procedures are the same with the General Manager receiving the daily reports as well as the weekly reports.

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Appendix A

Urban Water Management Plan Act

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

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

CHAPTER 1.	GENERAL DECLARATION AND POLICY	10610-10610.4
CHAPTER 2.	DEFINITIONS	10611-10617
CHAPTER 3.	URBAN WATER MANAGEMENT PLANS	
Article 1.	General Provisions	10620-10621
Article 2.	Contents of Plans	10630-10634
Article 2.5.	Water Service Reliability	10635
Article 3.	Adoption and Implementation of Plans	10640-10645
CHAPTER 4.	MISCELLANEOUS PROVISIONS	10650-10656

WATER CODE
SECTION 10610-10610.4

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

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

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

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

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

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

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

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

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

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

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

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

10610.4. The Legislature finds and declares that it is the policy of the state as follows:
(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.
(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.
(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

WATER CODE
SECTION 10611-10617

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

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

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

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

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

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

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

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

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

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

WATER CODE
SECTION 10620-10621

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

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

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

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

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

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

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

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

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days prior to the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water

supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

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

WATER CODE
SECTION 10630-10634

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

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

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

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

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

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

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

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

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

(A) An average water year.

(B) A single dry water year.

(C) Multiple dry water years.

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

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

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

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

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

(I) Agricultural.

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

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

(1) A description of each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following:

(A) Water survey programs for single-family residential and multifamily residential customers.

(B) Residential plumbing retrofit.

(C) System water audits, leak detection, and repair.

(D) Metering with commodity rates for all new connections and retrofit of existing connections.

(E) Large landscape conservation programs and incentives.

(F) High-efficiency washing machine rebate programs.

(G) Public information programs.

(H) School education programs.

(I) Conservation programs for commercial, industrial, and institutional accounts.

(J) Wholesale agency programs.
(K) Conservation pricing.
(L) Water conservation coordinator.
(M) Water waste prohibition.
(N) Residential ultra-low-flush toilet replacement programs.
(2) A schedule of implementation for all water demand management measures proposed or described in the plan.
(3) A description of the methods, if any, that the supplier will use to evaluate the effectiveness of water demand management measures implemented or described under the plan.
(4) An estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the supplier's ability to further reduce demand.
(g) An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following:
(1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors.
(2) Include a cost-benefit analysis, identifying total benefits and total costs.
(3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost.
(4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation.
(h) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.
(i) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.
(j) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivisions (f) and (g) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California,"

dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.

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

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

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

10631.5. (a) (1) Beginning January 1, 2009, the terms of, and eligibility for, a water management grant or loan made to an urban water supplier and awarded or administered by the department, state board, or California Bay-Delta Authority or its successor agency shall be conditioned on the implementation of the water demand management measures described in Section 10631, as determined by the department pursuant to subdivision (b).

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

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

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

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

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

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

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

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

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

(i) Compliance on an individual basis.

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

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

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

the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.

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

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

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

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

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

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

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

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

sequence for the agency's water supply.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

WATER CODE SECTION 10635

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

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

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

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

WATER CODE
SECTION 10640-10645

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

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

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

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

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

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

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

(c) (1) For the purpose of identifying the exemplary elements of the individual plans, the department shall identify in the report those water demand management measures adopted and implemented by specific urban water suppliers, and identified pursuant to Section

10631, that achieve water savings significantly above the levels established by the department to meet the requirements of Section 10631.5.

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

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

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

WATER CODE
SECTION 10650-10656

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

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

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

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

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

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

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

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

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

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

Appendix B

Notice of Public Hearing and Adoption of Resolution

Appendix B-1

District No. 40

Notice of Public Hearing and Adoption Resolution

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

GAIL FARBER, Director

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 28, 2011

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, CA 90012

Dear Supervisors:

PUBLIC HEARING FOR THE 2010 URBAN WATER MANAGEMENT PLAN FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU, AND THE MARINA DEL REY WATER SYSTEM, AND THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY (SUPERVISORIAL DISTRICTS 3, 4, AND 5) (3 VOTES)

SUBJECT

This action is to adopt the 2010 Urban Water Management Plan for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System, and the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley for the Los Angeles County Waterworks District No. 40, Antelope Valley.

IT IS RECOMMENDED THAT YOUR BOARD AFTER THE PUBLIC HEARING, AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU, AND THE MARINA DEL REY WATER SYSTEM, AND THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY:

1. Adopt the resolution approving the 2010 Urban Water Management Plan for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System.

2. Adopt the resolution approving the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley for the Los Angeles County Waterworks District No. 40, Antelope Valley.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to adopt the 2010 Urban Water Management Plan for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System, and the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley for the Los Angeles County Waterworks District No. 40, Antelope Valley (collectively "2010 Urban Water Management Plans"), as required by the State Urban Water Management Planning Act.

Implementation of Strategic Plan Goals

The Countywide Strategic Plan directs the provision of Operational Effectiveness (Goal 1) and Community and Municipal Services (Goal 3) by supporting long-term resource planning and to ensure adequate water supplies are available to meet existing and future customer water demands in order to preserve the quality of life for the County of Los Angeles residents. The 2010 Urban Water Management Plans will implement customer feedback to meet the requirements of the Urban Water Management Planning Act and better serve our customers' needs.

FISCAL IMPACT/FINANCING

There will be no impact to the County General Fund.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The Act (California Water Code §10610 through 10657) requires every water supplier with more than 3,000 service connections, or supplying more than 3,000 acre-feet of water annually, to prepare and adopt an Urban Water Management Plan every five years. The Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System have approximately 7,800 service connections; and the Los Angeles County Waterworks District No. 40, Antelope Valley, has approximately 55,000 service connections. A six-month extension was granted by the legislature for submittals of the 2010 Urban Water Management Plans to provide additional time for water suppliers to address Senate Bill X7-7 (Steinberg) requirements, of reducing per capita water use by 20 percent by the year 2020 from a prescribed base period.

Prior to adoption of an Urban Water Management Plan, California Water Code §10642 requires that the water supplier make the plan available for public inspection and hold a public hearing. Notice of the time and place of the hearing must be published pursuant to Government Code §6066, which states that the publication of the notice shall be once a week for two successive weeks with at least five intervening days. The notice must also be provided to any city within which the supplier provides water supplies.

The public hearing is being held pursuant to California Water Code §10642. Notice of the time and place of the hearing was published pursuant to Government Code §6066 and has been provided to the Cities of Malibu, Lancaster, and Palmdale.

County Counsel has reviewed and approved the proposed resolution approving the 2010 Urban Water Management Plan for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System (Enclosure A); the proposed resolution approving the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley for the Los Angeles County Waterworks District No. 40, Antelope Valley (Enclosure B); and Notices of Public Hearing (Enclosures C and D) as to form.

The 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley was prepared in cooperation with all the other retail water agencies in the Antelope Valley. It fulfills the requirements of an Urban Water Management Plan for Los Angeles County Waterworks District No. 40, Antelope Valley; Quartz Hill Water District; and Rosamond Community Services District. The Antelope Valley Region recently received a grant award from the State of California to update the Antelope Valley Integrated Regional Water Management Plan (AVIRWMP) by the end of 2013. Once the update to the AVIRWMP is complete, we will return to your Board to adopt the update and will recommend the inclusion of the Integrated Regional Urban Water Management Plan as an Appendix to the AVIRWMP.

ENVIRONMENTAL DOCUMENTATION

Pursuant to §10652 of the California Water Code, the California Environmental Quality Act does not apply to the preparation and adoption of Urban Water Management Plans.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

There will be no negative impact on current County services or projects.

CONCLUSION

Please return two adopted copies of this letter and two copies of the signed resolutions to the Department of Public Works, Waterworks Division.

Respectfully submitted,

GAIL FARBER
Director of Public Works

GF:AA:cr

Enclosures

c: Chief Executive Office (Rita Robinson)
County Counsel
Executive Office

ENCLOSURE B

A RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES, CALIFORNIA, APPROVING THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY

WHEREAS, the Urban Water Management Planning Act (Division 6 of the California Water Code) requires each water supplier with more than 3,000 customers (service connections), or annually supplying more than 3,000 acre-feet of water, to prepare and adopt an Urban Water Management Plan; and

WHEREAS, Los Angeles County Waterworks District No. 40, Antelope Valley (hereinafter referred to as DISTRICT), has approximately 55,000 service connections, and is therefore required to prepare and adopt an Urban Water Management Plan; and

WHEREAS, the DISTRICT'S 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley (Attachment 2) meets the requirements of the Urban Water Management Planning Act.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors of the County of Los Angeles, as the Board of Directors of the DISTRICT hereby adopts the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley.

The foregoing Resolution was on the ___ day of ___, 2011, adopted by the Board of Supervisors of the County of Los Angeles as the governing body of the Los Angeles County Waterworks District No. 40, Antelope Valley.

SACHI A. HAMAI
Executive Officer of the
Board of Supervisors of the
County of Los Angeles

By _____
Deputy

APPROVED AS TO FORM:

ANDREA SHERIDAN ORDIN
County Counsel

By _____
Deputy

ENCLOSURE D

INSTRUCTION SHEET FOR PUBLISHING
LEGAL ADVERTISEMENTS

TO: Executive Officer
Board of Supervisors
County of Los Angeles

FROM: Department of Public Works
Waterworks Division

NOTICE OF HEARING
2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY

Publishing

That the Executive Officer of the Board of Supervisors shall cause notice of the public hearing, in the form and manner specified in Section 6066 of the Government Code, to be published once a week for two consecutive weeks in the Antelope Valley Press, a newspaper published and circulated in the County of Los Angeles, which is hereby designated for that purpose, such publication to be completed not less than ten days prior to the date of said hearing. Copies of this Plan will be available for review approximately two weeks prior to the public hearing in all Public Libraries in the District's service areas. The Plan will also be available for review at http://www.avwaterplan.org/.

Forward five reprints of the attached advertisement to the County of Los Angeles Department of Public Works, Waterworks Division, P.O. Box 1460, Alhambra, California 91802-1460; City of Lancaster, 44933 North Fern Avenue, Lancaster, California 93534-2461; and City of Palmdale, 38300 North Sierra Highway, Palmdale, California 93550-4798.

Should there be any questions regarding this matter, please contact Mr. Adam Ariki, of this office, at (626) 300-3300, Monday through Thursday, 7 a.m. to 5:45 p.m.

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY NOTICE OF PUBLIC HEARING FOR ADOPTION OF THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY

The County of Los Angeles Board of Supervisors, as the governing body of the Los Angeles County Waterworks District No. 40, Antelope Valley, will hold a public hearing on June 28, 2011, at 9:30 a.m., in Room 381, Kenneth Hahn Hall of Administration, 500 West Temple Street, Los Angeles, California 90012, in the matter of adopting the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley.

The Plan has been prepared in compliance with the Urban Water Management Planning Act and includes a water-shortage contingency plan, the projection of future water demands, identification of sufficient water supplies to meet projected water demands, and an explanation of existing and future water conservation practices to meet the reduction of 20 percent per capita use by the year 2020 based on the Legislative Senate Bill X7-7.

The Plan has been prepared cooperatively by the Los Angeles County Waterworks District No. 40, Antelope Valley; Rosamond Community Services District; and Quartz Hill Water District. Copies of the Plan will be available for public review approximately two weeks prior to the public hearing at the County libraries located in Lake Los Angeles, Lancaster, Littlerock, and Quartz Hill and at the Waterworks field office located at 260 East Avenue K-8 in Lancaster.

The Board of Supervisors will consider and may approve the Plan as recommended by the Director of Public Works. For further information regarding this matter, please call (626) 300-3315.

Appendix B-2

RCSD

Notice of Public Hearing and Adoption Resolution

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY, PALMDALE WATER DISTRICT, QUARTZ HILL WATER DISTRICT, AND ROSAMOND COMMUNITY SERVICES DISTRICT
NOTICE OF PUBLIC HEARING FOR ADOPTION OF THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY

The Los Angeles County Waterworks District No. 40, Antelope Valley, Palmdale Water District, Quartz Hill Water District, and Rosamond Community Services District will hold a public hearing on May 31, 2011, at 6:15 p.m., in the Emergency Operations Center, Lancaster City Hall, 44933 N. Fern Avenue, Lancaster, California, 93534, in the matter of adopting the Integrated Regional Urban Water Management Plan for the Antelope Valley.

The plan has been prepared in compliance with the Urban Water Management Planning Act and includes a water-shortage contingency plan, the projection of future water demands, identification of sufficient water supplies to meet projected water demands, and an explanation of existing and future water conservation practices to meet the reduction of 20 percent per capita use by the year 2020 based on the legislative Senate Bill X7-7.

The plan has been prepared cooperatively by the above water agencies. Copies of the plan will be available for public review approximately two weeks prior to the public hearing at the Los Angeles County libraries located in Lake Los Angeles, Lancaster, Littlerock, and Quartz Hill, in addition to the Kern County Library in Rosamond, and at the City of Lancaster, 44933 North Fern Avenue, Lancaster, California 93534, and the City of Palmdale, 38300 North Sierra Highway, Palmdale, California 93550.

Adoption of the 2010 Urban Water Management Plan is required under the Urban Water Management Planning Act by July 1, 2011. For further information regarding this matter, please call (626) 300-3315.

Public Notices

NOTICE OF TRUSTEE'S SALE Trustee Sale No. 7090632 Loan No. 0280203203 YOU ARE IN DEFAULT UNDER A DEED OF TRUST, DATED 6/19/2007. UNLESS YOU TAKE ACTION TO PROTECT YOUR PROPERTY, IT MAY BE SOLD AT A PUBLIC SALE. IF YOU NEED AN EXPLANATION OF THE NATURE OF THE PROCEEDING AGAINST YOU, YOU SHOULD CONTACT A LAWYER. On 5/18/2011 at 10:30 AM, Max Default Services Corporation, as duly appointed Trustee under and pursuant to Deed of Trust recorded 7/11/2007, as Instrument No. 20071639635, in book xx , page xx , of Official Records in the office of the County Recorder of Los Angeles County, State of California, executed by Jesse J. Tarver An Unmarried Man, WILL SELL AT PUBLIC AUCTION TO HIGHEST BIDDER FOR CASH, CASHIER'S CHECK/CASH EQUIVALENT or other form of payment authorized by 2924h(b), (payable at time of sale in lawful money of the United States), at the west side of the Los Angeles County Courthouse, directly facing Norwalk Blvd., 12720 Norwalk Boulevard, Norwalk, CA. All right, title and interest conveyed to and now held by it under said Deed of Trust in the property situated in said County and State, described as: FULLY DESCRIBED IN THE ABOVE DEED OF TRUST. APN # 3109-019-015 The street address and other common designation, if any, of the real property described above is purported to be: 1540 W. Avenue L, Lancaster, CA 93534 The undersigned Trustee disclaims any liability for any incorrectness of the street address and other common designation, if any, shown herein. Said sale will be made, but without covenant or warranty, expressed or implied, regarding title, possession, or encumbrances, to pay the remaining principal sum of the note(s) secured by said Deed of Trust, with interest thereon, as provided in said note(s), advances, if any, under the terms of said Deed of Trust, fees, charges and expenses of the Trustee and of the trusts created by said Deed of Trust. The total amount of the unpaid balance of the obligation secured by the property to be sold and reasonable estimated costs, expenses and advances at the time of the initial publication of the Notice of Sale is: $262,177.50 The beneficiary under said Deed of Trust heretofore executed and delivered to the undersigned a written Declaration of Default and Demand for Sale. The undersigned caused a Notice of Default and Election to Sell to be recorded in the county where the real property is located. Pursuant to California Civil Code Section 2923.54, Lender or Servicer has declared it has obtained a final or temporary order of exemption pursuant to Section 2923.53 from the Commissioner that is current and valid as of the date of this Notice of Trustee's Sale and the requirements of Section 2923.52(a) does not apply to this Notice of Trustee's Sale. Dated: 4/22/2011 MAX DEFAULT SERVICES CORPORATION Ryan Remington/Authorized Signature FOR TRUSTEE'S SALE INFORMATION PLEASE CALL 714-259-7850 Max Default Services Corp. is attempting to collect a debt. Any information obtained will be used for that purpose. ASAP# FNMA3976015 04/28/2011, 05/05/2011, 05/12/2011

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Antelope Valley Press

Public Notices

NOTICE OF TRUSTEE'S SALE TS No. 08-0060712 Title Order No. 08-8-222220 Investor/Insurer No. APN No. 3153-044-026 YOU ARE IN DEFAULT UNDER A DEED OF TRUST, DATED 02/23/2006. UNLESS YOU TAKE ACTION TO PROTECT YOUR PROPERTY, IT MAY BE SOLD AT A PUBLIC SALE. IF YOU NEED AN EXPLANATION OF THE NATURE OF THE PROCEEDING AGAINST YOU, YOU SHOULD CONTACT A LAWYER." Notice is hereby given that RECONTRUST COMPANY, as duly appointed trustee pursuant to the Deed of Trust executed by SAMUEL V. MORENO, A SINGLE MAN, dated 02/23/2006 and recorded 03/01/06, as Instrument No. 06 0448513, in Book , Page), of Official Records in the office of the County Recorder of Los Angeles County, State of California, will sell on 05/19/2011 at 10:30AM, At the West side of the Los Angeles County Courthouse, directly facing Norwalk Blvd., 12720 Norwalk Blvd., Norwalk, CA 90650 at public auction, to the highest bidder for cash or check as described below, payable in full at time of sale, all right, title, and interest conveyed to and now held by it under said Deed of Trust, in the property situated in said County and State and as more fully described in the above referenced Deed of Trust. The street address and other common designation, if any, of the real property described above is purported to be: 44154 SHAD STREET, LANCASTER, CA, 93536. The undersigned Trustee disclaims any liability for any incorrectness of the street address and other common designation, if any, shown herein. The total amount of the unpaid balance with interest thereon of the obligation secured by the property to be sold plus reasonable estimated costs, expenses and advances at the time of the initial publication of the Notice of Sale is $391,746.55. It is possible that at the time of sale the opening bid may be less than the total indebtedness due. In addition to cash, the Trustee will accept cashier's checks drawn on a state or national bank, a check drawn by a state or federal credit union, or a check drawn by a state or federal savings and loan association, savings association, or savings bank specified in Section 5102 of the Financial Code and authorized to do business in this state. Said sale will be made, in an "AS IS" condition, but without covenant or warranty, express or implied, regarding title, possession or encumbrances, to satisfy the indebtedness secured by said Deed of Trust, advances thereunder, with interest as provided, and the unpaid principal of the Note secured by said Deed of Trust with interest thereon as provided in said Note, plus fees, charges and expenses of the Trustee and of the trusts created by said Deed of Trust. DATED: 09/12/2008 RECONTRUST COMPANY 1757 TAPO CANYON ROAD, SVW-88 SIMI VALLEY, CA 93063 Phone: (800) 281 8219, Sale Information (626) 927-4399 By:-- Trustee's Sale Officer RECONTRUST COMPANY is a debt collector attempting to collect a debt. Any information obtained will be used for that purpose. ASAP# 3976599 04/28/2011, 05/05/2011, 05/12/2011

NOTICE OF TRUSTEE'S SALE TS No. 10-0163086 Title Order No. 10-0006739 Investor/Insurer No. 1705587309 APN No. 3150-073-032 YOU ARE IN DEFAULT UNDER A DEED OF TRUST, DATED 11/13/2007. UNLESS YOU TAKE ACTION TO PROTECT YOUR PROPERTY, IT MAY BE SOLD AT A PUBLIC SALE. IF YOU NEED AN EXPLANATION OF THE NATURE

Public Notices

OF THE PROCEEDING AGAINST YOU, YOU SHOULD CONTACT A LAWYER." Notice is hereby given that RECONTRUST COMPANY, N.A., as duly appointed trustee pursuant to the Deed of Trust executed by JOSE LUIS OCHOA, AND ANGELICA MURILLO, HUSBAND AND WIFE AS COMMUNITY PROPERTY, dated 11/13/2007 and recorded 11/28/07, as Instrument No. 20072614269, in Book , Page), of Official Records in the office of the County Recorder of Los Angeles County, State of California, will sell on 05/26/2011 at 9:00AM, Los Angeles Convention Center 1201 South Figueroa Street, Los Angeles, CA 90012, Concourse - Center section of the Convention center between the West and South Halls Main Floor - Concourse (Sections E & F) at public auction, to the highest bidder for cash or check as described below, payable in full at time of sale, all right, title, and interest conveyed to and now held by it under said Deed of Trust, in the property situated in said County and State and as more fully described in the above referenced Deed of Trust. The street address and other common designation, if any, of the real property described above is purported to be: 3051 EAST NORBERRY STREET, LANCASTER, CA, 93535. The undersigned Trustee disclaims any liability for any incorrectness of the street address and other common designation, if any, shown herein. The total amount of the unpaid balance with interest thereon of the obligation secured by the property to be sold plus reasonable estimated costs, expenses and advances at the time of the initial publication of the Notice of Sale is $254,927.84. It is possible that at the time of sale the opening bid may be less than the total indebtedness due. In addition to cash, the Trustee will accept cashier's checks drawn on a state or national bank, a check drawn by a state or federal credit union, or a check drawn by a state or federal savings and loan association, savings association, or savings bank specified in Section 5102 of the Financial Code and authorized to do business in this state. Said sale will be made, in an "AS IS" condition, but without covenant or warranty, express or implied, regarding title, possession or encumbrances, to satisfy the indebtedness secured by said Deed of Trust, advances thereunder, with interest as provided, and the unpaid principal of the Note secured by said Deed of Trust with interest thereon as provided in said Note, plus fees, charges and expenses of the Trustee and of the trusts created by said Deed of Trust. DATED: 03/18/2011 RECONTRUST COMPANY, N.A. 1800 Tapo Canyon Rd., CA6-914-01-94 SIMI VALLEY, CA 93063 Phone: (800) 281 8219, Sale Information (626) 927-4399 By Trustee's Sale Officer RECONTRUST COMPANY, N.A. is a debt collector attempting to collect a debt. Any information obtained will be used for that purpose. ASAP# FNMA3978546 05/05/2011, 05/12/2011, 05/19/2011

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*private party advertisers only

Superior Court of California, County of Los Angeles
415 West Ocean Blvd.
Long Beach, CA 90802
PETITION OF: VARAZ BOUZOGHLANIAN FOR CHANGE OF NAME
ORDER TO SHOW CAUSE

Public Notices

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY, PALMDALE WATER DISTRICT, QUARTZ HILL WATER DISTRICT, AND ROSAMOND COMMUNITY SERVICES DISTRICT
NOTICE OF PUBLIC HEARING FOR ADOPTION OF THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY

The Los Angeles County Waterworks District No. 40, Antelope Valley, Palmdale Water District, Quartz Hill Water District, and Rosamond Community Services District will hold a public hearing on May 31, 2011, at 6:15 p.m., in the Emergency Operations Center, Lancaster City Hall, 44933 N. Fern Avenue, Lancaster, California, 93534, in the matter of adopting the Integrated Regional Urban Water Management Plan for the Antelope Valley.

The plan has been prepared in compliance with the Urban Water Management Planning Act and includes a water-shortage contingency plan, the projection of future water demands, identification of sufficient water supplies to meet projected water demands, and an explanation of existing and future water conservation practices to meet the reduction of 20 percent per capita use by the year 2020 based on the legislative Senate Bill X7-7.

The plan has been prepared cooperatively by the above water agencies. Copies of the plan will be available for public review approximately two weeks prior to the public hearing at the Los Angeles County libraries located in Lake Los Angeles, Lancaster, Littlerock, and Quartz Hill, in addition to the Kern County Library in Rosamond, and at the City of Lancaster, 44933 North Fern Avenue, Lancaster, California 93534, and the City of Palmdale, 38300 North Sierra Highway, Palmdale, California 93550.

Adoption of the 2010 Urban Water Management Plan is required under the Urban Water Management Planning Act by July 1, 2011. For further information regarding this matter, please call (626) 300-3315.
Publish: 5/12, 5/19, 2011

NOTICE OF TRUSTEE'S SALE TS No. 11-0005928 Title Order No. 11-0004034 Investor/Insurer No. 144351905 APN No. 3071-007-017 YOU ARE IN DEFAULT UNDER A DEED OF TRUST, DATED 07/28/2006. UNLESS YOU TAKE ACTION TO PROTECT YOUR PROPERTY, IT MAY BE SOLD AT A PUBLIC SALE. IF YOU NEED AN EXPLANATION OF THE NATURE OF THE PROCEEDING AGAINST YOU, YOU SHOULD CONTACT A LAWYER." Notice is hereby given that RECONTRUST COMPANY, N.A., as duly appointed trustee pursuant to the Deed of Trust executed by WILLIE E. JOHNSON, A SINGLE MAN, dated 07/28/2006 and recorded 08/04/06, as Instrument No. 06 1731505, in Book , Page), of Official Records in the office of the County Recorder of Los Angeles County, State of California, will sell on 05/26/2011 at 10:30AM, At the West side of the Los Angeles County Courthouse, directly facing Norwalk Blvd., 12720 Norwalk Blvd., Norwalk, CA 90650 at public auction, to the highest bidder for cash or check as described below, payable in full at time of sale, all right, title, and interest conveyed to and now held by it under said Deed of Trust, in the property situated in said County and State and as more fully described in the above refer-

Public Notices

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Appendix B-3

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Notice of Public Hearing and Adoption Resolution

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY, PALMDALE WATER DISTRICT, QUARTZ HILL WATER DISTRICT, AND ROSAMOND COMMUNITY SERVICES DISTRICT
NOTICE OF PUBLIC HEARING FOR ADOPTION OF THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY

The Los Angeles County Waterworks District No. 40, Antelope Valley, Palmdale Water District, Quartz Hill Water District, and Rosamond Community Services District will hold a public hearing on May 31, 2011, at 6:15 p.m., in the Emergency Operations Center, Lancaster City Hall, 44933 N. Fern Avenue, Lancaster, California, 93534, in the matter of adopting the Integrated Regional Urban Water Management Plan for the Antelope Valley.

The plan has been prepared in compliance with the Urban Water Management Planning Act and includes a water-shortage contingency plan, the projection of future water demands, identification of sufficient water supplies to meet projected water demands, and an explanation of existing and future water conservation practices to meet the reduction of 20 percent per capita use by the year 2020 based on the legislative Senate Bill X7-7.

The plan has been prepared cooperatively by the above water agencies. Copies of the plan will be available for public review approximately two weeks prior to the public hearing at the Los Angeles County libraries located in Lake Los Angeles, Lancaster, Littlerock, and Quartz Hill, in addition to the Kern County Library in Rosamond, and at the City of Lancaster, 44933 North Fern Avenue, Lancaster, California 93534, and the City of Palmdale, 38300 North Sierra Highway, Palmdale, California 93550.

Adoption of the 2010 Urban Water Management Plan is required under the Urban Water Management Planning Act by July 1, 2011. For further information regarding this matter, please call (626) 300-3315.

Public Notices

NOTICE OF TRUSTEE'S SALE Trustee Sale No. 7090632 Loan No. 0280203203 YOU ARE IN DEFAULT UNDER A DEED OF TRUST, DATED 6/19/2007. UNLESS YOU TAKE ACTION TO PROTECT YOUR PROPERTY, IT MAY BE SOLD AT A PUBLIC SALE. IF YOU NEED AN EXPLANATION OF THE NATURE OF THE PROCEEDING AGAINST YOU, YOU SHOULD CONTACT A LAWYER. On 5/18/2011 at 10:30 AM, Max Default Services Corporation, as duly appointed Trustee under and pursuant to Deed of Trust recorded 7/11/2007, as Instrument No. 20071639635, in book xx , page xx , of Official Records in the office of the County Recorder of Los Angeles County, State of California, executed by Jesse J. Tarver An Unmarried Man, WILL SELL AT PUBLIC AUCTION TO HIGHEST BIDDER FOR CASH, CASHIER'S CHECK/CASH EQUIVALENT or other form of payment authorized by 2924h(b), (payable at time of sale in lawful money of the United States), at the west side of the Los Angeles County Courthouse, directly facing Norwalk Blvd., 12720 Norwalk Boulevard, Norwalk, CA. All right, title and interest conveyed to and now held by it under said Deed of Trust in the property situated in said County and State, described as: FULLY DESCRIBED IN THE ABOVE DEED OF TRUST. APN # 3109-019-015 The street address and other common designation, if any, of the real property described above is purported to be: 1540 W. Avenue L, Lancaster, CA 93534 The undersigned Trustee disclaims any liability for any incorrectness of the street address and other common designation, if any, shown herein. Said sale will be made, but without covenant or warranty, expressed or implied, regarding title, possession, or encumbrances, to pay the remaining principal sum of the note(s) secured by said Deed of Trust, with interest thereon, as provided in said note(s), advances, if any, under the terms of said Deed of Trust, fees, charges and expenses of the Trustee and of the trusts created by said Deed of Trust. The total amount of the unpaid balance of the obligation secured by the property to be sold and reasonable estimated costs, expenses and advances at the time of the initial publication of the Notice of Sale is: $262,177.50 The beneficiary under said Deed of Trust heretofore executed and delivered to the undersigned a written Declaration of Default and Demand for Sale. The undersigned caused a Notice of Default and Election to Sell to be recorded in the county where the real property is located. Pursuant to California Civil Code Section 2923.54, Lender or Servicer has declared it has obtained a final or temporary order of exemption pursuant to Section 2923.53 from the Commissioner that is current and valid as of the date of this Notice of Trustee's Sale and the requirements of Section 2923.52(a) does not apply to this Notice of Trustee's Sale. Dated: 4/22/2011 MAX DEFAULT SERVICES CORPORATION Ryan Remington/Authorized Signature FOR TRUSTEE'S SALE INFORMATION PLEASE CALL 714-259-7850 Max Default Services Corp. is attempting to collect a debt. Any information obtained will be used for that purpose. ASAP# FNMA3976015 04/28/2011, 05/05/2011, 05/12/2011

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Public Notices

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415 West Ocean Blvd.
Long Beach, CA 90802
PETITION OF: VARAZ BOUZOGHLANIAN FOR CHANGE OF NAME
ORDER TO SHOW CAUSE

Public Notices

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Publish: 5/12, 5/19, 2011

NOTICE OF TRUSTEE'S SALE TS No. 11-0005928 Title Order No. 11-0004034 Investor/Insurer No. 144351905 APN No. 3071-007-017 YOU ARE IN DEFAULT UNDER A DEED OF TRUST, DATED 07/28/2006. UNLESS YOU TAKE ACTION TO PROTECT YOUR PROPERTY, IT MAY BE SOLD AT A PUBLIC SALE. IF YOU NEED AN EXPLANATION OF THE NATURE OF THE PROCEEDING AGAINST YOU, YOU SHOULD CONTACT A LAWYER." Notice is hereby given that RECONTRUST COMPANY, N.A., as duly appointed trustee pursuant to the Deed of Trust executed by WILLIE E. JOHNSON, A SINGLE MAN, dated 07/28/2006 and recorded 08/04/06, as Instrument No. 06 1731505, in Book , Page), of Official Records in the office of the County Recorder of Los Angeles County, State of California, will sell on 05/26/2011 at 10:30AM, At the West side of the Los Angeles County Courthouse, directly facing Norwalk Blvd., 12720 Norwalk Blvd., Norwalk, CA 90650 at public auction, to the highest bidder for cash or check as described below, payable in full at time of sale, all right, title, and interest conveyed to and now held by it under said Deed of Trust, in the property situated in said County and State and as more fully described in the above refer-

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TRUST COMPANY, N.A.
TAPO CANYON ROAD, SV
SIMI VALLEY, CA 9
Phone/Sale Information:
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Officer RECONTRUST
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accept cashier's chec
on a state or nationa
check drawn by a stat
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drawn by a state or
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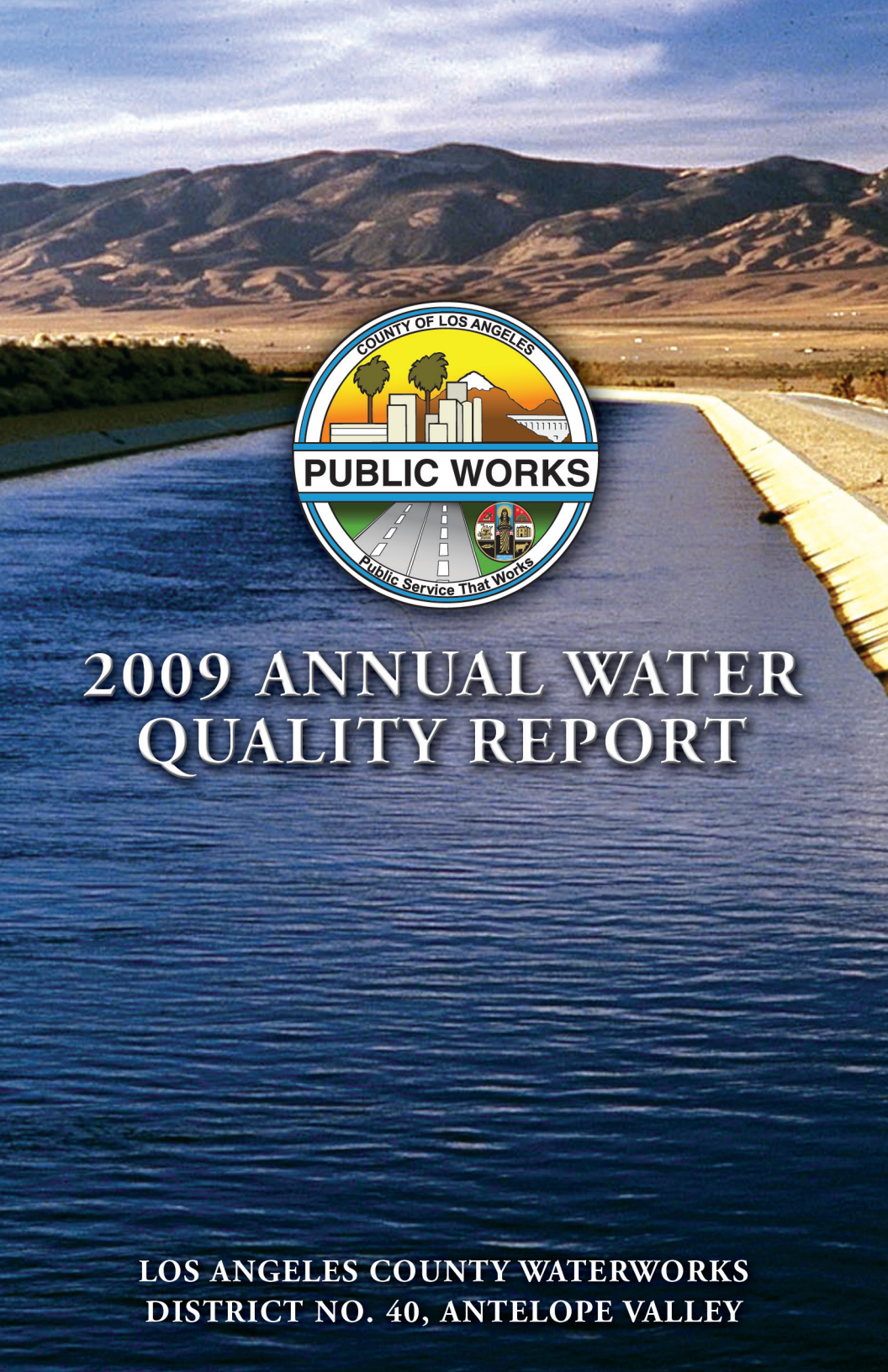
savings association, o
bank specified in Sectio

Appendix C

Consumer Confidence Reports

Appendix C-1

District No. 40 Consumer Confidence Reports



COUNTY OF LOS ANGELES
PUBLIC WORKS
Public Service That Works

2009 ANNUAL WATER QUALITY REPORT

LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. 40, ANTELOPE VALLEY

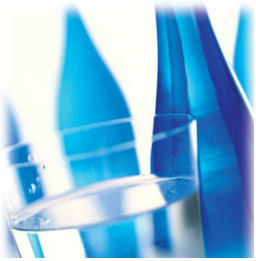
LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY WATER QUALITY REPORT FOR CALENDAR YEAR 2009

The Los Angeles County Waterworks District is pleased to provide you with our 2009 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2009, your drinking water met all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.



WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses. The source water is tested for chemical, physical, radiological, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not regulated.

Key locations within the distribution system have been selected to monitor water quality. Every week, the distribution system is tested for bacteria and disinfectant levels to ensure that you receive safe and high quality drinking water. The distribution system is also tested for color, odor, temperature, turbidity, and disinfection by-products monthly. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

WHERE YOUR WATER COMES FROM

The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. The District's sources of drinking water in the Antelope Valley are local groundwater and surface ("imported") water purchased from the Antelope Valley-East Kern Water Agency (AVEK). AVEK's water primarily comes from the State Water Project (SWP), the 444 mile-long California Aqueduct that transports water from the Sacramento-San Joaquin Delta to Southern California SWP contractors for use as agricultural or urban supply.

The surface water in your region comes from one of AVEK's facilities, Quartz Hill Water Treatment Plant (QHWTP) or Eastside Water Treatment Plant (EWTP). Water quality information is presented in the table contained in this report.

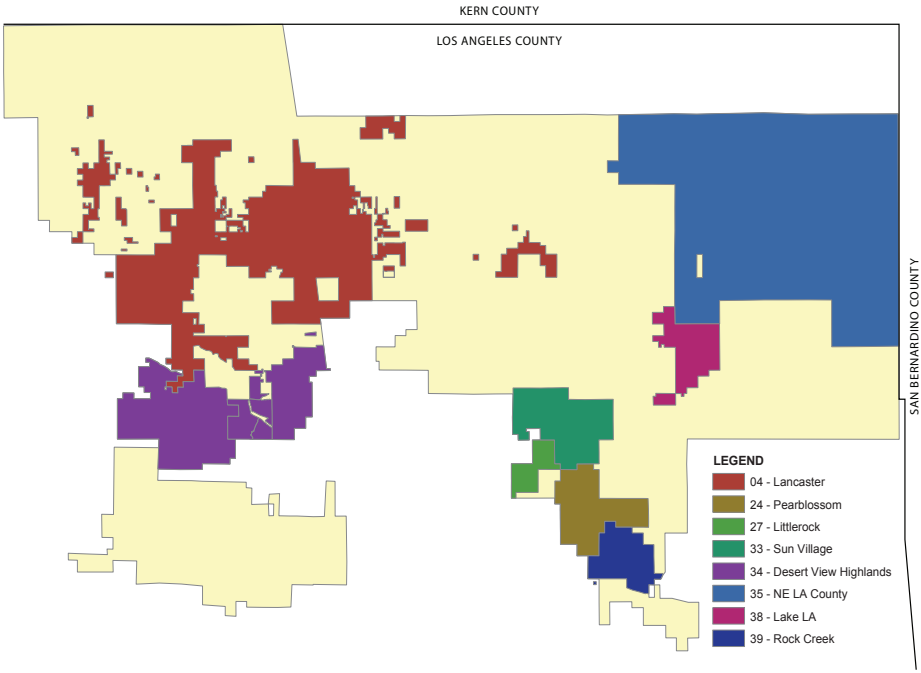
Regions 4 & 34 provides water to customers in Lancaster and Desert View Highlands. Customers received approximately 36% local groundwater and 64% SWP water from QHWTP in 2009.

Regions 24, 27, & 33 provides water to customers in Pearblossom, Littlerock and Sun Village. Customers received approximately 26% local groundwater and 74% SWP water from EWTP in 2009.

Region 35 provides water to customers in Northeast Los Angeles County. Customers received approximately 79% local groundwater and 21% SWP water from EWTP in 2009.

Region 38 provides water to customers in Lake Los Angeles. Customers received approximately 50% local groundwater and 50% SWP water from EWTP in 2009.

Region 39 provides water to customers in Rock Creek. Customers received approximately 72% local groundwater and 28% water purchased from Region 24 in 2009.



SOURCE WATER ASSESSMENT

CDPH completed a 2006 update of the Source Water Assessment (SWA) for the California Aqueduct, AVEK's water source. The SWA is used evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. Water supplies from the Sacramento-San Joaquin Delta are most vulnerable to contamination from municipal, industrial and agricultural activities. Also influencing the quality of water pumped from the Delta is the impact of the estuarial nature of the Delta and the naturally occurring salt-water intrusion which is dependent to a large extent on the inflow from the contributing rivers. A copy of the complete assessment can be obtained by contacting AVEK by phone at (661) 943-3201.

An SWA for the District's groundwater sources was completed in January 2002. The wells in the Antelope Valley region are considered vulnerable to various contaminating activities including the following; dry cleaners, high density housing, sewer collection/septic systems, agriculture, automobile gas stations/repair and body shops, chemical processing/storage, above ground storage tanks, and other commercial/industrial activities. A copy of the complete assessment can be obtained by contacting CDPH by phone at (818) 551-2004.

CAPITAL IMPROVEMENTS

The construction of nine new groundwater wells were completed in 2009 to increase water supply reliability in the Antelope Valley.

THE QUALITY OF YOUR WATER

Lead and Copper: The District is required to sample for lead and copper at specific consumer taps. The results for lead and copper are reported as the 90th percentile. The 90th percentile is the result that is greater than 90% of all the results.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Arsenic: While your drinking water meets the federal and state standard of arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Disinfection by-products: Disinfection by-products, which include trihalomethanes (THMs) and haloacetic acids (HAA5), are generated by the interaction of between naturally occurring organic matter and disinfectants such as chlorine and ozone. THMs and HAA5 are measured at several points in each system and averaged once per quarter and reported as a running annual average.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

CONTAMINANTS THAT MAY BE PRESENT IN WATER

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential use.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.

Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, the USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2009 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system. Trihalomethanes, haloacetic acids, and chlorine are also tested regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old, which is indicated in the parameter.

PARAMETER	PHG or [MCLG]	MCL or [MRDL]	SURFACE WATER EASTSIDE PLANT		SURFACE WATER QUARTZ HILL PLANT		REGION 4 & 34 CHLORINATED GROUNDWATER		REGION 24, 27 & 33 CHLORINATED GROUNDWATER		REGION 35 CHLORINATED GROUNDWATER		REGION 38 CHLORINATED GROUNDWATER		REGION 39 CHLORINATED GROUNDWATER	
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL
PRIMARY DRINKING WATER STANDARDS																
INORGANIC CONTAMINANTS																
ARSENIC (ppb)	0.004	10	3.1-3.5	3.3	3.1	3.1	ND-16.6	5.31	ND	ND	ND-2.1	1.0	2.1	2.1	ND	ND
CHROMIUM (ppb)	(100)	50	ND	ND	ND	ND	ND-12.1	11.5	ND	ND	14.2	14.2	ND	ND	ND	ND
FLUORIDE (ppm)	1	2	0.12	0.12	0.10	0.10	ND-0.46	0.38	ND	ND	0.32	0.32	ND	ND	0.35	0.35
NITRATE (AS NO_3) (ppm)	45	45	3.1	3.1	2.7	2.7	ND-20.7	3.7	4.3-20.1	10.3	4.4	4.4	3.8-6.2	5.0	ND	ND
SELENIUM (ppb)	(50)	50	10	10	10	10	ND	ND	ND	ND	ND	ND	5.6	5.6	ND	ND
MICROBIOLOGICAL CONTAMINANT																
TOTAL COLIFORM (%)	0	5					0-0.74	0.17	0	0	0	0	0	0	0	0
DISINFECTION BYPRODUCT PRECURSORS																
TOTAL ORGANIC CARBON (ppm)	NS	TT	0.7-2.4	1.6	0.7-2.4	1.6										
RADIOLOGICAL CONTAMINANTS																
GROSS ALPHA PARTICLE ACTIVITY (pCi/L)	[0]	15					ND-5.9	2.25	3.44-4.21	3.68	1.81	1.81	1.50-3.54	2.52	3.14	3.14
RADIUM 226 (pCi/L)	0.05	5					ND-0.61	0.12	ND-0.12	0.04	0.53	0.53	ND	ND	0.17	0.17
RADIUM 228 (pCi/L)	0.019	5					ND-2.91	0.28	ND-0.09	0.03	0.28	0.28	ND	ND	0.71	0.71
URANIUM (pCi/L)	0.43	20					ND-4.81	1.78	0.8-3.3	1.7	1.7	1.7	ND-1.71	0.90	0.8	0.8
GROSS BETA PARTICLE ACTIVITY (pCi/L)	[0]	50*					1.84	1.84								
Year of Analysis							2005-2009		2005		2006		2009		2006	
SECONDARY DRINKING WATER STANDARDS																
ZINC (ppm)	NS	5	0.57	0.57	0.41	0.41	ND	ND	ND	ND	ND	ND	4.92	4.92	ND	ND
TOTAL DISSOLVED SOLIDS (ppm)	NS	1000	230	230	220	220	176-524	303	355	355	232	232	368	368	376	376
SPECIFIC CONDUCTANCE (uS/cm)	NS	1600	450	450	266-700	511	271-425	326	522	522	393	393	587	587	604	604
CHLORIDE (ppm)	NS	500	65	65	76	76	12.4-64.3	28.4	29.5	29.5	6.2	6.2	106	106	4.1	4.1
SULFATE (ppm)	NS	500	53	53	62	62	18.5-72.9	37.5	67	67	69	69	75	75	104	104
GENERAL PHYSICAL PARAMETERS																
COLOR (units)	NS	15	<1-<5	<5	<1-<5	<5	ND-5	1	ND	ND	ND	ND	ND	ND	ND	ND
ODOR THRESHOLD (units)	NS	3	<1-1	<1	<1	<1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TURBIDITY (units)	NS	5	0.02-0.18	0.05	0.01-0.18	0.08	0.17-4.16	1.55	0.12	0.12	0.19	0.19	0.28	0.28	0.28	0.28
UNREGULATED CONTAMINANTS																
BORON (ppb)	NS	NL=1000					ND-760	228	ND-96	61	34-59	47	120	120	99-153	126
CHROMIUM VI (ppb)	NS	NS					ND-10.5	6.0	ND-2.5	1.5	9.8-12.4	11.1	9.0	9.0	ND	ND
VANADIUM (ppb)	NS	NL=50					ND-33.5	13.9	3.1-12.9	8.5	8.4-12.3	10.4	8.0	8.0	4.7-5.7	5.2

PARAMETER	PHG or [MCLG]	MCL or [MRDL]	SURFACE WATER EASTSIDE PLANT		SURFACE WATER QUARTZ HILL PLANT		REGION 4 & 34 CHLORINATED GROUNDWATER		REGION 24, 27 & 33 CHLORINATED GROUNDWATER		REGION 35 CHLORINATED GROUNDWATER		REGION 38 CHLORINATED GROUNDWATER		REGION 39 CHLORINATED GROUNDWATER	
			RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL	RANGE OF DETECTION	AVERAGE LEVEL
GENERAL MINERAL CONSTITUENTS																
BICARBONATE ALKALINITY (ppm)	NS	NS	60	60	63	63	82-275	127	174	174	134	134	78	78	262	262
CALCIUM (ppm)	NS	NS	20	20	21	21	6-128	30	62	62	24	24	28	28	76	76
MAGNESIUM (ppm)	NS	NS	7.5	7.5	9.3	9.3	0.5-43.7	7.6	16	16	17	17	6	6	24	24
SODIUM (ppm)	NS	NS	51	51	58	58	18-114	49	22	22	37	37	70	70	22	22
TOTAL HARDNESS (ppm)	NS	NS	81	81	91	91	20-500	104	220	220	130	130	120	120	280	280
pH (pH Units)	NS	NS	6.2-8.5	6.8	6.5-7.4	6.8	6.94-8.14	7.69	7.68	7.68	7.88	7.88	7.03	7.03	7.51	7.51
TOTAL ALKALINITY (as $CaCO_3$) (ppm)	NS	NS	49	49	52	52										
POTASSIUM (ppm)	NS	NS	<2.0	<2.0	2.3	2.3										
DISTRIBUTION SYSTEM WATER QUALITY																
DISINFECTANTS & DISINFECTION BYPRODUCTS	**MCLG or [MRDLG]**	**MCL or [MRDL]**					**RANGE OF DETECTION**	**HRAA**	**RANGE OF DETECTION**	**HRAA**	**RANGE OF DETECTION**	**HRAA**	**RANGE OF DETECTION**	**HRAA**	**RANGE OF DETECTION**	**HRAA**
TOTAL CHLORINE (ppm)	[4] as Cl_2	[4] as Cl_2					0.96-1.58	1.22	0.61-1.58	1.16	0.64-1.58	1.25	0.69-1.58	1.11	0.22-1.58	1.00
TOTAL TRIHALOMETHANES (ppb)	NS	80					ND-102.0	33.9	2.7-99.6	45.7	6.7-20.5	14.1	ND-132.0	34.8	3.7-68.0	27.3
HALOACETIC ACIDS (ppb)	NS	60					ND-35.1	12.6	ND-25.9	9.7	ND-6.6	2.6	ND-23.9	11.4	ND-22.8	5.8
RESIDENTIAL TAP WATER QUALITY																
LEAD AND COPPER							**RANGE** / **90TH%**	**ABOVE AL**	**RANGE** / **90TH%**	**ABOVE AL**	**RANGE** / **90TH%**	**ABOVE AL**	**RANGE** / **90TH%**	**ABOVE AL**	**RANGE** / **90TH%**	**ABOVE AL**
COPPER (ppm)	0.17	1.3					ND-0.34 / 0.38	0	ND-0.55 / 0.32	0	ND-0.28 / ND	0	ND-0.45 / 0.41	0	ND-0.19 / 0.19	0
LEAD (ppb)	2	15					ND-30.7 / 7.12	2	ND-131 / ND	1	ND-5.7 / ND	0	ND-75.7 / ND	1	ND-29.4 / 14.2	2
NUMBER OF SITES TESTED							51		20		15		30		12	
YEAR OF ANALYSIS							2007		2008		2008		2008		2008	

TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Public Health Goal (PHG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) is the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the USEPA.

Primary Drinking Water Standards (PDWS) are MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Regulatory Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.

* 50 pCi/L is used as a screening level

ppm = parts per million (milligrams per liter)
ppb = parts per billion (micrograms per liter)
pCi/L = picoCuries per liter
ppt = parts per trillion
N/A = Not Applicable
ND = None Detected
NS = No Standard
NL = Notification Level
HRAA = Highest Running Annual Average
AL = Action Level

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitation Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION TIPS

"We all need to conserve water," is the resounding message from Mark Cowin, Director of the State Department of Water Resources. Despite recent storms California continues to face a water crisis resulting from the past three years of drought as well as environmental constraints. According to Mr. Cowin California's water shortage will continue this year. Residents are highly encouraged to make an extra effort to conserve water given the current condition of the region and District's water supply.

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs for the Districts' customers. You can learn how to conserve water at home and save money by calling (888) 828-8602 or email watersurveys@niagaraconservation.com to request a conservation specialist to visit your home at no cost to you. We will provide personalized recommendations for water conserving measures to reduce your water usage without affecting your quality of life. In addition, we offer rebates of up to $150 on water saving devices like high efficiency clothes washers. For more information visit **www.lacwaterworks.org** or contact Ms. Virginia Fowler at (626) 300-3362.

Every California resident can take these simple steps to save water and reduce our impact on the planet.

- Adjust your sprinklers. Up to 70 percent of residential water use goes to maintaining our yards. Try taking a minute or two off the timer.
- Check your system. Do a weekly check for broken or clogged sprinker heads and replace them right away. Make sure you are watering your yard and not the driveway or sidewalk.
- Fix those leaks. Just a drip can waste more than 10,000 gallons per month. A leaking flapper on a toilet also increases flows at the water treatment plant.
- Plant native species or drought-tolerant plants. Many of the lawns and plants we use are not intended for the unique climate in Southern California.

Up to 70% of residential water use occurs outdoors. Make sure your sprinklers water the yard, not the sidewalk or street. Landscaping your yard and garden with California native and drought-tolerant plants is also a smart alternative for residents who want to have a beautiful garden and save water and money. These plants are accustomed to local weather and soil conditions and thrive with little summer watering. Using them not only saves water, but saves maintenance time and produces a habitat for native birds, beneficial insects and wildlife. The best time to plant native plants is between October and May each year.

PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Timothy Chen at (626) 300-3342. To view this report on the internet, please visit our website at **http://www.lacwaterworks.org/waterquality**.

Make every drop count in this drought. Visit **www.lacwaterworks.org** for rebate information and more water saving tips.

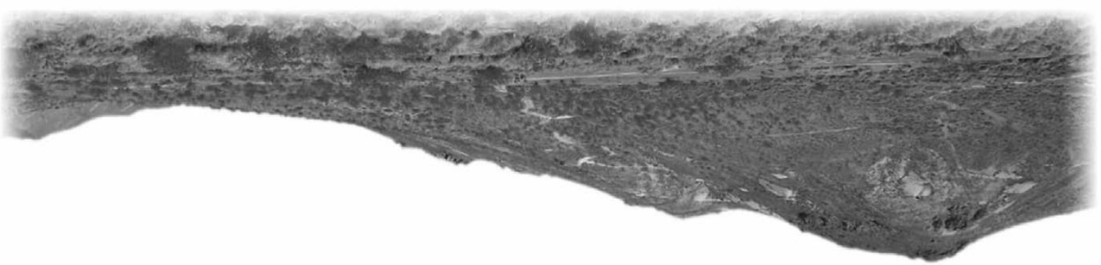
PUBLIC WORKS

900 S. Fremont Ave.
Alhambra, CA 91803

To the Water Customer at:

Appendix C-2

RCSD Consumer Confidence Reports



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Rosamond, CA 93560

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ANNUAL CONSUMER CONFIDENCE REPORT

For the reporting period of January 1, 2010 through December 31, 2010

WHAT IS THIS REPORT?

Rosamond Community Services District is proud of the fine drinking water it provides. This annual water quality report shows the source of our water, lists the results of our tests, and contains important information about water and health.

The bottom line: *Is the water safe to drink?* Absolutely!

WHERE DOES THE WATER COME FROM?

The Rosamond CSD provides water from a blend of surface and groundwater. The Antelope Valley East Kern Water Agency (AVEK) supplies surface water to us. Surface water is blended with water from the Districts three (3) producing water wells and then is distributed through the distribution system to your home. The District also maintains six and one-half million gallons of water storage in five above ground tanks so that you can have drinking water available to your homes.

WHAT SHOULD BE IN MY WATER?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, steams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

IMPORTANT HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have under gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791) or visit www.epa.gov/safewater.

WHAT ABOUT RADON?

Radon is found throughout the U.S. It is a radioactive gas that you can't see, taste, or smell. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air.

If you are concerned about radon in your home and would like additional information on how to test your home, contact the EPA's Radon Hotline (800-SOS-RADON).

WHAT ABOUT ARSENIC?

The EPA has been reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. In January 2001, the EPA set the new arsenic MCL at 10 ppb. In January 2006 all water systems were required to meet the new arsenic MCL.

While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The California Department of Public Health continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and other circulatory problems.

HOW TO READ YOUR WATER QUALITY SUMMARY

Our water is tested regularly for many contaminants. The results of tests performed in 2010 is presented here.

Public Health Goal or PHG is the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by California Environmental Protection Agency. If the number in this column is in parentheses, it is the Maximum Contaminant Level Goal or MCLG. This is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Contaminant Level or MCL is the highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Average and Range shows the results observed in our water during the most recent round of testing. AVERAGE is the average of values detected for each contaminant. RANGE is the range of all tested levels from low to high during the testing period.

Source of Contaminants provides an explanation of the typical natural or man-made origins of the contaminant.

Regulatory Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.

Primary Drinking Water Standard (PDWS) MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

WHAT CONTAMINANTS MIGHT BE IN THE WATER?

Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

(E) Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Rosamond Community Services District (RCSD) welcomes any questions or comments. Our Board of Directors meet on the second and fourth Wednesdays of every month at 6:00 p.m. at the Rosamond Community Services District offices, 3179 35th Street, Rosamond, CA 93560.

We can also be contacted by e-mail at rosamondcsd.com and additional information about the District can be obtained on our website at **www.rosamondcsd.com**

If you have questions about this report or drinking water quality call Steve A. Perez, General Manager with Rosamond Community Services District: (661) 256-3411 or the EPA Safe Drinking Water Hotline: (800) 426-4791.

Rosamond Community Services District is a member of:

- American Water Works Association
- Association of California Water Agencies
- California Rural Water Association
- California Special Districts Association
- Water Reuse Association

Este informe contiene informacion muy importane sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

2010 SUMMARY OF WATER QUALITY DATA
ROSAMOND COMMUNITY SERVICES DISTRICT WATER SYSTEM

MICROBIOLOGICAL CONTAMINANTS	TEST DATE	UNIT	PHG	MCL	AVERAGE	VIOLATION	SOURCE OF CONTAMINANTS
Total Coliform Bacteria	2009		0	0	0	No	Naturally present in the environment.
DISINFECTION BY-PRODUCTS* **	**TEST DATE**	**UNIT**	**PHG**	**MCL**	**AVERAGE**	**VIOLATION**	**SOURCE OF CONTAMINANTS**
Total Trihalomethane (TTHM)	2009	ppb	n/a	80	23.1	No	By-product of drinking water chlorination
Total Haloacetic Acids (HAA5)	2009	ppb	n/a	60	6.0	No	By-product of drinking water chlorination
Chlorine	2009	ppm	4	4	0.8	No	Drinking water disinfectant added for treatment
INORGANIC CHEMICALS	**TEST DATE**	**UNIT**	**PHG**	**MCL**	**AVERAGE**	**VIOLATION**	**SOURCE OF CONTAMINANTS**
Nitrate	2009	ppm	45	45	7.6	No	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Arsenic	2009	ppb	n/a	10	9.6	No	Erosion of natural deposit; runoff form orchards; glass and electronics productions wastes
Chromium	2009	ppb	2.5	50	14.6	No	Discharge from steel and pulp mills and chrome plating, erosion of natural deposits.
Fluoride	2009	ppm	.15	2	0.6	No	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.
Turbidity	2006	NTU	n/a	TT(5.0)	0.06	No	Soil runoff
Secondary Drinking Water Standards	**TEST DATE**	**UNIT**	**PHG**	**MCL**	**AVERAGE**	**VIOLATION**	**SOURCE OF CONTAMINANTS**
Alkalinity	2009	ppm	n/a	n/a	123	No	
Calcium	2009	ppm	n/a	n/a	38	No	Erosion of natural deposits
Chloride	2009	ppm	n/a	(600)	27	No	Runoff/leaching from natural deposits; seawater influence
Hardness	2009	ppm	n/a	n/a	128	No	Naturally-occurring polyvalent action present in the water, generally magnesium and calcium
Sodium	2009	ppm	n/a	n/a	47	No	Naturally-occurring salt; seawater influence
Specific conductance	2009	umhos/cm	n/a	(1600)	456	No	Substances that form ions when in water; seawater influence
Total dissolved solids	2009	ppm	n/a	(1000)	303	No	Runoff/leaching from natural deposits
Color	2009	Units	n/a	15	ND		Naturally occurring organic materials
Metals – (LEAD & COPPER Monitoring)	**TEST DATE**	**UNIT**	**PHG**	**MCL**	**AVERAGE**	**VIOLATION**	**SOURCE OF CONTAMINANTS**
Copper	2009	ppm	0.17	AL = n/a 1000	0.18	n/a	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2009	ppb	2	AL = n/a	ND	n/a	Internal corrosion of household water plumbing systems: discharges from industrial manufacturers

KEY TO TABLE

AL= Regulatory Action Level * ND = none detected * PHG = Public Health Goal * MCL = Maximum Contaminant Level NTU = Nephelometric Turbidity Units * SMCL = Secondary Maximum Contaminant Level * MCLG = Maximum Contaminant Level Goal * pCi/L = picocuries per liter (a measure of radioactivity) * TT = Treatment Technique * n/a = not applicable ppb = parts per billion, or micrograms per liter * ppm = parts per million, or micrograms per liter * umhos/cm = units of specific conductance

Appendix C-3

QHWD Consumer Confidence Reports

Quality First

Once again we are proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2010. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all of our water users. Thank you for allowing us to continue providing you and your family with high-quality drinking water.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions or concerns, we are always available to assist you.

From the General Manager

The Quartz Hill Water District has historically relied upon two sources of water to supply all of our customers. The first source comes from the Antelope Valley Ground Water Basin and is commonly referred to as ground water. During the 2010 year, 35 percent of the total amount of water used by the District came from one of the nine district-owned wells. These wells vary in depth from 500 to 600 feet and are monitored daily to ensure that only the highest quality of water is distributed through our system. The second source of water that supplies the Quartz Hill Water District comes from Antelope Valley East Kern Water Agency's Quartz Hill Treatment Plant. This source provides 65 percent of the total water used during the 2010 year. This water is supplied to the district through two interconnections that are both located south of M-8.

Monthly general physical samples are tested on the distribution system as well as weekly bacteriological samples throughout the system to ensure that only the highest quality of water is delivered to our customers. Additional parameters, not shown in this pamphlet, were tested but not reported because the tests found no contaminants. All water quality analyses were conducted by a state certified laboratory in compliance with California Department of Public Health Drinking Water Standards.

Respectfully,

Chad J. Reed, General Manager

Impact of Zebra Mussels

The zebra mussel is a small mussel native to Russia. In 1988, it reached North America by a transatlantic freighter. Since then, they have continued to spread throughout the country. Zebra mussels are very successful invaders because they live and feed in many different aquatic habitats and breed prolifically (each female produces 1 million eggs per year) for their entire five-year lifespan.

Adult zebra mussels colonize on living and nonliving surfaces, including boats, buoys, piers, plants, and clams. They are a great concern to drinking water utilities because they can attach themselves to water intake pipes, severely restricting the flow of fresh water. They can also impact water quality by increasing taste-and-odor problems in the water supply.

Zebra mussels are almost impossible to eradicate once they become established. Water utilities have had to retool their water intake systems to prevent zebra-mussel-related problems, costing millions of dollars a year. Utilities rely on a variety of methods to remove mussels from intake pipes; since there is no single, ideal removal solution, new methods are constantly under investigation.

While complete removal may be impossible, preventing zebra mussel spread is not. Human activities have spread them into many inland lakes and streams, usually through recreational boating, fishing, and diving practices. Simple steps such as draining live wells, cleaning vegetation off boat trailers, removing attached zebra mussels from boat hulls, and not dumping bait into lakes or rivers can prevent the spread of zebra mussels into noninfested waters.

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Community Participation

We welcome input from our rate payers. The Board of Directors meets in our Conference Room on the second Wednesday of each month at 7:00 p.m. The public is always welcome to attend Board Meetings.

Source Water Assessment

A Source Water Assessment Plan (SWAP) is available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply's susceptibility to contamination by the identified potential sources.

According to the Source Water Assessment Plan, our water system had a susceptibility rating of "medium." If you would like to review the Source Water Assessment Plan, please feel free to contact our office during regular business hours.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Chad J. Reed, General Manager, at (661) 943-3170. The Antelope Valley East Kern Water Agency (AVEK) 2010 Water Quality Report is available on request.

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Quartz Hill Water District
42141 N 50th Street West
Quartz Hill, CA 93536

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

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CA000214

Annual Water Quality Report

Water testing performed in 2010

Presented By
Quartz Hill Water District

PWS ID#: 1910130

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2010	10	0.004	3.26	ND–5.5	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2010	1	2	0.022	ND–0.11	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2010	[4.0 (as Cl2)]	[4 (as Cl2)]	38	14–56	No	Drinking water disinfectant added for treatment
Gross Alpha Particle Activity (pCi/L)	2007	15	(0)	1.95	ND–4.2	No	Erosion of natural deposits
Gross Beta Particle Activity[1] (pCi/L)	2003	50	(0)	3.65	3.1–4.2	No	Decay of natural and man-made deposits
Haloacetic Acids [HAAs][2] (ppb)	2010	60	NA	3.5	ND–16.2	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2010	45	45	13.58	3–28	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes][2] (ppb)	2010	80	NA	16.7	ND–69.2	No	By-product of drinking water disinfection
Turbidity (NTU)	2010	TT	NA	0.4	ND–0.4	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2010	1.3	0.3	0.280	0/32	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2010	15	0.2	9	0/32	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Corrosivity (Units)	2010	Noncorrosive	NS	11.65	11.54–11.81	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors
Odor–Threshold (Units)	2008	3	NS	1	1–1	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2010	1,600	NS	520	360–650	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2010	500	NS	57.6	32–93	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2010	1,000	NS	371.6	220–390	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2010	5	NS	0.3	0.2–0.5	No	Soil runoff

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Boron (ppb)	2010	94	ND–120
Chromium VI [Hexavalent Chromium] (ppb)	2003	9.15	4.3–14
Sodium (ppm)	2010	66	60–77
Vanadium (ppb)	2010	17.8	15–22

[1] Effective 6/11/2006, the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.

[2] We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.

Definitions

AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Q&A

Why do I get this report each year?

Community water system operators are required by Federal law to provide their customers an annual water quality report. The report helps people make informed choices about the water they drink. It lets people know what contaminants, if any, are in their drinking water and how these contaminants may affect their health. It also gives the system operators a chance to tell customers what it takes to deliver safe drinking water.

Why does my water sometimes look "milky"?

The "milky" look is caused by tiny air bubbles in the water. The water in the pipes coming into your home or business might be under a bit of pressure, and gasses (the air) are dissolved and trapped in the pressurized water as it flows into your glass. As the air bubbles rise in the glass, they break free at the surface, thus clearing up the water. Although the milky appearance might be disconcerting, the air bubbles won't affect the quality or taste of the water.

How can I keep my pet's water bowl germ free?

Veterinarians generally recommend that water bowls be washed daily with warm, soapy water — normally when you change the water. Scour the corners, nooks, and crannies of the water dish using a small scrub brush. In addition, once a week put water bowls into the dishwasher to sanitize them with hot water. In most situations, disinfectants like bleach are not needed; warm, soapy water is all you need to keep your pet's water clean and safe.

How much water is used during a typical shower?

The Federal Energy Policy Act set a nationwide regulation that limits showerheads to a maximum flow of 2.5 gallons per minute (GPM). Showerheads made before 1980 are rated at 5 GPM. Since the average shower is estimated to last 8.2 minutes, the old showerheads use 41 gallons of water while the newer, low-flow showerheads use only about 21 gallons.

How many contaminants are regulated in drinking water?

The U.S. EPA regulates over 80 contaminants in drinking water. Some states may choose to regulate additional contaminants or to set stricter standards, but all states must have standards at least as stringent as the U.S. EPA's.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks (if you are allowed access). Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Appendix C-4

AVEK Consumer Confidence Report

Antelope Valley-East Kern Water Agency
2010 Annual Water Quality Report - Los Angeles County System

The Antelope Valley-East Kern Water Agency provides treated surface water as a source of drinking water.
Treatment technique: Conventional
EPA Turbidity Performance Standards: Turbidity of the filtered water must:

1. Be less than or equal to 0.30 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: **100%**
Highest single turbidity measurement during the year: **0.20 NTU**
Percentage of samples < 0.30 NTU: **100%**
The number of violations of any surface water treatment requirements: **NONE**
Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

MICROBIOLOGICAL CONTAMINANTS

Type of Sample(s)	Parameter	Sampling Frequency	MCL	No. of Months in Violation	System Results Range	System Results Average
Distribution	Total Coliform Bacteria	116 - 153 / mo	5% positive	None	0.0-0.6%	0%
Distribution	Fecal Coliform/*E. coli*	116 - 153 / mo	1 pos. with 2 TC pos.	None	0%	0%

INORGANIC CONTAMINANTS

Parameter	Units	MCL	DLR	PHG or (MCLG)	RESULTS: Acton Plant Effluent (CWR) Range	Acton Plant Effluent (CWR) Average	Eastside Plant Effluent (CWR) Range	Eastside Plant Effluent (CWR) Average	Quartz Hill Plant Effluent (CWR) Range	Quartz Hill Plant Effluent (CWR) Average	Raw Influent (Source) Range	Raw Influent (Source) Average
Aluminum	mg/L	1	0.05	0.6	ND	ND	ND	ND	ND	ND		ND
Antimony	µg/L	6	6.0	20		ND		ND		ND		ND
Arsenic	µg/L	10	2.0	0.004		ND		ND		ND		ND
Barium	mg/L	1	0.1	2		ND		ND		ND		ND
Beryllium	µg/L	4	1.0	1		ND		ND		ND		ND
Cadmium	µg/L	5	1.0	0.04		ND		ND		ND		ND
Chromium (Total)	µg/L	50	10			ND		ND		ND		ND
Cyanide	µg/L	150	100	150		ND		ND		ND		ND
Fluoride	mg/L	2	0.1	1		0.12		ND		0.12		ND
Lead	µg/L		5.0	0.2		ND		ND		ND		ND
Mercury	µg/L	2	1.0	1.2		ND		ND		ND		ND
Nickel	µg/L	100	10	12		ND		ND		ND		ND
Nitrate (as NO3)	mg/L	45	2.0	45		ND		2.2		2.5	ND-3.1	2.1
Nitrite (as N)	mg/L	1	0.4	1		ND		ND		ND		ND
Nitrate+Nitrite (as N)	mg/L	10	0.4	10		ND		1.0		1.0		1.0
Perchlorate	µg/L	6	4.0	6		ND		ND		ND		ND
Selenium	µg/L	50	5.0	30		ND		ND		ND		ND
Thallium	µg/L	2	1.0	0.1		ND		ND		ND		ND

RADIOLOGICAL CONTAMINANTS

Parameter	Units	MCL	DLR	PHG	RESULTS: Raw Influent (Source)
Uranium	pCi/L	20	1.0	0.43	1.1

SYNTHETIC ORGANIC CHEMICALS

Parameter	Units	MCL	DLR	RESULTS: Raw Influent (Source)
Silvex	µg/L	50	1.0	ND
2,4-D	µg/L	70	10	ND
Alachlor	µg/L	2	1.0	ND
Atrazine	µg/L	1	0.5	ND
Bentazon	µg/L	18	2.0	ND
Benzo(a)pyrene	µg/L	0.2	0.1	ND
Carbofuran	µg/L	18	5.0	ND
Chlordane	µg/L	0.1	0.1	ND
Dalapon	µg/L	200	10	ND
Di(2-ethylhexyl)adipate	µg/L	400	5.0	ND
Di(2-ethylhexyl)phthalate	µg/L	4	3.0	ND
Dibromochloropropane (DBCP)	µg/L	0.2	0.01	ND
Dinoseb	µg/L	7	2.0	ND
Endrin	µg/L	2	0.1	ND
Ethylene Dibromide (EDB)	µg/L	0.05	0.02	ND
Glyphosate	µg/L	700	25	ND
Heptachlor	µg/L	0.01	0.01	ND
Heptachlor Epoxide	µg/L	0.01	0.01	ND
Hexachlorobenzene	µg/L	1	0.5	ND
Hexachlorocyclopentadiene	µg/L	50	1.0	ND
Lindane	µg/L	2	0.2	ND
Methoxychlor	µg/L	30	10	ND
Molinate	µg/L	20	2.0	ND
Oxamyl	µg/L	50	20	ND
Pentachlorophenol	µg/L	1	0.2	ND
Picloram	µg/L	500	1.0	ND
Polychlorinated Biphenyls	µg/L	0.5	0.5	ND
Simazine	µg/L	4	1.0	ND
Thiobencarb (Bolero)	µg/L	70	1.0	ND
Toxaphene	µg/L	3	1.0	ND

VOLATILE ORGANIC CONTAMINANTS

Parameter	Units	MCL	DLR	PHG	RESULTS: Raw Influent (Source)
1,1,1-Trichlorethane (1,1,1-TCA)	µg/L	200	0.5	100	ND
1,1,2,2-Tetrachloroethane	µg/L	1	0.5	0.1	ND
1,1,2-Trichloroethane (1,1,2-TCA)	µg/L	5	0.5	0.3	ND
1,1-Dichloroethane (1,1-DCA)	µg/L	5	0.5	3	ND
1,1-Dichloroethylene (1,1-DCE)	µg/L	6	0.5	10	ND
1,2,4-Trichlorobenzene	µg/L	5	0.5	5	ND
1,2-Dichlorobenzene (o-DCB)	µg/L	600	0.5	600	ND
1,2-Dichloroethane (1,2-DCA)	µg/L	0.5	0.5	0.4	ND

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1,2-Dichloropropane	µg/L	5	0.5	0.5	ND
1,3-Dichloropropene (Total)	µg/L	0.5	0.5	0.2	ND
1,4-Dichlorobenzene (p-DCB)	µg/L	5	0.5	6	ND
Benzene	µg/L	1	0.5	0.15	ND
Carbon tetrachloride	µg/L	0.5	0.5	0.1	ND
cis-1,2-Dichloroethylene (c-1,2-DCE)	µg/L	6	0.5	100	ND
Dichloromethane (Methylene Chloride)	µg/L	5	0.5	4	ND
Ethylbenzene	µg/L	300	0.5	300	ND
Methyl-tert-butyl ether (MTBE)	µg/L	5	3.0	13	ND
Monochlorobenzene (Chlorobenzene)	µg/L	70	0.5	200	ND
Styrene	µg/L	100	0.5	0.5	ND
Tetrachloroethylene (PCE)	µg/L	5	0.5	0.06	ND
Toluene	µg/L	150	0.5	150	ND
trans-1,2-Dichloroethylene (t-1,2-DCE)	µg/L	10	0.5	60	ND
Trichloroethylene (TCE)	µg/L	5	0.5	1.7	ND
Trichlorofluromethane (Freon11)	µg/L	150	5.0	700	ND
Trichlorotrifluoroethane (Freon 113)	µg/L	1200	10	4000	ND
Vinyl Chloride (VC)	µg/L	0.5	0.5	0.05	ND
Xylenes (Total)	µg/L	1750	0.5	1800	<0.50

GENERAL PHYSICAL AND SECONDARY STANDARDS

				RESULTS							
				Acton Plant Effluent (CWR)		Eastside Plant Effluent (CWR)		Quartz Hill Plant Effluent (CWR)		Raw Influent (Source)	
Parameter	Units	MCL	DLR	Range	Average	Range	Average	Range	Average	Range	Average
Aluminum	µg/L	200	50	ND	ND	ND	ND	ND	ND		ND
Calcium	mg/L	no standard			18		18		18		20
Chloride	mg/L	250			91		89		86		82
Color	Units	15		<1-<5	<5	<1-<5	<5	<1-<5	<5		
Copper	µg/L	1000	50		ND		ND		ND		ND
Foaming Agents (MBAS)	mg/L	0.5			<0.050		<0.050		<0.050		<0.050
Hardness (Total) as CaCO3	mg/L	no standard			98		98		96		100
Iron	µg/L	300	100		ND		ND		ND		ND
Magnesium	mg/L	no standard			13		13		12		13
Manganese	µg/L	50	20		ND		ND		ND		ND
Odor @ 60 C	Units	3	1	<1	<1	<1	<1	<1	<1		
pH	Units	no standard		6.1-7.5	6.7	6.3-7.2	6.7	6.5-7.2	6.8	6.8-9.4	7.9
Potassium	mg/L	no standard			2.9		2.8		2.7		2.9
Silver	µg/L	100	10		ND		ND		ND		ND
Sodium	mg/L	no standard			60		58		57		59
Specific Conductance	µmhos	900			500		490	330 - 644	455		460
Sulfate	mg/L	250	0.5		47		50		48		29
Thiobencarb (Bolero)	µg/L	1	1.0		ND		ND		ND		ND
Total Dissolved Solids	mg/L	500			260		250		260		350
Turbidity	Units	5		0.01-0.20	0.05	0.01-0.08	0.04	0.01-0.18	0.04		
Zinc	mg/L	5.0	0.05		0.100		0.590		0.440		ND
Total Alkalinity (as CaCO3)	mg/L	no standard			61		57		60	55-84	69
Bicarbonate Alkalinity(HCO3)	mg/L	no standard			75		70		74		
Carbonate Alkalinity	mg/L	no standard			<1.8		<1.8		<1.8		
Hydroxide Alkalinity	mg/L	no standard			<1.0		<1.0		<1.0		

DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS

Type of Sample(s)	Parameter	Units	MCL/MRDL	DLR	MRDLG	RESULTS Range	RESULTS Average
Distribution	Chlorine (as total Cl2)	mg/L	4.0**		4	0.10 - 1.60	0.87
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		0.6 - 2.7	1.7
Source Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		0.8 - 4.3	2.7
Distribution	Total Trihalomethanes	µg/L	80**	0.5	None	18 - 24	21 #
Distribution	Total Haloacetic Acids (5)	µg/L	60**	2		7.0 - 9.3	8.5 #

** Running Annual Average of distribution system samples. The MCLs are based upon Running Annual Averages.

This average is a system-wide value, please see the attached summaries for site specific averages.

DEFINITIONS and FOOTNOTES:

Plant Effluent, CWR, is finished, treated drinking water.

Raw Water is the Source Water, the California Aqueduct, prior to treatment.

Units: **mg/L** = milligrams per liter, parts per million (ppm)

µg/L = micrograms per liter, parts per billion (ppb)

µmhos = micromhos, a measure of specific conductance

MFL = million fibers per liter

pCi/L = pico Curies per liter

< = less than

> = greater than

ND = none detected above the DLR

NTU = nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

MCL: Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set by the U.S. Environmental Protection Agency or the California Department of Public Health as close to the PHGs and MCLGs as is economically or technologically feasible.

MRDL: Maximum Residual Disinfectant Level. The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

DLR: Detection Limit for purposes of Reporting.

(DL): Detection limit determined by the Laboratory when no DLR has been established.

MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MRDLG: Maximum Residual Disinfectant Level Goal. The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

PHG: Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Office of Environmental Health Hazard Assessment.

Primary Drinking Water Standard: Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations.

Secondary Standards: Aesthetic standards established by the California Department of Public Health.

AL: Action Level. There is no MCL, if this level is exceeded, action is required by the Califronia Department of Public Health.

This average is a system-wide value, please see the attached summary for site specific averages.

** Total Trihalomethanes and Haloacetic Acids(5) MCLs an annual running average of distribution system samples.

*** A corrosion inhibitor is added to the treated water before entry into the distribution system

All analyses performed by the ELAP certified laboratories: AVEK Water Agency, BSK Analytical Laboratories, or BSK subcontract lab.

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The Antelope Valley-East Kern Water Agency provides treated surface water as a source of drinking water.
Treatment technique: Conventional
EPA Turbidity Performance Standards: Turbidity of the filtered water must:

1. Be less than or equal to 0.30 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: **100%**
Highest single turbidity measurement during the year: **0.19 NTU**
Percentage of samples < 0.30 NTU: **100%**
The number of violations of any surface water treatment requirements: **NONE**
Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

MICROBIOLOGICAL CONTAMINANTS

Type of Sample(s)	Parameter	Sampling Frequency	MCL	No. of Months in Violation	System Results Range	System Results Average
Distribution	Total Coliform Bacteria	76 - 91 / mo	5% positive	None	0%	0%
& Effluent	Fecal Coliform and E. coli	76 - 91 / mo	1 pos. with 2 TC pos.	None	0%	0%

INORGANIC CONTAMINANTS

Parameter	Units	MCL	DLR	PHG	RESULTS Plant Effluent (CWR) Range	Plant Effluent (CWR) Average	Raw Influent (Source) Range	Raw Influent (Source) Average
Aluminum	mg/L	1	0.05	0.6	ND	ND		ND
Antimony	µg/L	6	6.0	20		ND		ND
Arsenic	µg/L	10	2.0	0.004		ND		ND
Barium	mg/L	1	0.1	2		ND		ND
Beryllium	µg/L	4	1.0	1		ND		ND
Cadmium	µg/L	5	1.0	0.04		ND		ND
Chromium (Total)	µg/L	50	10			ND		ND
Cyanide	µg/L	150	100	150		ND		ND
Fluoride	mg/L	2	0.1	1		ND		ND
Lead	µg/L		5.0	0.2		ND		ND
Mercury	µg/L	2	1.0	1.2		ND		ND
Nickel	µg/L	100	10	12		ND		ND
Nitrate (as NO3)	mg/L	45	2.0	45		2.5	ND-3.1	2.1
Nitrite (as N)	mg/L	1	0.4	1		ND		ND
Nitrate+Nitrite (as N)	mg/L	10	0.4	10		1.0		1.0
Perchlorate	µg/L	6	4.0	6		ND		ND
Selenium	µg/L	50	5.0	30		ND		ND
Thallium	µg/L	2	1.0	0.1		ND		ND

RADIOLOGICAL CONTAMINANTS

Parameter	Units	MCL	DLR	PHG	RESULTS Raw Influent (Source)
Uranium	pCi/L	20	1.0	0.43	1.1

SYNTHETIC ORGANIC CHEMICALS

Parameter	Units	MCL	DLR	RESULTS Raw Influent (Source)
Silvex	µg/L	50	1.0	ND
2,4-D	µg/L	70	10	ND
Alachlor	µg/L	2	1.0	ND
Atrazine	µg/L	1	0.5	ND
Bentazon	µg/L	18	2.0	ND
Benzo(a)pyrene	µg/L	0.2	0.1	ND
Carbofuran	µg/L	18	5.0	ND
Chlordane	µg/L	0.1	0.1	ND
Dalapon	µg/L	200	10	ND
Di(2-ethylhexyl)adipate	µg/L	400	5.0	ND
Di(2-ethylhexyl)phthalate	µg/L	4	3.0	ND
Dibromochloropropane (DBCP)	µg/L	0.2	0.01	ND
Dinoseb	µg/L	7	2.0	ND
Endrin	µg/L	2	0.1	ND
Ethylene Dibromide (EDB)	µg/L	0.05	0.02	ND
Glyphosate	µg/L	700	25	ND
Heptachlor	µg/L	0.01	0.01	ND
Heptachlor Epoxide	µg/L	0.01	0.01	ND

Hexachlorobenzene	µg/L	1	0.5	ND
Hexachlorocyclopentadiene	µg/L	50	1.0	ND
Lindane	µg/L	2	0.2	ND
Methoxychlor	µg/L	30	10	ND
Molinate	µg/L	20	2.0	ND
Oxamyl	µg/L	50	20	ND
Pentachlorophenol	µg/L	1	0.2	ND
Picloram	µg/L	500	1.0	ND
Polychlorinated Biphenyls	µg/L	0.5	0.5	ND
Simazine	µg/L	4	1.0	ND
Thiobencarb (Bolero)	µg/L	70	1.0	ND
Toxaphene	µg/L	3	1.0	ND

VOLATILE ORGANIC CONTAMINANTS

Parameter	Units	MCL	DLR	PHG	RESULTS Raw Influent (Source)
1,1,1-Trichlorethane (1,1,1-TCA)	µg/L	200	0.5	100	ND
1,1,2,2-Tetrachloroethane	µg/L	1	0.5	0.1	ND
1,1,2-Trichloroethane (1,1,2-TCA)	µg/L	5	0.5	0.3	ND
1,1-Dichloroethane (1,1-DCA)	µg/L	5	0.5	3	ND
1,1-Dichloroethylene (1,1-DCE)	µg/L	6	0.5	10	ND
1,2,4-Trichlorobenzene	µg/L	5	0.5	5	ND
1,2-Dichlorobenzene (o-DCB)	µg/L	600	0.5	600	ND
1,2-Dichloroethane (1,2-DCA)	µg/L	0.5	0.5	0.4	ND
1,2-Dichloropropane	µg/L	5	0.5	0.5	ND
1,3-Dichloropropene (Total)	µg/L	0.5	0.5	0.2	ND
1,4-Dichlorobenzene (p-DCB)	µg/L	5	0.5	6	ND
Benzene	µg/L	1	0.5	0.15	ND
Carbon tetrachloride	µg/L	0.5	0.5	0.1	ND
cis-1,2-Dichloroethylene (c-1,2-DCE)	µg/L	6	0.5	100	ND
Dichloromethane (Methylene Chloride)	µg/L	5	0.5	4	ND
Ethylbenzene	µg/L	300	0.5	300	ND
Methyl-tert-butyl ether (MTBE)	µg/L	5	3.0	13	ND
Monochlorobenzene (Chlorobenzene)	µg/L	70	0.5	200	ND
Styrene	µg/L	100	0.5	0.5	ND
Tetrachloroethylene (PCE)	µg/L	5	0.5	0.06	ND
Toluene	µg/L	150	0.5	150	ND
trans-1,2-Dichloroethylene (t-1,2-DCE)	µg/L	10	0.5	60	ND
Trichloroethylene (TCE)	µg/L	5	0.5	1.7	ND
Trichlorofluromethane (Freon11)	µg/L	150	5.0	700	ND
Trichlorotrifluoroethane (Freon 113)	µg/L	1200	10	4000	ND
Vinyl Chloride (VC)	µg/L	0.5	0.5	0.05	ND
Xylenes (Total)	µg/L	1750	0.5	1800	<0.50

GENERAL PHYSICAL AND SECONDARY STANDARDS

				RESULTS			
				Plant Effluent (CWR)		Raw Influent (Source)	
Parameter	Units	MCL	DLR	Range	Average	Range	Average
Aluminum	µg/L	200	50	ND	ND		ND
Calcium	mg/L	no standard			18		20
Chloride	mg/L	250			89		82
Color	Units	15		<5	<5		
Copper	µg/L	1000	50		ND		ND
Foaming Agents (MBAS)	mg/L	0.5			<0.050		<0.050
Hardness (Total) as CaCO3	mg/L	no standard			97		100
Iron	µg/L	300	100		ND		ND
Magnesium	mg/L	no standard			13		13
Manganese	µg/L	50	20		ND		ND
Odor @ 60 C	Units	3	1	<1	<1		
pH	Units	no standard		6.4-7.1	6.8	6.8-9.0	7.8
Potassium	mg/L	no standard			2.8		2.9
Silver	µg/L	100	10		ND		ND
Sodium	mg/L	no standard			58		59
Specific Conductance	µmhos	900			490		460
Sulfate	mg/L	250	0.5		48		29
Thiobencarb (Bolero)	µg/L	1	1.0		ND		ND
Total Dissolved Solids	mg/L	500			260		350
Turbidity	Units	5		0.01-0.19	0.04		

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Zinc	mg/L	5.0	0.05	0.990		ND
Total Alkalinity (as CaCO3)	mg/L	no standard		60	61-83	70
Bicarbonate Alkalinity(HCO3)	mg/L	no standard		73		
Carbonate Alkalinity	mg/L	no standard		<1.8		
Hydroxide Alkalinity	mg/L	no standard		<1.0		

DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS

Type of Sample(s)	Parameter	Units	MCL/MRDL	DLR	MRDLG	RESULTS Range	RESULTS Average
Distribution	Chlorine (as total Cl2)	mg/L	4.0**		4	0.03-1.55	0.81
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement		DLR=0.3	0.6-2.8	1.6
Source Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement		DLR=0.3	0.7-4.2	2.5
Distribution	Total Trihalomethanes	µg/L	80**	0.5	none	35-53	41 #
Distribution	Total Haloacetic Acids (5)	µg/L	60**	2		13-15	15 #

** Running Annual Average of distribution system samples. The MCLs are based upon Running Annual Averages.
# This average is a system-wide value, please see the attached summaries for site specific averages.

DEFINITIONS and FOOTNOTES:

Plant Effluent, CWR, is finished, treated drinking water.
Raw Water is the Source Water, the California Aqueduct, prior to treatment.

Units: **mg/L** = milligrams per liter, parts per million (ppm)
µg/L = micrograms per liter, parts per billion (ppb)
µmhos = micromhos, a measure of specific conductance
MFL = million fibers per liter
pCi/L = pico Curies per liter
< = less than
> = greater than
ND = none detected above the DLR
NTU = nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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MRDL: Maximum Residual Disinfectant Level. The level of a disinfectant added for water treatment that may not be be exceeded at the consumer's tap.

DLR: Detection Limit for purposes of Reporting.

(DL): Detection limit determined by the Laboratory when no DLR has been established.

MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

MRDLG: Maximum Residual Disinfectant Level Goal. The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the US Environmental Protection Agency.

PHG: Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Office of Environmental Health Hazard Assessment.

Primary Drinking Water Standard: Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations.

Secondary Standards: Aesthetic standards established by the California Department of Public Health.

AL: Action Level. There is no MCL, if this level is exceeded, action is required by the Califronia Department of Public Health.

This average is a system-wide value, please see the attached summary for site specific averages.

** Total Trihalomethanes and Haloacetic Acids(5) MCLs an annual running average of distribution system samples.

*** A corrosion inhibitor is added to the treated water before entry into the distribution system

All analyses performed by the ELAP certified laboratories: AVEK Water Agency, BSK Analytical Laboratories, or BSK subcontract lab.

Appendix D

District No. 40 BMPs/DMMs

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Base Year Data

Link to FAQs

Reporting Unit Base Year

Base Year: 2008

What is your reporting period? Calendar

BMP 1.3 Metering

Number of unmetered accounts in Base Year: 0

BMP 3.1 & BMP 3.2 & BMP 3.3 Residential Programs

Number of Single Family Customers in Base Year: 49,849

Number of Multi Family Units in Base Year: 945

BMP 3.4 WaterSense Specification (WSS) Toilets

Number of Single Family Housing Units constructed prior to 1992: 38300

Number of Multi Family Units prior to 1992: 910

Average number of toilets per single family household: 2.5

Average number of toilets per multi family household: 1.5

Five year average resale rate of single family households: Unknown

Five-year average resale rate of multi family households: Unknown

Average number of persons per single family household: 3

Average number of persons per multi family household: Unknown

BMP 4.0 & BMP 5.0 CII & Landscape

Total water use (in Acre Feet) by CII accounts: 4027.1

Number of accounts with dedicated irrigation meters: 806

Number of CII accounts without meters or with Mixed Use Meters: 456

Number of CII accounts: 1,616

Comments

Number of CII accounts with mixed use meters is an estimate.

The fields in red are required.

Agency name: Los Angeles County Waterworks

Division name (Reporting unit): Los Angeles County Waterworks

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

CUWCC

WATER SOURCES

Service Area Population: 168,968

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
Wells	18,216.21	Groundwater	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
AVEK	30,626.12	Surface	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Exported Water Name	AF/YEAR	Where Exported?

The fields in red are required.

Agency name: Los Angeles County Waterworks

Division name (Reporting unit): Los Angeles County Waterworks

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

CUWCC

Water Uses

2009

Potable Water Billed

Make sure to enter numbers in AF/Year.

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Single-Family	50,001.00	33,552.42			
Multi-Family	940.00	3,596.01			
Commercial	1,576.00	3,702.68			
Industrial	35.00	81.06			
Dedicated Irrigation	811.00	3,486.38			
Other	800.00	3,447.93			
Other					
Other					
Other					
Other					
Other					
Other					
Other					

Potable Water Un-Billed

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

The fields in red are required

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

2009

See the complete MOU: View MOU

See the coverage requirements for this BMP:

BMP 1.1 Operations Practices

Comments:

Conservation Coordinator

Conservation Coordinator (•) Yes ( ) No

Contact Information

First Name	Virginia
Last Name	Maloles-Fowler
Title	Water Conservation Coordinator
Phone	626 300-3362
Email	vmfowler@dpw.lacounty.gov

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: Los Angeles County, Title 11 - Health and Safety of the Los Angeles County Code, Ordinance No. 91-00

Web address(s) URL, comma separated list: http://search.municode.com/html/16274/_DATA/TITLE11/Chapter_11_38_WATER_AND_SEWERS.html

Enter a description: WATER CONSERVATION REQUIREMENTS FOR THE UNINCORPORATED LOS ANGELES COUNTY AREA

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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: 47,866.48

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

Determine system verifiable uses AF: 0.00

Determine total supply into the system in AF: 48,842.33

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: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

2009 BMP 1.2 Water Loss Control

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

Leak Detection Contract

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 Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)

Comments:

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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	Billing Frequency Per Year	# of estimated bills/yr
Single-Family	50,001	50,001	50,001	Bi-monthly	300,006
Multi-Family	940	940	940	Bi-monthly	5,640
Commericial	1,576	1,576	1,576	Bi-monthly	9,456
Industrial	35	35	35	Bi-monthly	210
Dedicated Irrigatic	811	811	811	Bi-monthly	4,866
Other	800	800	800	Bi-monthly	4,800
Other				Other	
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters: 451

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period: 0

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 Feasiblity Study conducted

B. Email or provide a link to the feasibility study (or description of):

File name(s): Email files to natalie@cuwcc.org: Enter the file name here e.g. WaterWastePreventionOrdinan

Web address(s) URL: comma-separated list: Enter the URL to your documentation

General Comments about BMP 1.3:

Other Account Type includes: Fire, Public/Gov Agency, Temporary, Domestic/Private

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

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.

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)
Increasing Block Se	Single-Family	12,741,361.05	9,992,859.45
Uniform	Multi-Family	1,357,290.16	658,020.65
Uniform	Commercial	1,473,923.17	895,447.23
Uniform	Industrial	26,663.99	26,118.04
Uniform	Dedicated Irrigation	1,550,382.99	485,500.10
Uniform	Other	1,415,348.90	812,578.32
Select a Rate Struc	Other		

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

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)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Comments:

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name) Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact.

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

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
2	Newsletter articles on conservation
2	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets
1	Landscape water conservation media campaigns
1	General water conservation information
	Select a public contact

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
3		Articles or stories resulting from outreach
1		News releases
11		Newspaper contacts
5		Radio contacts
2		Television contacts
		Select a type of media contact

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): http://www.lacwaterworks.org/

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

Schedule of events, Water Conservation Tips, Quarterly Splash Newsletter, Rebate information and eligible lists

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 brake 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
Total Budget	$255,825	✓	

Comments:

The Public Outreach Annual Budget Amount is the total budget for all 5 Waterworks Districts.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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

CUWCC

Link to FAQs

View MOU

2009

BMP 2.1 Public Outreach Cont'd

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?
Media Relations	$22,790	✓
Community Events	$20,089	✓
Advertising	$167,910	✓
Project Management	$45,038	✓

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.

Theme: Three Easy Ways
Brand: Water Drop
Mascot: Little girl

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: AV Water Partners

Training

Training Type	# of Trainings	# of Attendees	Description of Other

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description
Advertising	$167,910	TV, Radio, Billboard, Newspaper Ads; Google AdWords

Partnering Programs - Partners

Name	Type of Program
☐ CLCA?	
☐ Green Building Programs?	
☐ Master Gardeners?	
☐ Cooperative Extension?	
☐ Local Colleges?	
☑ Other	Lowe's and Home Depot Events; Plant Booklets and CDs

☐ 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

None

Conservation Gardens

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

None

Landscape contests or awards

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

None

Comments:

The Public Outreach Expense amount is for all 5 Waterworks Districts.

The fields in red are required

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact.

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

2009

BMP 2.2 School Education Programs, Retail Agencies

View MOU

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: 1

Number of attendees: 54

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 2

Number of attendees 243

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:

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.

CUWCC

Link to FAQs

View MOU

2009

BMP 3 Residential

⊙ **Traditional (Sections A - D)**

○ **Flex Track (All Sections)**

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.
You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in form which are necessary to show that the measure was implemented as described.

A) Residential Assistance / Leak Detection

Traditional

Flex Track

	Single Family	Multi Family	Total Water Savings AF/YR	Measured Water Savings AF/YR
Total Number of Accounts	50,001.00	940.00		
Total Number of Participants Overall	342.00	0.00		
Total Number of Leak Det Surveys	99.00	0.00		
Total Number of Showerheads	400.00	0.00		
Total Number of Faucet Aerators	558.00	0.00		
Total Number of Landscape Water Survey	99.00	0.00		

Number of Other Components

Description of Other Components Distributed

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

B) High Efficiency Clothes Washers (HECWs)

Traditional

Flex Track

Number of incentives for HECWs with an AVERAGE Water Factor of 5.0: 121.00

Are Financial incentives provided for HECWs ? ⊙ Yes ○ No

Has your Agency completed a HECW Market Penetration Study
(this question does not impack your coverage report, purely informational) ○ Yes ⊙ No

HECW Market Penetration Study Documents (Enter the file name and Email file to Natalie@cuwcc.org)

Measured water savings (AF/Year)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

C) WaterSense Specification (WSS) Toilets

(Agency must complete information for at least one coverage option (For Traditional 1, 2, or 3; For Flex Tarck 1, 2, 3, or 4).
You are encouraged to include information on other coverage options, as available.
If seeking credit for additional water savings, you must select Flex Track option)

Traditional

1. Retrofiton Resale Ordinance is in Place ○ Yes ⊙ No

If Yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org)

2. A 75% Market Saturation Achieved ○ Yes ⊙ No

If yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org)

Flex Track

3. WSS Toilets Installed

	Single Family	Multi Family
Number of WSS Toilets Installed	199.00	1,041.00
Measured Water Savings AF/YR		

4. Non-WSS Toilets

	Single Family		Multi Family	
Type of Toilets	Number of Toilets	Water Savings	Number of Toilets	Water Savings
Select an Option				

Description of Other Non-WSS Type of Toilets

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

D) WSS for New Residential Development

(Agency must complete information for at least one coverage option.You are encouraged to include information on other coverageoptions, as available. If seeking credit for additional water savings you must select the Flex Track option)

Traditional

	Single Family	Multi Family
Residential development Rebates	Yes ⊙ No ○	Yes ⊙ No ○
Recognition Programs	Yes ○ No ⊙	Yes ○ No ⊙
Reduced connection Fees	Yes ○ No ⊙	Yes ○ No ⊙
Ordinances	Yes ○ No ⊙	Yes ○ No ⊙

New Development Ordinance
(Enter the file name and Email file to Natalie@cuwcc.org)

Number of new Single Family Units built in Service Area

Number of new Multi Family Units built in Service Area

Flex Track

In the following table, enter one row for each incentive typr program you offer

List of Incentive Amount

Incentive Type	Incentive Amount	Number of WSS fixtures installed	Number of Participating Single Family	Number of Participating Multi Family	Measured Water Savings Single Family	Measured Water Savings Multi Family
HE Toilet	150.00	1,240.00	130.00	4.00		
HE Clothes	150.00	121.00	121.00	0.00		

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

For Traditional Option, Stop Here, do not go further.
For Flex Track Option, please continue...

Flex Track Menu Options

In addition to the measures on the BMP List, the Flex Track menu options may be implemented to meet the savings goal for this BMP. Fill in the water savings measures that your agency has implemented.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles Country Waterworks Di

Reporting unit number: 5,029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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

Link to FAQs

View MOU

BMP 4 CII

Traditional ⊙ (Section A - L)

Flex Track ○ (All Sections)

For Traditional Track please answer the fields within the traditional boxes.

For Flex Track option, please answer the fileds within the flex track boxes.

You must enter all measured water savings manually in the summary cells on the right. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings was measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in the flex track data entry form which are necessary to show that the measure was implemented as described.

CII Type of measure implemented

Traditional

Flex Track

A) High - Efficiency Toilets.

Measured water savings (AF/Year)

Number: 31

Type of program: Incentive

Other type of program:

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.041748 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

B) High - Efficiency Urinals (0.5 gpf)

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.069086 AF per device

If not, Please provide the following

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

C) Ultra Low Volume Urinals (0.125 gpf)

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.080603 AF per device

If not, Please provide the following

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

D) Zero Consumption Urinals (0.0 gpf)

Traditional

Number 4

Type of program Incentive

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes ○ No

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

Council's Annual Water Savings 0.0921146 AF per device

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

E) Commercial High - Efficiency Single Load Clothes Washers

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Counsil's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.116618 AF per device

If not , Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

F) Cooling Tower Conductivity Controllers.

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 1.032250 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

G) Cooling Tower pH Controllers

Traditional

Number

Type of program: Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 3.981543 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

H) Connectionless Food Steamers.

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.25 AF per Steamer Compartment

mIf not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

I) Medical Equipment Steam Sterilizers

Flax Track

Traditional

Number

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 1.538 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

J) Water - Efficient Ice Machines.

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.0834507 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

K) Pressurized Water Brooms.

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.1534 AF per device

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

L) Dry Vacuum Pumps.

Traditional

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.064 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

Traditional Reporting Stop Here, Do not continue

Flex Track Reporing Please Continue...

M) Industrial Process Water Use Reduction.

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Type of Process Water Reduced

If re-using water, what was the secondary use of the water? (such as pre-rince cycle or landscaping)

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5,029

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

2009

Link to FAQs

View MOU

BMP 5 Landscape

◉ **Traditional** ○ **Flex Track**

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.
You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data point salso requested in form which are necessary to show that the measure was implemented as described.

Accounts with Dedicated Irrigation Meters

Traditional

Number of dedicated irrigation meter accounts	811.00
Number of dedicated irrigation meter accounts with water budgets	0.00
Aggregate water use for dedicated non-recreational landscape accounts with budgets	0.00
Aggregate acreage assigned water budgets for dedicated non-recreational landscape accounts with budgets	0.00
Preserved water use records and budgets for customers with dedicated landscape irrigation accounts for at least four years	◉ Yes ○ No

Flex Track

Water Savings from Accounts with dedicated irrigation meters with water budgets (Acre Feet)	

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)

(Enter the file name and Email file to Natalie@cuwcc.org)

Technical Assistance

Traditional

Number of Accounts 20% over-budget	0.00
Number of accounts 20% over-budget offered technical assistance	0.00
Number of accounts 20% over-budget accepting technical assistance	0.00

Measured water savings (AF/Year)

Flex Track

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)

(Enter the file name and Email file to Natalie@cuwcc.org)

Irrigation Water Use Surveys for Mixed-use and Un-metered Accounts

Traditional

Flex Track

		Measured water savings (AF/Year)
Number of mixed use and un-metered accounts	451.00	
Number of irrigation water use surveys offered (cumulative, all years)	811.00	
Number of irrigation water use surveys accepted (cumulative)	24.00	
Can your Agency estimate the amount of landscape acreage for mixed use and Un-metered accounts	○ Yes ⊙ No	
If Yes, Aggregate acreage for mixed use and Un-metered accounts		
Esrimated water demand from acreage for mixed use and Un-metered accounts		
Annual water savings by customers receiving irrigation water savings surveys and implementing recomendations		

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Financial Incentives

Traditional

Flex Track

Have you implemented and maintained an irrigation equipment retrofit incentive program? ⊙ Yes ○ No

Number of incentives	Dollar value of incentives	Incentive Types	Measured Water Savings (AF/YR)
920.00	4.00	Rotating Sprinkler Nozzles	
23.00	150.00	Smart Sprinkler Controller	
5,937.00	0.30	Synthetic Turf	
4.00	50.00	Drip Irrigation	

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Traditional Reporting Stop Here, Do not continue
Flex Track Reporing Please Continue...

The fields in red are required.

Agency name: Los Angeles County Waterworks

Division name (Reporting unit): Los Angeles County Waterworks

Reporting unit number: 5029

Primary contact.

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

CUWCC

WATER SOURCES

Service Area Population: 147,600

2010

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
Wells	7,615.32	Groundwater	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
AVEK	39,378.78	Surface	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Exported Water Name	AF/YEAR	Where Exported?

The fields in red are required

Agency name: Los Angeles County Waterworks

Division name (Reporting unit): Los Angeles County Waterworks

Reporting unit number: 5029

Primary contact.

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

CUWCC

Water Uses

2010

Potable Water Billed

Make sure to enter numbers in AF/Year.

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Single-Family	50,781.00	31,559.11			
Multi-Family	947.00	3,671.98			
Commercial	1,633.00	3,677.69			
Industrial	34.00	95.43			
Dedicated Irrigation	824.00	3,098.22			
Other	791.00	3,420.19			
Other					
Other					
Other					
Other					
Other					
Other					
Other					

Potable Water Un-Billed

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

2010

See the complete MOU: View MOU

See the coverage requirements for this BMP:

BMP 1.1 Operations Practices

Comments:

Conservation Coordinator

Conservation Coordinator (•) Yes ( ) No

Contact Information

First Name: Virginia

Last Name: Maloles-Fowler

Title: Water Conservation Coordinator

Phone: 626-300-3362

Email: vmfowler@dpw.lacounty.gov

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: Los Angeles County, Title 11 - Health and Safety of the Los Angeles County Code, Ordinance No. 91-00

Web address(s) URL, comma-separated list: http://search.municode.com/html/16274/_DATA/TITLE11/Chapter_11_38_WATER_AND_SEWERS.html

Enter a description: WATER CONSERVATION REQUIREMENTS FOR THE UNINCORPORATED LOS ANGELES COUNTY AREA

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Dis

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

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Link to FAQs

View MOU

2010 BMP 1.2 Water Loss Control

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

Leak Detection Contract

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 Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)

Comments

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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
Single-Family	50,781	50,781	50,781	Bi-monthly	304,686
Multi-Family	947	947	947	Bi-monthly	5,682
Commericial	1,633	1,633	1,633	Bi-monthly	9,798
Industrial	34	34	34	Bi-monthly	204
Dedicated Irrigatic	824	824	824	Bi-monthly	4,944
Other	791	791	791	Bi-monthly	4,746
Other				Other	
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters: 467

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period: 0

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 Feasiblity 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

Web address(s) URL: comma-separated list

Comments

Other Account Type includes:Fire, Public/Gov Agency, Temporary, Domestic/Private;

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

View MOU

2010

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
1	Newsletter articles on conservation
2	Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets
1	Landscape water conservation media campaigns
1	General water conservation information
3	Website

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
3		Articles or stories resulting from outreach
1		News releases
11		Newspaper contacts
5		Radio contacts
2		Television contacts
		Select a type of media contact

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): http://www.lacwaterworks.org/

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

Schedule of events, Water Conservation Tips, Quarterly Splash Newsletter, Rebate information and eligible lists, Cash For Grass

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 brake 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
Total Budget	$205,825	✓	

Comments:

The Public Outreach Annual Budget Amount is the total budget for all 5 Waterworks Districts.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact.

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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

CUWCC

Link to FAQs

View MOU

2010

BMP 2.1 Public Outreach Cont'd

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?
Media Relations	$23,661	✓
Community Events	$7,853	✓
Advertising	$134,879	✓
Website Development	$32,614	✓

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.

Theme: Three Easy Ways
Brand: Water Drop
Mascot: Little girl

Market Research

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

Market Research Topic	Focus group to assess customer awareness and perception of water supply and conservation to determine best ways to convey water conservation messages
Brand Message	Three easy ways
Brand Mission Statement	

Community Committees

Do you have a community conservation committee? ⊙ Yes ○ No

Enter the names of the community committees: AV Water Partners

Training

Training Type	# of Trainings	# of Attendees	Description of Other

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description
Advertising	$134,878.85	TV, Radio, Billboard, Newspaper, Movie Theater Ads; Google AdWords

Partnering Programs - Partners

Name	Type of Program
☐ CLCA?	
☐ Green Building Programs?	
☐ Master Gardeners?	
☐ Cooperative Extension?	
☐ Local Colleges?	
☑ Other	Lowe's Event

☐ 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

None

Conservation Gardens

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

None

Landscape contests or awards

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

None

Comments:

The Public Outreach Expense amount is for all 5 Waterworks Districts.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name) Los Angeles County Waterworks Di

Reporting unit number: 5029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

Link to FAQs

2010

BMP 2.2 School Education Programs, Retail Agencies

View MOU

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: 1

Number of attendees: 189

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: 3

Number of attendees: 552

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: Los Angeles County Waterworks Districts

Reporting unit name (District name): Los Angeles County Waterworks District 40 - A

Reporting unit number: 5,029

Primary contact.

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

2010

Link to FAQs

View MOU

BMP 3 Residential

⊙ **Traditional (Sections A - D)** ○ **Flex Track (All Sections)**

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.
You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in form which are necessary to show that the measure was implemented as described.

A) Residential Assistance / Leak Detection

Traditional / Flex Track

	Single Family	Multi Family	Total Water Savings AF/YR	Measured Water Savings AF/YR
Total Number of Accounts	50,781.00	947.00		
Total Number of Participants Overall	667.00	1.00		
Total Number of Leak Det Surveys	115.00	1.00		
Total Number of Showerheads	754.00	18.00		
Total Number of Faucet Aerators	959.00	11.00		
Total Number of Landscape Water Survey	115.00	1.00		

Number of Other Components

Description of Other Components Distributed

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

B) High Efficiency Clothes Washers (HECWs)

Traditional / Flex Track

Number of incentives for HECWs with an AVERAGE Water Factor of 5.0: 134.00

Are Financial incentives provided for HECWs ? ⊙ Yes ○ No

Has your Agency completed a HECW Market Penetration Study
(this question does not impack your coverage report, purely informational) ○ Yes ⊙ No

HECW Market Penetration Study Documents (Enter the file name and Email file to Natalie@cuwcc.org)

Measured water savings (AF/Year)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

C) WaterSense Specification (WSS) Toilets

(Agency must complete information for at least one coverage option (For Traditional 1, 2, or 3; For Flex Tarck 1, 2, 3, or 4).
You are encouraged to include information on other coverage options, as available.
If seeking credit for additional water savings, you must select Flex Track option)

Traditional

1. Retrofiton Resale Ordinance is in Place ○ Yes ⊙ No

If Yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org)

2. A 75% Market Saturation Achieved ○ Yes ⊙ No

If yes, Choose A File (Enter the file name and Email file to Natalie@cuwcc.org)

Flex Track

3. WSS Toilets Installed

	Single Family	Multi Family
Number of WSS Toilets Installed	170.00	1,435.00
Measured Water Savings AF/YR		

4. Non-WSS Toilets

	Single Family		Multi Family	
Type of Toilets	Number of Toilets	Water Savings	Number of Toilets	Water Savings
Select an Option				

Description of Other Non-WSS Type of Toilets

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

D) WSS for New Residential Development

(Agency must complete information for at least one coverage option.You are encouraged to include information on other coverageoptions, as available. If seeking credit for additional water savings you must select the Flex Track option)

Traditional

	Single Family	Multi Family
Residential development Rebates	Yes ⊙ No ○	Yes ⊙ No ○
Recognition Programs	Yes ○ No ⊙	Yes ○ No ⊙
Reduced connection Fees	Yes ○ No ⊙	Yes ○ No ⊙
Ordinances	Yes ○ No ⊙	Yes ○ No ⊙

New Development Ordinance
(Enter the file name and Email file to Natalie@cuwcc.org)

Number of new Single Family Units built in Service Area

Number of new Multi Family Units built in Service Area

Flex Track

In the following table, enter one row for each incentive typr program you offer

List of Incentive Amount

Incentive Type	Incentive Amount	Number of WSS fixtures installed	Number of Participating Single Family	Number of Participating Multi Family	Measured Water Savings Single Family	Measured Water Savings Multi Family
HE Toilet	150.00	1,605.00	115.00	6.00		
HE Clothes Washer	150.00	134.00	134.00	0.00		

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

For Traditional Option, Stop Here, do not go further.
For Flex Track Option, please continue...

Flex Track Menu Options

In addition to the measures on the BMP List, the Flex Track menu options may be implemented to meet the savings goal for this BMP. Fill in the water savings measures that your agency has implemented.

The fields in red are required.

Agency name: Los Angeles County Waterworks Dis

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5,029

Primary contact

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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

Link to FAQs

View MOU

BMP 4 CII

Traditional ⊙ (Section A - L)

Flex Track ○ (All Sections)

For Traditional Track please answer the fields within the traditional boxes.

For Flex Track option, please answer the fileds within the flex track boxes.

You must enter all measured water savings manually in the summary cells on the right. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings was measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data points also requested in the flex track data entry form which are necessary to show that the measure was implemented as described.

CII Type of measure implemented

Traditional

A) High - Efficiency Toilets.

Measured water savings (AF/Year)

Number: 0

Type of program: Select an Option

Other type of program:

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.041748 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

B) High - Efficiency Urinals (0.5 gpf)

Flex Track

Traditional

Number: 0

Type of program:

Other type of program:

Measured water savings (AF/Year):

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.069086 AF per device

If not, Please provide the following

Total Measured Water Savings(AF/Year):

Measure life (years):

Lifetime water savings (years):

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

C) Ultra Low Volume Urinals (0.125 gpf)

Flex Track

Traditional

Number: 0

Type of program: Select an Option

Other type of program:

Measured water savings (AF/Year):

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.080603 AF per device

If not, Please provide the following

Total Measured Water Savings(AF/Year):

Measure life (years):

Lifetime water savings (years):

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

D) Zero Consumption Urinals (0.0 gpf)

Flex Track

Traditional

Number: 0

Type of program: Select an Option

Other type of program:

Measured water savings (AF/Year):

Do you accept the Council's default savings number for this measure? ○Yes ○ No

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

Council's Annual Water Savings 0.0921146 AF per device

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

E) Commercial High - Efficiency Single Load Clothes Washers

Traditional

Number 0

Type of program

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Counsil's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.116618 AF per device

If not , Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

F) Cooling Tower Conductivity Controllers.

Traditional

Number 0

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 1.032250 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet Enter the file name and Email to Natalie@cuwcc.org

G) Cooling Tower pH Controllers

Traditional

Number: 0

Type of program: Select an Option

Other type of program:

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 3.981543 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

H) Connectionless Food Steamers.

Traditional

Number: 0

Type of program:

Other type of program:

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.25 AF per Steamer Compartment

mIf not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet

Enter the file name and Email to Natalie@cuwcc.org

I) Medical Equipment Steam Sterilizers

Traditional

Number: 0

Type of program:

Other type of program:

Measured water savings (AF/Year)

Flax Track

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 1.538 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

J) Water - Efficient Ice Machines.

Traditional

Number 0

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.0834507 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

K) Pressurized Water Brooms.

Traditional

Number 0

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure? ○Yes○No

Council's Annual Water Savings 0.1534 AF per device

Flex Track

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

L) Dry Vacuum Pumps.

Traditional

Number 0

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Flex Track

Do you accept the Council's default savings number for this measure ? ○Yes○No

Council's Annual Water Savings 0.064 AF per device

If not, Please provide the following:

Total Measured Water Savings(AF/Year)

Measure life (years)

Lifetime water savings (years)

If you are using your own water-savings measure, send your supporting spreadsheet
Enter the file name and Email to Natalie@cuwcc.org

Traditional Reporting Stop Here, Do not continue

Flex Track Reporing Please Continue...

M) Industrial Process Water Use Reduction.

Number

Type of program Select an Option

Other type of program

Measured water savings (AF/Year)

Type of Process Water Reduced

If re-using water, what was the secondary use of the water? (such as pre-rince cycle or landscaping)

The fields in red are required.

Agency name: Los Angeles County Waterworks Dist

Reporting unit name (District name): Los Angeles County Waterworks Di

Reporting unit number: 5,029

Primary contact:

First name: Virginia

Last name: Maloles-Fowler

Email: vmfowler@dpw.lacounty.gov

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.

CUWCC

2010

Link to FAQs

View MOU

BMP 5 Landscape

(•) **Traditional** ( ) **Flex Track**

For Traditional Track please answer the fields within the traditional boxes.
For Flex Track option, please answer the fileds within the flex track boxes.
You must enter all measured water savings manually. For each measure entered, upload a spreadsheet with sufficient information to show the way that water savings were measured and that the measure was adequately tracked (i.e., all relevant data was collected) - in some cases there are specific data point salso requested in form which are necessary to show that the measure was implemented as described.

Accounts with Dedicated Irrigation Meters

Traditional

Number of dedicated irrigation meter accounts	824.00
Number of dedicated irrigation meter accounts with water budgets	0.00
Aggregate water use for dedicated non-recreational landscape accounts with budgets	0.00
Aggregate acreage assigned water budgets for dedicated non-recreational landscape accounts with budgets	0.00
Preserved water use records and budgets for customers with dedicated landscape irrigation accounts for at least four years	(•) Yes ( ) No

Flex Track

Water Savings from Accounts with dedicated irrigation meters with water budgets (Acre Feet)	

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Technical Assistance

Traditional

Number of Accounts 20% over-budget	0.00
Number of accounts 20% over-budget offered technical assistance	0.00
Number of accounts 20% over-budget accepting technical assistance	0.00

Measured water savings (AF/Year)

Flex Track

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Irrigation Water Use Surveys for Mixed-use and Un-metered Accounts

Traditional

Flex Track

		Measured water savings (AF/Year)
Number of mixed use and un-metered accounts	467.00	
Number of irrigation water use surveys offered (cumulative, all years)	824.00	
Number of irrigation water use surveys accepted (cumulative)	24.00	
Can your Agency estimate the amount of landscape acreage for mixed use and Un-metered accounts	○ Yes ⊙ No	
If Yes, Aggregate acreage for mixed use and Un-metered accounts		
Esrimated water demand from acreage for mixed use and Un-metered accounts		
Annual water savings by customers receiving irrigation water savings surveys and implementing recomendations		

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Financial Incentives

Traditional

Flex Track

Have you implemented and maintained an irrigation equipment retrofit incentive program? ⊙ Yes ○ No

Number of incentives	Dollar value of incentives	Incentive Types	Measured Water Savings (AF/YR)
795.00	4.00	Rotating Sprinkler Nozzles	
7.00	150.00	Smart Sprinkler Controller	
5,857.00	0.30	Synthetic Turf	
1.00	50.00	Drip Irrigation	

If there is Water Savings in this measure, upload the Methodology Spreadsheet (backup data)
(Enter the file name and Email file to Natalie@cuwcc.org)

Traditional Reporting Stop Here, Do not continue
Flex Track Reporing Please Continue...

Appendix E

RCSD/QHWD “No Waste” Ordinance

Appendix E-1

RCSD “No Waste” Ordinance

ORDINANCE NO. 2009-1

AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE ROSAMOND COMMUNITY SERVICES DISTRICT, COUNTY OF KERN, STATE OF CALIFORNIA, AMENDING ORDINANCE NO. 2001-01 TO UPDATE THE WATER CONSERVATION (NO WASTE) PROGRAM

WHEREAS, the Board of Directors of the Rosamond Community Services District (the "District") in accordance with the Community Services District Law, Sections 61000 and following the Government Code of California, has duly adopted its Ordinance No. 2001-01 "An Ordinance Amending Ordinance No. 92-6 to establish a Water Conservation (No Waste) Program;" and

WHEREAS, California Constitution article X, section 2 and California Water Code section 100 provide that because of conditions prevailing in the state of California (the "State"), it is the declared policy of the State that the general welfare requires that the water resources of the State shall be put to beneficial use to the fullest extent of which they are capable, the waste or unreasonable use of water shall be prevented, and the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and the public welfare; and

WHEREAS, pursuant to California Water Code section 106, it is the declared policy of the State that the use of water for domestic use is the highest use of water and that the next highest use is for irrigation; and

WHEREAS, pursuant to California Water Code section 375, the District is authorized to adopt and enforce a water conservation program to reduce the quantity of water used by persons within its jurisdiction for the purpose of conserving the water supplies of the District; and

WHEREAS, on September 28, 2006, the Governor of the State announced measure AB 1881, to significantly increase water conservation in California through new landscape irrigation requirements, which would require a local agency to adopt an ordinance that is at least as effective in conserving water as the updated model ordinance created by the Department of Water Resources; and

WHEREAS, on June 4, 2008, the Governor of the State proclaimed a condition of statewide drought and strongly encouraged local agencies to take aggressive, immediate action to reduce water consumption locally and regionally for the remainder of 2008 and prepare for potentially worsening conditions in 2009; and

WHEREAS, because of the prevailing conditions in the State, the current statewide drought, and the declared policy of the State the District that the District manage its water resources for the general welfare to ensure their beneficial use to the fullest extent of which they are capable, the District hereby finds and determines that it is necessary and appropriate for the District to adopt, implement, and enforce a water conservation program to reduce the quantity of water used by consumers within the District to ensure that there is sufficient water for human consumption, sanitation, and fire protection; and

WHEREAS, pursuant to California Water Code section 350, the Board of Directors of the District (the "Board of Directors") is authorized to declare a water shortage emergency to prevail within its jurisdiction when it finds and determines that the District will not be able to or cannot satisfy the ordinary demands and requirements of water consumers without depleting the water supply of the District to the extent that there would be insufficient water for human consumption, sanitation, and fire protection, and as more fully set forth in this ordinance; and

WHEREAS, the District hereby finds and determines that in the event the District determines that it is necessary to declare that a water shortage emergency exists, the District will be authorized pursuant to this ordinance to implement drought response measures and a water conservation and regulatory program to regulate water consumption activities within the District and ensure that the water delivered in the District is put to beneficial use for the greatest public benefit, with particular regard to domestic use, including human consumption, sanitation, and fire protection, and that the waste or unreasonable use of water is prevented; and

WHEREAS, the District is authorized and hereby finds and determines that it is necessary to prescribe and define by ordinance restrictions, prohibitions, and exclusions for the use of water during a threatened or existing water shortage and adopt and enforce a water conservation and regulatory program to: (i) prohibit the wastage of District water or the use of District water during such period; (ii) prohibit use of water during such periods for specific uses which the District may from time to time find nonessential; and (iii) reduce and restrict the quantity of water used by those persons within the District for the purpose of conserving the water supplies of the District; and

WHEREAS, the District hereby finds and determines that the District shall: (i) implement water conservation and drought response measures; (ii) regulate the water consumption activities of persons within the District for the purposes of conserving and protecting the District's water supplies, reducing the quantity of water consumed, and deterring and preventing the waste or unreasonable use or unreasonable method of use of valuable water resources; and (iii) establish and collect regulatory fees and impose fines and penalties as set forth herein to accomplish these purposes and recover the costs of the District's water conservation and regulatory program; and

WHEREAS, the Board of Directors hereby finds and determines that it is desirable to codify the rules and regulations governing its actions, and the actions of persons using and consuming water within the District, particularly during declared water shortages and water shortage emergencies, to protect the general welfare and the District's water supplies, and to reduce water consumption all in accordance with the declared policies and laws of the State; and

WHEREAS, the Board of Directors hereby further finds and determines that this ordinance and the Rules and Regulations set forth in **Exhibit A,** attached hereto and by this reference incorporated herein, are in the public interest, serve a public purpose, and will promote the health, welfare, and safety of the people of the District.

BE IT ORDAINED by the Board of Directors of the Rosamond Community Services District as follows:

Section 1. Recitals.

The District hereby finds and determines that the above recitals are true and correct and incorporated herein.

Section 2. Findings and intent.

(A) The Board of Directors finds and determines that because of the prevailing conditions in the State, and the declared policy of the State, it is necessary and appropriate for the District to adopt, implement, and enforce a water conservation program to reduce the quantity of water used by persons within the District to ensure that there is sufficient water for human consumption, sanitation, and fire protection. The District further finds and determines that during periods of drought, water shortages, and water shortage emergencies the general welfare requires that the District maximize the beneficial use of its available water resources to the extent that it is capable, and that the waste or unreasonable use, or unreasonable method of use of water shall be prevented and the conservation of water is to be extended with the view to the reasonable and beneficial use thereof in the interests of the people of the District and for the public health, safety, and welfare.

(B) This ordinance establishes water conservation and drought response measures and Rules and Regulations to be implemented during declared water conservation stages.

(C) This ordinance establishes five stages of water conservation and drought response measures to be implemented by the District, with increasing restrictions on water use in response to decreasing water supplies and worsening drought conditions.

Section 3. Purpose and scope.

(A) The purpose of the water conservation provisions of this ordinance are to:

(1) protect the health, safety and welfare of the citizens and property owners of the District;

(2) assure the maximum beneficial use of District water supplies;

(3) attempt to provide sufficient water supplies to meet the basic needs of human consumption, sanitation, and fire protection.

(B) This ordinance is not intended to repeal, abrogate, annul, impair or in any way interfere with the free use of property by covenant, deed, or other private agreement or with restrictive covenants running with the land to which the District provides water services.

(C) The provisions of this ordinance shall apply to all persons within the District and all property served by the District wherever situated.

(D) Nothing in this ordinance is intended to affect or limit the ability of the District to respond to an emergency, including an emergency that affects the ability of the District to supply water.

Section 4. Definitions.

For the purposes of this ordinance, the following words, terms, and phrases shall have the following meanings:

(A) "Board of Directors" means the Board of Directors of the District.

(B) "District" means the Rosamond Community Services District, a community services district organized and existing pursuant to the Community Services District Law (California Government Code sections 61000 and following).

(C) "Enforcement Officer" means any individual employed or otherwise charged by the District to inspect or enforce codes, ordinances, mandates, regulations, resolutions, rules or other laws adopted by the Board of Directors or other regulatory bodies.

(D) "Graywater" means household wastewater other than toilet waste. Graywater includes wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs but does not include wastewater from kitchen sinks or dishwashers.

(E) "Person" means any natural person, firm, joint venture, joint stock company, partnership, public or private association, club, company, corporation, business trust, organization, public or private agency, government agency or institution, school district, college, university, any other user of water provided by the District, or the manager, lessee, agent, servant, officer or employee of any of them or any other entity which is recognized by law as the subject of rights or duties.

(F) "Property owner" means the record owner of real property based on the Kern County Assessor's records.

(G) "Rules and Regulations" mean the rules and regulations more fully set forth in Exhibit A hereto established pursuant to this ordinance for the regulation and enforcement of the District's Water Conservation (No Waste) Program.

(H) "Summer months" mean the months of April through October.

(I) "Water customer" or "customer" means a person who, according to the District's records, receives water service to a parcel of property.

(J) "Water shortage emergency" means a condition existing within the District in which the ordinary water demands and requirements of persons within the District cannot be satisfied without depleting the water supply of the District to the extent that there would be insufficient water for human consumption, sanitation, and fire protection. A water shortage emergency includes both an immediate emergency, in which the District is unable to meet current water needs of persons within the District, as well as a threatened water shortage, in which the District determines that its supply cannot meet an increased future demand.

(K) "Winter months" means the months of October through March.

Section 5. Water Conservation and unreasonable uses of water.

(A) It is unlawful at any time for any person to make, cause, or use or permit the use of water from the District for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this ordinance, or in an amount in excess of that use permitted by the water conservation stages which are in effect pursuant to this ordinance or by action taken by the Board of Directors in accordance with this ordinance. The water conservation and drought response measures set forth in this Section 5 shall be in effect at all times.

(B) It is unlawful at any time for any person to waste water or to use it unreasonably. Unreasonable uses of water shall include, but are not limited to, the following practices:

(1) use of potable water to irrigate in such a manner as to result in runoff for more than 5 minutes;

(2) allowing potable water to escape from breaks within the customer's plumbing system for more than twenty-four (24) hours after the customer is notified or discovers the break;

(3) use of potable water to wash down sidewalks, driveways, parking areas, tennis courts, patios or other paved areas, except to alleviate immediate safety or sanitation hazards;

(4) washing automobiles, trucks, boats, trailers, airplanes or other types of mobile equipment by hose without a shutoff nozzle and bucket except to wash such vehicles at commercial or fleet vehicle washing facilities using water recycling equipment. Further, such washings are exempted from these regulations where the health, safety, and welfare of the public is contingent upon frequent vehicle cleanings, such as garbage trucks and vehicles used to transport food and perishables;

(5) use of potable water to clean, fill or maintain decorative fountains, lakes or ponds unless such item is re-circulating;

(6) except when specifically requested by a customer, serving water to a customer in a restaurant;

(C) Construction operations receiving water from a construction meter or water truck shall not use water unnecessarily for any purpose other than those required by regulatory agencies.

(D) The number of new construction meters shall not exceed the existing number of currently authorized meters. A new meter shall be issued only when an old meter is returned. Construction projects requiring water from a construction meter or a water truck shall not use water unnecessarily for any purposes other than those required by regulatory agencies.

(E) A water conservation stage shall be determined by the Board of Directors in accordance with the provisions of this ordinance. A water conservation stage shall remain in full force and effect until otherwise determined or discontinued by resolution of the Board of Directors declaring that existing water supply conditions and the supply of water available for distribution within the District's service area has been replenished or augmented.

(F) The Board of Directors may declare a water shortage emergency during any water conservation stage.

(G) For new construction, recycled water, or untreated surface water shall be used for construction dust control or exterior non-potable water application purposes.

(H) Rosamond Community Services (RCSD) will read meters once a month for monitoring and billing purposes.

(I) During Water Conservation Stage 1, the water conservation and drought response measures are voluntary and will be enforced through local and regional public education and awareness measures by the District.

(J) During Water Conservation Stages 2 through 5, the water conservation and drought response measures are mandatory and violations are subject to criminal, civil, and administrative penalties and remedies as specified in this ordinance and by State law.

Section 6. Landscape Restrictions.

(A) Residential Landscape Restrictions:

(1) Single-family and multifamily residential developments are prohibited from installing new turf in common areas of residential neighborhoods. This restriction shall not apply to public parks or privately owned and maintained parks, including required usable open space in multifamily developments.

(2) The installation of new turf is prohibited in residential front yards; provided, however, a residential property owner may apply to the District for an exemption from the prohibition of this Section 6. Upon the approval of such application, the property owner may be permitted to install new turf in the residential front yard (in the quantity allowed for the side and rear yards), and shall not install turf in the side and rear yards. The approval of any application hereto shall be conditioned upon the property owner to give permission for District staff to gain access to the back and side yards for compliance inspection purposes.

(3) For single-family residential lots, the installation of new turf in yard shall not exceed 20% percent of total yard.

(B) Non-Residential Landscape Restrictions:

(1) The installation of new turf in non-residential developments is prohibited, unless specifically permitted by a land use application approved by the District. Under no circumstances shall a land use application be approved to allow more than 50 percent of the turf permitted under Water Conservation Stage 2. Notwithstanding the forgoing, these provisions shall not apply to public or private schools or parks.

(C) Any person or association shall be prohibited from imposing private covenants, conditions, restrictions, deed clauses or other agreements between the respective parties, which prevent a person from utilizing water efficient landscaping, including, but not limited to, xeriscape, provided such landscaping receives appropriate review approval.

(D) The District will not grant any waiver or variance with respect to the standards listed in this Section 6. Such a request shall be considered a request to amend the requirements of this Section 6.

Section 7. Water Conservation Stage 1. – Normal Water Supply.

(A) Water Conservation Stage 1 is also referred to as a "Normal Water Supply" and applies during periods when the District is able to meet all of the water demands of its customers. Water Conservation Stage 1 is in effect at all times unless the Board of Directors otherwise declares that another water conservation stage is in effect pursuant to this ordinance. Water is a limited natural resource and must be used efficiently and economically to meet the health and safety needs of the community. All normal water efficiency programs and water conservation regulations of the District will be in full force and effect during Water Conservation Stage 1.

Section 8. Water Conservation Stage 2. – Minimum Water Shortage.

(A) Water Conservation Stage 2 is also referred to as a "Minimum Water Shortage" and applies during periods when a reasonable probability exists that the District will not be able to meet all of the water demands of its customers. Water Conservation Stage 2 may be caused by, but not limited to, any or all of the following circumstances or events:

(1) a regional water supply shortage exists and a regional public outreach campaign is being implemented asking or requiring all persons to reduce water use;

(2) groundwater wells are inoperable or unusable (such as by power outages, mechanical failure, or contamination);

(3) alternative water supplies are limited or unavailable;

(4) groundwater levels or groundwater quality is approaching levels which may require augmentation of the groundwater basin or other actions necessary to protect the groundwater basin as prescribed by the California Department of Water Resources, the Regional Water Quality Control Board, Kern County, or some other regulatory body.

(B) The objective of the measures undertaken in Water Conservation Stage 1 is to reduce water system consumption within the District by ten to fifteen percent.

(C) Upon declaration of a Water Conservation Stage 2 by the Board of Directors, implementation by the District and publication of notice, the following water conservation and drought response measures shall apply:

(1) The District shall determine the total amount of water delivered to the property of each customer in the prior fiscal year (the "Base Year Consumption Amount"). Water customers shall reduce their water consumption by ten to fifteen percent from the Base Year Consumption Amount for the duration of Water Conservation Stage 2. Provided, however, the Base Year Consumption Amount for any subsequent fiscal year shall be determined by the District as appropriate in the event that the District is required to continue Water Conservation Stage 2 for more than twelve months.

(2) Lawns and/or ground covers may be watered and landscaping may be irrigated, including construction meter irrigation, for a maximum of 25 minutes per day only during the following designated hours and designated days:

(a) lawns and/or ground cover may be watered and landscaping may be irrigated for properties with odd number street addresses, parks, and the public right of ways, only on Saturdays, Mondays, and Wednesdays between the hours of 6:00 p.m. to 6:00 a.m. during the winter months and 8:00 a.m. to 8 p.m. during the summer months;

(b) lawns and/or ground cover may be watered and landscaping may be irrigated for properties with even number street addresses only on Sundays, Tuesdays, and Thursdays between the hours of 6:00 p.m. to 6:00 a.m. during the winter months and 8:00 a.m. to 8 p.m. during the summer months;

(c) watering lawns and/or ground cover and irrigating landscaping is prohibited on Fridays and on any day of the week from 6:00 a.m. to 6:00 p.m. during the winter months and 8:00 a.m. to 8 p.m. during the summer months;

(3) All irrigation timers shall be adjusted to comply with the provisions of Section 8(C)(2) hereof.

(4) Notwithstanding the provisions of Section 8(C)(2) hereof, the use of graywater to irrigate fruit trees, lawns and ground covers, and ornamental trees and shrubs is permitted on any day and at any time. Provided, however, graywater may only be used in accordance with Kern County Health Department regulations.

(5) All swimming pools, spas, ponds, and fountains shall be equipped with recirculating pumps.

(6) All plumbing leaks, improperly adjusted sprinklers, or other water conduits/fixtures that require repair or adjustment shall be corrected to the satisfaction of the District.

(7) Water customers shall read their water meters at least once each month to monitor their water consumption.

(8) Use of water from fire hydrants shall be limited to fire fighting, related activities or other activities necessary to maintain the health, safety, and welfare of the public.

(9) All new Single Family Residence and Duplex homes shall be equipped with dual water meters and shall initially reduce water through landscape meters.

Section 9. Water Conservation Stage 3. – Moderate Water Shortage.

(A) Water Conservation Stage 3 is also referred to as a "Moderate Water Shortage" and applies during periods when the District will not be able to meet all of the water demands of its customers. Water Conservation Stage 3 may be caused by, but is not limited to, any or all of the following circumstances or events:

(1) a regional or statewide water supply shortage exists and a regional public outreach campaign is being implemented asking or requiring all persons to reduce water use;

(2) groundwater wells are inoperable or unusable (such as by power outages, mechanical failure, or contamination);

(3) alternative water supplies are limited or unavailable;

(4) groundwater levels or groundwater quality is approaching levels which may require augmentation of the groundwater basin or other actions necessary to protect the groundwater basin as prescribed by the California Department of Water Resources, the Regional Water Quality Control Board, Kern County, or some other regulatory body.

(B) The objective of the measures undertaken in Water Conservation Stage 3 is to reduce water system consumption within the District by fifteen to twenty percent.

(C) Except as otherwise provided in this Section 9, all water conservation and drought response measures of Water Conservation Stages 1 and 2 shall be in full force and effect during Water Conservation Stage 3. Upon declaration of a Water Conservation Stage 3 by the Board of Directors, implementation by the District

and publication of notice, the following water conservation and drought response measures shall apply:

(1) Water customers shall reduce their water consumption by fifteen to twenty percent from the Base Year Consumption Amount for the duration of Water Conservation Stage 3. Provided, however, the Base Year Consumption Amount for any subsequent fiscal year shall be determined by the District as appropriate in the event that the District is required to continue Water Conservation Stage 3 for more than twelve months.

(2) Lawns and/or ground cover may be watered and landscaping may be irrigated, including construction meter irrigation, for a maximum of twenty-five minutes per day, only during the following designated hours and designated days:

(a) lawns and/or ground cover may be watered and landscaping may be irrigated for properties with odd number street addresses, parks, and public right of ways, only on Saturdays and Wednesdays between the hours of 6:00 p.m. and 6:00 a.m.;

(b) lawns and/or ground cover may be watered and landscaping may be irrigated for properties with even number street addresses only on Sundays and Thursdays between the hours of 6:00 p.m. and 6:00 a.m.;

(c) watering lawns and/or ground cover and irrigating landscaping is prohibited on Mondays and Fridays and on any day of the week from 6:00 a.m. to 6:00 p.m.

(3) Notwithstanding the provisions of Section 9(C)(2) hereof, the use of graywater to irrigate fruit trees, lawns and ground covers, and ornamental trees and shrubs is permitted on any day and at any time. Provided, however, graywater may only be used in accordance with Kern County Health Department regulations.

(4) Irrigation timers shall be adjusted to comply with the provisions of Section 9(C)(2) hereof.

(5) The washing of automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment is permitted only during the hours of 5:00 p.m. to 7 p.m. or to coincide with daylight savings PST, on Saturdays, Sundays, and Mondays with a hand-held bucket or a hand-held hose equipped with an automatic, positive shut-off nozzle for quick rinses. Washing is permitted at any time on the immediate premises of a commercial car wash. The use of water by all types of commercial car washes not using partially reclaimed or recycled water shall be reduced in volume by an amount determined by the Board of Directors. Further, such washings are exempt from these regulations where the health, safety, and welfare of the public is

contingent upon frequent vehicle cleanings, such as garbage trucks and vehicles used to transport food and perishables.

(6) The overfilling of swimming pools and spas is prohibited. The filling or refilling of ponds, streams, and artificial lakes is prohibited.

(7) The operation of any ornamental fountain or similar structure is prohibited except for short periods of time to prevent damage.

Section 10. Water Conservation Stage 4. – Severe Water Shortage.

(A) Water Conservation Stage 4 is also referred to as a "Severe Water Shortage" and applies during periods when the District will not be able to meet all of the water demands of its customers. Water Conservation Stage 4 may be caused by, but is not limited to, any or all of the following circumstances or events:

(1) a regional or statewide water supply shortage exists and a regional public outreach campaign is being implemented asking or requiring persons to reduce water use;

(2) groundwater wells are inoperable or unusable (such as by power outages, mechanical failure, or contamination);

(3) alternative water supplies are limited or unavailable;

(4) groundwater levels or groundwater quality is approaching levels which may require augmentation of the groundwater basin or other actions necessary to protect the groundwater basin as prescribed by the California Department of Water Resources, the Regional Water Quality Control Board, Kern County, or some other regulatory body; and

(5) a major failure of any supply or distribution facility, whether temporary or permanent, occurs in the water distribution system of the State, the Antelope Valley East Kern Water Agency, or District water facilities.

(B) The objective of the measures undertaken in Water Conservation Stage 4 is to reduce water consumption within the District by twenty to forty percent.

(C) Except as otherwise provided in this Section 10, all water conservation and drought response measures of Water Conservation Stages 1, 2 and 3 shall be in full force and effect during Water Conservation Stage 4. Upon declaration of a Water Conservation Stage 4 by the Board of Directors, implementation by the District and publication of notice, the following water conservation and drought response measures shall apply:

(1) Water customers shall reduce their water consumption by twenty to forty percent from the Base Year Consumption Amount for the duration of Water Conservation Stage 4. Provided, however, the Base Year Consumption Amount for subsequent fiscal years shall be determined by the District as appropriate in the event that the District is required to continue Water Conservation Stage 4 for more than twelve months.

(2) Irrigation of landscaping shall be limited to supporting minimal survival of trees and shrubs. Landscaping may be irrigated, including construction meter irrigation, for a maximum of twenty-five minutes per day only during the following designated hours and designated days:

(a) properties with odd number street addresses, parks, and public right of ways may irrigate landscaping only on Saturdays between the hours of 6:00 p.m. and 6:00 a.m.;

(b) properties with even number street addresses may irrigate landscaping and pastures only on Sundays between the hours of 6:00 p.m. and 6:00 a.m.;

(c) irrigating landscaping is prohibited on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays and on any day of the week from 6:00 a.m. to 6:00 p.m.

(3) Notwithstanding the provisions of Section 10(C)(2) hereof, the use of graywater to irrigate fruit trees, lawns and ground covers, and ornamental trees and shrubs is permitted on any day and at any time. Provided, however, graywater may only be used in accordance with Kern County Health Department regulations.

(4) All outdoor watering and irrigation of lawns and ground covers is prohibited with the exception of plant materials classified and determined by the District General Manager to be rare, exceptionally valuable, or essential to the well being of the public at large or rare animals.

(5) The washing of automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment is prohibited. Washing is permitted at any time on the immediate premises of a commercial car wash. Commercial car washes shall only use partially reclaimed or recycled water for washing automobiles, trucks, trailers, boats, airplanes and other types of mobile equipment. Further, such washings are exempt from these regulations where the health, safety and welfare of the public is contingent upon frequent vehicle cleanings, such as garbage trucks and vehicles used to transport food and perishables.

(6) The filling, refilling, or adding of water to swimming pools, spas, ponds, streams, and artificial lakes is prohibited.

(7) The operation of any ornamental fountain, pond, or similar structure is prohibited except for short periods of time to prevent damage.

(8) The use of water for cooling mists is prohibited.

(9) The use of water for commercial, manufacturing, or processing purposes shall be reduced in volume by an amount determined by the Board of Directors.

(10) Provided the Board of Directors has declared a water shortage emergency pursuant to California Government code section 350 *et sseq.*, no new construction meters will be issued. Construction water shall not be used for earth work, road construction purposes, dust control, compaction, or trenching jetting. Construction projects necessary to maintaining the health, safety, and welfare of the public are exempt from these regulations.

(11) Provided the Board of Directors has declared a water shortage emergency pursuant to California Water Code sections 350 *et seq.*, except as to property for which a building permit has been heretofore issued, no new meter(s) will be installed, except in the following circumstances:

(a) for projects necessary to protect the public's health, safety, and welfare;

(b) when using reclaimed water;

(c) when the recipient of the building permit can demonstrate that no net increase in water use will occur; or

(d) where the recipient of the building permit provides a conservation offset. For purposes of this Section 10(C)(11)(d), "conservation offset" shall mean the implementation of proven conservation techniques which, when installed, will result in a reduction equal to demand of the proposed use. A conservation offset may be effected by paying a fee established by the District in an amount necessary to cover the cost of implementing such conservation techniques or acquiring alternative water sources. The fee will be based on the conservation offset required for an equivalent dwelling unit. Such fee shall apply to residential as well as commercial and industrial buildings, and may be adjusted from time to time as determined by the District.

Section 10. Water Conservation Stage 5. – Critical Water Shortage.

(A) Water Conservation Stage 5 is also referred to as a "Critical Water Shortage" and applies during periods when the District will not be able to meet all of the water demands of its customers. Water Conservation Stage 5 may be caused by, but is not limited to, any or all of the following circumstances or events:

(1) a regional or statewide water supply shortage exists and a regional public outreach campaign is being implemented asking or requiring all persons to reduce water use;

(2) groundwater wells are inoperable or unusable (such as by power outages, mechanical failure, or contamination);

(3) alternative water supplies are limited or unavailable;

(4) groundwater levels or groundwater quality is approaching levels which may require augmentation of the groundwater basin or other actions necessary to protect the groundwater basin as prescribed by the California Department of Water Resources, the Regional Water Quality Control Board, Kern County, or some other regulatory body;

(5) a major failure of any supply or distribution facility, whether temporary or permanent, occurs in the water distribution system of the State, the Antelope Valley East Kern Water Agency, or District water facilities and the District cannot meet all of the water demands of its customers.

(B) The objective of the measures undertaken in Water Conservation Stage 5 is to reduce water consumption by forty percent or more.

(C) Except as otherwise provided in this Section 11, all water conservation and drought response measures of Water Conservation Stages 1, 2, 3, and 4 shall be in full force and effect during Water Conservation Stage 5. Upon declaration of a Water Conservation Stage 5 by the Board of Directors, implementation by the District and publication of notice, the following water conservation and drought response measures shall apply:

(1) Water customers shall reduce their water consumption by forty percent or more from the Base Year Consumption Amount for the duration of Water Conservation Stage 5. Provided, however, the Base Year Consumption Amount for subsequent fiscal years shall be determined by the District as appropriate in the event that the District is required to continue Water Conservation Stage 5 for more than twelve months.

(2) All outdoor watering and irrigation of lawns and ground cover, and landscaping shall be prohibited, with the exception of the use of graywater to irrigate fruit trees, lawns and ground covers, and ornamental trees and shrubs, which is permitted on any day and at any time. Provided, however, graywater may only be used in accordance with Kern County Health Department regulations.

(3) Provided the Board of Directors has declared a water shortage emergency pursuant to California Water Code sections 350 *et seq.*, the District shall not allow any new connections to the water system during Water Conservation Stage 5.

Section 11. Conflicting Provisions.

If provisions of this ordinance are in conflict with each other, other rules and regulations of the District, any other resolution or ordinance of the District, or any State law or regulation, the more restrictive provisions shall apply.

Section 12. Severability.

If any provision, section, subsection, sentence, clause or phrase or sections of this ordinance, including Exhibit A hereto, or the application of same to any person or set of circumstances, is for any reason held to be unconstitutional, void or invalid, the invalidity of the remaining portions of sections of this ordinance shall not be affected, it being the intent of the Board of Directors in adopting this ordinance that no portions, provisions, or regulations contained herein shall become inoperative, or fail by reason of the unconstitutionality of any other provision hereof, and all provisions of this ordinance are declared to be severable for that purpose.

Section 1. Effective Date.

This ordinance shall be effective upon adoption. Before the expiration of 15 days after its passage, the Secretary shall cause this ordinance to be published once, with the names of the members voting for and against it, in a newspaper published in the County pursuant to the provisions of California Government Code Section 25124. Within ten (10) days after its adoption, the District Secretary shall cause this ordinance to be published once pursuant to California Government Code section 6061 in full in a newspaper of general circulation which is printed, published, and circulated in the District. If there is no such newspaper, the ordinance shall be posted within the District after its adoption in three public places.

Introduced at a regular meeting of the Board of Directors of the Rosamond Community Services District, Rosamond, California, held on the 11th day of March, 2009;

Enacted at a regular meeting of the Board of Directors of the Rosamond Community Services District, Rosamond, California, held on the 25th day of March, 2009, by the following vote: 5 Ayes, 0 Noes.

Kathleen Spoor, President
Board of Directors
Rosamond Community Services District

ATTEST:

Lizette Guerrero, Secretary of the Rosamond Community Services District and the Board of Directors thereof

Exhibit A
Rules and Regulations of the District's Water Conservation (No Waste) Program

Section 1. Mandatory Conservation Stage Implementation.

(A) The District General Manager, or his or her designee, shall monitor the projected supply and demand for water by water customers on a daily basis during periods of a water shortage or drought and shall recommend to the Board of Directors the extent of the conservation required through the implementation and/or termination of particular water conservation stages to prudently plan and supply water to water customers. Thereafter, the Board of Directors may order the implementation or termination of the appropriate water conservation stage.

(B) The declaration of any water conservation stage beyond Water Conservation Stage 1 shall be made by resolution of the Board of Directors. Within ten (10) days of the adoption of the resolution declaring the applicable Water Conservation Stage, the District shall make a public announcement of the applicable Water Conservation Stage, which shall be published a minimum of three (3) times for three (3) consecutive weeks. Three publications in a newspaper regularly published once a week or oftener, with at least five days intervening between the respective publication dates not counting such publication dates, are sufficient. Such declaration and notice shall provide the extent, terms, and conditions respecting the use and consumption of water in accordance with the applicable water conservation stage as provided in this ordinance. Upon such declaration and publication of such notice, due and proper notice shall be deemed to have been given to each and every person supplied water within the District. The water conservation stage designated shall become effective immediately upon announcement.

(C) The declaration of a water shortage emergency during any water conservation stage shall be made in accordance with California Water Code sections 350 *et seq.*

Section 2. Violations and remedies.

(A) It shall be unlawful for any person to willfully violate the provisions of this ordinance. Any violation of the provisions of this ordinance shall be a misdemeanor subject to imprisonment in the county jail for not more than thirty (30) days or by fine not to exceed $1,000, or by both as provided in California Water Code section 377.

(B) Upon conviction of a misdemeanor for violating any provision of this ordinance, a person shall be subject to payment of a fine, imprisonment or both, not to exceed the limits set forth by law.

(C) Upon conviction of an infraction for violating any provision of this ordinance, a person shall be subject to payment of a fine, not to exceed the limits set forth by law.

(D) In addition to criminal penalties, any conditions caused or permitted to exist in violation of any of the provisions of this ordinance is a threat to the public health, safety, and welfare and may be declared and deemed, after an administrative hearing, to be a public nuisance which may be summarily abated. The cost of such abatement shall be borne by the property owner of the premises and the cost thereof may be imposed as a lien upon and against the premises, and as such lien shall continue in existence until the same shall be paid.

(E) In addition to any other remedies provided in this ordinance or available under applicable law, the District can alternatively seek injunctive relief in the Superior Court or take enforcement action, including discontinuing or appropriately limiting water service to any customer, against any person who violates any provision of this ordinance through one or any combination of the administrative enforcement options set forth in this ordinance.

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

Section 3. Notice of violation.

(A) The District General Manager or his or her designee may serve a notice of violation onto the property owner and/or occupant of any property, and/or any other person responsible for a violation of this ordinance. The notice of violation shall:

(1) identify the provision(s) of this ordinance and any State law, if applicable, alleged to have been violated; and

(2) state that continued noncompliance may result in civil, criminal, or administrative enforcement actions against the person who committed the violation, or the property owner and/or occupant of the property where the violation occurred; and

(3) state a compliance date that must be met by the person who committed the violation, or the property owner and/or occupant of the property where the violation occurred; and

(4) order remediation work, where applicable, that must be taken by the property owner and/or occupant of the property.

(B) The notice of violation may include, where deemed applicable by the District General Manager or his or her designee, the following terms and conditions:

(1) specific steps or actions and time schedules for compliance as reasonable necessary to prevent future violations of this ordinance; and

(2) specific steps or actions and time schedules for compliance as necessary to prevent further violations; and

(3) any other terms, conditions, or requirements reasonably calculated to prevent continued or threatened future violations of this ordinance, including, but not limited to, discontinuing or limiting water service with the installation of a flow restricting device.

(C) In addition to or in conjunction with the notice of violation, for a first violation of any provision of this ordinance, within two weeks of the violation:

(1) the District may provide notice to the property owner or occupant of the property where the violation occurred to advise such person of:

(a) the water conservation stage then in effect and the provisions of this ordinance relating thereto;

(b) water conservation and drought response measures that are required and may be implemented pursuant to this ordinance;

(c) possible consequences and actions which may be taken by the District for future violations of this ordinance, including discontinuance of water service;

(d) penalties that may be imposed for the specific violation and any future violations of this ordinance; and

(2) if the District General Manager or his or her designee deems it to be appropriate, the District may order the installation of a flow-restricting device on the service line for any person who violates any term or provision of this ordinance.

(D) In addition to or in conjunction with the notice of violation, for a second or any subsequent violation of this ordinance, within two weeks of the violation:

(1) the District may provide notice to the property where the violation occurred to notify the property owner or occupant of the property where the violation occurred to advise such person of:

(a) the water conservation stage then in effect and the provisions of this ordinance relating thereto;

(b) the water conservation and drought response measures that are required and may be implemented by such person; and

(c) possible consequences which may occur in the event of any future violations of this ordinance;

(2) if the District General Manager or his or her designee deems it to be appropriate, the District may order the installation of a flow-restricting device on the service line for any person who violates any term or provision of this ordinance;

(3) if the District General Manager or his or her designee deems it to be appropriate, the District may discontinue water service at the location where the violation occurred.

(E) The District may, after one written notice of violation, order that a special meter reading or readings be made in order to ascertain whether wasteful or unreasonable use of water is occurring. The District may impose a meter reading fee for each meter reading it conducts pursuant to this ordinance.

Section 4. Cease and desist order.

(A) The District General Manager or his or her designee may issue a cease and desist order directing the property owner, or occupant, or other person in charge of day-to-day operations of any property, and/or any other person responsible for a violation of this ordinance to:

(1) immediately discontinue any prohibited use of water pursuant to this ordinance;

(2) immediately cease any activity not in compliance with the terms, conditions, and requirements of this ordinance.

Section 5. Administrative compliance order and penalties.

(A) Separate from, in addition to, or in combination with a notice of violation or cease and desist order, the District General Manager or his or her designee may issue an administrative compliance order against the property owner and/or occupant of the property where a violation of this ordinance occurred and/or any other person responsible for a violation of this ordinance who violates any provision of this ordinance. Issuance of a notice of violation or a cease and desist order is not a prerequisite to the issuance of an administrative compliance order. The administrative compliance order shall allege the act(s) or failure(s) to act that constitute violations of this ordinance and shall set forth the penalty for the violation.

(B) The District General Manager or his or her designee may impose the following monetary penalties, in addition to other appropriate action requirements:

(1) An amount that shall not exceed one hundred dollars ($100.00) for each day a person fails or refuses to timely comply with a notice of violation or cease and desist order required by the District General Manager or his or her designee or this ordinance.

(2) An amount that shall not exceed one thousand dollars ($1,000.00) per day for each day on which a person violates any provision of this ordinance. Unless timely

appealed, an administrative compliance order shall be effective and final as of the date it is issued by the District General Manager or his or her designee.

(C) The amount of any penalties imposed pursuant to this Section 15 which have remained delinquent for a period of sixty (60) days shall constitute a lien against the real property of the person violating this ordinance. The lien provided herein shall have no force and effect until recorded with the Kern County Recorder and when recorded shall have the force and effect and priority of a judgment lien and continue for ten (10) years from the time of recording unless sooner released, and shall be renewable in accordance with the provisions of Sections 683.110 to 683.220, inclusive, of the California Code of Civil Procedure.

(D) All moneys collected under this Section 15 shall be deposited in a special account of the District and shall be made available for enforcement of this ordinance.

(E) The District may, at its option, elect to petition the Superior Court to confirm any order establishing administrative penalties and enter judgment in conformity therewith in accordance with the provisions of Sections 1285 to 1287.6, inclusive, of the California Code of Civil Procedure.

Section 6. Separate Offenses.

A person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any provision of this ordinance is committed, continued, or permitted.

Section 7. Civil actions.

(A) In addition to any other remedies provided in this ordinance, any violation of this ordinance may be enforced by civil action brought by the District.

(B) In any such action, the District may seek, and the court may grant, as appropriate, any or all of the following remedies:

(1) a temporary and/or permanent injunction;

(2) assessment of the violator for the costs of any investigation which led to the establishment of the violation and for the reasonable costs of preparing and bringing legal action under this ordinance;

(3) any other costs incurred in enforcing the provisions of this ordinance.

(C) Assessments under this subsection shall be paid to the District to be used exclusively for costs associated with implementing or enforcing the water conservation and regulatory provisions of this ordinance.

Section 8. Recovery of costs.

(A) The District General Manager or his or her designee shall serve an invoice for costs upon the property owner and/or occupant of any property, or any other responsible person who is subject to a notice of violation, a cease and desist order, or an administrative compliance order. An invoice for costs shall be immediately due and payable to the District. If any property owner or person in charge of day-to-day operations, customer, or responsible party, or any other person fails to either pay the invoice for costs or appeal successfully the invoice for costs in accordance with this ordinance, then the District may institute collection proceedings. The invoice for costs may include reasonable attorneys' fees.

(B) The District shall impose any other penalties or regulatory fees, as fixed from time to time by the Board of Directors, for a violation or enforcement of this ordinance.

(C) In order to recover the costs of the water conservation regulatory program set forth in this ordinance, the Board of Directors may, from time to time, fix and impose fees and charges. The District fees and charges may include, but are not limited to fee and charges for:

(1) any visits of an enforcement officer or other District staff for time incurred for meter reading, follow-up visits, or the installation or removal of a flow-restricting device;

(2) monitoring, inspection, and surveillance procedures pertaining to enforcement of this ordinance;

(3) enforcing compliance with any term or provision of this ordinance;

(4) reinitiating service at a property where service has been discontinued pursuant to this ordinance;

(5) processing any fees necessary to carry out the provisions of this ordinance.

Section 9. Notices.

(A) Any notice, notice of violation, cease and desist order, and administrative compliance order shall be served pursuant to the requirements of this ordinance and shall:

(1) state that the recipient has a right to appeal the matter as set forth in this ordinance;

(2) include the address of the affected property and be addressed to the property owner as shown on the most recently issued equalized assessment roll or as may otherwise appear in the current records of the District. If the order applies to a responsible party who is not the owner of the property or if the event is not related to a specific property, the notice may be sent to the last known address of the responsible party; and

(3) be deemed served ten (10) business days after posting on the property, if the property owner or occupant of the affected property cannot be located after the reasonable efforts of the District General Manager or his or her designee.

(B) Any notice of violation, cease and desist order, and administrative compliance order may be sent by regular mail. Service by regular mail is effective on the date of mailing.

Section 10. Appeals.

Any person subject to a notice of violation, cease and desist order, or administrative compliance order aggrieved by the issuance of an order may appeal from the issuance thereof to a hearing officer in accordance with the appeal procedures of the District of this Code except that any such appeal shall be filed within fifteen (15) days of the date of service of the notice of violation, cease and desist order, or administrative compliance order by the District General Manager or his or her designee upon the appealing party.

Section 11. Relief from compliance.

Consideration of written applications for relief from compliance ("relief") regarding the regulations and restrictions on water use set forth in this ordinance may be made by the District.

(A) Written applications for relief shall be accepted, and may be granted or denied, by the General Manager (the "approving authority"), at his or her sole discretion, or by his or her designee at his or her sole discretion. The application shall be in a form prescribed by the District and shall be accompanied by a non-refundable processing fee in an amount as determined by the Board of Directors for the purpose of defraying the costs incidental to the proceedings.

(B) The grounds for granting or conditionally granting relief are:

(1) due to unique circumstances, a specific requirement of this ordinance would result in undue hardship to a person using District water or to property upon which District water is used, that is disproportionate to the impacts to other District water users generally or to similar property or classes of water users; or

(2) failure to grant relief would adversely affect the health, sanitation, fire protection, or safety of the applicant or the public.

(C) The application for relief shall be accompanied, as appropriate, with photographs, maps, drawings, and other information substantiating the applicant's request, including a statement of the applicant.

(D) An application for relief shall be denied unless the approving authority finds, based on the information provided in the application, supporting documentation, or such other additional information as may be requested, and on water use information for the property as shown by the records of the District, all of the following:

(1) That the relief does not constitute a grant of special privilege inconsistent with the limitations upon other District customers.

(2) That because of special circumstances applicable to the property or its use, the strict application of this ordinance would have a disproportionate impact on: (a) the property or use that exceeds that customers generally; or (b) the applicant's health that exceeds customers generally.

(3) That the authorization of such relief will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the District to effectuate the purposes of this ordinance and will not be detrimental to the public interest.

(4) That the condition or situation of: (a) the subject property or the intended use of the property for which the relief is sought is not common, recurrent, or general in nature; or (b) the applicant's health or safety is not common, recurrent, or general in nature.

(E) The denial or grant of a relief shall be acted upon within fifteen (15) days of the submittal of the complete application, including any photographs, maps, drawings, and other information substantiating the applicant's request and the statement of the applicant. The application may be approved, conditionally approved, or denied. The decision of the approving authority shall be prepared in writing, include terms and conditions, if any, and promptly sent to the applicant.

(F) The denial of a request for relief may be appealed in writing to the Secretary of the Board. An appeal shall be made in accordance with the following procedures:

(1) The person appealing the denial of the request for relief ("appellant") shall complete and submit in writing a form provided by the District for such purpose and shall state in such form the grounds for his or her appeal. All appeals shall be submitted to the Secretary of the Board within thirty (30) calendar days of the date of the notice of the denial of the request for relief.

(2) The General Manager, or his or her designee, shall review the appeal and any related information provided, and, if necessary, cause an investigation and report to be made concerning the request for relief. The General Manager, or his or her designee, shall have fifteen (15) calendar days from the submission of the appeal to render a decision on whether to grant the appeal and mail notice thereof to the appellant. If the General Manager, or his or her designee, grants the appeal and determines that the request for a relief shall be granted, then within fifteen (15) calendar days of such determination the General Manager, or his or her designee, shall give written notice thereof.

(3) The decision of the General Manager, or his or her designee, may be appealed by the appellant to the Board of Directors. Such appeal must be submitted in writing and filed with the District Secretary within fifteen (15) calendar days of the date of decision of the General Manager, or his or her designee. The Board of Directors shall conduct a hearing on such appeal at its next regularly scheduled Board of Directors meeting; provided, however, the Board of Directors shall have received the notice of appeal at least fifteen (15) calendar days prior to such meeting. If the appeal is not submitted within at least fifteen (15) calendar days prior to a regularly scheduled Board of Directors meeting, then the hearing shall be held at the following regularly scheduled Board of Directors meeting. A notice of the hearing shall be mailed to the appellant at least ten (10) calendar days before the date fixed for the hearing. The Board of Directors shall review the appeal de novo. The determination of the Board of Directors shall be conclusive and shall constitute a final order. Notice of the determination by the Board of Directors shall be mailed to the appellant within ten (10) calendar days of such determination and shall indicate whether the appeal has been granted in whole or in part and set forth the terms and conditions of the relief, if any, granted to the appellant. If the appeal is denied, the appellant shall comply with all terms and conditions of this ordinance and the applicable water conservation stage then in effect.

(4) Until the conclusion of the appeal process, all provisions and decisions under appeal shall remain in full force and effect until the conclusion of the appeal process.

Appendix E-2

QHWD “No Waste” Ordinance

APPENDIX C

QHWD's WATER SHORTAGE INFORMATION

No-Waste Policy

Resolution to Declare a Water Shortage Emergency

Moratorium on New Connections During a Declared Water Shortage

Water Shortage Rationing Allocation Method (TO BE ADDED)

No Waste Policy

QUARTZ HILL WATER DISTRICT
LOS COUNTY, CALIFORNIA
Date

The Board of Directors of the Quartz Hill Water District has adopted the following Policy No. xxxxx. Waste to be prevented:

XXXXXXX Waste to be prevented. Consumers shall prevent all waste of water and for the purposed of this chapter the word "waste" shall be defined as:

A. Where water is uable to be absorbed within the limits of the cultivated area upon which it is being used;
B. Where water is allowed to gather, from any cause whatsoever, into a pool where it serves no useful purpose; but may act as a harbor or breeding place for mosquitoes;
C. Where water is allowed to run into a gutter or upon land which has no need for it at the time. (Ord. 1046 para.1 (Exh. A(part)), 2000.

Resolution To Declare A Water Shortage Emergency

QUARTZ HILL WATER DISTRICT
LOS ANGELES COUNTY, CALIFORNIA
Date

The District Board of Directors of the Quartz Hill Water District does hereby resolve as follows:

PURSUANT to California Water Code Section 350 et seq., the Board of Directors has conducted duly noticed public hearings to establish the criteria under which a water shortage emergency may be declared.

WHEREAS, the Board of Directors finds, determines and declares as follows:

(a) The District is the water purveyor for the property owners and inhabitants of QHWD;

(b) The demand for water service is not expected to lessen.

(c) When the combined total amount of water supply available to the District from all sources falls at or below the Stage II triggering levels described in the 2002 Urban Water Management Plan, the Board of Directors will declare a water shortage emergency. The water supply would not be adequate to meet the ordinary demands and requirements of water consumers without depleting the District's water supply to the extent that there may be insufficient water for human consumption, sanitation, fire protection, and environmental requirements. This condition is likely to exist until precipitation and inflow dramatically increases or until water system damage resulting from a disaster are repaired and normal water service is restored.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Quartz Hill Water District hereby directs the General Manager to find, determine, declare and conclude that a water shortage emergency condition exists that threatens the adequacy of water supply, until the District's water supply is deemed adequate. After the declaration of a water shortage emergency, the General Manager is directed to determine the appropriate Rationing Stage and implement the District's Water Shortage Emergency Response.

FURTHERMORE, the Board of Directors shall periodically conduct proceedings to determine additional restrictions and regulations which may be necessary to safeguard the adequacy of the water supply for domestic, sanitation, fire protection, and environmental requirements.

Moratorium On New Connections During A Water Supply Reduction

QUARTZ HILL WATER DISTRICT
LOS ANGELES COUNTY, CALIFORNIA
Date

The Board of Directors of the Quartz Hill Water District does hereby resolve as follows:
The Municipal Code of the Quartz Hill Water District is hereby amended to read as follows:

XX-1 MORATORIUM ON SERVICE COMMITMENTS AND CONNECTIONS

1 When the District declares a water shortage emergency, the following regulations shall become effective immediately and shall continue in full force and effect to prohibit the following while it remains in full force and effect:
   a. The District shall not issue oral or written commitments to provide new or expanded water service, including will-serve letters.
   b. The District shall not sell meters for water service connections, despite the prior issuance of will-serve letters or other oral or written service commitments, unless building permits have been issued.
   c. The District shall not provide new or expanded water service connections, despite the prior issuance of will-serve letters or other oral or written service commitments and meters, unless building permits have been issued.
   d. The District shall not provide water for use on any new plantings installed after the declaration of a Water Shortage Emergency.
   e. The District shall not annex territory located outside the District's service boundary.

2. The following uses are exempt from the moratorium and upon application to the District shall receive necessary water service commitments and connections to receive water from the District:
   a. Uses, including but not limited to, commercial, industrial, single and multifamily residential, for which a building permit has been issued by the District on or before the declaration of a Water Shortage Emergency.
   b. Uses, including but not limited to, commercial, industrial, single and multifamily residential, for which a retail meter had been purchased from the District before the declaration of a Water Shortage Emergency, as evidenced by a written receipt and for which a building permit has been issued and remains in full force and effect.
   c. Publicly owned and operated facilities, including but not limited to schools, fire stations, police stations, and hospitals and other facilities as necessary to protect the public health, safety and welfare.

Appendix F

Water Shortage Contingency Plans

Appendix F-1

District No. 40 Water Shortage Contingency Plan

PART 5 - PHASED WATER CONSERVATION PLAN

SECTION A - STATEMENT OF POLICY AND DECLARATION OF PURPOSE

5-A-1 STATEMENT OF POLICY AND DECLARATION OF PURPOSE:

Because of the water supply conditions prevailing in any or all of the County Waterworks Districts and/or in the area from which any or all of the Districts obtain all or a portion of their supply, the general welfare requires that the water resources available to any or all of the Districts be put to the maximum beneficial use to the extent to which they are capable, and that the unreasonable use, or unreasonable method of use of water be discouraged and that the conservation of such water be practiced with a view to the reasonable and beneficial use thereof in the interest of the people of any or all of the Districts and for the public welfare. The purpose of this Phased Water Conservation Plan is to minimize the effect of a shortage of water supplies on the customers of any or all of the Districts during a water shortage emergency.

SECTION B - AUTHORIZATION TO IMPLEMENT WATER CONSERVATION

5-B-1 AUTHORIZATION TO IMPLEMENT WATER CONSERVATION:

5-B-1a The Board of Directors of the Waterworks Districts may implement the applicable provisions of this conservation plan, following the public hearing required by Rule 5-B-1b, upon its determination that such implementation is necessary to protect the public welfare and safety.

5-B-1b The Board of Directors of the Waterworks Districts shall hold a public hearing for the purpose of determining whether a shortage exists in any or all of the Districts and which measures provided by this ordinance should be implemented. Notice of the time and place of the public hearing shall be published not less than ten (10) days before the hearing in a newspaper of general circulation within the affected District or Districts.

5-B-1c The Board of Directors shall issue its determination of shortage and corrective measures by resolution published in a daily newspaper of general circulation within the affected District or Districts. Conservation surcharges assessed per Rule 5-0-1 shall become effective no sooner than the first full billing period commencing on or after the date of such publication.

Part 5	Added 5/23/91 Ordenance No. 91-0075M
5-A-1	Rev. 7/25/91
5-B-1	Rev. 7/25/91

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)

SECTION C - GENERAL PROHIBITION

5-C-1 GENERAL PROHIBITION:

5-C-1a No customer of the District or Districts shall make, cause, use, or permit the use of water from the District or Districts in a manner contrary to any provision of this ordinance.

5-C-1b In the area of District No. 34 Desert View Highlands known as Ritter Ranch, as defined in Agreement No. 66407 as amended between the District and Ritter Park Associates, the water use limitations contained in Agreement No. 66407 as amended shall be implemented in addition to those required by this Part of these rules.

SECTION D - PHASE I SHORTAGE

5-D-1 PHASE I SHORTAGE:

5-D-1a A Phase I Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a ten percent (10□) shortage in its water supplies.

5-D-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of ninety percent (90□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-D-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of ninety percent (90□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)

SECTION E - PHASE II SHORTAGE

5-E-1 PHASE II SHORTAGE:

5-E-1a A Phase II Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between ten percent (10□) and fifteen percent (15□) in its water supplies.

5-E-1b A customer with a meter size of one and one-half (1 1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty-five percent (85□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-E-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty-five percent (85□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

SECTION F - PHASE III SHORTAGE

5-F-1 PHASE III SHORTAGE:

5-F-1a A Phase III Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between fifteen percent (15□) and twenty percent (20□) in its water supplies.

5-E-1c Rev. 7/24/91
5-F-1c Rev. 7/91,Rev. 1/09

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)

SECTION F □PHASE III SHORTAGE (continued)

5-F-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty percent (80□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-F-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of eighty percent (80□) of the base quantity. All water used in excess of the target quantity shall be subject to a surcharge per Rule 5-0-1.

5-F-1d New meters to provide construction water service shall not be issued.

5-F-1e Water service ("Will Serve") letters will be issued, but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

SECTION G - PHASE IV SHORTAGE

5-G-1 PHASE IV SHORTAGE:

5-G-1a A Phase IV Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between twenty percent (20□) and twenty-five percent (25□) in its water supplies.

5-G-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy-five percent (75□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-G-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy-five percent (75□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-G-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be limited to not more than every other day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-G-1e New meters to provide construction water service shall not be issued.

5-G-1f Water Service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION H - PHASE V SHORTAGE

5-H-1 PHASE V SHORTAGE:

5-H-1a A Phase V Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between twenty-five (25□) and thirty percent (30□) in its water supplies.

5-H-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy percent (70□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Supervisors.

5-H-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of seventy percent (70□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-H-d The watering of lawn, landscape or other turf area with water supplied by the district shall be limited to not more than every other day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-H-1e New meters to provide construction water service shall not be issued.

5-H-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-H-1c Rev. 7/91, Rev.1/09

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION I - PHASE VI SHORTAGE

5-I-1 PHASE VI SHORTAGE:

5-I-1a A Phase VI Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between thirty (30□) and thirty-five percent (35□) in its water supplies.

5-I-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty-five percent (65□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-I-1c For meter sizes of one (1) inch or less, a base quantity shall be the average of the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the BOARD.

A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty-five percent (65□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-I-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be limited to not more than every third day and shall be prohibited between the hours of 10:00 a.m. and 5:00 p.m.

5-I-1e New meters to provide construction water service shall not be issued.

5-I-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

Part 5 Added 5/23/91 Ordinance No. 91-0075M, Rev. 1/09

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION J - PHASE VII SHORTAGE

5-J-1 PHASE VII SHORTAGE:

5-J-1a A Phase VII Shortage shall be declared whenever the Board of Directors determined that it is likely that the District will suffer a shortage of between thirty-five (35□) and forty percent (40□) in its water supplies.

5-J-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty percent (60□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-J-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of sixty percent (60□) of the base quantity. All water used in excess of the target quantity shall be subject to a surcharge per Rule 6-0-1.

5-J-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be prohibited, except that trees and shrubs may be watered at any time by bucket.

5-J-1e All meters to provide construction water shall be removed.

5-J-1f Water service ("Will Serve") letters will be issued, but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-J-1g No new permanent meters shall be installed.

Part 5 Added 5/23/91 Ordinance No. 91

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION K - PHASE VIII SHORTAGE

5-K-1 PHASE VIII SHORTAGE

5-K-1a A Phase VIII Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between forty percent (40□) and forty-five percent (45□) in its water supplies.

5-K-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of fifty-five percent (55□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-K-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to fifty-five percent (55□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-K-1d The watering of lawn, landscape or other turf area with water supplied by the District shall be prohibited except that trees and shrubs may be watered at any time by bucket.

5-K-1e All meters to provide construction water shall be removed.

5-K-1f Water service ("Will Serve") letters will be issued but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-K-1g No new permanent meters shall be installed.

Part 5 Added 5/23/91 Ordinance No. 91-0075M

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION L - PHASE IX SHORTAGE

5-L-1 PHASE IX SHORTAGE

5-L-1a A Phase IX Shortage shall be declared whenever the Board of Directors determines that it is likely that the District will suffer a shortage of between forty-five (45□) and fifty percent (50□) in its water supplies.

5-L-1b A customer with a meter size of one and one-half (1-1/2) inches or larger shall be billed at his or her normal established water rate for all water used up to a target quantity of fifty percent (50□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1. The base quantity shall be determined by the amount of water used on the customer's premises during the corresponding billing period of a base period to be defined by the Board of Directors.

5-L-1c For meter sizes of one (1) inch or less, a base quantity shall be computed by averaging the water usage for all similar sized meters during the corresponding billing period of a base period to be defined by the Board of Directors. A customer with a meter size of one (1) inch or less shall be billed at his or her normal established water rate for all water used up to a target quantity of fifty percent (50□) of the base quantity. All water used in excess of the target quantity shall be subject to a conservation surcharge per Rule 5-0-1.

5-L-1d The watering of lawn, landscape or other turf area including trees and shrubs, with water supplied by the District shall be prohibited.

5-L-1e All meters to provide construction water shall be removed.

5-L-1f Water service ("Will Serve") letters will be issued, but such letters will be issued with the condition that permanent metered service to any newly created lot will be prohibited until the Board of Directors determines that the provisions of the Phased Water Conservation Plan are no longer in effect or that the severity of the water supply condition may be reduced to a Phase I or Phase II shortage.

5-L-1g No new permanent meters shall be installed.

Part 5 Added 5/23/91 Ordinance No. 91-0075M

PART 5 - PHASED WATER CONSERVATION PLAN (CONTINUED)
SECTION M - RELIEF FROM COMPLIANCE

5-M-1 RELIEF FROM COMPLIANCE:

5-M-1a A customer may file an application for relief from any provisions of this ordinance. The Director of Public Works shall develop such procedures as he or she considers necessary to resolve such applications and shall, upon the filling by a customer of an application for relief, take such steps as he or she deems reasonable to resolve the application for relief. The decision of the Director of Public Works shall be final. The Director of Public Works may delegate his or her duties and responsibilities under this Rule as appropriate.

5-M-1b The application for relief may include a request that the customer be relieved, in whole or in part, from the conservation surcharge provisions of Rules 5-D-1b, 5-D-1c, 5-E-1b, 5-E-1c, 5-F-1b, 5-F-1c, 5-G-1b, 5-G-1c, 5-H-1b, 5-H-1c, 5-I-1b, 5-I-1c, 5-J-1b, 5-J-1c, 5-K-1b, 5-K-1c, 5-L-1b, and 5-L-1c.

5-M-1c In determining whether to grant relief, and the nature of any relief, the Director of Public Works shall take into consideration all relevant factors including, but not limited to:

1. Whether any additional reduction in water consumption will result in unemployment;

2. Whether additional members have been added to the household;

3. Whether any additional landscaped property has been added to the property since the corresponding billing period of the base year;

4. Changes in vacancy factors in multi-family housing;

5. Increased number of employees in commercial, industrial, and governmental offices;

6. Increased production requiring increased process water;

7. Water uses during new construction;

8. Adjustments to water use caused by emergency health or safety hazards;

9. First filling of a permit-constructed swimming pool; and

10. Water use necessary for reasons related to family illness or health.

Part 5 Added 5/23/91 Ordinance No. 91-0075M

11. Whether the basic period for billing should be adjusted due to the unique circumstances of the type of facility, such as a boat, which results in irregular, intermittent periods of consumption.

5-M-1d In order to be considered, an application for relief must be filed with the District within twenty (20) days from the date the provision from which relief is sought becomes applicable to the applicant. No relief shall be granted unless the customer shows that he or she has achieved the maximum practical reduction in water consumption other than in the specific areas in which relief is being sought. No relief shall be granted to any customer who, when requested by the Director of Public Works or designee, fails to provide any information necessary for resolution of the customer's application for relief. The decision shall be issued within twenty (20) days and provided to the customer.

SECTION N - NOTIFICATION OF CUSTOMERS

5-N-1 NOTIFICATION OF CUSTOMERS:

5-N-1a Each customer will be notified on his or her bill as to what the target quantity and the base quantity will be for the applicable billing period.

SECTION O - CONSERVATION SURCHARGES

5-O-1 CONSERVATION SURCHARGES:

5-O-1a Water use up to the target quantities specified in Rules 5-D-1b, 5-D-1c, 5-E-1b, 5-E-1c, 5-F-1b, 5-F-1c, 5-G-1b, 5-G-1c, 5-H-1b, 5-H-1c, 5-I-1b, 5-I-1c, 5-J-1b, 5-J-1c, 5-K-1b, 5-K-1c, 5-L-1b, and 5-L-1c shall be billed at the established QUANTITY CHARGE or NORMAL USE CHARGE. Water use in excess of the aforementioned target quantities shall be subject to the following conservation surcharges in addition to the established QUANTITY CHARGE or NORMAL USE CHARGE:

1. For all customers within Los Angeles County Waterworks Districts and Marina Del Rey Water System, an additional conservation surcharge of 1.0 times the established QUANTITY CHARGE or NORMAL USE CHARGE will be assessed for water use in excess of the target quantity, up to 115 percent of the target quantity.

2. For all customers within Los Angeles County Waterworks Districts and Marina Del Rey Water System, an additional conservation surcharge of 2.0 times the established QUALITY CHARGE or NORMAL USE CHARGE will be assessed for water use in excess of 115 percent of the target quantity.

3. If cost of purchased water obtained from the water wholesalers that sell water to the Los Angeles County Waterworks Districts increases beyond the amounts that can be offset and collected through the rates set in 1 and 2 of this provision, then the District Engineer is hereby authorized to revise the rates set in 1 and 2 of this provision in amounts necessary to offset the cost to purchase the water.

5-O-1b Violation by any customer of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d, and 5-L-1d shall be penalized as follows:

1. First violation. The Director of Public Works or designee shall issue a written notice of the fact of a first violation to the customer.

2. Second violation. For a second violation during any one water shortage emergency, the Director of Public Works or designee shall issue a written notice of the fact of a second violation to the customer.

3. Third and subsequent violations. For a third and each subsequent violation during any one water shortage emergency, the Director of Public Works or designee may install a flow-restricting device or the service of the customer at the premises at which the violation occurred for installing and for removing the flow-restricting devices and for restoration of normal service. The charge shall be paid before normal service can be restored.

5-O-1c All monies collected by a District pursuant to this ordinance shall be deposited in that District's General Fund as reimbursement for the District's costs and expenses of administering this conservation plan.

5-O-1d The District shall give notice to customer of water conservation surcharges or of water usage violations as follows:

a. Notice of water conservation surcharges or of first and second violations of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d, and 5-L-1d shall be given to the customer in person or by regular mail.

b. If the customer is absent from or unavailable at the premises at which the violation occurred, by leaving a copy with some person of suitable age and discretion at the premises and sending a copy through the regular mail to the address at which the customer is normally billed; or

c. If a person of suitable age or discretion cannot be found, then by affixing a copy in a conspicuous place at the premises at which the violation occurred and also sending a copy through the regular mail to the address at which the customer is normally billed.

5-O-1e The notice of a violation of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d, and 5-L-1d shall contain a description of the facts of the violation, a statement of the possible penalties for each violation and a statement informing the customer of his right to a hearing on the merits of the violation pursuant to Rule 5-P-1.

5-O-1f Nothing in these regulations shall prohibit any customer from either installing sub-meters or from pro-rating and collecting from the ultimate users any conservation surcharges assessed when the customer's master meter measures consumption of water for multiple tenancy facilities. However, unless the sub-meters are subsequently billed directly by the District, the customer responsible for the master meter shall continue to be responsible directly to the District for all payments including conservation surcharges.

SECTION P - HEARING REGARDING VIOLATIONS

5-P-1 HEARING REGARDING VIOLATIONS:

5-P-1a Any customer receiving notice of a third or subsequent violations of the water use prohibitions of Rules 5-G-1d, 5-H-1d, 5-I-1d, 5-J-1d, 5-K-1d or 5-L-1d shall have a right to a hearing by the Director of Public Works or his designee within fifteen (15) days of a mailing or other delivery of the notice of violation.

5-P-1b The customer's written request for a hearing must be received within ten (10) days of the issuance of the notice of violation. This request shall stay installation of a flow-restricting device on the customer's premises and the assessment of any surcharge until the Director of Public Works or designee renders his or her decision. The decision shall be issued within ten (10) days of the hearing, a copy of which shall be provided to the customer.

5-P-1c The decision of the Director of Public Works shall be final except for judicial review.

PART 5 PHASED WATER CONSERVATION PLAN (CONTINUED)

SECTION Q - ADDITIONAL WATER SHORTAGE MEASURES

5-Q-1 ADDITIONAL WATER SHORTAGE MEASURES:

The Board of Directors may order implementation of water conservation measures in addition to those set forth in Rules 5-D-1, 5-E-1, 5-F-1, 5-G-1, 5-H-1, 5-I-1, 5-J-1, 5-K-1, and 5-L-1. Such additional water conservation measures shall be implemented in the manner provided in Rule 5-B-1.

SECTION R - PUBLIC HEALTH AND SAFETY NOT TO BE AFFECTED

5-R-1 PUBLIC HEALTH AND SAFETY NOT TO BE AFFECTED:

Nothing in this ordinance shall be construed to require the District to curtail the supply of water to any customer when such water is required by that customer to maintain an adequate level of public health and safety.

SECTION S - SEVERABILITY

5-S-1 SEVERABILITY:

If any part of this ordinance or the application thereof to any person or circumstances is for any reason held invalid or unconstitutional by a decision of any court of competent jurisdiction, the validity of the remainder of the ordinance or the application of such provision to other persons or circumstances shall not be affected. The Board of Directors of the District or Districts declares that it would have adopted this ordinance and all provisions hereof irrespective of the fact that any one or more of the provisions be declared invalid or unconstitutional.

Part 5 Added 5/23/91 Ordinance No. 91-0075

ORDINANCE NO. 91-0046U

An urgency ordinance amending Title 11 - Health and Safety of the Los Angeles County Code, relating to water conservation requirements for the Unincorporated Los Angeles County Area.

The Board of Supervisors of the County of Los Angeles ordains as follows:

SECTION 1. Chapter 11.38, Part 4, is hereby readopted as amended to read as follows:

Part 4. Water Conservation Requirements for the Unincorporated Los Angeles County Area

11.38.620 Hose watering prohibition.

No person shall hose water or wash down any sidewalks, walkways, driveways, parking areas or other paved surfaces, except as is required for the benefit of public health and safety. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of 100.00 for each subsequent violation.

11.38.630 Watering of lawns and landscaping.

A. No person shall water or cause to be watered any lawn or landscaping between the hours of 10:00 a.m. and 5:00 p.m.

B. No person shall water or cause to be watered any lawn or landscaping more than once a day.

C. No person shall water or cause to be watered any lawn or landscaping to such an extent that runoff into adjoining streets, parking lots or alleys

occurs due to incorrectly directed or maintained sprinklers or excessive watering.

D. It shall be the duty of all persons to inspect all hoses, faucets and sprinkling systems for leaks, and to cause all leaks to be repaired as soon as is reasonably practicable.

E. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of □100.00 for each subsequent violation.

11.38.640 Indoor plumbing and fixtures.

A. It shall be the duty of all persons to inspect all accessible indoor plumbing and faucets for leaks, and to cause all leaks to be repaired as soon as is reasonably practicable.

B. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of □100.00 for each subsequent violation.

11.38.650 Washing vehicles.

No motor vehicle, boat, trailer, or other type of mobile equipment may be washed, except at a commercial carwash or with reclaimed water, unless such vehicle is washed by using a hand-held bucket or a water-hose equipped with an automatic shutoff nozzle. No person shall leave a water hose running while washing a vehicle or at any other time. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a

fine of □100.00 for each subsequent violation.

11.38.660 Public eating places.

No restaurant, hotel, cafeteria, caf□, or other public place where food is sold or served shall serve drinking water to any customer unless specifically requested to do so by such customer. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of □100.00 for each subsequent violation.

11.38.670 Decorative fountains.

No person shall use water to clean, fill, or maintain levels in decorative fountains, ponds, lakes, or other similar aesthetic structures unless such water flows through a recycling system. Willful violation hereof shall be subject to a written warning for the first violation, and shall be an infraction punishable by a fine of □100.00 for each subsequent violation.

11.38.680 Procedural requirements.

The Director of Public Works, with input and concurrence from the Director of Public Health, shall periodically review the provisions of this Part and recommend necessary updates to the Board of Supervisor. The review of the provisions and preparation of resulting recommendations, if any shall be performed, at a minimum, every two years following the first review, which shall to be completed by December 31, 2010.

SECTION 2. Due to the severity of the drought in the State of California, there is an immediate need to prohibit the wasting of water in the Los Angeles County unincorporated area to better utilize the available water supplies. This ordinance is urgently needed for the preservation of the public health, safety, and general welfare, and shall take effect immediately.

Appendix F-2

RCSD Water Shortage Contingency Plan

Table 13 ULFT Retrofit Program	
Year	# of ULFT Retrofits
2000	240e
2001	240e
2002	240e
2003	240e
2004	240e
2005	240e
2006	240e
2007	240e
2008	240e
2009	240e
2010	240e
e = estimate	
Estimated 3000 toilets @ 80% = 2400 toilets/10 years = 240 toilets/year	

METHODS TO EVALUATE EFFECTIVENESS: The District will calculate annual ULFT replacement program water savings to confirm the savings are within 10% of calculated retrofit-on-resale water savings, using the CUWCC MOU Exhibit 6 methodology and water savings estimates. Exhibit 6 has become an industry standard for evaluation of ULFT replacement programs.

CONSERVATION SAVINGS: Projected total annual water savings from toilet retrofits at full implementation has yet to be determined.

BUDGET: Proposed annual budget: $33,900.00, for materials, rebates, and administrative costs.

Water Shortage Contingency Plan

Preparation for Catastrophic Water Supply Interruption

Law

> 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:
>
> 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.

Water Shortage Emergency Response

RCSD is discussing plans that contain procedures for the distribution of potable water in a disaster; these procedures will be consistent with guidelines prepared by the California State Office of Emergency Services.

RCSD is considering the feasibility of : (1) the purchase of water purification equipment; (2) purchase of standby generators and auxiliary pumps; and (3) construction of emergency water conveyance and supply storage facilities.

Specific water-critical customers (such as hospitals, nursing facilities, schools, and a few individual customers with medical conditions dependent on continuous water availability) have been identified. Likely potable water distribution sites have been identified. Standby procurement documents procedures are being considered for emergency bulk purchase of bottled water. All existing water supply storage, treatment, and distribution, and wastewater treatment facilities are currently inspected monthly.

The District recognizes the importance of the DMMs in reducing water demand and would continue to implement the programs. Also, the District would increase media attention to the water supply situation during a shortage and would step up public water education programs, encourage property owners to apply for a landscape and interior water use survey and continue to advertise the importance of customers to install ULF plumbing fixtures.

During declared shortages, or when a shortage declaration appears imminent, the RCSD General Manager will activate a District water shortage response team. The team includes: water, fire, sewer, street lighting, public affairs, parks and recreation. During a declared water shortage, the District will accept applications for new building permits but will not issue permits until the shortage declaration is rescinded. An appeal process will be established.

Supplemental Water Supplies

To offset future potential water shortages due to drought or disaster, the District is considering the following supplemental water supplies.

Desalination

RCSD has no reason for considering desalination of its source water at the present time.

Water Transfers

See the Transfer or Exchange Opportunities section.

Long Term Additional Water Supply Options

To meet future long-term water demand beyond 2020, the District will be considering drilling additional wells and importing water from outside sources.

The following table summarizes the actions the water agency will take during a water supply catastrophe.

Table 14. Preparation Actions for a Catastrophe	
Examples of Actions	Check if Discussed
Determine what constitutes a proclamation of a water shortage.	✓
Stretch existing water storage.	✓
Obtain additional water supplies.	✓
Develop alternative water supplies.	✓
Determine where the funding will come from.	✓
Contact and coordinate with other agencies.	✓
Create an Emergency Response Team/Coordinator.	✓
Create a catastrophe preparedness plan.	✓
Put employees/contractors on-call.	✓
Develop methods to communicate with the public.	✓
Develop methods to prepare for water quality interruptions.	✓

Water Shortage Contingency Ordinance/Resolution

Law

> 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:
>
> 10632 (h) A draft water shortage contingency resolution or ordinance.

RCSD Water Shortage Response

As mentioned earlier, the District adopted a "No-Waste" Ordinance in 2000, and has developed a Resolution to Declare a Water Shortage Emergency. The District will adopt a policy to implement a Moratorium on New Connections during declared water shortages see Appendix C.

Stages of Action

Law

> 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:
>
> 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.

Rationing Stages and Reduction Goals

The District has developed a four stage rationing plan (see Table 16) to invoke during declared water shortages. The rationing plan includes voluntary and mandatory rationing, depending on the causes, severity, and anticipated duration of the water supply shortage.

Table 15:
Water Rationing Stages and Reduction Goals

Shortage Condition	Stage	Customer Reduction Goal	Type of Rationing Program
Up to 15%	I	15%	Voluntary
15 – 25%	II	25%	Mandatory
25 - 35%	III	35%	Mandatory
35 - 50%	IV	50% or >	Mandatory

Priority by Use

Priorities for use of available potable water during shortages were based on input from RCSD's operations personnel, staff statistical analysts, citizen groups, and legal requirements set forth in the California Water Code, Sections 350-358. Water allocations are established for all customers according to the following ranking system:

- Minimum health and safety allocations for interior residential needs (includes single family, multi-family, hospitals and convalescent facilities, retirement and mobile home communities, and student housing, and fire fighting and public safety)
- Commercial, industrial, institutional/governmental operations (where water is used for manufacturing and for minimum health and safety allocations for employees and visitors), to maintain jobs and economic base of the community (not for landscape uses)
- Existing landscaping
- New customers, proposed projects without permits when shortage declared.

Note: It is not expected that any potable water supply reductions would result in recycled water shortages. However, this may change in the future, as more customers use recycled water.

Health and Safety Requirements

Based on commonly accepted estimates of interior residential water use in the United States, Table 17 indicates per capita health and safety water requirements. In Stage I shortages, customers may adjust either interior or outdoor water use (or both), in order to meet the voluntary water reduction goal.

However, under Stage II, Stage III and Stage IV mandatory rationing programs, the District has established a health and safety allotment of 68 gallons per capita-day (gpcd). This translates to 33 hundred cubic feet (HCF) per person per year. Based on previous studies, that amount of water insufficient for essential interior water with no habit or plumbing fixture change. If customers wish to change water use habits or plumbing fixtures, 68 gpcd is sufficient to provide for limited non-essential (i.e. outdoor) uses.

Stage IV mandatory rationing, which is likely to be declared only as the result of a prolonged water shortage or as a result of a disaster, would require that customers make changes in their interior water use habits (for instance, not flushing toilets unless "necessary" or taking less frequent showers).

Table 16.
Per Capita Health and Safety Water Quantity Calculations

	Non-Conserving Fixtures		Habit Changes 1		Conserving Fixtures 2	
Toilets	5 flushes x 5.5 gpf	27.5	3 flushes x 5.5 gpf	16.5	5 flushes x 1.6 gpf	8.0
Shower	5 min x 4.0 gpm	20.0	4 min x 3.0 gpm	12.0	5 min x 2.0	10.0
Washer	12.5 gpcd	12.5	11.5 gpcd	11.5	11.5 gpcd	11.5
Kitchen	4 gpcd	4.0	4 gpcd	4.0	4 gpcd	4.0
other	4 gpcd	4.0	4 gpcd	4.0	4 gpcd	4.0
Total (gpcd)		68.0		48.0		37.5
HCF per capita per year		33.0		23.0		18.0

1 Reduced shower use results from shorter and reduced flow. Reduced washer use results from fuller loads.
2 Fixtures include ULF 1.6 gpf toilets, 2.0 gpm showerheads and efficient clothes washers.

Water Shortage Stages and Triggering Mechanisms

As the water purveyor, RCSD must provide the minimum health and safety water needs of the community at all times. The water shortage response is designed to provide a minimum of 50% of normal supply during a severe or extended water shortage. The rationing program triggering levels shown below were established to ensure that this goal is met.

Rationing stages may be triggered by a shortage in one water source or a combination of sources. Although an actual shortage may occur at any time during the year, a shortage (if one occurs) is usually forecasted by the AVEK on or about April 1 each year. If it appears that it may be a dry year, the District advises all of its customers in April or May so that they can minimize potential financial impacts.

The District's potable water sources are groundwater, and imported surface water. Rationing stages may be triggered by a supply shortage or by contamination in one source or a combination of sources. Because shortages overlap Stages, triggers automatically implement the more restrictive Stage. Specific criteria for triggering the City's rationing stages are shown in Table 17.

Table 17
Water Shortage Stages and Triggering Mechanisms

Percent Reduction of Supply	Stage I Up to 15%	Stage II 15 - 25%	Stage III 25 - 35%	Stage IV 35 - 50% >
		Water Supply Condition		
Current Supply	Total supply is 85 – 90% of "normal." And Below "normal" year is declared. Or	Total supply is 75 – 85% of "normal." Or Below "normal" year is declared Or	Total supply is 65 – 75% of "normal." Or Fourth consecutive below "normal" year is declared. Or	Total supply is less than 65% of "normal." Or Fifth consecutive below "normal" year is declared. Or
Future Supply	Projected supply insufficient to provide 80% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 75% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 65% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 50% of "normal" deliveries for the next two years. Or
Groundwater	No excess groundwater pumping undertaken. Or	First year of excess groundwater pumping taken, must be "replaced" within four years. Or	Second year of excess groundwater pumping taken, must be "replaced" within four years. Or	No excess groundwater pumping available. Or Reduced groundwater pumping due to replenishment of previously pumped groundwater. Or
Water Quality	Contamination of 10% of water supply (exceeds primary drinking water standards)	Contamination of 20% of water supply (exceeds primary drinking water standards)	Contamination of 30% of water supply (exceeds primary drinking water standards)	Or
Disaster Loss				Disaster Loss

Water Allotment Methods

The District plans to establish the following allocation method for each customer type. See Appendix C for sample water shortage rationing allocation method.

Single Family	Hybrid of Per-capita and Percentage Reduction
Multifamily	Hybrid of Per-capita and Percentage Reduction
Commercial	Percentage Reduction
Industrial	Percentage Reduction
Gvt/Institutional	Percentage Reduction
Agricultural-Permanent	Percentage Reduction - vary by efficiency
Agricultural-Annual	Percentage Reduction - vary by efficiency
Recreational	Percentage Reduction - vary by efficiency
New Customers	Per-capita (no allocation for new landscaping during a declared water shortage.)

Based on current and projected customer demand, Appendix C indicates the water allocated to each customer type by priority and rationing stage during a declared water shortage.

Individual customer allotments are based on a five-year period. This gives the District a more accurate view of the usual water needs of each customer and provides additional flexibility in determining allotments and reviewing appeals. However, no allotment may be greater than the amount used in the most recent year of the five-year base period.

The General Manager's staff shall classify each customer and calculate each customer's allotment according to the Sample Water Rationing Allocation Method. The allotment shall reflect seasonal patterns. Each customer shall be notified of their classification and allotment by mail before the effective date of the Water Shortage Emergency. New customers will be notified at the time the application for service is made. In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. Any customer may appeal the General Manager's classification on the basis of use or the allotment on the basis of incorrect calculation.

Prohibitions, Consumption Reduction Methods and Penalties

Law

> 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:
>
> 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.
> 10632 (f) Penalties or charges for excessive use, where applicable.

Mandatory Prohibitions on Water Wasting

The RCSD "No Waste" Ordinance (see Appendix C) includes prohibitions on various wasteful water uses such as lawn watering during mid-day hours, washing sidewalks and driveways with potable water, and allowing plumbing leaks to go uncorrected more than 24 hours after customer notification.

The following table is a list of consumption reduction methods that could be implemented at the various water shortage stages. The BOD has not decided which, if any of these measures shall be incorporated into the Ordinance at a future date.

Table 18
Consumption Reduction Methods

Examples of Consumption Reduction Methods	Stage When Method Takes Effect
Demand reduction program	All stages
Reduce pressure in water lines	
Flow restriction	IV
Restrict building permits	II, III, IV
Restrict for only priority uses	
Use prohibitions	All stages
Water shortage pricing	All stages
Per capita allotment by customer type	IV
Plumbing fixture replacement	
Voluntary rationing	I
Mandatory rationing	II, III, IV
Incentives to reduce water consumption	
Education Program	All Stages
Percentage reduction by customer type	II, III, IV
Other	
Other	

See Appendix C, the "No Waste" Ordinance and Moratorium on New Connections - which details the reduction methods - regarding Table 18.

Excessive Use Penalties

The BOD has decided upon the penalties as stated in the "No Waste" Ordinance. See Appendix C.

Revenue and Expenditure Impacts and Measures to Overcome Impacts

Law

> 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:
>
> 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...

> 10632 (g) [An analysis of the impacts of each of the] proposed measures to overcome those [revenue and expenditure] impacts, such as the development of reserves and rate adjustments.

RCSD has begun the process of evaluating rate changes based on projected wastewater handling expenses, water equipment expenses and projected expenses for additional purchased surface water. See Appendix D for the District's efforts to establish an Emergency Fund and a Rate Stabilization Fund.

Reduction Measuring Mechanism

Law

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

Mechanism to Determine Reductions in Water Use

Under normal water supply conditions, potable water production figures are recorded daily. Totals are reported weekly to the Water Treatment Facility Supervisor. Totals are reported monthly to the General Manager and incorporated into the water supply report.

During a Stage I or Stage II water shortage, daily production figures are reported to the General Manager. The General Manager compares the weekly production to the target weekly production to verify that the reduction goal is being met. Weekly reports are forwarded to the Chairman of the Board of Directors (BOD) and the Water Shortage Response Team. Monthly reports are sent to the BOD as well. If reduction goals are not met, the Manager will notify the BOD so that corrective action can be taken.

During a Stage III or Stage IV water shortage, the procedure listed above will be followed, with the addition of a daily production report to the General Manager.

During emergency shortages, production figures are reported to the Field Supervisor hourly and to the General Manager and the Water Shortage Response Team daily. Daily reports will also be provided to the BOD and the Kern County Office of Emergency Services.

Appendix F-3

QHWD Water Shortage Contingency Plan

IMPLEMENTATION SCHEDULE: The District will continue to implement this DMM until the District's goal is met: at least 80% of all non-conserving and low-flush model toilets in the District will be replaced with ultra-low flush models.

Table 13
ULFT Retrofit Program

Year	# of ULFT Retrofits
2002	0
2003	10e
2004	20e
2005	20e
2006	20e
2007	20e
2008	20e
2009	20e
2010	20e
2011	20e
2012	20e
e = estimate	

METHODS TO EVALUATE EFFECTIVENESS: The District will calculate annual ULFT replacement program water savings to confirm the savings are within 10% of calculated retrofit-on-resale water savings, using the CUWCC MOU Exhibit 6 methodology and water savings estimates. Exhibit 6 has become an industry standard for evaluation of ULFT replacement programs.

CONSERVATION SAVINGS: Projected total annual water savings from toilet retrofits at full implementation are 0.5 AFY per year.

BUDGET: Proposed annual budget: $130,000, for materials, rebates, and administrative costs.

Agricultural Water Conservation Programs

The District has no agricultural water accounts, although it interacts with area agricultural business for information exchange.

The District may consider becoming a signatory to the Memorandum of Understanding Regarding Efficient Water Management Practices by Agricultural Water Suppliers in California in 2 to 3 years.

Water Shortage Contingency Plan

Preparation for Catastrophic Water Supply Interruption

Law

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:

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.

Water Shortage Emergency Response

In 2001, in accordance with the requirements of Assembly Bill 11X, the District water, fire, and emergency services departments developed a comprehensive water shortage contingency plan, which was incorporated into the District's Emergency Response Plan in early 2002. The District's plan is consistent with provisions in the County's Emergency Response Plan. Both plans contain procedures for the distribution of potable water in a disaster; these procedures are consistent with guidelines prepared by the California State Office of Emergency Services.

The District plan recommended the following: (1) the purchase of water purification equipment; (2) purchase of standby generators and auxiliary pumps; and (3) development of emergency water conveyance and supply storage facilities. Steps (1) and (2) have been or are currently being implemented. Step (3) is in the study and design phases.

In addition, specific water-critical customers (such as hospitals, nursing facilities, schools, and a few individual customers with medical conditions dependent on continuous water availability) have been identified. Likely potable water distribution sites have been identified.

Be assured that the District recognizes the importance of the DMMs in reducing water demand and would continue to implement the programs. Also, the District would increase media attention to the water supply situation during a shortage and would step up public water education programs, encourage property owners to apply for a landscape and interior water use survey and continue to advertise the importance of customers to install ULF plumbing fixtures.

During declared shortages, or when a shortage declaration appears imminent, the District General Manager, who serves as the temporary chair, activates a District water shortage response team. The Chairman of the Board of Directors assumes the responsible director's role when he/she has arrived at the operational control center. The team includes: Board of Directors, General Manager, Operations Foreman, Clerical Staff Director. During a declared water shortage, the District will accept applications for new building permits but will not issue permits until the shortage declaration is rescinded. An appeal process has been established.

Supplemental Water Supplies

To offset future potential water shortages due to drought or disaster, the District is considering the following supplemental water supplies.

Water Transfers

See the Transfer or Exchange Opportunities section.

Long Term Additional Water Supply Options

To meet future long-term water demand beyond 2020, the District has purchased land for additional wells.

The following table summarizes the actions the water district will take during a water supply catastrophe.

Table 14 Preparation Actions for a Catastrophe	
Examples of Actions	**Check if Discussed**
Determine what constitutes a proclamation of a water shortage.	✓
Stretch existing water storage.	✓
Obtain additional water supplies.	✓
Develop alternative water supplies.	✓
Determine where the funding will come from.	✓
Contact and coordinate with other agencies.	✓
Create an Emergency Response Team/Coordinator.	✓
Create a catastrophe preparedness plan.	✓
Put employees/contractors on-call.	✓
Develop methods to communicate with the public.	✓
Develop methods to prepare for water quality interruptions.	✓

Water Shortage Contingency Ordinance/Resolution

Law

> 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:
>
> 10632 (h) A draft water shortage contingency resolution or ordinance.

Quartz Hill Water District Water Shortage Response

As mentioned earlier, the District adopted a "No-Waste" Ordinance in 1997, and based on rationing experience, the District has developed a Resolution to Declare a Water Shortage Emergency. The District adopted a policy in 1998 to implement a Moratorium on New Connections during declared water shortages see Appendix C.

Stages of Action

Law

> 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:
>
> 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.

Rationing Stages and Reduction Goals

The District has developed a four stage rationing plan (see Table 15) to invoke during declared water shortages. The rationing plan includes voluntary and mandatory rationing, depending on the causes, severity, and anticipated duration of the water supply shortage.

Table 15
Water Rationing Stages and Reduction Goals

Shortage Condition	Stage	Customer Reduction Goal	Type of Rationing Program
Up to 15%	I	15%	Voluntary
15 – 25%	II	25%	Mandatory
25 - 35%	III	35%	Mandatory
35 - 50%	IV	50% or >	Mandatory

Priority by Use

Priorities for use of available potable water during shortages were based on input from the District Emergency Response Team, citizen groups, and legal requirements set forth in the California Water Code, Sections 350-358. Water allocations are established for all customers according to the following ranking system:

- Minimum health and safety allocations for interior residential needs (includes single family, multi-family, hospitals and convalescent facilities, retirement and mobile home communities, and student housing, and fire fighting and public safety)
- Commercial, industrial, institutional/governmental operations (where water is used for manufacturing and for minimum health and safety allocations for employees and visitors), to maintain jobs and economic base of the community (not for landscape uses)
- Permanent agriculture (orchards, vineyards, and other commercial agriculture which would require at least five years to return to production).
- Annual agriculture (floriculture, strawberries, other truck crops)
- Existing landscaping
- New customers, proposed projects without permits when shortage declared.

Health and Safety Requirements

Based on commonly accepted estimates of interior residential water use in the United States, Table 18 indicates per capita health and safety water requirements. In Stage I shortages, customers may adjust either interior or outdoor water use (or both), in order to meet the voluntary water reduction goal.

However, under Stage II, Stage III and Stage IV mandatory rationing programs, the District has established a health and safety allotment of 68 gpcd (which translates to 33 HCF per person per year), because that amount of water is sufficient for essential interior water with no habit or plumbing fixture changes. If customers wish to change water use habits or plumbing fixtures, 68 gpcd is sufficient to provide for limited non-essential (i.e. outdoor) uses.

Stage IV mandatory rationing, which is likely to be declared only as the result of a prolonged water shortage or as a result of a disaster, would require that customers make changes in their interior water use habits (for instance, not flushing toilets unless "necessary" or taking less frequent showers).

Table 16
Per Capita Health and Safety Water Quantity Calculations

	Non-Conserving Fixtures		Habit Changes 1		Conserving Fixtures 2	
Toilets	5 flushes x 5.5 gpf	27.5	3 flushes x 5.5 gpf	16.5	5 flushes x 1.6 gpf	8.0
Shower	5 min x 4.0 gpm	20.0	4 min x 3.0 gpm	12.0	5 min x 2.0	10.0
Washer	12.5 gpcd	12.5	11.5 gpcd	11.5	11.5 gpcd	11.5
Kitchen	4 gpcd	4.0	4 gpcd	4.0	4 gpcd	4.0
other	4 gpcd	4.0	4 gpcd	4.0	4 gpcd	4.0
Total (gpcd)		68.0		48.0		37.5
HCF per capita per year		33.0		23.0		18.0

1 Reduced shower use results from shorter and reduced flow. Reduced washer use results from fuller loads.
2 Fixtures include ULF 1.6 gpf toilets, 2.0 gpm showerheads and efficient clothes washers.

Water Shortage Stages and Triggering Mechanisms

As the water purveyor, the Quartz Hill Water District must provide the minimum health and safety water needs of the community at all times. The water shortage response is designed to provide a minimum of 50% of normal supply during a severe or extended water shortage. The rationing program triggering levels shown below were established to ensure that this goal is met.

Rationing stages may be triggered by a shortage in one water source or a combination of sources. Although an actual shortage may occur at any time during the year, a shortage (if one occurs) is usually forecasted by the Water Department on or about April 1 each year. If it appears that it may be a dry year, the District contacts its agricultural customers in March, so that they can minimize potential financial impacts.

The District's potable water sources are groundwater and imported surface. Rationing stages may be triggered by a supply shortage or by contamination in one source or a combination of sources. Because shortages overlap Stages, triggers automatically implement the more restrictive Stage. Specific criteria for triggering the District's rationing stages are shown in Table 19.

Table 17
Water Shortage Stages and Triggering Mechanisms

Percent Reduction of Supply	Stage I Up to 15%	Stage II 15 - 25%	Stage III 25 - 35%	Stage IV 35 - 50% >
Water Supply Condition				
Current Supply	Total supply is 85 – 90% of "normal." And Below "normal" year is declared. Or	Total supply is 75 – 85% of "normal." Or Below "normal" year is declared Or	Total supply is 65 – 75% of "normal." Or Fourth consecutive below "normal" year is declared. Or	Total supply is less than 65% of "normal." Or Fifth consecutive below "normal" year is declared. Or
Future Supply	Projected supply insufficient to provide 80% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 75% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 65% of "normal" deliveries for the next two years. Or	Projected supply insufficient to provide 50% of "normal" deliveries for the next two years. Or
Groundwater	No excess groundwater pumping undertaken. Or	First year of excess groundwater pumping taken, must be "replaced" within four years. Or	Second year of excess groundwater pumping taken, must be "replaced" within four years. Or	No excess groundwater pumping available. Or Reduced groundwater pumping due to replenishment of previously pumped groundwater. Or
Water Quality	Contamination of 10% of water supply (exceeds primary drinking water standards)	Contamination of 20% of water supply (exceeds primary drinking water standards)	Contamination of 30% of water supply (exceeds primary drinking water standards)	Or
Disaster Loss				Disaster Loss

Water Allotment Methods

The District has established the following allocation method for each customer type. See Appendix C for sample water shortage rationing allocation method.

Single Family	Hybrid of Per-capita and Percentage Reduction
Multifamily	Hybrid of Per-capita and Percentage Reduction
Commercial	Percentage Reduction
Industrial	Percentage Reduction
Gov'ment/Institutional	Percentage Reduction
Agricultural-Permanent	Percentage Reduction - vary by efficiency
Agricultural-Annual	Percentage Reduction - vary by efficiency
Recreational	Percentage Reduction - vary by efficiency
New Customers	Per-capita (no allocation for new landscaping during a declared water shortage.)

Based on current and projected customer demand, Appendix C indicates the water allocated to each customer type by priority and rationing stage during a declared water shortage.

Individual customer allotments are based on a five-year period. This gives the District a more accurate view of the usual water needs of each customer and provides additional flexibility in determining allotments and reviewing appeals. However, no allotment may be greater than the amount used in the most recent year of the five-year base period.

The Water Department Manager shall classify each customer and calculate each customer's allotment according to the Sample Water Rationing Allocation Method. The allotment shall reflect seasonal patterns. Each customer shall be notified of their classification and allotment by mail before the effective date of the Water Shortage Emergency. New customers will be notified at the time the application for service is made. In a disaster, prior notice of allotment may not be possible; notice will be provided by other means. Any customer may appeal the Water Department Manager's classification on the basis of use or the allotment on the basis of incorrect calculation.

Prohibitions, Consumption Reduction Methods and Penalties

Law

> 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:
>
> 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.
> 10632 (f) Penalties or charges for excessive use, where applicable.

Mandatory Prohibitions on Water Wasting

The QHWD "No Waste" Ordinance (see Appendix C) includes prohibitions on various wasteful water uses such as lawn watering during mid-day hours, washing sidewalks and driveways with potable water, and allowing plumbing leaks to go uncorrected more than 24 hours after customer notification.

Table 18
Consumption Reduction Methods

Examples of Consumption Reduction Methods	Stage When Method Takes Effect
Demand reduction program	All stages
Reduce pressure in water lines	
Flow restriction	IV
Restrict building permits	II, III, IV
Restrict for only priority uses	
Use prohibitions	All stages
Water shortage pricing	All stages
Per capita allotment by customer type	IV
Plumbing fixture replacement	
Voluntary rationing	I
Mandatory rationing	II, III, IV
Incentives to reduce water consumption	
Education Program	All Stages
Percentage reduction by customer type	II, III, IV
Other	
Other	

See Appendix C, the "No Waste" Ordinance and Moratorium on New Connections - which details the reduction methods - regarding Table 18.

Excessive Use Penalties

Any customer violating the regulations and restrictions on water use set forth in the "No Waste" Ordinance shall receive a written warning for the first such violation. Upon a second violation, the customer shall receive a written warning and the district may cause a flow-restrictor to be installed in the service. If a flow-restrictor is placed, the violator shall pay the cost of the installation and removal. Any willful violation occurring subsequent to the issuance of the second written warning shall constitute a misdemeanor and may be referred to the Los Angeles County District Attorney's office for prosecution pursuant. If water service is disconnected, it shall be restored only upon payment of the turn-on charge fixed by the Board of Directors.

Revenue and Expenditure Impacts and Measures to Overcome Impacts

Law

> 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:
>
> 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...
>
> 10632 (g) [An analysis of the impacts of each of the] proposed measures to overcome those [revenue and expenditure] impacts, such as the development of reserves and rate adjustments.

All surplus revenues that the District collects are currently used to fund the Rate Stabilization Fund. conservation, recycling, and other capital improvements. The District estimated projected ranges of water sales by shortage stage to best understand the impact each level of shortage will have on projected revenues and expenditures by each shortage stage.

This analysis is undertaken first with no additional water purchases and no rate increases and then with a 25% rate increase at Stage II; 50% at Stage III, and a 100% increase at Stage IV. To cover increased expenses and decreased sales, rate increases would need to be "severe".

See Appendix D for the District's efforts to establish an Emergency Fund and a Rate Stabilization Fund.

Reduction Measuring Mechanism

Law

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

Mechanism to Determine Reductions in Water Use

Under normal water supply conditions, potable water production figures are recorded daily. Totals are reported weekly to the General Manager. Totals are reported monthly to the Board of Directors and incorporated into the water supply report.

During a Stage I or Stage II water shortage, daily production figures are reported to the Operations Supervisor. The Operations Supervisor compares the weekly production to the target weekly production to verify that the reduction goal is being met. Weekly reports are forwarded to the General Manager and the Water Shortage Response Team. Monthly reports are sent to the Board of Directors. 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 or Stage IV water shortage, the procedure listed above will be followed, with the addition of a daily production report to the General Manager.

During emergency shortages, production figures are reported to the Operations Supervisor hourly and to the General Manager and the Water Shortage Response Team daily. Daily reports will also be provided to the Board of Directors.

ENCLOSURE C

INSTRUCTION SHEET FOR PUBLISHING
LEGAL ADVERTISEMENTS

TO: Executive Officer
Board of Supervisors
County of Los Angeles

FROM: Department of Public Works
Waterworks Division

NOTICE OF HEARING
2010 URBAN WATER MANAGEMENT PLAN FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU, AND THE MARINA DEL REY WATER SYSTEM

Publishing

That the Executive Officer of the Board of Supervisors shall cause notice of the public hearing, in the form and manner specified in Section 6066 of the Government Code, to be published once a week for two consecutive weeks in the Malibu Times, Surfside News, and Topanga Messenger newspapers published and circulated in the County of Los Angeles, which is hereby designated for that purpose, such publication to be completed not less than ten (10) days prior to the date of said hearing. Copies of the Urban Water Management Plan (Plan) will be available for public review in all Public Libraries in the District's service areas. The Plan will also be available for review at http://www.lacwaterworks.org/.

Forward five reprints of the attached advertisement to the County of Los Angeles Department of Public Works, Waterworks Division, P.O. Box 1460, Alhambra, California 91802-1460.

Should there be any questions regarding this matter, please contact Mr. Adam Ariki, of this office, at (626) 300-3300, Monday through Thursday, 7 a.m. to 5:45 p.m.

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU AND THE MARINA DEL REY WATER SYSTEM NOTICE OF PUBLIC HEARING FOR ADOPTION OF THE 2010 URBAN WATER MANAGEMENT PLAN

The County of Los Angeles Board of Supervisors, as the governing body of the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System, will hold a public hearing on June 28, 2011, at 9:30 a.m., in Room 381, Kenneth Hahn Hall of Administration, 500 West Temple Street, Los Angeles, California 90012, in the matter of adopting the Urban Water Management Plan (Plan) for the Los Angeles County Waterworks District No. 29, Malibu, and the Marina del Rey Water System.

The Plan has been prepared in compliance with the Urban Water Management Planning Act. The Plan includes a water-shortage contingency plan, projection of future water demands, an identification of sufficient water supplies to meet projected water demands, and an explanation of existing and future water conservation practices to meet the reduction of 20 percent per capita use by the year 2020 based on the Legislative Senate Bill X7-7.

Copies of the Plan are available for public review at the Lloyd Taber Marina del Rey County Library, Malibu Library, City of Malibu, and at the Waterworks field office located at 23533 West Civic Center Way in Malibu.

The Board of Supervisors will consider and may approve the Plan as recommended by the Director of Public Works. For further information regarding this matter, please call (626) 300-3315.

ENCLOSURE D

INSTRUCTION SHEET FOR PUBLISHING
LEGAL ADVERTISEMENTS

TO: Executive Officer
Board of Supervisors
County of Los Angeles

FROM: Department of Public Works
Waterworks Division

NOTICE OF HEARING
2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY

Publishing

That the Executive Officer of the Board of Supervisors shall cause notice of the public hearing, in the form and manner specified in Section 6066 of the Government Code, to be published once a week for two consecutive weeks in the Antelope Valley Press, a newspaper published and circulated in the County of Los Angeles, which is hereby designated for that purpose, such publication to be completed not less than ten days prior to the date of said hearing. Copies of this Plan will be available for review approximately two weeks prior to the public hearing in all Public Libraries in the District's service areas. The Plan will also be available for review at http://www.avwaterplan.org/.

Forward five reprints of the attached advertisement to the County of Los Angeles Department of Public Works, Waterworks Division, P.O. Box 1460, Alhambra, California 91802-1460; City of Lancaster, 44933 North Fern Avenue, Lancaster, California 93534-2461; and City of Palmdale, 38300 North Sierra Highway, Palmdale, California 93550-4798.

Should there be any questions regarding this matter, please contact Mr. Adam Ariki, of this office, at (626) 300-3300, Monday through Thursday, 7 a.m. to 5:45 p.m.

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 40, ANTELOPE VALLEY NOTICE OF PUBLIC HEARING FOR ADOPTION OF THE 2010 INTEGRATED REGIONAL URBAN WATER MANAGEMENT PLAN FOR THE ANTELOPE VALLEY

The County of Los Angeles Board of Supervisors, as the governing body of the Los Angeles County Waterworks District No. 40, Antelope Valley, will hold a public hearing on June 28, 2011, at 9:30 a.m., in Room 381, Kenneth Hahn Hall of Administration, 500 West Temple Street, Los Angeles, California 90012, in the matter of adopting the 2010 Integrated Regional Urban Water Management Plan for the Antelope Valley.

The Plan has been prepared in compliance with the Urban Water Management Planning Act and includes a water-shortage contingency plan, the projection of future water demands, identification of sufficient water supplies to meet projected water demands, and an explanation of existing and future water conservation practices to meet the reduction of 20 percent per capita use by the year 2020 based on the Legislative Senate Bill X7-7.

The Plan has been prepared cooperatively by the Los Angeles County Waterworks District No. 40, Antelope Valley; Rosamond Community Services District; and Quartz Hill Water District. Copies of the Plan will be available for public review approximately two weeks prior to the public hearing at the County libraries located in Lake Los Angeles, Lancaster, Littlerock, and Quartz Hill and at the Waterworks field office located at 260 East Avenue K-8 in Lancaster.

The Board of Supervisors will consider and may approve the Plan as recommended by the Director of Public Works. For further information regarding this matter, please call (626) 300-3315.