Ventura County Waterworks District No. 1

2015 Urban Water Management Plan

June 14, 2016

VENTURA COUNTY WATERWORKS DISTRICTS

PSOMAS

2015

URBAN WATER MANAGEMENT PLAN

Ventura County Waterworks District No. 1

June 14, 2016

PSOMAS
3 Hutton Centre Drive, Suite 200
Santa Ana, CA 92707

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY **EDMUND G. BROWN JR.,** *Governor*

DEPARTMENT OF WATER RESOURCES
1416 NINTH STREET, P.O. BOX 942836
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November 23, 2016

Susan Pan, P.E.
Deputy Director, Engineering
Division Public Works Agency, County of Ventura
Ventura County Waterworks District No. 01 – Moorpark
6767 Spring Road
PO Box 250
Moorpark, CA 93021-0250

RE: Urban Water Management Plan Requirements Addressed

Dear Ms. Pan:

The Department of Water Resources (DWR) has reviewed the Ventura County Waterworks District No. 01 – Moorpark's 2015 Urban Water Management Plan (UWMP) received on November 21, 2016. The California Water Code (CWC) directs DWR to report to the legislature once every five years on the status of submitted UWMPs. In meeting this legislative reporting requirement, DWR reviews all submitted UWMPs.

DWR's review of the Ventura County Waterworks District No. 01 – Moorpark's 2015 plan has found that the UWMP addresses the requirements of the CWC. DWR's review of plans is limited to assessing whether suppliers have addressed the required legislative elements. In its review, DWR does not evaluate or analyze the supplier's UWMP data, projections, or water management strategies. This letter acknowledges that the Ventura County Waterworks District No. 01 – Moorpark's 2015 UWMP addresses the CWC requirements. The results of the review will be provided to DWR's Financial Assistance Branch.

If you have any questions regarding the review of the UWMP or urban water management planning please call Gwen Huff at 916-651-9672.

Sincerely,

Vicki Lake
Unit Chief
Urban Water Use Efficiency
(916) 651-0740

Electronic cc:
Michael D. Swan, P.E.

Errata Sheet for Minor Corrections to
Ventura County Waterworks District No. 1 (VCWWD No. 1)
2015 Urban Water Management Plan (UWMP)

This errata sheet logs minor content errors that were identified after final adoption of the VCWWD No. 1 2015 UWMP. DWR has determined that these corrections are minor and do not require the UWMP to be amended.

[X] These data errors have been corrected in the Department of Water Resources (DWR) UWMP database at http://wuedata.water.ca.gov.

[X] This errata sheet has been filed with the UWMP in all locations where it is made publicly available, including the California State Library.

Name and agency of the person filing errata sheet:

Susan Pan

Name

Ventura County Waterworks District No.1

Agency

#	Description of Correction	Location	Rationale	Date Error Corrected
1	Under Section 5.6 2015 AND 2020 TARGETS, under Method 4: Remove text and replace with "Method 4 could not be utilized because of insufficient CII (Commercial, Industrial and Institutional) water use data"	Page 5-4	Year 2005 CII data was used as baseline midpoint year to determine Method 4 target, but Year 2004 is midpoint year, and this data is not available for 2004.	November 22, 2016
2	In Table 5-1C: 2020 Targets by Method, change value for Method 4 from "195.7" to "Not Applicable"	Page 5-5	See Rationale for #1	November 22, 2016
3	Change paragraph immediately below Table 5-1C to read, " As shown in Table 5-1C, Method 1 results in the most favorable 2020 water use target level for the District: 194.3 gpcd. The 2015 interim target is calculated to be 218.6 gpcd	Page 5-5	See Rationale for #1: Method 1 instead of Method 4 is the method used to calculate the District's 2020 Target, which is 194.3 gpcd (not 195.7). This also changes the	November 22, 2016

	(mid-point between baseline of 242.9 and 2020 target of 194.3). In the District's 2010 UWMP, the District's 2020 target water use was calculated to be 191.8 gpcd using Method 1 and the 2015 interim target was calculated to be 215.8 gpcd.		2015 Interim Target to 218.6 gpcd (from 219.3 gpcd)	
4	In Table 5-1: Baselines and Targets Summary, change 2015 Interim Target to 218.6 gpcd (from 219.3 gpcd) and change Confirmed 2020 Target to 194.3 gpcd (from 195.7 gpcd)	Page 5-5	See Rationale for #3	November 22, 2016
5	In Table 5-2: 2015 Compliance (GPCD), change 2015 Interim Target to 218.6 gpcd (from 219.3 gpcd)	Page 5-5	See Rationale for #3	November 22, 2016
6	In Table 4-3: Total Water Demands, change 2015 Recycled Water Demand and 2015 Total Water Demand to 520 AF (from 599 AF) and 10,045 AF (from 10,124 AF), respectively	Page 4-4	Removed internal recycled water use at the treatment plant in 2015 of 79 AF	November 22, 2016
7	In Table 6-3: Wastewater Treatment and Discharge within Service Area in 2015, change 2015 Recycled within Service Area to 520 AF (from 599 AF)	Page 6-16	See Rationale for #6	November 22, 2016
8	In Table 6-4: 2010 UWMP Recycled Water Use Projection Compared to 2015 Actual, change Industrial Use for 2010 Projection and 2015 Actual Use to Zero, and the Total to 1,025 AF and 520 AF, respectively	Page 6-16	Removed internal recycled water use at the treatment plant in 2015 of 79 AF and also 2010 projected recycled water use at plant in 2015 of 75 AF	November 22, 2016
9	In Table 6-8: Water Supplies Actual, change 2015 Recycled Water Supply to 520 AF (from 599 AF) and 2015 Total Supply to 10,045 AF (from 10,124 AF)	Page 6-19	See Rationale for #6	November 22, 2016

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FIGURES

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TABLES

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ACRONYMS and ABBREVIATIONS

AB	Assembly Bill
AC	Acre
AF	Acre Feet
AFY	Acre Feet per Year
AMI	Area Median Income
ASR	Aquifer Storage and Recovery
AVEK	Antelope Valley-East Kern Water Agency
AWWA	American Water Works Association
Bay-Delta	Sacramento-San Joaquin Bay-Delta
BDCP	Bay Delta Conservation Plan
BMP	Best Management Practices
Calleguas	Calleguas Municipal Water District
CASGEM	California Statewide Groundwater Elevation Monitoring
CAWCD	Central Arizona Water Conservation District
CEQA	California Environmental Quality Act
CII	Commercial, Institutional, and Industrial
CIMIS	California Irrigation Management Information System
CRA	Colorado River Aqueduct
CUWCC	California Urban Water Conservation Council
CVP	Central Valley Project
CVWD	Coachella Valley Water District
CWC	California Water Code
CY	Calendar Year
Delta	San Joaquin River Delta
DMM	Demand Management Measure
DOF	Department of Finance
DU	Dwelling Unit
DWR	Department of Water Resources
DWCV	Desert Water Agency/Coachella Valley Water District
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPM	Emergency Procedures Manual
ESA	Endangered Species Act
ET	Evapotranspiration
Eto	Evapotranspiration From a Standardized Grass Surface
FCGMA	Fox Canyon Groundwater Management Agency
FY	Fiscal Year
GIS	Geographic Information System
gpcd	Gallons Per Capita Per Day
GPM	Gallons Per Minute
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HCD	Housing and Community Development

ICS	Intentionally Created Surplus
IID	Imperial Irrigation District
IRP	Integrated Resources Plan
KML	Keyhole Markup Language
LAS	Lower Aquifer System
MAF	Million Acre Feet
MCL	Maximum Contaminant Level
Metropolitan	Metropolitan Water District of Southern California
MGD	Million Gallons per Day
Mg/L	Milligrams per Liter
MOU	Memorandum of Understanding
MWELO	Model Water Efficient Landscape Ordinance
MWRF	Moorpark Water Reclamation Facility
MWD	Metropolitan Water District of Southern California
OWDDF	Ocean Water Desalination Demonstration Facility
PVID	Palo Verde Irrigation District
QMCP	Quagga Mussel Control Program
QSA	Quantification Settlement Agreement
RDM	Robust Decision-Making
RHNA	Regional Housing Needs Allocation
RTP	Regional Transportation Plan
RUWMP	Regional Urban Water Management Plan
SB	California Senate Bill
SCAG	Southern California Association of Governments
SDCWA	San Diego County Water Authority
SGMA	Sustainable Groundwater Management Act
SMP	Salinity Management Pipeline
SNWA	Southern Nevada Water Authority
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAF	Thousand Acre Feet
TDS	Total Dissolved Solids
TEA	Temporary Extraction Allocation
UAS	Upper Aquifer System
USBR	U.S. Bureau of Reclamation
UWMP	Urban Water Management Plan
VCWPD	Ventura County Watershed Protection District
VCWWD	Ventura County Waterworks District
WQCP	Water Quality Control Plan
WSA	Water Service Area
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan
WSDM	Water Surplus and Drought Management
WUCA	Water Utility Climate Alliance

1 INTRODUCTION AND OVERVIEW

1.1 BACKGROUND AND PURPOSE

Ventura County Waterworks District No. 1 (VCWWD No. 1 or District) has prepared the 2015 update of its Urban Water Management Plan (UWMP) to fulfill the requirements outlined in the California Urban Water Management Planning Act and the Water Conservation Bill of 2009.

1.2 UWMP UPDATE AND THE CALIFORNIA WATER CODE

This report has been prepared in compliance with Water Code Sections 10610 through 10656 of the Urban Water Management Planning Act (Act), which were added by Statute 1983, Chapter 1009, and became effective on January 1, 1984. This Act requires that "every urban water supplier shall prepare and adopt an urban water management plan" (Water Code § 10620(a)). An "urban water supplier" is defined as a supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually (Water Code § 10617).

These plans must be filed with the California Department of Water Resources (DWR) every five years. However, the 2015 plans must be submitted to DWR by July 1, 2016. The Act's requirements include:

- Detailed evaluation of the supplies necessary to meet demands over at least a 20-year period, in five-year increments, for a single dry water year, in multi-year droughts, and during average year conditions,
- Documentation of the stages of actions an urban water supplier would undertake to address up to a 50% reduction in its water supplies,
- Description of the actions to be undertaken in the event of a catastrophic interruption in water supplies, and
- Evaluation of reasonable and practical efficient water uses, recycling, and conservation activities.

1.2.1 Changes in the Act Since 2010

Since 2010, several amendments have been made to the Act. The following is a summary of the significant changes in the Act that have occurred from 2010 to the present:

- Changes the deadline for water suppliers to submit their 2015 UWMPs to DWR by July 1, 2016 (Water Code § 10621(d)).
- Adds "distribution system water loss" to the list of past, present, and projected future water uses that the UWMP is to quantify to the extent that records are available and over the same 5-year increments described in Water Code § 10631(a). (Water Code § 10631(e)(1)(J)). For the 2015 UWMP, the distribution system water loss must be quantified for the most recent 12-month period

available. For all subsequent updates, the distribution system water loss must be quantified for each of the 5 years preceding the plan update. (Water Code § 10631(e)(3)(A)). The distribution system water loss quantification must be reported in accordance with a worksheet approved or developed by DWR through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association (AWWA) (Water Code § 10631(e)(3)(B)).

- If available and applicable to an urban water supplier, water use projections may display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area (Water Code § 10631(e)(4)(A)). To the extent that an urban water supplier reports the information described in Water Code § 10631(e)(4)(A), an urban water supplier shall do both of the following: (1) provide citations of the various codes, standards, ordinances, or transportation and land use plans used in making the projections; and (2) indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall note that fact (Water Code § 10631(e)(4)(B)).
- Requires plans by retail water suppliers to include a narrative description that addresses the nature and extent of each water Demand Management Measure (DMM) implemented over the past 5 years. The narrative must describe the water DMMs that the supplier plans to implement to achieve its water use targets pursuant to Water Code § 10608.20 (Water Code § 10631(f)(1)(A)). The narrative must also include descriptions of the following water DMMs: water waste prevention ordinances, metering, conservation pricing, public education and outreach, programs to assess and manage distribution system real loss, water conservation program coordination and staffing support; and other DMMs that have a significant impact on water use as measured in gpcd, including innovative measures, if implemented (Water Code § 10631(f)(1)(B).
- Requires plans by wholesale water suppliers to include a narrative description of metering, public education and outreach, water conservation program coordination and staffing support, and other DMMs that have a significant impact on water use as measured in gpcd, including innovative measures, if implemented, as well as a narrative description of their distribution system asset management and wholesale supplier assistance programs (Water Code § 10631(f)(2)).
- Adds the voluntary reporting in the UWMP of any of the following information: an estimate of the amount of energy used: (1) to extract or divert water supplies; (2) to convey water supplies to water treatment plants or distribution systems; (3) to treat water supplies; (4) to distribute water supplies through the distribution system; (5) for treated water supplies in comparison to the amount used for non-treated water supplies; and (6) to place water into or to withdraw water from storage; and (7) any other energy-related information the urban water supplier deems appropriate (Water Code § 10631.2(a)). DWR included in its UWMP

guidance a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems (Water Code § 10631.2(b))

- Requires urban water suppliers to submit plans or amendments to plans electronically and to include any standardized forms, tables, or displays specified by DWR (Water Code § 10644(a)(2)).

1.2.2 Senate Bill 7 of the Seventh Extraordinary Session of 2009, Water Conservation in the Delta Legislative Package

In addition to changes to the Act, the California State Legislature passed Senate Bill 7 as part of the Seventh Extraordinary Session, referred to as SB X7-7, on November 10, 2009, which became effective February 3, 2010. This law was the water conservation component to the historic Delta legislative package, and seeks to achieve a 20% statewide reduction in urban per capita water use in California by December 31, 2020. This implements the Governor's similar 2008 water use reduction goals. The law requires each urban retail water supplier to develop urban water use targets to help meet the 20% goal by 2020, and an interim urban water reduction target by 2015.

The bill states that the legislative intent is to require all water suppliers to increase the efficiency of use of water resources and to establish a framework to meet the state targets for urban water conservation called for by the Governor. The bill establishes methods for urban retail water suppliers to determine targets to help achieve increased water use efficiency by the year 2020. The law is intended to promote urban water conservation standards consistent with the California Urban Water Conservation Council's adopted best management practices.

An urban retail water supplier may update its 2020 urban water use target in its 2015 UWMP (Water Code § 10608.20(g)).

2 PLAN PREPARATION

2.1 BASIS FOR PREPARING A PLAN

Per CWC 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. VCWWD No. 1 is a public water supplier that meets the definition of an urban water supplier with 10,944 municipal water service connections (as of the end of calendar year 2015) and a total 9,525 acre-feet (AF) of water supplied to customers in their water service area in 2015. See Table 2-1.

Table 2-1: Public Water Systems

Public Water System Number	Public Water System Name	Number of Municipal Connections 2015	Water Supplied 2015 (AF)
1	Ventura County Waterworks District No. 1	10,944	9,525
Total		10,944	9,525

2.2 INDIVIDUAL OR REGIONAL PLANNING AND COMPLIANCE

VCWWD No. 1 has developed an individual UWMP (as opposed to a Regional UWMP) that reports solely on its service area; addresses all requirements of the CWC; and notifies and coordinates with appropriate regional agencies and constituents. See Table 2-2.

Table 2-2: Plan Identification

☑	Individual UWMP
☐	Regional UWMP (RUWMP)

2.3 FISCAL OR CALENDAR YEAR AND UNITS OF MEASURE

VCWWD No. 1 is a water retailer (as opposed to a water wholesaler). The District's 2015 UWMP has been prepared using calendar years (as opposed to fiscal years) and has been prepared using acre-feet (AF) as the units of water volume measure. See Table 2-3.

2.4 COORDINATION AND OUTREACH

Per CWC 10631(j), an urban water supplier that relies 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.

Table 2-3: Agency Identification	
Type of Agency	
☐	Agency is a wholesaler
☑	Agency is a retailer
Fiscal or Calendar Year	
☑	UWMP Tables are in Calendar Years
☐	UWMP Tables are in Fiscal Years
Units of Measure Used in UWMP	
Unit	AF

VCWWD No. 1 has provided Calleguas Municipal Water District (Calleguas), the District's water wholesaler, with projected water use in accordance with CWC 10631 and has relied upon water supply information provided by Calleguas, as well as Metropolitan Water District of Southern California (Metropolitan), Calleguas' water wholesaler, in fulfilling its 2015 UWMP.

Table 2-4: Water Supplier Information Exchange
The retail supplier has informed the following wholesale supplier of projected water use in accordance with CWC 10631.
Wholesale Water Supplier Name
Calleguas Municipal Water District

Development of the UWMP was led by the VCWWD No. 1 staff. District staff provided notification to the City of Moorpark and County of Ventura Planning Departments for development of the Plan and the County Clerk for the adoption of the Plan. Psomas coordinated with the City of Moorpark Planning Department for land use and population information. VCWWD No. 1 staff was responsible for distribution of the Plan with assistance from Psomas.

The intent of this Plan is to focus on specific issues unique to the VCWWD No. 1 water service area (WSA). While some regional UWMP issues are introduced in this Plan, more detailed regional information is presented in Metropolitan's and Calleguas' 2015 UWMPs.

To assist VCWWD No. 1 staff in preparation of their 2015 UWMP, Psomas attended the 2015 UWMP Workshop at the Irvine Ranch Water District, November 18, 2015, that was facilitated by DWR.

Table 2-4A lists the entities that District or Psomas coordinated with in the development of the District's 2015 UWMP. The City of Moorpark was notified of the District's preparation of an updated UWMP and public hearing for consideration of adoption of the UWMP at least 60 days prior to the public hearing.

Table 2-4A: VCWWD No. 1 Coordination and Public Involvement

Entities	Coordination and Public Involvement Actions					
	Participated in UWMP Preparation	Used Agency Data as an Information Resource	Sent and/or Available To: Copy of Draft UWMP	Commented on Draft UWMP	Sent Notice of Public Hearing	Attended Public Hearing
County Planning Department	X	X	X		X	
VCWWD No. 1	X	X	X	X		X
City of Moorpark Planning Department	X	X	X		X	
Calleguas		X	X		X	
Fox Canyon Groundwater Management Agency		X	X		X	
Metropolitan		X	X		X	
General Public			X		X	

The District also utilized information from the Final Calleguas 2015 Regional UWMP, the Metropolitan 2015 Final UWMP, and the *"Guidebook to Assist Urban Water Suppliers to Prepare a 2015 Urban Water Management Plan"* prepared by DWR in preparing the VCWWD No. 1 2015 UWMP. This UWMP details the specifics as they relate to the VCWWD No. 1 water service area and will refer to Metropolitan, Calleguas, Fox Canyon Groundwater Management Agency, and other agencies throughout.

The District's water supply planning considers the programs of local and regional water agencies. The County of Ventura Water and Sanitation Department staff manages and administers activities, projects, and programs to optimize the District's water supply.

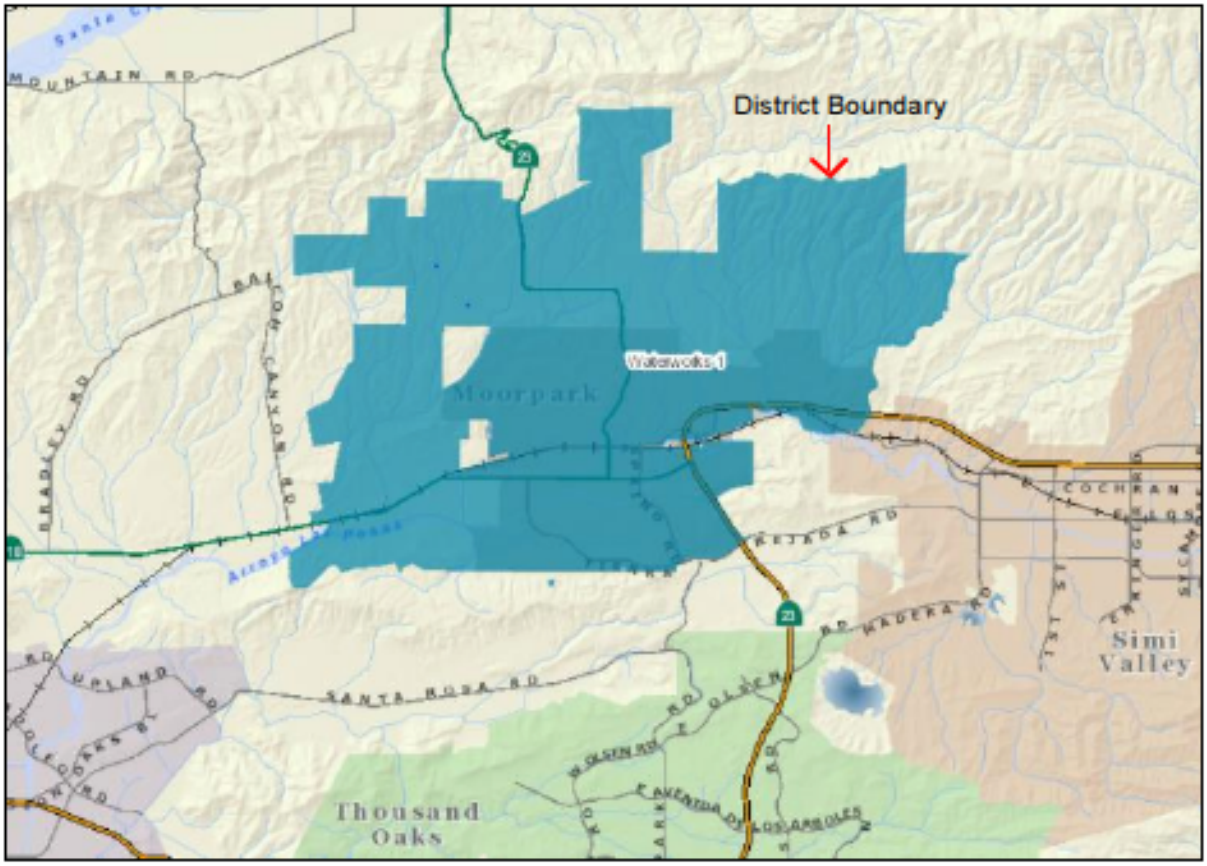
The UWMP is intended to serve as a general, flexible, and open-ended document that is updated every five years (or more often if necessary) to reflect changes in the District's water supply trends, and conservation and water use efficiency policies. The District's 2015 UWMP, along with other regional 2015 UWMPs and other County of Ventura (County) planning documents, will be used by VCWWD No. 1 staff to guide the water use and management efforts through the year 2015. The 2015 UWMP will require an update in 2020.

3 SYSTEM DESCRIPTION

3.1 GENERAL DESCRIPTION

VCWWD No. 1 was formed on November 22, 1921, and serves approximately 39,000 residents through 10,944 service connections, including 10,152 residential and commercial service connections and 170 agricultural service connections. The District encompasses approximately 33.7 square miles (21,567 acres) and consists of the City of Moorpark, which accounts for 12.8 square miles (38%) of the District's service area, and contiguous unincorporated areas (62%) in eastern Ventura County. The City of Moorpark is approximately five miles west of the City of Simi Valley and five miles north of the City of Thousand Oaks. A vicinity map of the District's water service area is shown on Figure 3-1.

Figure 3-1: VCWWD No. 1 Location and Water Service Area



Source: GIS CountyView at http://maps/countyview/

3.1.1 City Water System Description

Historically, the primary VCWWD No. 1 source of water supply has been potable water imported from Metropolitan through the local wholesale agency, Calleguas. The imported water, which is primarily State Water Project (SWP) water from the Sacramento-San Joaquin River Delta in Northern California, is treated at Metropolitan's Joseph Jensen

Filtration Plant. Groundwater production from District wells has been the next most prevalent source of water supply followed by Title 22 recycled water produced by the tertiary treatment facilities at the District's Moorpark Water Reclamation Facility (MWRF).

Groundwater is currently produced from the East Las Posas Groundwater Basin, which is managed by Fox Canyon Groundwater Management Agency (FCGMA), via five wells owned and operated by the District with production ranging from 600 gallons per minute (gpm) to 1,100 gpm, and an existing total system capacity of approximately 3,500 gpm. The groundwater is chlorinated at the well sites and two wells are treated for high iron and manganese before being pumped into the potable water distribution system (Well Nos. 15 and 20).

In 2015, the District supplied a total of 9,525 acre feet (AF) of potable water: 81% (7,717 AF) from imported water purchased from Calleguas, and 19% (1,808 AF) from District groundwater production.

The MWRF was originally constructed as a secondary treatment plant in 1965 and began supplying Title 22 recycled water for golf course irrigation in 2003 when tertiary treatment facilities were constructed at the plant. There are now eight active recycled water customers, including the plant itself, and the plant produced 599 AF of recycled water in 2015. The plant currently has a total treatment capacity of 5.0 mgd (5,600 AFY) and a tertiary treatment capacity of 1.5 mgd (1,680 AFY). The plant is required to annually discharge a minimum 0.76 million gallons per day (mgd) (850 AFY) of its treated effluent to percolation basins for groundwater recharge.

The District's potable water distribution system consists of approximately 138 miles of distribution and transmission pipelines, 10 booster pump stations, 20 pressure-reducing stations, 5 active production wells, 9 imported water turnouts, and 18 reservoirs.

Domestic, commercial, industrial, and fire protection customers accounted for approximately 72% of the total water use in 2015, with agricultural customers accounting for 25%, and system water losses accounting for 3%.

3.2 SERVICE AREA BOUNDARY MAPS

The District's water service area, which encompasses approximately 33.7 square miles (21,567 acres), is shown on Figure 3-1.

3.3 SERVICE AREA CLIMATE AND TERRAIN

In addition to the City of Moorpark, the District generally encompasses the surrounding agricultural lands in the valley area of the Arroyo Las Posas and State Highway 118. This area lies between the cities of Camarillo and Thousand Oaks to the south, and the Santa Clara River Valley to the north.

3.3.1 Service Area Climate

The District's service area is characterized by a "Mediterranean" climate that is a semi-arid environment with mild winters, warm summers, and light to moderate rainfall. The climate for the District is consistent with coastal Southern California. The general region lies in the semi-permanent, high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

As shown in Table 3-1A, the average monthly maximum temperature of 83°F occurs in August, and the average monthly minimum temperature of 41 °F occurs in December and January. The average annual maximum temperature for the service area is 75.3°F and the average annual minimum temperature is 48.3 °F. Approximately 75% of the area's average annual rainfall of 10.44 inches occurs between December and March. As shown in Table 3-1A, the average annual evapotranspiration is 55.14 inches

Table 3-1A Historical District Climate Characteristics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg or Total
Avg. Max Temp (°F)	69	69	71	74	75	77	81	83	82	79	74	69	75.3 Avg
Avg. Min Temp (°F)	41	43	44	46	50	53	57	56	55	50	44	41	48.3 Avg
Avg. Rainfall (in.)[(a)]	1.65	1.61	1.89	0.64	0.20	0.03	0.13	0.01	0.12	0.59	0.84	2.72	10.44 Total
Std. Monthly ETo (in.)	2.17	2.80	4.03	5.10	5.89	6.60	7.44	6.82	5.70	4.03	2.70	1.86	55.14 Total

(a) Average rainfall based on average of 2010-2015 data collected at Stations 126A and 508 located in Moorpark, CA.

Sources:
Temperatures: http://www.weather.com/weather/monthly/l/USCA0728:1:US
Precipitation for Moorpark Station 126A: http://vcwatershed.net/hydrodata/php/getstation.php?siteid=126A#top
Precipitation for Moorpark Station 508: http://vcwatershed.net/hydrodata/php/getstation.php?siteid=508#top
Evapotranspiration: CIMIS Reference Evapotranspiration Zones – Zone 9 for Moorpark area:
http://wwwcimis.water.ca.gov/App_Themes/images/etozonemap.jpg

3.3.2 Service Area Terrain and Soils

The District is within the Ventura County Watershed Protection District (VCWPD). The area has hills to the north and south and increases in elevation from 500 feet to 1,000 feet, with a four-mile-wide valley in between. The District encompasses a portion of the hills to the north, yet the southern boarder only runs up to the base of the southern hills.

The soils in the area are mainly silty and sandy loam, which were formed from weathered alluvium, derived primarily from weathered sedimentary bedrock deposited as alluvial fans. Local soil characteristics are identified in Table 3-1B.

Table 3-1B: Local Soil Characteristics

Soil	Characteristics	Surface	Subsoil	Substratum	% of the District
Rincon	Well-drained, very slow permeability	Silty clay loam	Sandy clay and sandy clay loam that becomes more calcareous with depth	Calcareous, very fine sandy loam	35%
Huerhuero	Moderately well-drained, slow to very slow permeability, very high runoff	Sandy loam underlain by a thin layer of very fine sandy loam	Sandy clay and sandy clay loam	Sandy clay loam	30%
Azule	Well-drained to moderately well drained, slow to very slow permeability	Loam	Sandy clay	Sandy clay loam	20%
Chesterton	Well-drained, very slow permeability, medium runoff	*Unavailable*	*Unavailable*	*Unavailable*	15%
Soper	Well-drained, moderately slow permeability, rapid runoff	*Unavailable*	*Unavailable*	*Unavailable*	

Sources:
http://ceventura.ucanr.edu/Com_Ag/Soils/The_environamental_characteristics_of_Ventura_County_and_its_soils_/General_Soil_Map/
http://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/cnmCA2013/cnmCA2013.pdf
http://www.simivalley.org/gcsearch.aspx?q=+Simi+Valley+General+Plan+Update+Technical+Background+Report

3.4 SERVICE AREA POPULATION AND DEMOGRAPHICS

3.4.1 Service Area Population

The District encompasses approximately 33.7 square miles (21,567 acres) and consists of the City of Moorpark, which accounts for 12.8 square miles (38%) of the District's water service area, and contiguous unincorporated areas (62%) in eastern Ventura County.

The DWR Population Tool developed for use on the 2015 UWMP estimates a water agency's water service area population from 1990 through 2015 based on inputting residential (single-family and multi-family) water service connections for the years 1990, 2000, 2010, and 2015 along with the water service area boundary in electronic (KML) format. A District WSA population of 35,782 was estimated for the year 2015 using the DWR Population Tool. The Population Tool worksheets are included in Appendix D for reference. Southern California Association of Government (SCAG) Regional

Transportation Plan (RTP) 2016 population projections for the City of Moorpark were used as the basis for projecting future District WSA populations through 2040, which are shown in Table 3-1. The WSA population is projected to increase 25.8% to 45,000 in the year 2040 relative to the 2015 population of 35,782.

Table 3-1: Population - Current and Projected

Service Area	2015	2020	2025	2030	2035	2040	Increase[(a)]
District WSA	35,782	38,000	40,000	41,700	43,300	45,000	25.8%

(a) Increase relative to 2015

3.4.2 Water-Use-Related Demographics

Of the 10,944 District water service connections in 2015, 10,152 were residential connections (92.8%). Of the 10,152 residential connections, 10,023 were single family (98.7%) and 129 were multi-family (1.3%).

The majority of the District WSA population, housing and development is located in the City of Moorpark. Accordingly, existing demographics, housing, and land use in the City, as well as future development planning in the City, significantly impact overall water use and water system planning for the District.

In 2015, the average number of people per dwelling unit inside the City of Moorpark was 3.33. Of the 10,966 housing units inside the City limits in 2015, 8,016 (73.1%) were single-detached houses, 1,455 (13.3%) were single-attached; 205 (1.9%) were 2- to 4-unit residences; 1,177 were five-plus units (10.7%); and 143 were mobile homes (1.3%). The vacancy rate in 2015 was only 2.4%.

For the City, significant land uses by area are Open Space 2, which allows for 1 dwelling unit (DU) per acre (1 DU/AC), and rural low density residential (1 DU/5 AC), located primarily and exclusively north of Poindexter Avenue and the California State Route 118, respectively. There is also significant medium-low density (2 DU/AC) and medium density residential (4/DU AC) located in the northeast in the vicinity of Campus Park Drive and in the south in the vicinity of Tierra Rejada Road with lower and higher density residential intermixed. The majority of commercial, industrial, and public/institutional land uses are located in the vicinity of Los Angeles Avenue in the center of the City.

The City has a number of specific plans in various stages of completion. Specific plans approved or submitted in the City are as follows:

Carlsberg Specific Plan

This approved and largely constructed specific plan is located on approximately 500 acres in the southeastern portion of the City, bounded generally by the Arroyo Simi and New Los Angeles Avenue on the north, Spring Road on the west, Tierra Rejada Road on

the south, and State Highway 23 on the east. The plan includes 534 single-family homes on both sides of Miller Parkway, north of Tierra Rejada Road. The northerly portion of the site, along New Los Angeles Avenue, consists of 40 acres for commercial use, which includes the 29-acre Moorpark Marketplace. South of the Moorpark Marketplace, there are 33 acres for office/business park use, currently being developed as the Patriot Commerce Center. There is also a 29-acre school and seven acres for institutional use.

Moorpark Highlands - Specific Plan Two

The approved Moorpark Highlands Specific Plan includes up to 450 single-family residential lots and one multi-family neighborhood proposed for up to 102 units, on property located north of Charles Street, along the extension of Spring Road, east of Walnut Canyon Road (SR-23), and west of Happy Camp Canyon Regional Park. The project permanently preserves 169 acres of land in a Habitat Conservation Plan, providing open space that enhances the habitat within 94 of those acres, and provides multi-use trails for access to these areas by the public. The project also includes a 7-acre park and reserves land for State Route 23 and North Hills Parkway, a potential bypass route for California State Route 118, as well as an extension of Spring Road to Walnut Canyon Road.

Hitch Ranch - Specific Plan One

A request is currently in process for a 281-acre specific plan that would include development of up to 620 dwelling units and three acres of institutional use, located north of the Union Pacific Railroad, west of Walnut Canyon Road (California State Route 23), and generally east of Gabbert Road.

Downtown Specific Plan

The Downtown Specific Plan area is located in the center of the city limits and contains High Street as its core. Also included in the specific plan area are other parts of Old Town Moorpark, including the residential neighborhood north of High Street, the railroad right of way south of High Street and the properties along Moorpark Avenue north of Los Angeles Avenue. The Downtown Specific Plan furthers the vision for the overall revitalization of the downtown and implements design standards, guidelines, and a strategy for business attraction and development of the city-owned parcels in the downtown.

4 SYSTEM WATER USE

4.1 RECYCLED VERSUS POTABLE AND RAW WATER DEMAND

The primary source of water supply for the District has been imported Metropolitan water purchased through the local wholesale agency, Calleguas. The imported water, which is primarily State Water Project (SWP) water from the Sacramento-San Joaquin River Delta in northern California, is treated at Metropolitan's Joseph Jensen Filtration Plant to drinking (potable) water standards. In 2015, the District supplied a total of 7,717 AF from imported water purchased from Calleguas, which was 76.2% of the total water supply including recycled water.

The District produces groundwater from the East Las Posas Groundwater Basin via five wells owned and operated by the District with a total system capacity of approximately 3,500 gpm (2,170 AFY). The groundwater is chlorinated at the well sites before being pumped into the potable water distribution system. In 2015, the District supplied a total of 1,808 AF from groundwater production, which was 17.9% of the total water supply including recycled water.

The District is planning the Moorpark Desalter Project, which is a groundwater production and treatment system that could provide up to 5,000 AFY of potable water for customers in the District's water service area by the end of 2018. As part of the project, 10 to 18 extraction wells will be constructed to extract poor-quality, brackish groundwater from a shallow aquifer in the South Las Posas Basin and pump the groundwater via a new transmission pipeline to the proposed Moorpark Desalter Plant, where the water will be treated to drinking water standards through a membrane treatment process that includes filters, low-pressure reverse osmosis, disinfection, and chemical water conditioning.

The District's Moorpark Water Reclamation Facility (MWRF) produces Title 22 recycled water via tertiary treatment facilities. There are eight active recycled water customers, and the plant produced 599 AF of recycled water in 2015, which was 5.9% of the total water supply. The plant currently has a treatment capacity of 5.0 mgd (5,600 AFY) and a tertiary capacity of 1.5 mgd (1,680 AFY).

The recycled water supply will increase to approximately 1,100 AFY in 2017 with the addition of a new golf course to the recycled water customer base. It is projected that recycled water use in the District will increase to 2,200 AFY by 2040.

4.2 WATER USES BY SECTOR

Historical potable water service connections by customer sector are shown in Table 4-1A. The total number of water service connections increased by 6.6% between 2005 and 2010, and by 3.5% between 2010 and 2015. Residential (single-family plus multi-family) connections accounted for approximately 93% of total water service connections in 2015.

Table 4-1A: Historical Potable Water Service Connections			
Customer Sector	2005	2010	2015[a]
Single Family	8,981	9,572	10,023
Multi Family	125	125	129
Commercial	203	219	237
Industrial	72	70	65
Institutional	132	158	202
Agricultural	171	172	170
Other[b]	235	257	247
	9,919	10,573	10,944

(a) As of the end of CY 2015
(b) Construction and fire services

Historical metered and billed potable water use by customer sector is shown in Table 4-1B. Total potable water use including unaccounted-for (lost) water decreased from 11,872 AFY in 2005 to 10,197 AFY in 2010 (14.1% decrease); and to 9,525 AFY in 2015 (19.8% decrease relative to 2005). Per capita water use also decreased and is discussed in Section 4.4. System water losses has decreased from 4.0% in 2005 to 2.8% in 2015 and is discussed in Section 4.3. Residential water use has accounted for approximately 57 to 62% of total system water use over the past ten years.

District water system demands for potable water for 2015 are shown in Table 4-1. Projected District potable water demands (including water losses) for the planning period (2020-2040) by water use sector are shown in Table 4-2. The methodology for developing these projected demands is presented in Section 4-4. Total projected potable and recycled water demands for the District are shown in Table 4-3. The District's recycled water production and demands are discussed in Chapter 6.

4.3 DISTRIBUTION SYSTEM WATER LOSSES

In accordance with CWC 10631, distribution system water loss is to be quantified for the most recent 12-month period available for the 2015 Urban Water Management Plan update and is to be reported in accordance with a worksheet approved or developed by DWR through a public process. The water loss quantification worksheets are to be based on the water system balance methodology developed by the American Water Works Association (AWWA). The AWWA water loss worksheets used to calculate VCWWD No. 1 water losses are included in Appendix E.

The AWWA Water Audit Software Version 5.0 was used to quantify distribution water loss for the District for Calendar Year 2015. As shown in Table 4-4, a water loss volume of 144 AFY was calculated for the domestic water system, which is 1.5% of the water supplied assuming 1.25% of authorized consumption (119 AFY) was unbilled and unmetered water use, i.e. water typically used for fighting fires, flushing water mains, conducting fire flow tests, etc.

Table 4-1B: Historical Potable Water Use and Water Loss (AFY)						
	2005[a] Water Use/ Supply	2010[a] Water Use/ Supply	% Change (2005-2010)	2015[a] Water Use/ Supply	% Change (2010-2015)	% Change (2005-2015)
Single-Family Residential	6,555	5,866	-10.5%	5,718	-2.5%	-12.8%
Multi-Family Residential	161	144	-10.5%	151	4.7%	-6.3%
Total Residential	6,716	6,011	-10.5%	5,869	-2.4%	-12.6%
Population	33,702	35,351	4.9%	35,782	1.2%	6.2%
Residential Per Capita (gpcd)	177.9	151.7	-14.7%	146.4	-3.5%	-17.7%
Commercial	675	628	-7.0%	533	-15.1%	-21.0%
Industrial	248	154	-37.9%	135	-12.3%	-45.6%
Institutional	766	677	-11.6%	341	-49.6%	-55.5%
Agricultural	2,615	2,279	-12.8%	2,384	4.6%	-8.8%
Other	372	-	0.0%	-	0.0%	0.0%
Unaccounted	480	449	-6.5%	263	-41.4%	-45.2%
Total	11,872	10,197	-14.1%	9,525	-6.6%	-19.8%
Total Per Capita (gpcd)	314.4	257.4	-18.1%	237.6	-7.7%	-24.4%
Water Supply	11,872	10,197	-14.1%	9,525	-6.6%	-19.8%
Water Loss[c]	480	449		263		
Water Loss %	4.0%	4.4%		2.8%		
Total Per Capita w/o Agricultural[b] (gpcd)	245.1	199.9	-18.4%	178.1	-10.9%	-27.3%

(a) 2005 is fiscal year and 2010 and 2015 are calendar year
(b) For comparison with SBx7-7 2015 and 2020 targets (gpcd), which exclude agricultural water use
(c) Includes authorized but unbilled/unmetered water use for fighting fires, flushing water mains, conducting fire flow tests

Table 4-1: 2015 Demands for Potable Water – Actual			
	Additional Description	Level of Treatment When Delivered	Volume (AFY)
Single Family		Drinking Water	5,718
Multi-Family		Drinking Water	151
Commercial		Drinking Water	533
Industrial		Drinking Water	135
Institutional/Governmental		Drinking Water	341
Agricultural irrigation		Drinking Water	2,384
Losses		Drinking Water	144
Other[a]		Drinking Water	119
Total			9,525

(a) authorized but unbilled water use for fighting fires, flushing water mains, conducting fire flow tests

Table 4-2: Demands for Potable Water Projected					
Use Type	Projected Water Use				
	2020	2025	2030	2035	2040
Single Family	6,602	6,897	7,031	7,133	7,244
Multi-Family	175	179	181	183	185
Commercial	617	631	640	647	654
Industrial	156	160	162	164	166
Institutional	395	404	410	414	419
Agricultural	2615	2615	2615	2615	2615
Losses	386	395	400	405	409
Total	10,945	11,280	11,440	11,560	11,693

Table 4-3: Total Water Demands						
	2015	2020	2025	2030	2035	2040
Potable Water Demand	9,525	10,945	11,280	11,440	11,560	11,693
Recycled Water Demand	599	1,400	1,600	1,800	2,000	2,200
Total Water Demand	10,124	12,345	12,880	13,240	13,560	13,893

Table 4-4: 12 Month Water Loss Audit Reporting	
Reporting Period Start Date (mm/yyyy)	Volume of Water Loss (AF)
(01/2015)	144

4.4 ESTIMATING FUTURE WATER SAVINGS

In September 2014, two legislative bills amending sections of the Act were approved and chaptered: AB 2067 and SB1420. Key among the changes to existing statutes was the addition of CWC Section 10631(e)(4). This specific addition provides the option for urban water suppliers to reflect its and its customer's efficiency efforts as part of its future demand projection. The new statutes added the following to CWC Section 10631(e):

> *(4) (A): If available and applicable to an urban water supplier, water use projections may display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.*

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:

(i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.
(ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

4.4.1 Reduced District Water Use Since 2005

Through the implementation of District water conservation ordinances and measures discussed in Chapter 9, and as shown in Table 4-1B, total District per capita water use has decreased 7.7% since 2010 and 24.4% since 2005; and residential per capita water use has decreased 3.5% since 2010 and 17.7% since 2005.

In April 2015, Governor Edward G. Brown, Jr. issued Executive Order B-29-15 requiring the State Water Resources Control Board to implement measures to cut the State's overall water usage by 25% due to the continuing drought. The Executive Order mandates a 25% reduction in supply to California's approximately 400 water control agencies and requires water agencies and cities to reduce water use 25% (on average) below 2013 levels by the end of February 2016, with usage reported to the State by water suppliers. Cities and water agencies were assigned various reduction goals, and the District's reduction goal was set at 30%. District water use has decreased a cumulative 26.3% for the first nine recording months (June 2015 through March 2016) relative to year 2013 water usage in response to the District's conservation goal set by the State, which has been extended to October 2016 or as long as the drought continues.

On May 9, 2016 Governor Brown issued Executive Order B-37-16 that builds on temporary statewide emergency water restrictions to establish longer-term water conservation measures, including permanent monthly water use reporting, new permanent water use standards in California communities and bans on clearly wasteful practices. Through a public process and working with partners such as urban water suppliers, local governments and environmental groups, DWR and the SWRCB will develop new water use efficiency targets as part of a long-term conservation framework for urban water agencies. These targets go beyond the 20% reduction in per capita urban water use by 2020 that was embodied in SB X7-7, and will be customized to fit the unique conditions of each water supplier.

4.4.2 Reduced Future District Water Use due to Existing and Future Conservation Measures

As shown in Table 4-1B, through the implementation of District water conservation ordinances and measures discussed in Chapter 9, total per-capita District water use (including agricultural water use) has significantly dropped from 314.4 gpcd in 2005 to 257.4 in 2010 to 237.4 in 2015 (a reduction of 24.4% relative to 2005). *Not including*

agricultural water use, total per capita District water use has dropped from 245.1 gpcd in 2005 to 199.9 in 2010 to 178.1 in 2015 (a reduction of 27.3%).

It is not known how long the current drought will last or when new droughts will start and end in the future. However, many of the water conservation measures already implemented and being implemented by District customers such as turf removal, conversion to drought resistance landscapes, conversion to more efficient irrigation systems and ET-based irrigation controllers, retrofits to high efficiency clothes washers and toilets, implementation of weather-based irrigation controllers, etc. will have permanent effects on water use (reduction) in the future.

It is anticipated that once the drought ends, some water conservation will end, and per capita water use will increase some relative to 2015 water use. However, it is also anticipated that a great deal of water conservation will remain due to permanent measures that have already been implemented for existing District residences and development.

As shown in Table 4-5A, it is estimated in this UWMP that total District per-capita water use (including agricultural water use) will increase from 237.6 gpcd in 2015 to 260.0 in 2020 (approximately a 9.4% increase) for existing houses and development after the end of the drought, which is similar to the water use in 2010. However, it is estimated that water conservation retrofits will continue for existing residences and development as aged plumbing and irrigation appurtenances are replaced over time, and that per-capita water use will decrease to 233.0 gpcd by 2040 (a reduction of approximately 10.4% relative to 2020). Water loss estimated at 3.5% for existing development areas and to range from 2.5 to 3.5% for new development areas.

Agricultural demand is estimated to remain constant at 2,615 AFY from 2020 through 2040, which is approximately the average for the past 10 years. The District will work to keep this demand from increasing in the future with enforced water conservation measures.

Lower per capita water use is projected for new housing development (relative to existing housing and development) due to new building codes and landscape ordinances. California's newly adopted green building code will have a direct impact on home building and water conservation in the State. The new code aims to cut indoor water consumption by at least 20%, primarily through more efficient indoor water fixtures. For a three-bedroom house, the saving is estimated to be about 10,000 gallons of water per year, on average.

The California Green Building program also includes outdoor water conservation by reducing the area devoted to high-water-use lawns and plants, emphasizing natural drought-tolerant plantings, and installing irrigation controls that respond to local weather conditions. This is consistent with the new Model Water Efficient Landscape Ordinance (MWELO), which was adopted by the State on July 15, 2015 and was adopted by the City of Moorpark (City Ordinance 10-383, Chapter 15.23) and County of Ventura on December 1, 2015 by default.

As shown in Table 4-5A, total per-capita water use (including agricultural water use) for new housing and development is estimated to range from 243.0 gpcd in 2020 to 228.0 gpcd in 2040. Residential per-capita water use is estimated to range from 146.0 to 142.0 gpcd. Water loss is estimated at 3.5% for existing development areas and to range from 2.5 to 3.5% for new development areas.

Table 4-5A: Historical & Projected Per-Capita Water Use

	2005	2010	2015	2020	2040
Existing Households					
Residential Per Capita (gpcd)	177.9	151.7	146.4	150.0	146.0
CII Per Capita[(a)] (gpcd)	54.5	36.9	25.2	37.0	25.0
Ag Per Capita[(b)] (gpcd)	69.3	57.5	59.5	61.0	52.0
Water Loss Per Capita[(c)](gpcd)	12.7	11.3	6.6	10.0	10.0
Total Per Capita (gpcd)	314.4	257.4	237.6	258.0	233.0
New Households					
Residential Per Capita (gpcd)	-	-	-	146.0	142.0
CII Per Capita[(a)] (gpcd)	-	-	-	28.0	24.0
Ag Per Capita[(b)] (gpcd)	-	-	-	61.0	52.0
Water Loss Per Capita[(c)](gpcd)	-	-	-	8.0	10.0
Total Per Capita (gpcd)	-	-	-	243.0	228.0

(a) Commercial, industrial and institutional per-capita water use
(b) Agricultural demand estimated at 2,615 AFY from 2020 through 2040
(c) Water loss estimated at 3.5% for existing development areas and to range from 2.5 to 3.5% for new development areas.

Based on per capita water use developed for existing and new housing and development in Table 4-5A, projected District water demands were developed and are shown in Table 4-5B. Based on a projected increase of approximately 3,000 new households by 2040, total water use is estimated to increase from 9,525 AFY in 2015 to 11,693 AFY in 2040 (an increase of approximately 22.8%), which is all attributable to new development. Total per capita water use is estimated to increase from 237.6 gpcd in 2015 to 259.0 in 2020, and then gradually decrease back to 231.9 gpcd in 2040.

Table 4-5B: Projected Potable Water Demands						
	2015	2020	2025	2030	2035	2040
Existing Households						
Population	35,782	35,664	35,545	35,427	35,308	35,190
Total Per Capita Water Use (gpcd)	237.6	258.0	253.3	246.5	239.8	233.0
Water Use (AFY)	9,526	10,309	10,086	9,785	9,485	9,187
New Households						
Population	0	2,336	4,455	6,273	7,992	9,810
Total Per Capita Water Use (gpcd)	0	243.0	239.3	235.5	231.8	228.0
Water Use (AFY)	0	636	1,194	1,655	2,075	2,506
Total Per Capita Water Use (gpcd)	237.6	257.0	251.7	244.8	238.3	231.9
Total Water Use (AFY)	9,526	10,945	11,280	11,440	11,560	11,693

Total per capita water use *not including agricultural water use* is estimated to increase from 178.1 gpcd in 2015 to 196.0 gpcd in 2020, and then gradually decrease back to 179.9 gpcd in 2040. The actual 2015 per capita water use of 178.1 gpcd is less than the 2015 SBx7-7 targets of 219.3 gpcd calculated for the District in this UWMP as detailed in Chapter 5. Also, the 2020 per capita water use projection of 196.0 gpcd matches very closely the 2020 SBx7-7 targets of 195.7 gpcd calculated for the District in this UWMP as detailed in Chapter 5. Note: SBx7-7 target per capita water use does not include agricultural water use.

4.5 WATER USE FOR LOWER INCOME HOUSEHOLDS

For planning and funding purposes, the State Department of Housing and Community Development (HCD) categorizes households into five income groups based on the County Area Median Income (AMI):

- Extremely Low-Income — up to 30% of AMI
- Very Low-Income - 31 to 50% of AMI
- Low-Income - 51 to 80% of AMI
- Moderate Income - 81 to 120% of AMI
- Above Moderate Income — greater than 120% of AMI

Combined, extremely low-, very low-, and low-income households are often referred to as lower-income household. State Housing Element law requires that a local jurisdiction accommodate a share of the region's projected housing needs for the planning period. This share, called the Regional Housing Needs Allocation (RHNA), is important because State law mandates that a jurisdiction provide sufficient land to accommodate a variety of housing opportunities for all economic segments of the community. Compliance with this requirement is measured by the jurisdiction's ability in providing adequate land with adequate density and appropriate development standards to accommodate the RHNA. The Southern California Association of Governments (SCAG) is responsible for allocating the RHNA to individual jurisdictions within the region.

The City of Moorpark accounts for approximately 97% of the water service area by population, with the majority of housing also located in the City. SCAG assigned a RHNA of 1,164 units to the City of Moorpark for the 2014-2021 RHNA period, in the income distribution shown in Table 4-5C.

Table 4-5C: City of Moorpark's 2014-2021 RHNA Assigned Units

Income Group	Number of Units	Percentage
Extremely/Very Low	289	24.8%
Low	197	16.9%
Moderate	216	18.6%
Above Moderate	462	39.7%
Total	1,164	100.0%

The lower-income households total 486 units for the City of Moorpark. Assuming all 486 lower-income housing units are built by 2025, and based on an estimated 3.28 people per dwelling unit, and a per capita water usage of 182.0 gpcd (not including agricultural water use), the water demand increase for these 486 lower income housing units is estimated at 325 AFY, which is included in all water demand projections in this UWMP.

Confirmation that future water savings and demands for lower-income households are included in demand projections is provided in Table 4-5.

Table 4-5: Inclusion in Water Use Projections

Are Future Water Savings Included in Projections?	Yes
If "Yes" to above, state the section where citations of the codes, ordinances, etc., utilized in demand projections are found.	Chapter 9 2015 UWMP
Are Lower Income Residential Demands Included in Projections?	Yes

4.6 CLIMATE CHANGE

As presented in Metropolitan's 2015 UWMP: Climate change adds its own uncertainties to the challenges of planning. Metropolitan's water supply planning has been fortunate in having almost one-hundred years of hydrological data regarding weather and water supply. This history of rainfall data has provided a sound foundation for forecasting both the frequency and the severity of future drought conditions, as well as the frequency and abundance of above-normal rainfall.

But, weather patterns can be expected to shift dramatically and unpredictably in a climate driven by increased concentrations of carbon dioxide in the atmosphere. These changes in weather significantly affect water supply planning, irrespective of the debate associated with the sources and cause of increasing concentrations of greenhouse gasses. As a major steward of the region's water supply resources, Metropolitan is committed to performing its due diligence with respect to climate change.

While uncertainties remain regarding the exact timing, magnitude, and regional impacts of these temperature and precipitation changes, researchers have identified several areas of concern for California water planners. These include:

- Reduction in Sierra Nevada snowpack;
- Increased intensity and frequency of extreme weather events; and
- Rising sea levels resulting in
    - Impacts to coastal groundwater basins due to seawater intrusion
    - Increased risk of damage from storms, high-tide events, and the erosion of levees; and
    - Potential pumping cutbacks on the SWP and Central Valley Project (CVP)

Other important issues of concern due to global climate change include:

- Effects on local supplies such as groundwater;
- Changes in urban and agricultural demand levels and patterns;
- Impacts to human health from water-borne pathogens and water quality degradation;
- Declines in ecosystem health and function; and
- Alterations to power generation and pumping regimes.

4.6.1 Metropolitan's Activities Related to Climate Change Concerns

Under the 2015 Integrated Resource Plan (IRP) Update, Metropolitan recognizes additional risks and uncertainties from a variety of sources:

- Water quality
- Climate change
- Regulatory and operational changes
- Project construction and implementation issues

- Infrastructure reliability and maintenance
- Demographic and growth uncertainty

Any of these risks and uncertainties, should they occur individually or collectively, may result in a negative impact to water supply reliability. While it is impossible to know how much risk and uncertainty to guard against, the region's reliability will be more secure with a long-term plan that recognizes risk and provides resource development to offset that risk. Some risk and uncertainty will be addressed by following the findings of the 2015 IRP Update. But there are other risks that may take longer to manifest, like climate change or shifts in demographic growth patterns that increase or move the demands for water.

Metropolitan has established an intensive, comprehensive technical process to identify key vulnerabilities. This Robust Decision-Making (RDM) approach was used with the 2010 IRP Update resource plan. The RDM approach can show how vulnerable the region's reliability is to longer-term risks and can also establish "signposts" that can be monitored to see when critical changes may be happening. Signposts include monitoring the direction of ever-changing impacts from improved Global Climate Models, and housing and population growth patterns. The RDM approach will be revisited with the new resource reliability targets identified in the 2015 IRP Update.

Initial 2015 IRP analysis indicated an additional 200,000 AF of water conservation and local supplies may be needed to address these risks. This additional supply goal will be considered when examining implementation polices and approaches as the IRP process continues.

Metropolitan is an active and founding member of the Water Utility Climate Alliance (WUCA). WUCA consists of ten nationwide water providers collaborating on climate change adaptation and greenhouse gas mitigation issues. As a part of this effort, WUCA pursues a variety of activities on multiple fronts.

Member agencies of WUCA annually share individual agency actions to mitigate greenhouse gas emissions to facilitate further implementation of these programs. WUCA also monitors development of climate change-related research, technology, programs, and federal legislation.

In addition to supporting federal and regional efforts, WUCA released a white paper entitled "Options for Improving Climate Modeling to Assist Water Utility Planning for Climate Change" in January 2010. The purpose of this paper was to assess Global Circulation Models, identify key aspects for water utility planning, and make seven initial recommendations for how climate modeling and downscaling techniques can be improved so that these tools and techniques can be more useful for the water sector. Another recent WUCA publication related to water planning entitled "Embracing Uncertainty: A Case Study Examination of How Climate Change is Shifting Water Utility Planning" (2015). A fundamental goal of this recent white paper is to provide water professionals with practical and relevant examples, with insights from their peers,

on how and why to modify planning and decision-making processes to better prepare for a changing climate.

In addition to these efforts, the member agencies of WUCA annually share individual agency actions to mitigate greenhouse gas emissions to facilitate further implementation of these programs. At a September 2009 summit at the Aspen Global Change Institute, WUCA members met with global climate modelers, along with federal agencies, academic scientists, and climate researchers to establish collaborative directions to progress climate science and modeling efforts. WUCA continues to pursue these opportunities and partnerships with water providers, climate scientists, federal agencies, research centers, academia and key stakeholders.

Metropolitan also continues to pursue knowledge sharing and research support activities outside of WUCA. Metropolitan regularly provides input and direction on California legislation related to climate change issues. Metropolitan is active in collaborating with other state and federal agencies, as well as non-governmental organizations, on climate change related planning issues. The following list provides a sampling of entities that Metropolitan has recently worked with on a collaborative basis:

- USBR
- U.S. Army Corps of Engineers
- AWWA Research Foundation
- National Center for Atmospheric Research
- California Energy Commission
- California Department of Water Resources
- Quantification of Current Research

Metropolitan continues to incorporate current climate change science into its planning efforts. A major component of the current IRP update effort is to explicitly reflect uncertainty in Metropolitan's future water management environment. This involves evaluating a wider range of water management strategies, and seeking robust and adaptive plans that respond to uncertain conditions as they evolve over time, and that ultimately will perform adequately under a wide range of future conditions. The potential impacts and risks associated with climate change, as well as other major uncertainties and vulnerabilities, will be incorporated into the update and accounted. Overall, Metropolitan's planning activities strive to support the Board adopted policy principles on climate change by:

- Supporting reasonable, economically viable, and technologically feasible management strategies for reducing impacts on water supply,
- Supporting flexible "no regret" solutions that provide water supply and quality benefits while increasing the ability to manage future climate change impacts, and
- Evaluating staff recommendations regarding climate change and water resources under the California Environmental Quality Act (CEQA) to avoid adverse effects on the environment.

Metropolitan has made great efforts to implement greenhouse gas mitigation programs and policies for its facilities and operations. To date, these programs and policies have focused on:

- Exploring water supply/energy relationships and opportunities to increase efficiencies;
- Participating in the Climate Registry, a nonprofit greenhouse gas emissions registry for North America that provides organizations with the tools and resources to help them calculate, verify, report, and manage their greenhouse gas emissions in a publicly transparent and credible way;
- Acquiring "green" fleet vehicles, and supporting an employee Rideshare program;
- Developing solar power at both the Skinner water treatment plant (completed) and the Weymouth water treatment plant (in progress); and
- Identifying and pursuing development of "green" renewable water and energy programs that support the efficient and sustainable use of water.

Metropolitan also continues to be a leader in efforts to increase regional water use efficiency. Metropolitan has worked to increase the availability of incentives for local conservation and recycling projects, as well as supporting conservation Best Management Practices for industry and commercial businesses.

5 SB X7-7 BASELINES AND TARGETS

Senate Bill x7-7 (SBx7-7) was enacted in November 2009 (Water Conservation Act of 2009), requiring all water suppliers to increase water use efficiency. The legislation set an overall goal of reducing per capita urban water use by 20% by December 31, 2020 and to make incremental progress towards this goal by reducing per capita water use by at least 10% by December 31, 2015.

In preparing the 2010 UWMP, each urban retail water supplier was required to develop baseline daily per-capita water use, minimum baseline daily per capita water use, and target daily per capita water use for 2015 and 2020 that were to be 10% and 20% less, respectively, than the baseline daily per capita water use based on utilizing one of four methods provided; with the target reduction for 2020 greater than the legislation's minimum water use reduction requirement. The four methods are:

- Method 1: 80% of the water supplier's baseline per capita water use
- Method 2: Per capita daily water use estimated using the sum of performance standards applied to indoor residential use; landscape area water use; and commercial, industrial, and institutional uses
- Method 3: 95% of the applicable state hydrologic region target as stated in the State's April 30, 2009, draft 20x2020 Water Conservation Plan
- Method 4: A BMP Option based on standards that are consistent with the California Urban Water Conservation Council's (CUWCC) best management practices (BMPs).

Baseline daily per capita water use is defined as a continuous 10 or 15 year base period (baseline) for water use ending no earlier than December 31, 2004 and no later than December 31, 2010.

If the average baseline daily per-capita water use is greater than 100 gpcd for a defined 5-year baseline period, the legislation's minimum water use reduction requirement must also be met as set in Section 10608.22 of Senate Bill No. 7 SBx7-7. Per SBx7-7, the minimum water use reduction baseline period must end no earlier than December 31, 2007, and no later than December 31, 2010, and the minimum reduction shall be no less than 5% of this 5-year base daily per capita water use.

For the 2015 UWMP, water agencies must demonstrate compliance with their established water use target for 2015, which will also demonstrate whether the agency is currently on track to achieve its 2020 target.

5.1 UPDATING CALCULATIONS FROM 2010 UWMP

In the 2010 UWMP, water agencies calculated a 2020 Urban Water Use Target through the use of a selected target method. In 2015 UWMPs, water agencies may update their

2020 Target and may make this calculation using a different target method than was used in 2010

DWR determined that significant discrepancies existed between Department of Finance (DOF) projected populations for 2010 (based on 2000 U.S. Census data) and actual populations for 2010 based on 2010 U.S. Census data. The average difference between projected and actual was approximately 3%, but the difference for some cities was as high as 9%.

Therefore, if an agency did not use 2010 Census data for their baseline population calculations in the 2010 UWMP (the full census data set was not available until 2012), DWR has determined that these agencies must recalculate their baseline population for the 2015 UWMPs using 2000 and 2010 Census data. This may affect the baseline and target gpcd values calculated in the 2010 UWMP, which must be modified accordingly in the 2015 UWMP. The District's 2010 UWMP did not use 2010 census data for its baseline population calculations and it is therefore recalculated in the 2015 UWMP to update SBx7-7 targets

5.2 BASELINE PERIODS

Recycled water use in the District was not at least 10% of total water deliveries in 2008, and therefore, a 10-year baseline period is used as opposed to a 15-year baseline period. The baseline period must end no earlier than December 31, 2004, and no later than December 31, 2010. The most advantageous sequence of years for calculating per capita water use is the sequence that generates the highest per capita water use, making subsequent water conservation easier to achieve. Accordingly, the 10-year period 2000 through 2009 was selected as the average per capita water use baseline for the 2015 UWMP, which is the same baseline period used in the 2010 UWMP, as shown in Table 5-1A.

Per SBx7-7, the minimum 5-year water use reduction baseline period must end no earlier than December 31, 2007, and no later than December 31, 2010. A 5-year minimum water use reduction baseline period between 2004 through 2008 was selected to calculate the most advantageous 5-year minimum water use reduction target as shown in Table 5-1B. The minimum 5-year water use reduction baseline period is used to calculate the legislation's minimum water use reduction requirement.

5.3 SERVICE AREA POPULATION

DWR developed a "Population Tool" that uses GIS and Census data to calculate population within the water supplier's service area, which can be used for the preparation of the 2015 UWMP. The Population Tool is particularly useful for agencies whose water service area boundaries do not match to a city boundary and cannot use DOF population data alone. The Population Tool utilizes US Census data and electronic maps of the agency's service area. Using the number of agency service connections, the tool will calculate the population for the non-census years.

The DWR Population Tool was used to estimate the District's water service area population from 1990 through 2015 based on inputting residential (single-family and multi-family) water service connections for the years 1990, 2000, 2010, and 2015 along with the District's water service area boundary in electronic format. The Population Tool worksheets are included in Appendix D for reference.

Table 5-1A: Baseline Daily Per Capita Water Use

Sequence Year	Year	Water Service Area Population	Daily System Gross Water Use (AFY)	Annual Daily Per Capita Water Use (gpcd)
1	2000	31,913	8,327	232.9
2	2001	32,272	8,001	221.3
3	2002	32,639	8,869	242.5
4	2003	33,002	8,756	236.8
5	2004	33,356	9,930	265.7
6	2005	33,702	9,258	245.2
7	2006	34,042	8,855	232.2
8	2007	34,376	9,164	237.9
9	2008	34,706	10,538	271.0
10	2009	35,026	9,577	244.0
Baseline Daily Per Capita Water Use:				242.9

Table 5-1B: Minimum Baseline Daily Per-Capita Water Use

Sequence Year	Year	Water Service Area Population	Daily System Gross Water Use (AFY)	Annual Daily Per Capita Water Use (gpcd)
1	2004	33,356	9,930	265.7
2	2005	33,702	9,258	245.2
3	2006	34,042	8,855	232.2
4	2007	34,376	9,164	237.9
5	2008	34,706	10,538	271.0
Minimum Baseline Daily Per Capita Water Use:				250.4

5.4 GROSS WATER USE

Gross water use for the baseline and minimum baseline periods are shown in Table 5-1A and 5-1B, respectively. Gross water use includes all potable water use within the District's water service area excluding agricultural water use.

5.5 BASELINE DAILY PER CAPITA WATER USE

As shown in Table 5-1A, the baseline per-capita water use is calculated to be 242.9 gpcd. In the 2010 UWMP, the baseline per capita water use was calculated to be 239.8 gpcd. As shown in Table 5-1B, the minimum baseline per capita water use is calculated to be 250.4 gpcd. In the 2010 UWMP, the minimum baseline per capita water use was calculated to be 239.6 gpcd.

5.6 2015 AND 2020 TARGETS

As shown in Table 5-1B, the minimum baseline water use averages 250.4 gpcd. The minimum per capita water use target for 2020 must therefore be 237.9 gpcd (95% of 250.4 gpcd). The calculation of the 2020 water use reduction target for the four methods are as follows:

- Method 1: Using a baseline per capita average of 242.9 gpcd (shown in Table 5-1A) the District's 2020 target would be 194.3 gpcd (80% of 242.9). Since the target water use for Method 1 is less than the one found using the legislation's minimum requirement criteria (237.9), no further adjustments to this water use target would be required, if this method is selected.
- Method 2: The District does not currently maintain records of lot size, irrigated landscaped area for each parcel, reference evapotranspiration for each parcel, etc. to split its residential, commercial, industrial, or institutional uses into inside and outside (landscape irrigation) uses. The use of Method 2 to calculate conservation targets is therefore not feasible.
- Method 3: The District falls within the South Coast Hydrologic Region (Hydrologic Region 4). According to the State's 20x2020 Water Conservation Plan, the 2020 Target for Hydrologic Region 4 is 149 gpcd. Using Method 3, the District's 2020 water use target would be 141.6 gpcd (95% of 149). Since the target water use generated by Method 3 is less than the one found using the minimum requirement, no further adjustments to this water use target would be required, if this method is selected.
- Method 4: DWR's Target Method 4 Calculator was utilized to calculate 2020 target water use for the District under this method based on standards consistent with CUWCC BMPs. The District currently meters all water services, so there is no projected metering savings. A default indoor residential water savings of 15 gpcd was assumed. CII savings was calculated to be 4.5 gpcd and landscape irrigation and water loss savings was calculated to be 27.7 gpcd. Using Method 4, the District's 2020 water use target would be 195.7 gpcd. Since the target water use generated by Method 4 is less than the one found using the minimum requirement, no further adjustments to this water use target would be required, if this method is selected.

The discussion and calculations above are summarized in Table 5-1C.

Table 5-1C: 2020 Targets by Method	
Method	2020
1	194.3
2	Not Applicable
3	141.6
4	195.7

As shown in Table 5-1, Method 4 results in the most favorable 2020 water use target level for the District: 195.7 gpcd. The 2015 interim target is calculated to be 219.3 gpcd (mid-point between baseline of 242.9 and 2020 target of 195.7). In the District's 2010 UWMP, the District's 2020 target water use was calculated to be 191.8 gpcd using Method 1 and the 2015 interim target was calculated to be 215.8 gpcd.

A baselines and target summary is shown in Table 5-1.

Table 5-1: Baselines and Targets Summary					
Baseline Period	Start Year	End Year	Average Baseline gpcd[(a)]	2015 Interim Target[(a)]	Confirmed 2020 Target[(a)]
10 year	2000	2009	242.9	219.3	195.7
5 Year	2004	2008	250.4		

(a) All values are in Gallons per Capita per Day (gpcd)

5.7 2015 COMPLIANCE DAILY PER CAPITA WATER USE

In 2015, the District's per capita water use was 178.1 gpcd, which is significantly lower than its 2015 target of 219.3 gpcd as demonstrated in Table 5-2. There were no adjustments to the 2015 target for extraordinary events, economic adjustment, or weather normalization.

Table 5-2: 2015 Compliance (GPCD)								
Actual 2015 gpcd	2015 Interim Target gpcd	**Optional Adjustments to 2015** Enter "0" for adjustments not used *From Methodology 8*					2015 gpcd	Did Supplier Achieve Targeted Reduction for 2015? Y/N
		Extraordinary Events	Economic Adjustment	Weather Normal-ization	TOTAL Adjustments	Adjusted 2015 gpcd		
178.1	219.3	0	0	0	0	178.1	178.1	Yes

5.8 REGIONAL ALLIANCE

The District is not participating in a regional alliance and is submitting their 2015 UWMP individually.

6 SYSTEM SUPPLIES

The District's water supplies come from three sources:

1. Metropolitan imported water purchased through the local wholesale agency; Calleguas, which is treated at Metropolitan's Joseph Jensen Filtration Plant to drinking water standards;

2. Groundwater pumped from the East Las Posas Groundwater Basin via five wells owned and operated by the District. This groundwater is chlorinated at the well sites to potable water standards;

3. Title 22 recycled water produced at the District's Moorpark Water Reclamation Facility (MWRF).

6.1 PURCHASED IMPORTED WATER

The primary source of water supply for the District has been Metropolitan imported water through the local wholesale agency, Calleguas. The imported water, which is primarily State Water Project (SWP) water from the Sacramento-San Joaquin River Delta in Northern California, is treated at Metropolitan's Joseph Jensen Filtration Plant to drinking water standards. In 2015, the District supplied a total of 7,717 AF from imported water purchased from Calleguas, which was 76.2% of the total water supply including recycled water.

6.1.2 Calleguas Municipal Water District (Calleguas)

Calleguas is an enterprise special district that was formed by the voters of southern Ventura County in 1953 for the purpose of providing a safe, reliable water supply. Named for the watershed in which it is located, Calleguas is a public agency established under the Municipal Water District Act of 1911. It is governed by a five-member board of directors elected by voters to represent each of the five geographic divisions within the District. In 1960, Calleguas became a member agency of Metropolitan, which provides wholesale water from the Colorado River via the Colorado Aqueduct and Northern California via the State Water Project (SWP). Metropolitan is comprised of 26 member agencies, and Calleguas is the fifth largest member agency in terms of average annual water deliveries. The Calleguas water service area is shown in Figure 6-1.

Calleguas distributes high quality drinking water on a wholesale basis to 19 local purveyors, including VCWWD No. 1, who in turn deliver water to area residents, businesses, and agricultural customers. These 19 Calleguas purveyors are listed in Table 6-1A. Approximately three-quarters of Ventura County residents (roughly 630,000 people) depend on Calleguas for all or part of their water and the water supplied by Calleguas currently represents approximately 73% of the total municipal and industrial water demand within its service area. It is important to note that a large portion of the water use in Ventura County is for agricultural purposes. Agricultural demands are met by the District or by groundwater provided by other private entities.

Figure 6-1
Calleguas Municipal Water District Service Area

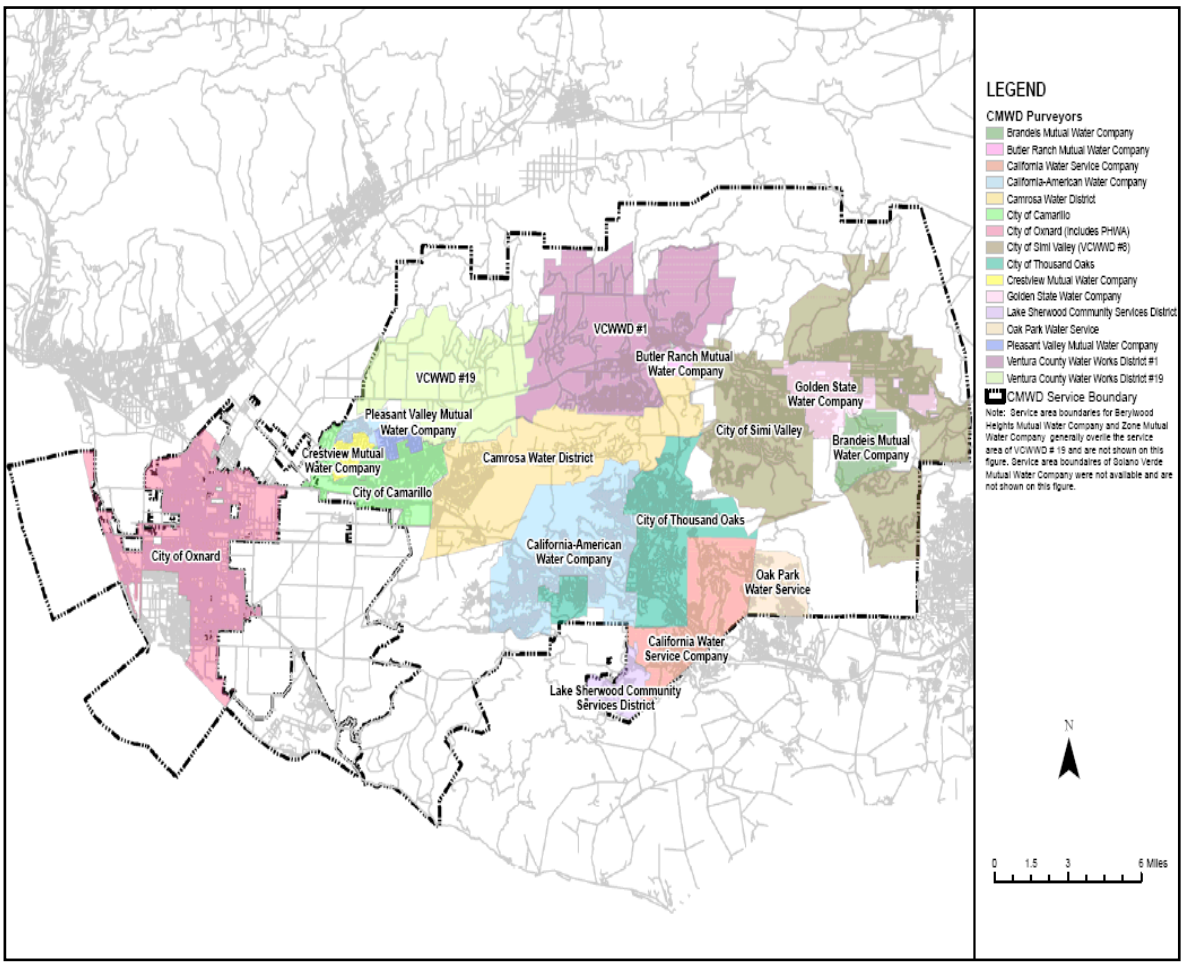


Table 6-1A: Calleguas Member Water Purveyors	
Berylwood Heights Mutual Water Company	Crestview Mutual Water Company
Brandeis Mutual Water Company	Golden State Water Company
Butler Ranch Mutual Water Company	VCWWD No. 38
California Water Service Company	Oak Park Water Service
California-American Water Company	Pleasant Valley Mutual Water Company
Camrosa Water District	Solano Verde Mutual Water Company
City of Camarillo	VCWWD No. 1
City of Oxnard	VCWWD No. 19
City of Simi Valley (VCWWD No. 8)	Zone Mutual Water Company
City of Thousand Oaks	

6.1.3 Metropolitan Water District of Southern California (Metropolitan)

Metropolitan is a wholesale water agency serving 19 million people in six Southern California counties. Metropolitan was formed in 1928 and is composed of 26 member agencies including Calleguas. As a wholesaler, Metropolitan has no retail customers, and distributes treated and untreated water directly to its 26 member agencies. Metropolitan's service area is shown on Figure 6-2.

Metropolitan provides water from the Colorado River and the State Water Project (San-Joaquin River Delta), and also obtains additional supplies from numerous storage, water transfers, exchanges, water banking, and fallowing projects.

Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. The Colorado River Aqueduct (CRA) transports water from Lake Havasu, at the border of the states of California and Arizona, approximately 242 miles to its terminus at Lake Mathews in Riverside County. The CRA is owned and operated by Metropolitan and has a capacity of 1.2 MAF a year.

Metropolitan also receives water from the San-Joaquin River Delta (Delta) in Northern California via the 444-mile-long California Aqueduct (State Water Project or SWP), which is managed by the Department of Water Resources (DWR). The SWP provides imported water to the Metropolitan service area and has provided from 25% to 50% of Metropolitan's water supplies. In accordance with its contract with the Department of Water Resources (DWR), Metropolitan has a Table A allocation of 1,911,500 AF per year under contract from the State Water Project. Calleguas and its member agencies primarily receive SWP water through Metropolitan with Colorado River water normally available as a backup imported water supply.

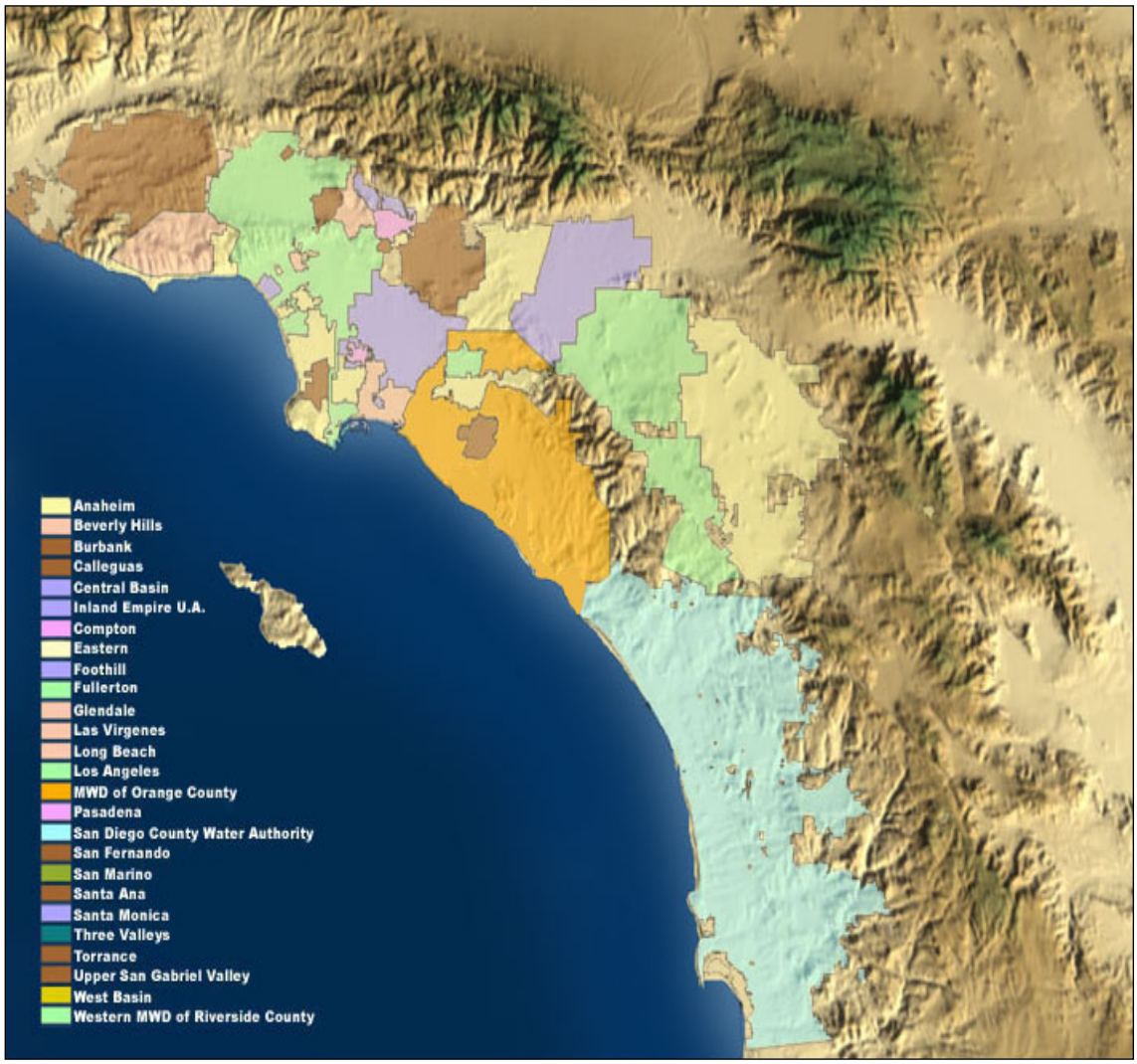
Metropolitan's total minimum supply, absent impacts of a major earthquake or other natural or man-made disaster, is approximately 1.2 million AFY.

6.1.4 Metropolitan Import Deliveries under Water Supply Allocation

In April 2015, citing continued drought conditions and reduced allocations from the State Water Project and Colorado River, the Metropolitan Board of Directors approved implementing their Water Supply Allocation Plan (WSAP) at a Regional Shortage Level 3 starting July 1, 2015, to cut imported water deliveries to its member agencies by 15%. Under a Level 3 WSAP, MWD could impose a surcharge, ranging from $1,480 to $2,960/AF of additional water for any member agency that failed to meet the 15% reduction. The allocation plan limits water usage for its 26 member agencies based on their dependency on MWD supplies, while considering local supply conditions and past water-saving actions. The Tier 1 threshold for Calleguas was set at 13.7%. Calleguas would pass the surcharge on to Calleguas' retail customers exceeding this water allocation threshold.

On May 10, 2016, the Metropolitan Board of Directors reduced the WSAP to a Level 2, which is a 10% reduction in imported water deliveries, effective immediately, due to lower demands achieved through the region's water saving efforts and improved supply conditions, particularly in Northern California; and declared there would be no WSAP set forth for FY 2017. Calleguas also rescinded their surcharge in May 2016.

Figure 6-2
Metropolitan Service Area



6.2 GROUNDWATER

The District's water service area overlies groundwater basins in Ventura County that are managed by Fox Canyon Groundwater Management Agency (FCGMA), whose jurisdictional area encompasses about 118,000 acres (185 square miles). The FCGMA was initially created to manage the groundwater in both over-drafted and potentially seawater-intruded areas within Ventura County. The prime objectives and purposes of the FCGMA are to preserve groundwater resources for agricultural, municipal, and industrial

uses in the best interests of the public. Protection of water quality and quantity along with maintenance of long-term water supply are included in those goals and objectives

The basins within the FCGMA are part of the Transverse Ranges geologic province, in which the mountain ranges and basins are oriented in an east-west rather than the typical northeast- southwest trend in much of California and the western United States. Active thrust faults border the basins of the Santa Clara River, causing rapid uplift of the adjacent mountains and down-dropping of the basins. The alluvial basins are filled with substantial amounts of Tertiary and Quaternary sediments deposited in both marine and terrestrial (non-marine) settings. The basins beneath the Oxnard Plain are filled with sediments deposited on a wide delta complex formed at the terminus of the Santa Clara River and was heavily influenced by alternating episodes of advancing or retreating shallow seas that varied with world-wide sea level changes over many millions of years.

There are seven main or significant groundwater basins within the FCGMA as shown in Figure 6-3. These groundwater basins include the Oxnard Plain, the Oxnard Plain Forebay, the Pleasant Valley, the Santa Rosa, and the Las Posas Valley (East, West and South) basins. These basins generally contain two major aquifer systems, the Upper Aquifer System (UAS) and the Lower Aquifer System (LAS).

Separate aquifers locally named within these systems include the Oxnard and Mugu aquifers (UAS) and the Hueneme, Fox Canyon, and Grimes Canyon aquifers (LAS). A shallower, unconfined aquifer is also present locally underlying rivers and creeks. Underlying the Oxnard Plain and Pleasant Valley basins are sand layers of the "semi-perched zone," which may locally contain poor-quality water. This zone extends from the surface to no more than 100 feet in depth. These sands overlie confining clay of the upper Oxnard Aquifer which generally protects the underlying aquifers from contamination from surface land uses. The Semi-perched zone is rarely used for water supply.

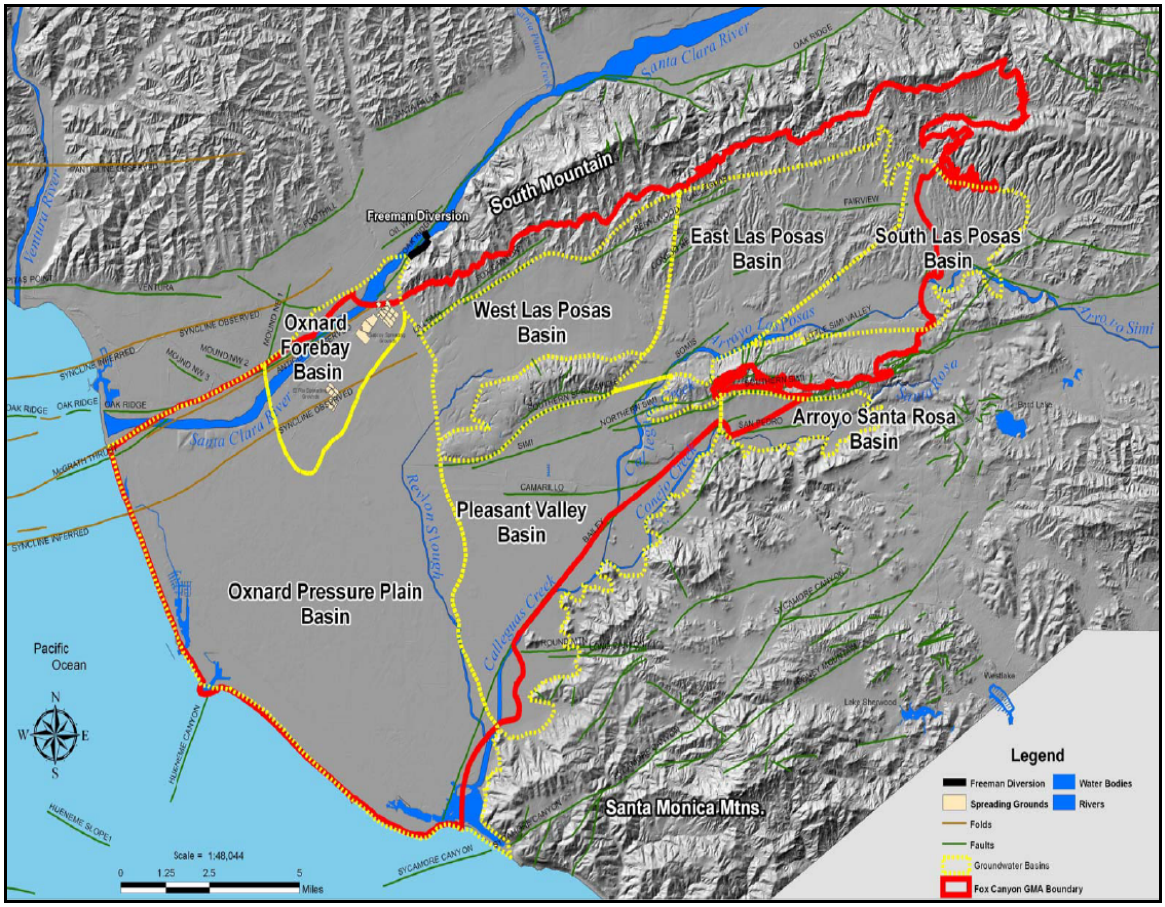
Historically, both the UAS and the LAS have been in a state of overdraft, which has led to seawater intrusion. Unfortunately, water in the UAS has elevated levels of chlorides and total dissolved solids (TDS). VCWWD No. 1 and other agencies are active participants in regional efforts to put some of this water to beneficial use by advancing groundwater desalter projects (groundwater recovery).

The Las Posas Valley Basin is bounded on the south by the Camarillo and Las Posas Hills and on the north by South Mountain and Oak Ridge (CSWRB, 1954). The Las Posas Valley Basin is not adjudicated, and based on the DWR official departmental bulletins (California's Groundwater Bulletin 118 Updated 2003, Bulletin 160, and the California Water Plan Update 2009), the Las Posas Valley Basin is not specifically identified as a basin in an overdraft condition.

However, subsidence and seawater intrusion are both common regional groundwater challenges facing the South Coast Hydrologic Region. FCGMA was formed primarily to manage water quality and managing extractions aids in this goal. FCGMA maintains that the Las Posas Valley Basin is in overdraft relative to the native water supply to the basin, yet has been sustained in some areas by non-native inflows from wastewater treatment

plant discharges, urban runoff, and shallow groundwater dewatering discharges from upstream areas. Since 1992, FCGMA has incrementally reduced groundwater allocations by 25%. On April 11, 2014, FCGMA further imposed a Temporary Extraction Allocation (TEA) reduction of 20% and implemented high penalties for over-pumping.

Figure 6-3
Fox Canyon Groundwater Management Agency Boundaries and Basins



The Las Posas Valley Basin has been subdivided into West, East, and South basins (e.g., Hanson, 1998). Productive aquifers in this basin include a shallow, unconfined aquifer that is most transmissive along the Arroyo Las Posas and a lower confined aquifer system that is considered to be the equivalent of the Lower Aquifer System on the Oxnard Plain. VCWWD No. 1 has historically produced groundwater from the East Las Posas Basin and is planning a groundwater production and treatment system (Moorpark Desalter Project), which is discussed later in this section, to produce groundwater from the South Las Posas Basin.

6.2.1 East Las Posas Basin

The District has historically produced groundwater from the East Las Posas Basin, which is separated from the West Las Posas Basin by a north-trending, unnamed fault running through Somis (CH2MHill, 1993; Hanson, 1998), across which groundwater levels differ

by as much as 400 feet. The fault also acts as a barrier to transport of saline waters from the East Las Posas basin to the West Las Posas basin (Bachman, 1999).

The source of recharge to the East Las Posas basin has changed significantly since urban development of the Simi Valley and Moorpark areas over the last 30 years. Prior to this time, recharge was predominantly from rainfall on outcrop areas and from percolation of winter floodwater along the Arroyo Las Posas. Geochemical studies show that groundwater in the central portion of the East Las Posas basin is hundreds to thousands of years old (Izbicki, 1996b), indicating a slow rate of historical recharge along the flanks of the basin.

As discussed for the South Las Posas basin, urban development has brought increased discharges of both treated wastewater (including treated discharges from the District's Moorpark Wastewater Treatment Plant) and shallow groundwater into Arroyo Las Posas, providing a year-round recharge source for the South and East Las Posas basins (CH2MHill, 1993; Bachman, 2002). This increased percolation from the arroyo has created a recharge mound that extends northward into the East Las Posas basin, where groundwater levels have risen by 125 feet to 200 feet during the past 30 years.

Conversely, pumping in the basin has resulted in falling groundwater levels in the eastern portion of the basin, away from the recharge mound. The largest drop in groundwater levels (190 feet) over the period 1973 to 1998 occurred in this region (Bachman, 1999). Groundwater levels have stabilized somewhat across the basin since the late 1990s, at least in part because of the addition of in-lieu and injected recharge by Calleguas as part of the Las Posas Basin Aquifer Storage and Recovery (ASR) project.

Increasing concentrations of salts (chloride, sulfate, sodium) in the portion of the basin along the Arroyo Las Posas continue to be a problem in the East Las Posas Basin. Chloride concentrations in the shallow aquifer beneath the arroyo can reach 360 mg/L, whereas chloride concentrations in the surface waters in the arroyo are in the range of 120-180 mg/L (Bachman, 2002). These increased chloride concentrations in the shallow aquifer are associated with historically-high groundwater levels (that apparently leach salts from previously-unsaturated sediments in the shallow aquifer along the arroyo).

shortages within Metropolitan's service area. The WSAP formula seeks to balance the System by moving downward from the shallow aquifer into the LAS, then northward into the basin. This recharge has formed a chloride-rich recharge mound beneath the Arroyo Las Posas and northward into the main portion of the East Las Posas basin (Bachman, 2002). Individual wells along the south flank of the basin show a progression of filling of the shallow aquifer, with a coincident increase in chloride concentration.

The District produces groundwater from the East Las Posas Groundwater Basin via five wells owned and operated by the District with a total system capacity of approximately 3,500 gpm (2,170 AFY). The groundwater meets all State and Federal water quality standards for drinking water with the exception that treatment is required at one of the well sites (Well No. 20) to lower iron and manganese levels below the State Title 22 Secondary Maximum Contaminant Level (MCL) for these two minerals. The

groundwater is chlorinated at each well site before being pumped into the potable water distribution system. Groundwater produced by the five District wells from 2011 through 2015 is shown in Table 6-1B with a summary provided in Table 6-1. FCGMA, the groundwater sustainability agency (GSA), has allocated the District a maximum 1,756 AFY for groundwater pumping in 2016 (Ordinance E). Regardless of system capacity, the District will not be allowed to exceed 1,756 AFY for local potable water supply going forward.

Table 6-1B: Historical Groundwater Production for District Wells (AFY)

Well No. (Design gpm)	2011	2012	2013	2014	2015
15 (600)	416.4	419.5	627.8	445.1	0
20 (1,100)	769.5	1,208.8	1,335.6	767.0	670.4
95 (600)	332.6	162.2	410.7	318.1	522.2
97 (600)	577.9	357.7	423.6	479.6	273.0
98 (600)	250.4	429.6	565.9	488.2	342.1
Total	2,346.8	2,795.7	3,519.1	2,504.6	1,807.7

Table 6-1: Groundwater Volume Pumped

Groundwater Type	Basin Name	2011	2012	2013	2014	2015
Alluvial Basin	East Las Posas	2,346.8	2,795.7	3,519.1	2,504.6	1,807.7
Total		2,346.8	2,795.7	3,519.1	2,504.6	1,807.7

6.2.1 South Las Posas Basin

The South Las Posas Basin is separated from the East Las Posas Basin by an east-trending anticline (fold) that affects all but the shallowest alluvium. This fold may affect groundwater flow between the East and South Las Posas Basins at some aquifer depths, although recharge from the South Las Posas Basin flows readily into the East Las Posas Basin at Lower Aquifer System (LAS) depths. To the south, the Springville and Santa Rosa fault zones produce disrupted and tightly folded rocks along the edge of the basin, restricting groundwater flow to the south (CSWRB, 1956). There is a shallow alluvial aquifer that follows the trend of Arroyo Las Posas as it crosses the South Las Posas Basin; this shallow aquifer is in hydrologic connection with the underlying LAS and is the main source of recharge to the LAS.

There has been a significant change in average groundwater levels over the past 40 years in the South Las Posas Basin, with groundwater levels rising more than 100 feet during this period. The mechanism for this rise in groundwater elevations is the increased recharge from percolation beneath the Arroyo Las Posas as discharges from the Moorpark and Simi Valley wastewater treatment plants and dewatering wells in Simi

Valley have increase year-round flow in the arroyo. The entire alluvial aquifer near the arroyo has progressively filled to the elevation of the arroyo, starting in the easternmost portion of the basin in the 1960s and moving westward through the 1990s (Bachman, 2002). Water from the filled alluvial aquifer has percolated into the underlying Lower Aquifer System, creating a recharge mound in the Lower Aquifer System that extends from the arroyo northward into the East Las Posas Basin (CH2MHill, 1993; Bachman, 1999).

Salts (i.e., chloride, sulfate) in the groundwater have increased in the South Las Posas basin and the southwestern portion of the East Las Posas basin as the shallow aquifer filled along Arroyo Las Posas. These salts apparently were leached from the shallow aquifer as groundwater levels reached record highs, saturating sediments that have been unsaturated for the historic period. These salts apparently migrated vertically with percolating groundwater into the LAS and then laterally into the main portion of the East Las Posas Basin as the recharge mound developed. Some of this groundwater is unsuitable.

The District is planning the construction of a groundwater production and treatment system that will provide up to 5,000 AFY of potable water from the South Las Posas Basin.

6.2.1.1 Moorpark Desalter Project

The District is planning the Moorpark Desalter Project, which is a groundwater production and treatment system that could provide up to 5,000 AFY of potable water for customers in the District's water service area by the end of 2018. As part of the project, 10 to 18 extraction wells will be constructed within or near an active agricultural field east of Hitch Boulevard between Los Angeles Avenue and the Arroyo Las Posas/Arroyo Simi. The proposed Moorpark Desalter Treatment Plant will be located east of the existing Moorpark Water Reclamation Facility (MWRF), which is located at 9550 East Los Angeles Avenue just west of Moorpark City limits along California State Route118.

The wells will extract poor-quality, brackish groundwater from a shallow aquifer in the South Las Posas Basin and pump the groundwater via a new transmission pipeline to the proposed treatment plant, where the water will be treated to drinking water standards through a membrane treatment process that includes filters, low-pressure reverse osmosis, disinfection, and chemical water conditioning. Brine produced by the reverse osmosis process will be transported out of the watershed through the Salinity Management Pipeline (SMP), currently being constructed by Calleguas. The SMP will convey brine from Moorpark to the ocean discharge point at Point Hueneme.

The Project is a key element in the Northern Reach Renewable Water Management Plan which was developed as part of the Calleguas Creek Boron, Chloride, Total Dissolved Solids, and Sulfate Total Maximum Daily Load Compliance Plan. The Project will supplement imported water supplies, remove poor quality groundwater, allow higher quality storm flows to recharge the shallow unconfined groundwater basin, and improve the groundwater quality of the overall basin.

The Ventura County Public Works Agency's Water and Sanitation Department received a $7 million Proposition 84 grant from the State Department of Water Resources through the Watershed Coalition of Ventura County for the Moorpark Desalter Project.

The Project, which has an overall estimated cost of $50 million to complete, will remove up to 18 million pounds of salt per year from the Las Posas Basin and provide up to 5,000 acre-feet per year of high quality water for use by customers in the VCWWD No. 1 water service area. The projected completion date of the project is December 2018.

6.2.2 Sustainable Groundwater Management Act of 2014

Historically, California has never managed its groundwater supplies on a statewide basis. That has now changed. As of January 1, 2015, the Sustainable Groundwater Management Act (SGMA), signed by Governor Edmund G. Brown, Jr. in September 2014, now regulates the use of groundwater on a more universal scale.

The new law will have profound practical impacts, particularly on the state's agricultural community. Issues raised by the SGMA – some of which will doubtless play out in protracted court battles – will shape western water law and policy for years to come. At the same time, the SGMA's emphasis on local groundwater management should provide an unprecedented opportunity to shape California's future, for those whose livelihoods and involvement in the larger economy are fundamentally dependent on access to the state's groundwater resources.

Until now, the right to use groundwater in California has been viewed as a property right attached to overlying surface lands. In *City of Pasadena v. City of Alhambra,* for example, the California Supreme Court stated that the "overlying right," or right of the owner of the land to take water from the ground underneath for use on his overlying land "…is based on ownership of the land and is appurtenant thereto." Under the doctrine of correlative rights, land owners had a common right to the beneficial use of percolating waters underlying their property. When an underlying aquifer became overdrawn, courts could allocate pumping rights among overlying land owners through an adjudicatory procedure.

The SGMA adopts a fundamentally different strategy for managing the state's groundwater resources. At the heart of the new law is a requirement to implement sustainability plans for the majority of groundwater basins throughout the state, including many on which California's agricultural community are highly dependent. These plans can vary from simple basin-wide plans developed and implemented by individual local agencies, to multiple plans by different local agencies operating in the same basin, to state-imposed plans where no sufficient local plan exists.

While sustainability plans must contain a number of specific requirements, by far the most significant is that they be designed to meet what the SGMA calls the "sustainability goal" within 20 years of implementation. The sustainability goal is, in short, a stated objective to "achieve sustainable groundwater management" by ensuring that a given basin is "operated within its sustainable yield." In other words, the basin must be operated in such a way as not to cause "undesirable results."

The SGMA also contains procedural requirements for plan development and implementation, and exempts many activities involved in that process from the environmental review requirements of the California Environmental Quality Act ("CEQA").

While the SGMA will regulate California's groundwater on a statewide basis for the first time, it does not cover every groundwater basin within the state's jurisdiction, nor will it impacts be felt immediately. The statute generally does not apply to specified basins that have already been adjudicated under existing law, for example, and it does not require sustainability plans from basins considered to be low priority. Moreover, sustainability plans need not be implemented for several years, and affected basins are not required to attain sustainability goals until approximately 2040.

That said, the California Department of Water Resources (DWR) has estimated the SGMA will cover 96% of groundwater used in California. California water users cannot afford to wait to get involved in efforts now underway to shape the manner in which the statute is applied.

The Las Posas Valley Basin has been designated as a high priority under SGMA. The basin is unadjudicated and will require the formation of a Groundwater Sustainability Agency (GSA) and the development of a Groundwater Sustainability Plan (GSP).

6.2.2.1 FCGMA as Local Groundwater Sustainability Agency

In enacting the SGMA, the California legislature sought to "manage groundwater basins through the actions of local governmental agencies to the greatest extent feasible." For the most part, any local agency with water supply, water management, or land use responsibilities in a given groundwater basin (or a combination of such agencies) can become the groundwater sustainability agency for that basin.

The SGMA gives sustainability agencies a number of powers and authorities in addition to those they already may possess. Agencies are authorized (among other things) to conduct investigations; require registration of facilities that extract groundwater; require said facilities to measure the amount of water they extract; acquire property including water rights; regulate, limit or allocate groundwater extraction; and authorize transfers of groundwater allocations. They also have the power to "impose fees, including…permit fees and fees on groundwater extraction" to support their activities, and to bring enforcement actions seeking civil penalties for violations relating to rules implemented pursuant to the SGMA.

The SGMA's use of local planning and management—as opposed to purely centralized state control—should be viewed as valuable opportunities for informed and proactive water users to have a say in groundwater sustainability planning from the start.

As outlined in the California Water Code, Part 2.74, Sustainable Groundwater Management Act (Act), Section 10723 (c), the Fox Canyon Groundwater Management

Agency (FCGMA) shall be deemed the exclusive Groundwater Sustainability Agency (GSA) within its boundaries with powers to comply with Act.

On January 9, 2015 the FCGMA held a public hearing and passed Resolution 2015-01, Attachment 1, wherein the FCGMA elected to become the GSA for the Arroyo Santa Rosa Valley, Las Posas Valley (West, South, and East), Oxnard Forebay, Oxnard Plain and Pleasant Valley Basins within the FCGMA boundaries.

Per Section 10723.2 of the Act, the GSA shall consider the interests of all beneficial uses and users of groundwater, as well as those responsible for implementing groundwater sustainability plans. The FCGMA as enacted has a Board of Directors and operating structure that clearly represents the interests of all users and uses of groundwater and surface water within the FCGMA boundaries. The five member Board of the FCGMA is comprised as follows:

- One member shall be chosen by United Water Conservation District, the member's district or divisions must overlie at least in part the territory of the FCGMA;
- One member shall be chosen by the County of Ventura, the member's district must overlie at least in part the territory of the FCGMA;
- One member shall be chosen from the members of the city councils of the cities whose territory at least in part overlies the territory of the FCGMA;
- One member shall be chosen from the members of the governing boards of the following mutual water companies and special districts not governed by the County Board of Supervisors which are engaged in water activities and whose territory at least in part overlies the territory of the FCGMA: the Alta Mutual Water Company, the Anacapa Municipal Water District, the Berylwood Mutual Water Company, the Calleguas Municipal Water District, the Camrosa County Water District, the Del Norte Mutual Water Company, the Pleasant Valley County Water District, and the Zone Mutual Water Company; and
- The fifth member of the Board shall be chosen by the other four members from a list of at least five nominations from the Ventura County Farm Bureau and the Ventura County Agricultural Association acting jointly for a two-year term to represent agricultural interests within the territory of the FCGMA. The fifth member shall reside and be actively and primarily engaged in agriculture within the territory of the FCGMA.

FCGMA is currently preparing a draft GSP for its subject basins, which is estimated to be completed by June 2016.

6.2.1.3 State Oversight and Intervention

While the SGMA generally emphasizes local management of groundwater resources, it does provide for state involvement on a number of levels. For example, DWR must develop and publish best management practices for sustainable groundwater management, and it is responsible for reviewing sustainability plans every five years to

ensure compliance with the SGMA. In addition, the State Water Resources Control Board (SWRCB or State Board) can "designate a basin as a probationary basin" for failure to develop a groundwater sustainability plan where one is needed, or for implementation of an insufficient plan. If a local agency fails to remedy the problem that led to a designation, the State Board may adopt its own interim sustainability plan for the basin.

DWR is also tasked with establishing the initial priority for the state's groundwater basins, a job of considerable consequence given that many of the SGMA's requirements apply only to those basins designated as high or medium priority. DWR has announced that the basin designations it finalized under the California Statewide Groundwater Elevation Monitoring (CASGEM) program will serve as the initial prioritization required by the SGMA.

6.2.1.4 Timeline

Some of the more important milestones for past and future actions to implement the SGMA are as follows:

- September 16, 2014: Groundwater management legislation became law

  Governor Brown signed Senate Bill 1168, Assembly Bill 1739, and Senate Bill 1319, which made up the groundwater management legislation package.

- January 1, 2015: Legislation went into effect

  The SGMA became effective.

- January 31, 2015: DWR established initial groundwater basin priority

  DWR established the initial priority – high, medium, low or very low – or each groundwater basin in the state by the end of January 2015 (Water Code § 10722.4).

- January 1, 2016: DWR set emergency regulations for basin boundary revision

  DWR adopted emergency regulations for groundwater basin boundary revisions by January 1, 2016. The regulations included the methodology and criteria used to evaluate proposed boundary revisions, including the establishment of new sub-basins (Water Code § 10722.2).

- June 1, 2016: DWR must establish emergency regulations for evaluating plans

  DWR adopts emergency regulations for evaluating GSPs and their implementation and coordination agreements among local agencies for ground water sustainability planning. The regulations must identify GSP components and information to assist plan and coordination agreement development and implementation (Water Code § 10733.2).

- December 31, 2016: DWR estimate of water available for groundwater replenishment

  DWR publishes its estimate of the water available for groundwater replenishment on its website (Water Code § 10729(c)).

- January 1, 2017: Basin deadline to submit alternative to a GSP

  Medium- and high-priority basins choosing to meet sustainability objectives by ways other than groundwater sustainability planning (which includes not forming a GSA) must submit their alternatives to DWR (and then again every five years) (Water Code § 10733.6).

- January 1, 2017: DWR will establish best management practices for sustainable management

  DWR publishes best management practices for the sustainable management of groundwater on its website (Water Code § 10729(d)).

- June 30, 2017: Deadline to form a GSA

  A local agency or agencies in each high- or medium-priority groundwater basin must have officially formed one or more (GSAs) for the entire basin (Water Code §5 10724, 10735.2(a)(1))

- June 30, 2017: State Water Board can begin to put basins on probation

  The State Water Board can initiate probationary status to a medium- or high-priority basin if the basin lacks one or more GSA(s) that covers the entire basin or no alternative has been approved (Water Code § 10735.2(a)(1)).

- July 1, 2017: Those pumping in a probationary basin must report extractions

  Pumping groundwater in a basin that either has been designated as a probationary basin or lies outside a GSA's management area must be reported to the State Water Board. These reporting requirements do not apply to those extracting for domestic purposes 2 AFY or less, and some others (Water Code § 5202, 10724).

- January 31, 2020: GSPs required for critically over drafted basins

  Basins designated as high- or medium-priority and subject to critical conditions of overdraft must be managed under a GSP or GSPs. The State Water Board can initiate probationary status for all or part of a basin if there is no GSP, if the GSP is inadequate, or the GSP implementation will not likely achieve sustainability (Water Code § 10720.7(a)(1), 10735.2(a)(2), 10735.2(a)(3)).

- January 31, 2022: GSPs required for all remaining high- and medium- priority groundwater basins

  All remaining basins designated as high- or medium-priority must be managed under a GSP or GSPs. The State Water Board can initiate probationary status in 2022 for all or part of a basin if there is no GSP, if the GSP is inadequate, or the GSP implementation will not likely achieve sustainability except for basins where groundwater extractions result in significant depletion of interconnected surface waters (Water Code § 10720.7(a)(2), 10735.2(a)(4), and 10735.2(a)(5)(A)).

- January 31, 2025: State Water Board actions where extractions impact surface waters

  The State Water Board can initiate probationary status for those medium- or high-priority basin where the GSP is inadequate or implementation is not likely to achieve sustainability and the basin is in a condition where groundwater extractions result in significant depletion of interconnected surface waters (Water Code § 10735(a)(5)(B).

6.3 SURFACE WATER

The District does not use, or plan to use, self-supplied surface water as part of its supply.

6.4 STORMWATER

The District is currently not using stormwater to meet local water supply demands. At this time, there are no plans to utilize stormwater, but that could change in the future.

6.5 WASTEWATER AND RECYCLED WATER

The District collects sanitary wastewater flows within the District's water service area and conveys the flows to the Moorpark Water Reclamation Facility (MWRF). The District operates and maintains the wastewater collection system and the treatment plant. Metered wastewater flows averaged 2.0 mgd (2,240 AFY) for 2015.

Table 6-2: Wastewater Collected Within Service Area in 2015

Wastewater Collection			Recipient of Collected Wastewater		
Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected in 2015 (AFY)	Wastewater Treatment Agency	Treatment Plant Name	Is WWTP Located Within UWMP Area?
VCWWD No. 1 Wastewater Division	Metered	2,240	VCWWD No. 1 Wastewater Division	MWRF	Yes
Total		2,240			

MWRF is located along California State Route118 just west of the Moorpark city limits. The plant, which provides advanced primary and secondary treatment, has a total treatment capacity of 5.0 mgd and a tertiary treatment capacity. The plant is required to discharge a portion of its treated effluent to percolation basins for groundwater recharge, which totaled 0.76 mgd (851 AFY) in 2015. The District provides recycled water to eight customers, including the plant itself, for facilities operations and landscape irrigation. In 2015, the plant provided 599 AFY (0.54 mgd) of recycled water for agricultural (lemon) irrigation, landscape irrigation, grading, and dust control uses. Wastewater treatment and discharge characteristics associated with the District are shown in Table 6-3.

Recycled water supply will increase to approximately 1,100 AFY in 2017 with the conversion of an existing golf course to the recycled water customer base. The District forecasts that customers will be added and recycled water supply will increase to 1,400 AFY by 2020, necessitating an expansion of the plant's tertiary treatment capacity, and to 2,020 AFY by 2040. Current and projected recycled water direct beneficial uses within the District's water service area are shown in Table 6-4. A comparison of projected recycled water use for 2015 compared with actual 2015 use is shown in Table 6-5. Methods to expand future recycled water use are shown in Table 6-6.

Table 6-3: Wastewater Treatment and Discharge Within Service Area in 2015

WW Treatment Plant	Method of Disposal	Does Plant Treat WW Outside Service Area?	Treatment Level	2015 Volumes			
				WW Treated	Discharged Treated WW	Recycled Within Service Area	Recycled Outside of Service Area
Moorpark[(a)]	Percolation Ponds/Recycled Water Use	No	Advanced /Tertiary	2,240	1,640	599	0
Total				2,240	1,640	599	0

(a) District required to discharge a portion of treated effluent (advanced secondary) to percolation basins for groundwater recharge, which totaled 851 AFY (0.76 mgd) in 2015

Table 6-4: Current & Projected Recycled Direct Beneficial Uses Within Service Area

Beneficial Use Type	Level of Treatment	2015	2020	2025	2030	2035	2040
Agricultural irrigation	Tertiary	64	100	100	100	100	100
Landscape irrigation	Tertiary	100	300	500	500	500	650
Golf course irrigation	Tertiary	356	900	900	1,050	1,200	1,200
Industrial[(a)]	Tertiary	79	100	100	150	200	250
Total	-	599	1,400	1,600	1,800	2,000	2,200

(a) Treatment plant operations and landscape irrigation

Table 6-5: 2010 UWMP Recycled Water Use Projection Compared to 2015 Actual

Use Type	2010 Projection for 2015	2015 Actual Use
Agricultural irrigation	75	64
Landscape irrigation	100	100
Golf course irrigation	850	356
Commercial use	0	0
Industrial use	75	79
Total	1,100	599

Table 6-6: Methods to Expand Future Recycled Water Use			
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Plant Capacity	Expand plant tertiary treatment facilities to 1,600 AFY	2018	0
Customers/Mains	Add/retrofit customers & construct transmission mains to users	2018 - 2025	500
Plant Capacity	Expand plant tertiary treatment facilities to 2,200 AFY	2025	0
Customers/Mains	Add/retrofit customers & construct transmission mains to users	2025 - 2040	600
Total			1,100

6.6 DESALINATED WATER OPPORTUNITIES

In 2015, Calleguas began exploring the feasibility of implementing seawater desalination as a baseline supply designed to meet essential water demands during a Stage 3 water shortage. A preliminary assessment indicates that the cost of a seawater desalination facility would be very high, in part because much of Calleguas' demand occurs over 20 miles inland and at an elevation up to 1,100 feet. Seawater desalination will be further evaluated by Calleguas along with other water supply alternatives to identify solutions that will meet Calleguas' reliability needs in the most cost-effective and environmentally-responsible manner.

6.7 EXCHANGES OR TRANSFERS

The District currently does not participate with other water agencies on water exchanges or transfers into or out of the District's water service area and none are planned for the future at this time.

6.8 FUTURE WATER PROJECTS

6.8.1 Moorpark Desalter Project

As discussed in Section 6.2.1.1, the District is planning the Moorpark Desalter Project, which is a groundwater production and treatment system that could provide up to 5,000 AFY of potable water for customers in the District's water service area by the end of 2018. As part of the project, 10 to 18 extraction wells will be constructed to extract poor-quality, brackish groundwater from a shallow aquifer in the South Las Posas Basin, and pump the groundwater via a new transmission pipeline to a proposed treatment plant, where the water will be treated to drinking water standards.

6.8.2 Expansions of Recycled Water System

As discussed in Section 6.5, recycled water supply, which was 599 AFY in 2015, will increase to approximately 1,100 AFY in 2017 with the conversion of an existing golf course to the recycled water customer base. The District forecasts that customers will be added and recycled water supply will increase to 1,400 AFY by 2020, necessitating an expansion of the plant's tertiary treatment capacity; and recycled water use will reach 2,200 AFY by 2040.

6.9 SUMMARY OF EXISTING AND PLANNED SOURCES OF WATER

The primary source of water supply for the District has been water imported from Metropolitan through the local wholesale agency, Calleguas. The imported water, which is primarily State Water Project (SWP) water from the Sacramento-San Joaquin River Delta in Northern California, is treated at Metropolitan's Joseph Jensen Filtration Plant to drinking water standards. In 2015, the District supplied a total of 7,717 AF from imported water purchased from Calleguas, which was 76.2% of the total water supply including recycled water.

The District also produces groundwater from the East Las Posas Groundwater Basin via five wells owned and operated by the District. The groundwater meets all State and Federal water quality standards for drinking water with the exception that treatment is required at one of the well sites *(Well No. 20) to lower iron and manganese levels below the State Title 22 Secondary Maximum Contaminant Level (MCL) for these two minerals. The groundwater is chlorinated at each well site before being pumped into the potable water distribution system. In 2015, the District supplied a total of 1,808 AF from groundwater production, which was 17.9% of the total water supply including recycled water.

The District is planning the Moorpark Desalter Project, which is a groundwater production and treatment system that could provide up to 5,000 AFY of potable water for customers in the District's water service area by the end of 2018.

The District's Moorpark Water Reclamation (MWRP) produces Title 22 recycled water via tertiary treatment facilities. The plant produced 599 AF that was distributed as recycled water in 2015, which was 5.9% of the total water supply. The District forecasts that recycled water supply will increase to approximately 1,100 AFY in 2017; to 1,400 AFY by 2020, necessitating an expansion of the plant's tertiary treatment capacity; and to 2,200 AFY by 2040.

A summary of expected future water supply projects or programs for the District is shown in Table 6-7. The District's actual water supplies for 2015 and projected supplies for 2020 through 2040 are shown in Table 6-8 and Table 6-9, respectively.

6.10 CLIMATE CHANGE IMPACTS TO SUPPLY

Climate change impacts to Metropolitan water supplies and Metropolitan's activities related to climate change concerns are discussed in Section 4.6.

Table 6-7: Expected Future Water Supply Projects or Programs					
Name	Joint Project with other agencies?	Description	Year Planned	Planned Year-Type	Expected Supply (AFY)
Moorpark Desalter Project	No	Construct 10-18 wells, transmission main & treatment plant	2018	All Year Types	5,000
Expand Recycled Water System	No	Expand plant tertiary facilities/construct transmission mains	2018	All Year Types	500
Expand Recycled Water System	No	Expand plant tertiary facilities/construct transmission mains	2025	All Year Types	600

Table 6-8: Water Supplies — Actual			
Water Supply	Additional Detail on Water Supply	2015	
		Actual Volume	Water Quality
Purchased or Imported Water	Treated Metropolitan/Calleguas	7,717	Drinking Water
Groundwater	East Las Posas Basin/District Wells	1,808	Drinking Water
Recycled Water	MWRF	599	Recycled Water
Total		10,124	

Table 6-9: Water Supplies — Projected						
Water Supply	Additional Detail	Projected Water Supply[(a)] (AFY)				
		2020	2025	2030	2035	2040
Imported[(b)] Water	Treated Metropolitan Water	5,204	5,870	5,911	5,880	5,943
Groundwater	East Las Posas Basin/District Wells	1,756	1,756	1,756	1,756	1,756
Groundwater	Moorpark Desalter/South Las Posas Basin	5,000	5,000	5,000	5,000	5,000
Recycled Water	MWRF	1,400	1,600	1,800	2,000	2,200
Total		13,360	14,226	14,467	14,636	14,899

(a) Supply expected to be reasonably available
(b) Includes estimated surplus imported water supply from Calleguas based on the "normal-year" percentage surpluses shown in Table 7-1D

7 WATER SUPPLY RELIABILITY ASSESSMENT

7.1 CONSTRAINTS ON WATER SOURCES AND RESPONSE PROGRAMS

Two of the most significant constraints on water supply for the District and for Southern California has been the drought that started in 2012 and has persisted into 2016, and Sacramento-San Joaquin River Delta ecosystem issues that affect imported water supply from the State Water Project. The water conditions that the region faced in 2015 were shaped by supply conditions and resource actions that occurred in the preceding years, including several extraordinary events, such as:

- An historic drought in California leading to record low contract supplies available from the State Water Project in 2014 (5% of contract supplies) and in 2015 (20% of contract supplies);
- An extended 16 year drought in the Colorado River watershed that has decreased storage levels in Lake Mead and Lake Powell to 38% and 51% of capacity respectively at the end of November 2015 and keeping storage below surplus levels despite an ease in drought conditions in 2014 and 2015;
- Groundwater basins and local reservoirs dropping to very low operating levels due to record dry hydrology in Southern California;
- Restrictions of SWP deliveries by federal court orders due to endangered delta smelt and salmon which resulted in the combined loss of approximately 3 MAF of SWP supplies between 2008 and 2014. These losses have impacted Metropolitan's ability to meet demands and refill regional storage;
- In 2014, Lake Oroville storage dropped within 10 TAF of its lowest operating level since the historic drought of 1977;
- Supply availability in the Los Angeles Aqueduct system continues to be affected by both the drought and environmental mitigation efforts related to Owens Lake and the Lower Owens River.

7.1.1 Imported Surface Water

As reported in their 2015 UWMP, Metropolitan faces a number of challenges in providing adequate, reliable and high-quality supplemental water supplies for Southern California. One of those challenges is dry hydrologic conditions that can have a significant impact on Metropolitan's imported water supply sources.

The peak of the snowpack season traditionally occurs on April 1; however, in 2015 the snowpack peaked in January at only 17% of the April 1 average measurement, resulting in the earliest and lowest snowpack peak in recorded history. The statewide snowpack was all but gone by April 1, 2015, and registered a record low of 5% of average for that day. This dry hydrology produced only 51% of average runoff for the water year and consequently kept state reservoirs below average storage levels. As a result, Metropolitan received only 20% of its contract water supplies from the State Water Project in 2015.

In 2015, the Upper Colorado River Basin snowpack peaked in March at 76% of normal. Runoff for that basin measured 94% of normal due to above normal rainfall in May, June and July, which averted Colorado River shortage conditions for 2016. This allowed Metropolitan to implement new water management programs and bolster supplies in 2015. The Colorado River, however, is experiencing a historic16-year drought causing total storage levels in that system to steadily decline increasing the likelihood of shortage in future years beyond 2016. The restrictions on water use generated a record demand for water-saving rebates and refocused efforts to increase development of local water resources.

These dry hydrologic conditions and reduced imported water supplies have led to significant withdrawals from Metropolitan's storage reserves, including Diamond Valley Lake (DVL) and its groundwater banking and conjunctive use programs to meet scheduled water deliveries. During the 2007-2009 drought, Metropolitan withdrew a combined 1.2 MAF from storage reserves to balance supplies and demands. In 2014 alone, Metropolitan withdrew 1.1 MAF from dry-year storage to balance supplies and demands because of the historic low final SWP allocation in that year.

In addition, challenges such as the detection of the quagga mussel in the Metropolitan's CRA supplies and increasingly stringent water quality regulations to control disinfection byproducts exacerbate the water supply condition and underscore the importance of flexible and adaptive regional planning strategies

7.1.1.1 Colorado River Water Supply Reliability Actions, Projects and Programs

The Colorado River Basin has been experiencing a prolonged drought where runoff above Lake Powell has been below average for twelve of the last sixteen years. Within those sixteen years, runoff in the Colorado River Basin above Lake Powell from 2000 through 2007 was the lowest eight-year runoff on record. While runoff returned to near normal conditions during 2008-2010, drought returned in 2012 with runoff in 2012 being among the four driest in history. During these drought conditions, Colorado River system storage has decreased to 50% of capacity.

In January 2007, Quagga mussels were discovered in Lake Mead and rapidly spread downstream to the Lower Colorado River. The presence and spawning of quagga mussels in the Lower Colorado River, and in reservoirs located in Southern California, poses an immediate threat to water and power systems serving more than 25 million people in the southwestern United States. Quagga mussels (Dreissena bugensis) are a related species to the better-known zebra mussels (Dreissena polymorpha) and indigenous to the Ukraine. They were introduced to the Great Lakes in the 1980s from fresh-water ballast of a transoceanic ship traveling from Eastern Europe. Although the introduction of these two species into drinking water supplies does not typically result in violation of drinking water standards, invasive mussel infestations can adversely impact aquatic environments and infrastructure. If unmanaged, invasive mussel infestations have been known to severely impact the aquatic ecology of lakes and rivers; clog intakes and raw water conveyance systems; reduce the recreational and aesthetic value of lakes and beaches; alter or destroy fish habitats; and render lakes more susceptible to deleterious algae blooms.

Metropolitan's planning strategy recognized explicitly that program development would play an important part in reaching the target level of deliveries from the CRA. The implementation approach explored a number of water conservation programs with water agencies that receive water from the Colorado River or are located in close proximity to the CRA. Negotiating the QSA was a necessary first step for all of these programs. On October 10, 2003, after lengthy negotiations, representatives from Metropolitan, Imperial Irrigation District (llD), and Coachella Valley Water District (CVWD) executed the QSA and other related agreements. Parties involved also included San Diego County Water Authority (SDCWA), the California Department of Water Resources (DWR), the California Department of Fish and Wildlife, the U.S. Department of the Interior, and the San Luis Rey Settlement Parties. One of those related agreements was the Colorado River Water Delivery Agreement: Federal Quantification Settlement Agreement which specifies to which agencies water will be delivered under priorities 3a and 6a of the Seven Party Agreement during its term.

Metropolitan has identified a number of programs that could be used to achieve the regional long-term development targets for the CRA. Metropolitan has entered into or is exploring agreements with a number of agencies.

Imperial Irrigation District / Metropolitan Water District Conservation Program

Under agreements executed in 1988 and 1989, Metropolitan has funded water efficiency improvements within IID's service area in return for the right to divert the water conserved by those investments. Under this program, IID implemented a number of structural and non-structural measures, including the lining of existing earthen canals with concrete, constructing local reservoirs and spill-interceptor canals, installing non-leak gates, and automating the distribution system. Other implemented programs include the delivery of water to farmers on a 12-hour rather than a 24-hour basis and improvements in on-farm water management through the installation of drip irrigation systems. Through this program, IID has conserved an additional 105 TAF per year on average upon completion of program implementation. Execution of the QSA and amendments to the 1988 and 1989 agreements resulted in changes in the availability of water under the program, extending the term to 2078 if the term of the QSA extends through 2077 and guaranteeing Metropolitan at least 85 TAF per year. The remainder of the conserved water is available to CVWD when needed.

Palo Verde Land Management, Crop Rotation, and Water Supply Program

In May 2004, Metropolitan's Board authorized a 35-year land management, crop rotation, and water supply program with PVID. Under the program, participating farmers in PVID are paid to reduce their water use by not irrigating a portion of their land. A maximum of 29% of the lands within the Palo Verde Valley can be hallowed in any given year. Under the terms of the QSA, water savings within the PVID service area are made available to Metropolitan. This program provides up to 133 TAF of water to be available to Metropolitan in certain years. In 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, and 2014 approximately 108.7, 105.0, 72.4, 94.3, 120.2, 116.3, 122.2, 73.7, 32.8, and 43.0 TAF of water, respectively, were saved and made available to Metropolitan. In March 2009, Metropolitan and PVID entered into a one-year supplemental Wallowing

program within PVID that provided for the Wallowing of additional acreage, with savings of 24.1 TAF in 2009 and 32.3 TAF in 2010.

Southern Nevada Water Authority and Metropolitan Storage and Interstate Release Agreement

SNWA has undertaken extraordinary water conservation measures to maintain its consumptive use within Nevada's basic apportionment of 300 TAF. The success of the conservation program has resulted in unused basic apportionment for Nevada. As SNWA expressed interest in storing a portion of the water with Metropolitan, the agencies, along with the United States and the Colorado River Commission of Nevada, entered into a storage and interstate release agreement in October 2004. Under the agreement, additional Colorado River water supplies are made available to Metropolitan when there is space available in the CRA to receive the water. SNWA will have stored approximately 330,000 AF with Metropolitan through 2015. SNWA is not expected to call upon Metropolitan to return water until after 2019.

Lower Colorado Water Supply Project

In March 2007, Metropolitan, the City of Needles, and the USBR executed a Lower Colorado Water Supply Project contract. Under the contract, Metropolitan receives, on an annual basis, Lower Colorado Water Supply Project water unused by Needles and other entities adjacent to the river that do not have rights or have insufficient rights to use Colorado River water. The water supply for the project comes from groundwater wells located along the All-American Canal. A portion of the payments made by Metropolitan to Needles are placed in a trust fund for potentially acquiring a new water supply for the Project should the groundwater pumped from the project's wells become too saline for use. In 2014, Metropolitan received 6.1 TAF from this project and is projected to receive 5.8 TAF in 2015.

Lake Mead Storage Program

In May 2006, Metropolitan and the USBR executed an agreement for a demonstration program that allowed Metropolitan to leave conserved water in Lake Mead that Metropolitan would otherwise have used in 2006 and 2007. USBR would normally make unused water available to other Colorado River water users, so the program included a provision that water left in Lake Mead must be conserved through extraordinary conservation measures and not simply be water that was not needed by Metropolitan in the year it was stored. This extraordinary conservation was accomplished through savings realized under the Palo Verde Land Management, Crop Rotation and Water Supply Program. Through the two-year demonstration program, Metropolitan created 44.8 TAF of "Intentionally Created Surplus" (ICS) water. In December 2007, Metropolitan entered into agreements to set both the rules under which ICS water is developed, stored in, and delivered from Lake Mead. The amount of water stored in Lake Mead, created through extraordinary conservation, that is available for delivery in a subsequent year is reduced by a one-time deduction of 5% resulting in additional system water in storage in the lake, and an annual evaporation loss of 3%, beginning in the year following the year the water is stored. Metropolitan created ICS water in 2009, 2010, 2011, and 2012 and withdrew

ICS water in 2008, 20a 3, and 2014. As of January 1, 2015, Metropolitan had a total of 61.8 TAF of Extraordinary Conservation ICS water in Lake Mead.

The December 2007 federal guidelines concerning the operation of the Colorado River system reservoirs provided the ability for agencies to create "System Efficiency ICS" through the development and funding of system efficiency projects that save water that would otherwise be lost from the Colorado River. To that end, in 2008 the Central Arizona Water Conservation District (CAWCD), SNWA, and Metropolitan contributed funds for the construction of the Drop 2 (Brock) Reservoir by the USBR. The purpose of the Drop 2 (Brock) Reservoir is to increase the capacity to regulate deliveries of Colorado River water at Imperial Dam reducing the amount of excess flow downstream of the dam by approximately 70 TAF annually. In return for its $25 million net contribution toward construction, operation, and maintenance, 100 TAF of water that was stored in Lake Mead was assigned to Metropolitan as System Efficiency ICS. Through 2014, Metropolitan has diverted 35 TAF of this amount, with 65 TAF remaining in storage.

In 2009, Metropolitan entered into an agreement with the United States, SNWA, the Colorado River Commission of Nevada, and CAWCD to have USBR conduct a one-year pilot operation of the Yuma Desalting Plant at one-third capacity. The pilot project operated between May 2010 and March 2011 and provided data for future decision making regarding long-term operation of the Plant and developing a near-term water supply. Metropolitan's contribution toward plant operating costs secured 24.4 TAF of System Efficiency ICS which was stored in Lake Mead as of January 1, 2015.

Quaqqa Mussel Control Program

The presence and spawning of quagga mussels in the lower Colorado River from Lake Mead through Lake Havasu poses a threat to Metropolitan and other Colorado River water users due to the potential to continuously seed water conveyance systems with mussel larvae. Chlorination is the most frequently used means to control mussel larvae entering water systems.

Metropolitan developed the Quagga Mussel Control Program (QMCP) in 2007 to address the long-term introduction of mussel larvae into the CRA from the lower Colorado River which is now heavily colonized from Lake Mead through Lake Havasu. The QMCP consists of surveillance activities and control measures. Surveillance activities are conducted annually alongside regularly scheduled 2 to 3 weeks long CRA shutdowns. Control activities consist of continuous chlorination at the outlet of Copper Basin Reservoir (5 miles into the aqueduct), a mobile chlorinator for control of mussels on a quarterly basis at outlet towers and physical removal of mussels from the trash racks at Whitsett Intake Pumping Plant in Lake Havasu. Since 2007, the CRA has had scheduled 2 to 3 week-long shutdowns each year for maintenance and repairs which provide the opportunity for direct inspections for mussels and the additions benefit of desiccating quagga mussels. Recent shutdown inspections have demonstrated that the combined use of chlorine and regularly scheduled shutdowns effectively control mussel infestation in the CRA since only few and small mussels have been found during these inspections.

In addition, Metropolitan has appropriated $9.55 million to upgrade chlorination facilities in the aqueduct and at two additional locations in its system, the outlets of Lakes Mathers

and Skinner. It is likely that additional upgrade costs will be incurred for these facilities. Chemical control (chlorination) at Copper Basin Reservoir, Lake Mathers, and the Lake Skinner Outlet costs approximately $3.0 million to $3.2 million per year depending on the amount of Colorado River water conveyed through the aqueduct.

Achievements to Date

Metropolitan has developed a number of supply and conservation programs to increase the amount of supply available from the CRA. However, other users along the River have rights that will allow their water use to increase as their water demands increases. The Colorado River faces long-term challenges of water demands exceeding available supply with additional uncertainties due to climate change. Because Metropolitan holds the lowest priority rights in California during a normal Lake Mead storage condition, future supply available could decrease.

7.1.1.2 State Water Project Supply Reliability Actions, Projects and Programs

Much of the SWP water supply passes through the Sacramento-San Joaquin Bay-Delta (Bay-Delta). The SWP consists of a series of pump stations, reservoirs, aqueducts, tunnels, and power plants operated by DWR. This statewide water supply infrastructure provides water to 29 urban and agricultural agencies throughout California. More than two-thirds of California's residents obtain some of their drinking water from the Bay-Delta system.

The Bay-Delta's declining ecosystem, caused by a number of factors that include agricultural runoff, predation of native fish species, urban and agricultural discharge, changing ecosystem food supplies, and overall system operation, has led to reduction in water supply deliveries. SWP delivery restrictions due to regulatory requirements resulted in the loss of about 1.5 MAF of supplies to Metropolitan from 2008 through 2014, reducing the likelihood that regional storage can be refilled in the near-term. Operational constraints will likely continue until a long-term solution to the problems in the Bay-Delta is identified and implemented.

In April 2015, the Brown Administration announced California WaterFix, as well as a separate ecosystem restoration effort called California EcoRestore. Together, the California WaterFix and California EcoRestore will make significant contributions toward achieving the coequal goals of providing a more reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem established in the Sacramento-San Joaquin Delta Reform Act of 2009. In addition to enhancing the Delta Ecosystem there are a number major actions, projects, and programs Metropolitan has undertaken to improve SWP reliability.

The Bay Delta Conservation Plan

The Bay Delta Conservation Plan (BDCP) was prepared through a collaboration of state, federal, and local water agencies, state and federal fish agencies, environmental organizations, and other interested parties. At the outset of the BDCP process, a planning agreement was developed and executed among the participating parties and a Steering Committee was formed. The BDCP identified a set of conservation measures including water conveyance improvements and restoration actions to contribute to the recovery of endangered and sensitive species and their habitats in California's Sacramento-San Joaquin Delta. The BDCP was formulated to contribute to the state's co-equal goals of water supply reliability and ecosystem restoration.

Lead agencies for the EIR/EIS were the California Department of Water Resources, the USBR, the United States Fish and Wildlife Service, and National Oceanic and Atmospheric Administration's National Marine Fisheries Service, in cooperation with the California Department of Fish and Game, the United States Environmental Protection Agency and the United States Army Corps of Engineers. Metropolitan served on the steering committee. DWR and USBR are the lead agencies for the California WaterFix.

In order to select the most appropriate elements of the final conservation plan, the BDCP considered a range of options for accomplishing these goals using information developed as part of an environmental review process. Potential habitat restoration and water supply conveyance options included in the BDCP were assessed through an Environmental Impact Report (EIR)/Environmental Impact Statement (EIS). The BDCP planning process and the supporting EIR/EIS process is being funded by state and federal water contractors. The First Administrative Draft BDCP was released in March 2012, a Second Administrative Draft BDCP and EIR/S was released in March 2012 and the Public Draft BDCP and EIR/S was released December 2013. Each of the above draft documents were released to the public. The official public comment draft was released in December 2013.

A new permitting approach and associated new alternatives to the BDCP were announced in April 2015. The California WaterFix and California EcoRestore would be implemented under a different Endangered Species Act permitting process. This would fulfill the requirement of the 2009 Delta Reform Act to contribute toward meeting the coequal goals of providing a more reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem. DWR and USBR serve as lead agencies for the California WaterFix. The new water conveyance facilities included in Alternative 4 (the BDCP) would be constructed and operated under the California WaterFix. Proposes changes to the design of the water conveyance facilities reduce the overall environmental/construction impacts to the environment, minimize disruptions to local communities, and increase long term operational and cost benefits.

Some of the engineering improvements configuration improvements would include moving the tunnel alignment away from local communities and environmentally sensitive areas. The elimination of pumping plants, reduction of permanent power lines and power use, and the reconfiguration of intake and pumping facilities sediment basins and reconfiguration/relocation of the construction staging sites in the North Delta will lessen construction and longer term operational impacts. If implemented, these would result in

reduced environmental and construction impacts and increase improved long-term operational and cost benefits.

The main objective under the EcoRestore Program is to pursue at least 30,000 acres of Delta habitats over the next five years. These restoration programs would include projects and actions that are in compliance with pre-existing regulatory requirements designed to improve the overall health of the Delta. Other priority restoration projects would also be identified by the Delta Conservancy and other local governments. Funding would be provided through multiple sources including state bonds and other state-mandated funds, State Water Project/Central Valley Project contractors' funds as part of existing regulatory obligations and from various local and federal partners.

As part of the new alternatives and the State's proposed project, the regulatory approach to obtaining state and federal endangered species compliance is shifting from the BDCP Habitat Conservation Plan/Natural Community Conservation Plan strategy to an approach that contemplates a Biological Opinion pursuant to Federal ESA Section 7 and a State 2081 Permit. This approach as well as the proposed revision to the new water facilities and ecosystem restoration actions is evaluated in the partially Recirculated Draft EIR/EIS released in July 2015.

The State Water Resources Control Board (SWRCB) is continuing its phased review and update of the 2006 Water Quality Control Plan (WQCP) for the Bay-Delta. The first phase focuses on the southern Delta salinity objectives for the protection of agriculture, San Joaquin River flow objectives for the protection of fish and wildlife, and a program of implementation for achieving those objectives. The second phase considers the comprehensive review of the other elements of the Bay-Delta WQCP, including but not limited to Sacramento River and Delta outflow objectives.

Metropolitan has been collaborating with water users and other stakeholders to develop sound science and technical analyses in support of the WQCP review process, including sharing results in technical forums and publishing findings in peer-reviewed scientific journals. Metropolitan has been meeting with Board members and staff to share findings as new science and analyses are developed and to encourage close coordination between BDCP and WQCP updates.

Monterey Amendment

The Monterey Amendment originated from disputes between the urban and agricultural SWP contractors over how contract supplies are to be allocated in times of shortage. In 1994, in settlement discussions in Monterey, the contractors and DWR reached an agreement to settle their disputes by amending certain provisions the long-term water supply contracts. These changes, known as the Monterey Amendment, altered the water allocation procedures such that both shortages and surpluses would be shared in the same manner for all contractors, eliminating the prior "agriculture first" shortage provision. In turn, the agricultural contractors agreed to permanently transfer 130 TAF to urban contractors and permanently retire 45 TAF of their contracted supply. The amendment facilitated several important water supply management practices including ground water banking, voluntary water marketing, and more flexible and efficient use of SWP facilities

such as borrowing from Castaic Lake and Lake Perris and using carryover storage in San Luis Reservoir to enhance dry-year supplies. It also provided for the transfer of DWR land to the Kern County Water Agency for development of the Kern Water Bank. The Monterey Amendment was challenged in court, and the original Environmental Impact Report (EIR) invalidated. Following a settlement, DWR completed a new EIR and concluded the CEQA review in May 2010.

However, the project has been challenged again in a new round of lawsuits. Central Delta Water Agency, South Delta Water Agency, California Water Impact Network, California Sportfishing Protection Alliance, and the Center For Biological Diversity filed a lawsuit against DWR in Sacramento County Superior Court challenging the validity of the EIR under CEQA and the validity of underlying agreements under a reverse validation action (the "Central Delta I" case). These same plaintiffs filed a reverse validation lawsuit against the Kern County Water Agency in Kern County Superior Court ("Central Delta II"). This lawsuit targets a transfer of land from Kern County Water Agency to the Kern Water Bank, which was completed as part of the original Monterey Agreement. The third lawsuit is an EIR challenge brought by Rosedale—Rio Bravo Water Storage District and Buena Vista Water Storage District against DWR in Kern County Superior Court ("Rosedale"). The Central Delta II and Rosedale cases were transferred to Sacramento Superior Court, and the three cases were consolidated for trial.

In January 2013, the Court ruled that the validation cause of action in Central Delta I was time-barred by the statute of limitations. On October 2, 2014, the court issued its final rulings in Central Delta I and Rosedale, holding that DWR must complete a limited scope remedial CEQA review addressing the potential impacts of the Kern Water Bank. However, the court's ruling also allows operation of the State Water Project to continue under the terms of the Monterey Agreement while the remedial CEQA review is prepared and leaves in place the underlying project approvals while DWR prepares the remedial CEQA review. The Central Delta II case was stayed pending resolution of the Central Delta I case. The plaintiffs have appealed the decision.

SWP Terminal Storage

Metropolitan has contractual rights to 65 TAF of flexible storage at Lake Perris (East Branch terminal reservoir) and 154 TAF of flexible storage at Castaic Lake (West Branch terminal reservoir). This storage provides Metropolitan with additional options for managing SWP deliveries to maximize yield from the project. Over multiple dry years, it can provide Metropolitan with 73 TAF of additional supply. In a single dry year like 1977, it can provide up to 219 TAF of additional supply to Southern California.

Yuba Dry Year Water Purchase Program

In December 2007, Metropolitan entered into an agreement with DWR providing for Metropolitan's participation in the Yuba Dry Year Water Purchase Program between Yuba County Water Agency and DWR. This program provides for transfers of water from the Yuba County Water Agency during dry years through 2025.

Desert Water Agency/Coachella Valley WD SWP Table A Transfer

Under the transfer agreement, Metropolitan transferred 100 TAF of its SWP Table A contractual amount to Desert Water Agency/CVWD (DWCV). Under the terms of the agreement, DWCV pays all SWP charges for this water, including capital costs associated with capacity in the California Aqueduct to transport this water to Perris Reservoir, as well as the associated variable costs. The amount of water actually delivered in any given year depends on that year's SWP allocation. Water is delivered through the existing exchange agreements between Metropolitan and DWCV, under which Metropolitan delivers Colorado River supplies to DWVC equal to the SWP supplies delivered to Metropolitan. While Metropolitan transferred 100 TAF of its Table A amount, it retained other rights, including interruptible water service; its full carryover amounts in San Luis Reservoir; its full use of flexible storage in Castaic and Perris Reservoirs; and any rate management credits associated with the 100 TAF.

In addition, Metropolitan is able to recall the SWP transfer water in years in which Metropolitan determines it needs the water to meet its water management goals. The main benefit of the agreement is to reduce Metropolitan's SWP fixed costs in wetter years when there are more than sufficient supplies to meet Metropolitan's water management goals, while at the same time preserving its dry-year SWP supply. In a single critically dry-year like 1977, the call-back provision of the entitlement transfer can provide Metropolitan about 5 TAF of SWP supply. In multiple dry years like 1990-1992, it can provide Metropolitan about 26 TAF of SWP supply.

Desert Water Agency/Coachella Valley WD Advance Delivery Program

Under this program, Metropolitan delivers Colorado River water to the Desert Water Agency and CVWD in advance of the exchange for their SWP Contract Table A allocations. In addition to their Table A supplies, Desert Water Agency and CVWD, subject to Metropolitan's written consent, may take delivery of SWP supplies available under Article 21 and the Turn-back Pool Program. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive Desert Water Agency and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient without having to deliver an equivalent amount of Colorado River water. This program allows Metropolitan to maximize delivery of SWP and Colorado River water in such years.

Desert Water Agency/Coachella Valley WD Other SWP Deliveries

Since 2008, Metropolitan has provided Desert Water Agency and CVWD written consent to take delivery of non-SWP supplies separately acquired by each agency from the SWP facilities. These deliveries include water acquired from the Yuba Dry Year Water Purchase Program and the 2009 Drought Water Bank. Metropolitan has also consented to:

- 10 TAF of exchange deliveries to CVWD for non-SWP water acquired from the San Joaquin Valley from 2008 through 2010,

- 36 TAF of exchange deliveries to Desert Water Agency for non-SWP water acquired from the San Joaquin Valley from 2008 through 2015, and
- 16.5 TAF of exchange deliveries to CVWD from groundwater storage of Kern River flood flows or SWP water delivered from Kern County Water Agency provided by Rosedale Rio Bravo Water Storage District from 2012 through 2035.

7.1.1.3 Central Valley/State Water Project Storage and Transfer Programs

Metropolitan increases the reliability of supplies received from the California Aqueduct by developing flexible SWP storage and transfer programs. Over the years, Metropolitan has developed numerous voluntary SWP storage and transfer programs, to secure additional dry-year water supplies.

Metropolitan has a long history of managing the wide fluctuations of SWP supplies from year to year by forming partnerships with Central Valley agricultural districts along the California Aqueduct, as well as with other Southern California SWP Contractors. These partnerships allow Metropolitan to store its State Water Project (SWP) supplies during wetter years for return in future drier years. Some programs also allow Metropolitan to purchase water in drier years for delivery via the California Aqueduct to Metropolitan's service area.

In addition, the SWP storage and transfer programs have served to demonstrate the value of partnering, and increasingly, Central Valley agricultural interests see partnering with Metropolitan as a sensible business practice beneficial to their local district and regional economy.

Metropolitan is currently operating several SWP storage programs that serve to increase the reliability of supplies received from the California Aqueduct. Metropolitan is also pursuing a new storage program with Antelope Valley-East Kern Water Agency, which is currently under development. In addition, Metropolitan pursues SWP water transfers on an as needed basis.

Semitropic Storage Program

Metropolitan has a groundwater storage program with Semitropic Water Storage District located in the southern part of the San Joaquin Valley. The maximum storage capacity of the program is 350 TAF. The specific amount of water Metropolitan can store in and subsequently expect to receive from the programs depends upon hydrologic conditions, any regulatory requirements restricting Metropolitan's ability to export water for storage, and the demands placed on the Semitropic Program by other program participants. In 2014, Metropolitan amended the program to increase the return yield by an additional 13.2 TAF per year. The minimum annual yield available to Metropolitan from the program is currently 34.7 TAF, and the maximum annual yield is 236.2 TAF, depending on the available unused capacity and the State Water Project allocation. During wet years, Metropolitan has the discretion to use the program to store portions of its SWP water that are in excess of the amounts needed to meet Metropolitan's service area demand. In Semitropic, the water is delivered to local farmers who use the water in-lieu of pumping groundwater. During dry years, the district returns Metropolitan's

previously stored water to Metropolitan by direct groundwater pump-in return or by exchange of SWP water.

Arvin-Edison Storage Program

Metropolitan amended the groundwater storage program with Arvin-Edison Water Storage District in 2008 to include the South Canal Improvement Project. The project increases the reliability of Arvin-Edison returning higher water quality to the California Aqueduct. In addition, Metropolitan and Arvin-Edison often enter into annual operational agreements to optimize program operations in any given year. The program storage capacity is 350 TAF. The specific amount of water Metropolitan can expect to store in and subsequently receive from the programs depends upon hydrologic conditions and any regulatory requirements restricting Metropolitan's ability to export water for storage. The storage program is estimated to deliver 75 TAF.

During wet years, Metropolitan has the discretion to use the program to store portions of its SWP supplies which are in excess of the amounts needed to meet Metropolitan's service area demand. The water can be either directly recharged into the groundwater basin or delivered to district farmers who use the water in-lieu of pumping groundwater. During dry years, the district returns Metropolitan's previously stored water to Metropolitan by direct groundwater pump-in return or by exchange of surface water supplies. In 2015, Metropolitan funded the installation of three new wells at a cost of $3 million that will restore the return reliability by 2.5 TAF per year. The funding will ultimately be recovered through credits against future program costs.

San Bernardino Valley Metropolitan Storage Program

The San Bernardino Valley Metropolitan Storage program allows for the purchase of a portion of San Bernardino Valley Metropolitan's SWP supply. The program includes a minimum purchase provision of 20 TAF and the option of purchasing additional supplies when available. This program can deliver between 20 TAF and 70 TAF in dry years, depending on hydrologic conditions. The expected delivery for a single dry year similar to 1977 is 20 TAF should supplies be available. The agreement with San Bernardino Valley Metropolitan also allows Metropolitan to store up to 50 TAF of transfer water for use in dry years. The agreement can be renewed until December 31, 2035.

San Gabriel Valley Metropolitan Exchange Program

The San Gabriel Valley Metropolitan program allows for the exchange of up to 5 TAF each year. For each acre-foot Metropolitan delivers to the City of Sierra Madre, a San Gabriel Valley Metropolitan member agency, San Gabriel Valley Metropolitan provides two acre-feet to Metropolitan in the Main San Gabriel Basin, up to 5 TAF. The program provides increased reliability to Metropolitan by allowing additional water to be delivered to Metropolitan's member agencies, Three Valleys Metropolitan and Upper San Gabriel Valley Metropolitan.

Antelope Valley-East Kern Water Agency Exchange and Storage Program

The Antelope Valley-East Kern Water Agency (AVEK) exchange and storage program provides Metropolitan with additional supplies and increased reliability. Under the exchange program, for every two acre-feet Metropolitan receives, Metropolitan returns one acre-foot to AVEK to improve its reliability. The exchange program is expected to deliver 30 TAF over ten years, with 10 TAF available in dry years. Under the program, Metropolitan will also be able to store up to 30 TAF in the AVEK's groundwater basin, with a dry year return capability of 10 TAF.

Kern-Delta Water District Storage Program

This groundwater storage program has 250 TAF of storage capacity. The program is capable of providing up to 50 TAF of dry-year supply. In 2015, Metropolitan funded the cross river pipeline that, when completed, will help improve Metropolitan's return reliability by reducing losses during exchanges. Water for storage can be either directly recharged into the groundwater basin or delivered to district farmers who use the water in-lieu of pumping groundwater. During dry years, the district returns Metropolitan's previously stored water to Metropolitan by direct groundwater pump-in return or by exchange of surface water supplies.

Mojave Storage Program

Metropolitan entered into a groundwater banking and exchange transfer agreement with Mojave Water Agency on October 29, 2003. This agreement was amended in 2011 to allow for the cumulative storage of up to 390 TAF. The agreement allows for Metropolitan to store water in on exchange account for later return. Through 2021, and when the State Water Project allocation is 60% or less, Metropolitan can annually withdraw the Mojave Water Agency's State Water Project contractual amounts in excess of a 10% reserve. When the State Water Project allocation is over 60%, the reserved amount for Mojave's local needs increases to 20%. Under a 100% allocation, the State Water Contract provides Mojave Water Agency 82.8 TAF of water.

Central Valley Transfer Programs

Metropolitan secures Central Valley water transfer supplies via spot markets and option contracts to meet its service area demands when necessary. Hydrologic and market conditions, and regulatory measures governing Delta pumping plant operations, will determine the amount of water transfer activity occurring in any year. Recent transfer market activity, described below, provides examples of how Metropolitan has secured water transfer supplies as a resource to fill anticipated supply shortfalls needed to meet Metropolitan's service area demands.

In 2003, Metropolitan secured options to purchase approximately 145 TAF of water from willing sellers in the Sacramento Valley during the irrigation season. These options protected against potential shortages of up to 650 TAF within Metropolitan's service area that might have arisen from a decrease in Colorado River supply or as a result of drier-than-expected hydrologic conditions. Using these options, Metropolitan purchased approximately 125 TAF of water for delivery to the California Aqueduct.

In 2005, Metropolitan, in partnership with seven other State Water Contractors, secured options to purchase approximately 130 TAF of water from willing sellers in the Sacramento Valley, of which Metropolitan's share was 113 TAF. Metropolitan also had the right to assume the options of the other State Water Contractors if they chose not to purchase the transfer water. Due to improved hydrologic conditions, Metropolitan and the other State Water Contractors did not exercise these options.

In 2008, Metropolitan, in partnership with seven other State Water Contractors, secured approximately 40 TAF of water from willing sellers in the Sacramento Valley, of which Metropolitan's share was approximately 27 TAF.

In 2009, Metropolitan, in partnership with eight other buyers, participated in a statewide Drought Water Bank, which secured approximately 74 TAF, of which Metropolitan's share was approximately 37 TAF.

In 2010, Metropolitan, in partnership with three other State Water Contractors, secured approximately 100 TAF of water from willing sellers in the Sacramento Valley, of which Metropolitan's share was approximately 88 TAF. Metropolitan also purchased approximately 18 TAF of water from Central Valley Project Contractors located in the San Joaquin Valley. In addition, Metropolitan entered into an unbalanced exchange agreement that resulted in Metropolitan receiving approximately 37 TAF.

In 2015, Metropolitan, in partnership with eight other State Water Contractors, secured approximately 20 TAF of water from willing sellers in the Sacramento Valley, of which Metropolitan's share was approximately 14 TAF.

In addition, Metropolitan has secured water transfer supplies under the Yuba Accord, which is a long-term transfer agreement. To date, Metropolitan has purchased approximately 165 TAF.

Finally, Metropolitan has secured water transfer supplies under the Multi-Year Water Pool Demonstration Program. In 2013 and 2015, Metropolitan secured 30 TAF and 1.3 TAF, respectively.

Metropolitan's recent water transfer activities demonstrated Metropolitan's ability to develop and negotiate water transfer agreements either working directly with the agricultural districts who are selling the water or through a statewide Drought Water Bank. Because of the complexity of cross-Delta transfers and the need to optimize the use of both CVP and SWP facilities, DWR and USBR are critical players in the water transfer process, especially when shortage conditions increase the general level of demand for transfers and amplify ecosystem and water quality issues associated with through-Delta conveyance of water. Therefore, Metropolitan views state and federal cooperation to facilitate voluntary, market-based exchanges and sales of water as a critical component of its overall water transfer strategy.

Achievements to Date

Metropolitan has made rapid progress to date developing SWP storage and transfer programs. Most notably, Metropolitan has utilized approximately 457 TAF to supplement

its SWP supplies during the recent 2012-2015 unprecedented drought. Of this total, approximately 325 TAF are from SWP storage program extractions in Semitropic, Arvin, Kern Delta, and Mojave; 57 TAF are from the San Bernardino and SGV/Metropolitan programs; and 78 TAF of SWP transfer supplies were purchased from the SWC Buyers Group, Multi-Year Water Pool, and Yuba water purchase programs.

7.1.2 Groundwater

Groundwater has been used in Ventura County for many years, for agricultural irrigation, and for municipal and industrial water supply. Historically, the aquifer system in southern Ventura County has been in a state of overdraft, primarily in the Lower Aquifer System (LAS), which has led to seawater intrusion. The non-consumptive portion of imported water used by the majority of Calleguas purveyor customers is treated at local wastewater treatment facilities and discharged to the Calleguas Creek watershed. This water ultimately percolates into the Upper Aquifer System (UAS), increasing groundwater levels in the region.

Unfortunately, water in the UAS can have elevated levels of chlorides and TDS. Calleguas, VCWWD No. 1, and other Calleguas member agencies are active participants in regional efforts to put some of this water to beneficial use by advancing groundwater desalter projects for groundwater recovery.

The District is planning the Moorpark Desalter Project, which is a groundwater production and treatment system that could provide up to 5,000 AFY of potable water for customers in the District's water service area by the end of 2018. As part of the project, 10 to 18 extraction wells will be constructed to extract poor-quality, brackish groundwater from a shallow aquifer in the South Las Posas Basin, and pump the groundwater via a new transmission pipeline to a proposed treatment plant, where the water will be treated to drinking water standards.

7.2 RELIABILITY BY TYPE OF YEAR

7.2.1 Metropolitan Reliability by Type of Year

In their 2015 UWMP dated June 2016, Metropolitan estimated supply capability and projected demands for an average (normal) year based on an average of hydrologies for the years 1922-2012; for a single dry-year based on a repeat of the hydrology in the year 1977; and for multiple dry years based on a repeat of the hydrology of 1990-1992. These estimates were summarized in Tables 2-4, 2-5, and 2-6 of their 2015 UWMP, which are included in Appendix F of this report for reference.

Table 2-4 summarizes the sources of supply for the single dry year (1977 hydrology), while Table 2-5 shows the region's ability to respond in future years under a repeat of the 1990-92 hydrology. Table 2-5 provides results for the average of the three dry-year series rather than a year-by-year detail because most of Metropolitan's dry-year supplies are designed to provide equal amounts of water over each year of a three-year period. These tables show that the region can provide reliable water supplies under both the single

driest year and the multiple dry-year hydrologies. Table 2-6 reports the expected situation on the average over all historic hydrologies from 1922 to 2012.

A summary of the information provided in Metropolitan Tables 2-4, 2-5, and 2-6 is shown in Table 7-1A. For each of these scenarios there is a projected surplus of supply in every forecast year. Projected supply surpluses, based on the capability of current supplies, range from 0.1% to 87% of projected demands. With the inclusion of supplies under development, potential surpluses range from 5% to 110% of projected demands. Metropolitan's supply capabilities were developed using the following assumptions:

7.2.1.1 Assumptions for Colorado River Aqueduct Supplies

Colorado River Aqueduct supplies include supplies that would result from existing and committed programs and from implementation of the Quantification Settlement Agreement (QSA) and related agreements. The QSA establishes the baseline water use for each of the agreement parties and facilitates the transfer of water from agricultural agencies to urban uses. Colorado River Water Management Programs are potentially available to supply additional water up to the CRA capacity of 1.2 MAF on an as needed basis.

7.2.1.2 Assumptions for State Water Project Supplies

State Water Project (SWP) supplies are estimated using the 2015 SWP Delivery Capability Report distributed by DWR in July 2015. The 2015 Delivery Capability Report presents the current DWR estimate of the amount of water deliveries for current (2015) conditions and conditions 20 years in the future. These estimates incorporate restrictions on SWP and Central Valley Project (CVP) operations in accordance with the biological opinions of the U.S. Fish and Wildlife Service and National Marine Fisheries Service issued on December 15, 2008, and June 4, 2009, respectively.

Under the 2015 Delivery Capability Report with existing conveyance and low outflow requirements scenario, the delivery estimates for the SWP for 2020 conditions as percentage of Table A amounts, are 12%, equivalent to 230 TAF, under a single dry-year (1977) condition and 51%, equivalent to 975 TAF, under the long-term average condition.

In dry, below-normal conditions, Metropolitan has increased the supplies received from the California Aqueduct by developing flexible Central Valley/SWP storage and transfer programs.

Over the last two years under the pumping restrictions of the SWP, Metropolitan has worked collaboratively with the other contractors to develop numerous voluntary Central Valley/SWP storage and transfer programs. The goal of these storage/transfer programs is to develop additional dry-year supplies that can be conveyed through the California Aqueduct during dry hydrologic conditions and regulatory restrictions.

A key component of Metropolitan's water supply capability is the amount of water in Metropolitan's storage facilities. Storage is a major component of Metropolitan's dry-

year resource management strategy. Metropolitan's likelihood of having adequate supply capability to meet projected demands, without implementing the Water Supply Allocation Plan (WSAP), is dependent on its storage resources.

Table 7-1A: Metropolitan Supply Capability and Projected Demands (AFY)					
Single Dry Year MWD Supply Capability and Projected Demands (1977 Hydrology)					
Fiscal Year	**2020**	**2025**	**2030**	**2035**	**2040**
Capability of Current Supplies	2,584,000	2,686,000	2,775,000	2,905,000	2,941,000
Projected Demands	2,005,000	2,066,000	2,108,000	2,160,000	2,201,000
Projected Surplus	579,000	620,000	667,000	745,000	740,000
Projected Surplus %[(a)]	29%	30%	32%	34%	34%
Supplies under Development	63,000	100,000	316,000	358,000	398,000
Potential Surplus	642,000	720,000	983,000	1,103,000	1,138,000
Potential Surplus %[(a)]	32%	35%	47%	51%	52%
Multiple Dry Year MWD Supply Capability and Projected Demands (1990-1992 Hydrology)					
Fiscal Year	**2020**	**2025**	**2030**	**2035**	**2040**
Capability of Current Supplies	2,103,000	2,154,000	2,190,000	2,242,000	2,260,000
Projected Demands	2,001,000	2,118,000	2,171,000	2,216,000	2,258,000
Projected Surplus	102,000	36,000	19,000	26,000	2,000
Projected Surplus %[(a)]	5%	2%	1%	1%	0.1%
Supplies under Development	43,000	80,000	204,000	245,000	286,000
Potential Surplus	145,000	116,000	223,000	271,000	288,000
Potential Surplus %[(a)]	7%	5%	10%	12%	13%
Average Year MWD Supply Capability and Projected Demands (1922 - 2012 Hydrology)					
Fiscal Year	**2020**	**2025**	**2030**	**2035**	**2040**
Capability of Current Supplies	3,448,000	3,550,000	3,658,000	3,788,000	3,824,000
Projected Demands	1,860,000	1,918,000	1,959,000	2,008,000	2,047,000
Projected Surplus	1,588,000	1,632,000	1,699,000	1,780,000	1,777,000
Projected Surplus %[(a)]	85%	85%	87%	89%	87%
Supplies under Development	63,000	100,000	386,000	428,000	468,000
Potential Surplus	1,651,000	1,732,000	2,085,000	2,208,000	2,245,000
Potential Surplus %[(a)]	89%	90%	106%	110%	110%

(a) As a percentage of projected demand
Source – 2015 Metropolitan Urban Water Management Plan, June 2016

In developing the supply capabilities for the 2015 UWMP, Metropolitan assumed the current (2015) storage levels at the start of simulation and used the median storage levels

going into each of the five-year increments based on the balances of supplies and demands. Under the median storage condition, there is an estimated 50% probability that storage levels would be higher than the assumption used, and a 50% probability that storage levels would be lower than the assumption used.

All storage capability figures shown in Metropolitan's 2015 UWMP reflect actual storage program conveyance constraints. It is important to note that under some conditions, Metropolitan may choose to implement the WSAP in order to preserve storage reserves for a future year, instead of using the full supply capability. This can result in impacts at the retail level even under conditions where there may be adequate supply capabilities to meet demands.

7.2.2 Calleguas Reliability by Type of Year

In the Calleguas 2015 UWMP, water supply and demand projections for the Calleguas service area were estimated for three hydrologic scenarios; normal year, single-dry year, and multiple-dry years. As summarized in Table 7-1, the normal year is the expected demand under average hydrologic conditions (based on historical average year conditions from 1922 through 2012); the single-dry year is the expected demand under the single driest hydrologic year (based on conditions experienced in 1977); and the multiple-dry year is the expected demand during a period of three consecutive dry years (based on conditions experienced from 1990 through 1992).

The available supplies (as a percentage of average supply) shown in Table 7-1 are those estimated for the Calleguas service area that includes VCWWD No. 1. Metropolitan and Calleguas develop independent supply/demand forecasts for the Calleguas service area. Metropolitan utilizes a top-down approach based on output from the Metropolitan-MAIN software model. This model incorporates demographic and economic projections from regional planning agencies, and considers conservation and end uses. Metropolitan's imported water demand projections for Calleguas are inferred to be equal to Metropolitan's supply projections for Calleguas. Calleguas demand projections are developed using a bottom-up approach based on demand projections developed by each Calleguas purveyor and include anticipated demand for both potable and recycled water service from Calleguas.

Table 7-1: Basis of Water Year Data

Year Type	Base Year	Available Supplies if Year Type Repeats
		% of Average Supply
Average Year	1922 to 2012	100%
Single-Dry Year	1977	101%
Multiple-Dry Years 1st Year	1990 to 1992	99%
Multiple-Dry Years 2nd Year	1990 to 1992	99%
Multiple-Dry Years 3rd Year	1990 to 1992	99%

As shown in Table 7-1B, the estimated supply of water as determined by Metropolitan during an average (normal) year, together with Calleguas' recycled water supply, is sufficient to meet the Calleguas' projected normal year water demands from 2020 through 2040. Also provided in Table 7-1B is the estimated demand on Calleguas during a normal year in the event new local water production facilities are not developed as forecasted by retail purveyors. These local projects include groundwater desalters and recycled water system start-ups or expansions such as the VCWWD No. 1 Moorpark Desalter Project and expansions to the MWRF recycled water system, respectively,

As shown in Table 7-1B, the estimated supply of water as determined by Metropolitan during an average (normal) year, together with Calleguas' recycled water supply, is sufficient to meet the Calleguas' projected normal year water demands from 2020 through 2040. Also provided in Table 7-1B is the estimated demand on Calleguas during a normal year in the event new local water production facilities, i.e. groundwater desalters and recycled water systems, are not developed as forecasted by retail purveyors.

Table 7-1B: Calleguas Supply Capability and Projected Demands (AFY)

Normal Year Supply and Demand Comparison (1977 Hydrology)						
		2020	2025	2030	2035	2040
	Supply totals	123,695	126,959	126,764	125,973	126,614
With Planned Local Projects	Demand totals	99,744	97,634	100,247	102,746	105,016
	Surplus	23,951	29,325	26,517	23,227	21,958
Without Planned Local Projects	Demand totals	115,729	120,119	122,932	125,631	128,101
	Surplus/(Deficit)	7,966	6,840	3,832	342	(1,487)
Single Dry Year Supply and Demand Comparison (1990 – 1992 Hydrology)						
		2020	2025	2030	2035	2040
	Supply totals	124,575	127,864	127,675	126,887	127,538
	Demand totals[a]	111,228	108,347	110,724	113,642	116,321
	Surplus	13,347	19,517	16,951	13,245	11,217
Multiple Dry Year Supply and Demand Comparison (1990 – 1992 Hydrology)						
		2020	2025	2030	2035	2040
First year	Supply totals	123,004	130,040	130,609	129,933	130,362
	Demand totals[a]	105,006	101,439	103,744	106,518	107,786
	Surplus	17,998	28,601	26,865	23,415	22,576
Second year	Supply totals	123,004	130,040	130,609	129,933	130,362
	Demand totals[a]	105,006	101,439	103,744	106,518	107,786
	Surplus	17,998	28,601	26,865	23,415	22,576

Multiple Dry Year Supply and Demand Comparison (1990 – 1992 Hydrology) cont.						
		2020	2025	2030	2035	2040
Third year	Supply totals	123,004	130,040	130,609	129,933	130,362
	Demand totals[a]	105,006	101,439	103,744	106,518	107,786
	Surplus	17,998	28,601	26,865	23,415	22,576

(a) Demands will be higher if planned local production projects by Calleguas purveyors not constructed

As shown in Table 7-1B, the estimated allocation of water from Metropolitan during a dry year is sufficient to meet the Calleguas' projected dry year imported water demands from 2020 through 2040. Table 7-1B also shows the water supply versus demand evaluation under multiple dry year hydrologic conditions. Sufficient supplies are projected to be available for the years 2020 through 2040. As noted in Table 7-1B, estimated demands for dry and multiple-dry year conditions will be higher if planned local water production projects by Calleguas purveyors are not constructed

The surpluses shown in Table 7-1B are a result of the different methodologies used to develop demand projections, including the level of conservatism applied regarding potential local supply projects. Specifically, purveyor-based projections include annual yield from planned local projects. For example, Calleguas may opt to store water in Lake Bard or the Las Posas wellfield when surplus imported water is available.

Based on the estimates made in Table 7-1B, estimated increases in Calleguas WSA demands as a percentage of normal demands assuming planned local production projects by Calleguas purveyors are constructed for dry-year and multiple-dry year conditions are shown in Table 7-1C. Based on the estimates made in Table 7-1B, estimated Calleguas supply capability, which is available Metropolitan supply to Calleguas as a percentage of estimated Calleguas WSA demands assuming planned local projects are implemented, for normal-year, dry-year and multiple-dry year conditions are shown in Table 7-1D.

Table 7-1C: Estimated Increases in Calleguas WSA Demands (%)					
Demand-Type Year	2020	2025	2030	2035	2040
Single-Dry Year[a]	11.5%	11.0%	10.5%	10.6%	10.8%
Multiple-Dry Years [a]	5.3%	3.9%	3.5%	3.7%	2.6%

(a) Assuming planned local projects are implemented

Table 7-1D: Estimated Calleguas Supply Capability (%)					
Demand-Type Year	2020	2025	2030	2035	2040
Normal Year[a]	124.0%	130.0%	126.5%	122.6%	120.6%
Single-Dry Year[a]	112.0%	118.0%	115.3%	111.7%	109.6%
Multiple-Dry Years [a]	117.1%	128.2%	125.9%	122.0%	120.9%

(a) Available Metropolitan supply to Calleguas WSA as a % of estimated Calleguas demands assuming planned local projects are implemented

7.3 SUPPLY AND DEMAND ASSESSMENT

As stated in CWC 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.*

Projected normal-year District supplies and demands as developed in Table 6-9 and Table 4-3, respectively, are shown in Table 7-2, which includes estimated surplus imported water supply from Calleguas based on the percentage surplus shown in Table 7-1D.

Table 7-2: Normal-Year Supply and Demand Comparison

	2020	2025	2030	2035	2040
Supply totals *(from Table 6-9)*	13,360	14,226	14,467	14,636	14,899
Demand totals *(from Table 4-3)*	12,345	12,881	13,239	13,561	13,892
Difference	1,014	1,345	1,228	1,075	1,007

The District's imported water demands are estimated to increase by 11.0% during single dry-year and by 5.0% during multiple dry-year supply scenarios consistent with the estimated increase in Calleguas WSA demands shown in Table 7-1D. Groundwater and recycled water demands are not projected to increase due to finite supply. Projected single-dry-year and multiple-dry-year District supplies and demands are shown in Table 7-3 and Table 7-4, respectively, which includes estimated surplus imported water supply from Calleguas based on the percentage surplus shown in Table 7-1D.

Table 7-3: Single-Dry Year Supply and Demand Comparison

	2020	2025	2030	2035	2040
Supply totals	12,932	13,687	13,950	14,115	14,365
Demand totals	12,890	13,373	13,750	14,084	14,431
Difference	42	314	200	31	-66

7.4 REGIONAL SUPPLY RELIABILITY

Calleguas distributes imported water on a wholesale basis to 19 local purveyors, including VCWWD No. 1, who in turn deliver water to area residents, businesses, and agricultural customers. These 19 Calleguas purveyors are listed in Table 6-1. Approximately three-quarters of Ventura County residents (roughly 630,000 people) depend on Calleguas for all or part of their water and the water supplied by Calleguas currently represents approximately 73% of the total municipal and industrial water demand within its service area.

As mentioned above, Calleguas WSA demand projections are developed using a bottom-up approach based on demand projections developed by each Calleguas purveyor and include anticipated demand for both potable and recycled water service from Calleguas. If new local water supply projects are constructed by Calleguas purveyors *as planned,* Calleguas projects a supply surplus for every 5-year year increment through 2040 for normal, single-dry, and multiple-dry year demand conditions.

These local projects include groundwater desalters and recycled water system start-ups or expansions such as the VCWWD No. 1 Moorpark Desalter Project and expansions to the MWRF recycled water system, respectively,

VCWWD's Moorpark Desalter Project is projected to provide up to 5,000 AFY of potable water for customers in the District's water service area by the end of 2018. The District is planning recycled water system expansions that will increase recycled water use from 599 AFY in 2015 to 2,200 AFY by 2040. As a result of these projects, District imported water demand as furnished through Calleguas is projected to decrease from 7,017 AFY in 2015 to 4,9893 AFY in 2040.

Table 7-4: Multiple Dry Years Supply and Demand Comparison

		2020	2025	2030	2035	2040
First year	Supply totals	13,149	14,143	14,442	14,606	14,918
	Demand totals	12,636	13,104	13,472	13,798	14,138
	Difference	513	1,039	970	808	780
Second year	Supply totals	13,149	14,143	14,442	14,606	14,918
	Demand totals	12,636	13,104	13,472	13,798	14,138
	Difference	513	1,039	970	808	780
Third year	Supply totals	13,149	14,143	14,442	14,606	14,918
	Demand totals	12,636	13,104	13,472	13,798	14,138
	Difference	513	1,039	970	808	780

8 WATER SHORTAGE CONTINGENCY PLANNING

California's extensive system of water supply infrastructure, its reservoirs, groundwater basins, and inter-regional conveyance facilities, mitigate the effect of short-term dry periods. Defining when a drought begins is a function of drought impacts to water users. Drought is a gradual phenomenon. Although droughts are sometimes characterized as emergencies, they differ from typical emergency events. Droughts occur slowly, over a multi-year period. Drought impacts increase with the length of a drought, as carry-over supplies in reservoirs are depleted and water levels in groundwater basins decline.

The District's Water Shortage Contingency Plan (WSCP) is documented in *Ventura County Waterworks District Nos. 1, 16, 17, and 19 Rules and Regulations, Part 1 - Section K – Water Shortages*, which is included in Appendix G. The District's WSCP will come into effect if a water supply shortage or threatened shortage exists, and a consumer demand reduction is necessary to make more efficient use of water, and appropriately respond to existing water conditions. The following discussion presents the various stages and basis for implementation.

8.1 STAGE OF ACTION

The District's WSCP will be implemented in congruence with Metropolitan's and Calleguas' water shortage/drought policies and activities. Calleguas' policy is based on Metropolitan's adopted Water Surplus and Drought Management Plan (WSDM Plan) as well as Metropolitan's Water Supply Allocation Plan as revised in June 2009. The WSDM Plan is designed to guide management of regional water supplies to achieve reliability goals for Southern California. The Water Supply Allocation Plan is designed to provide a framework for administering an allocation should a water shortage be declared.

In the event of a water shortage, the Director of the County of Ventura Public Works Agency (Agency Director) is authorized and directed by to implement provisions of the Water Shortage Plan, subject to ratification by the District Board at its first regularly scheduled meeting. The Agency Director determines the extent of conservation or water use efficiency required through the implementation and/or termination of particular conservation stages or levels consisting of three levels for the District to prudently plan for and supply water to its customers. However, in the case of local emergencies, the Director of the Water and Sanitation Department has the authority to order the implementation of the appropriate stage of water conservation. The three stages of the District's WSCP are shown in Table 8-1 and described in Section 8.1.1. It is important to note that agricultural water service is interruptible.

8.1.1 Ventura County Water District No. 1 – Water Supply Shortage Levels

Level 1 Water Supply Shortage

A Level 1, a water supply shortage is declared when the Engineer determines in his or her sole discretion that due to drought or other water supply conditions, a water supply

shortage or threatened shortage exists, and a consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions.

Table 8-1: Stages (Levels) of Water Shortage Contingency Plan

Level	Percent Supply Reduction[a]	Water Supply Condition
1	NA	A water supply shortage or threatened shortage exists, and a consumer demand reduction is necessary to make more efficient use of water
2	NA	A water supply shortage or threatened shortage exists, and a consumer demand reduction is necessary to make more efficient use of water. Additional prohibited water uses are identified relative to Level 1 prohibitions
3	NA	A significant reduction in consumer demand is necessary to maintain sufficient water supplies for public health and safety

(a) A percent supply reduction is not used by the District to signal a level of the WSCP; rather, it is up to the discretion of the Engineer to determine the severity of the water shortage and the appropriate level of the WSCP

Level 2 Water Supply Shortage

A Level 2, a water supply shortage is declared when the Engineer determines in his or her sole discretion that due to drought or other water supply conditions, a water supply shortage or threatened shortage exists, and a consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions. Additional prohibited water uses are identified relative to Level 1 prohibitions.

Level 3 Water Supply Shortage

A Level 3 water supply shortage condition is also referred to as an "Emergency" condition. A Level 3 condition is declared when the Engineer determines that a significant reduction in consumer demand is necessary to maintain sufficient water supplies for public health and safety. The Agency Director declares a water shortage emergency and notifies District residents and businesses of the emergency.

8.1.2 Calleguas Municipal Water District

Calleguas has developed water shortage contingency measures in the event that Metropolitan significantly reduces deliveries to its member agencies due to severe water shortage conditions or in the event that a catastrophe interrupts water deliveries. The following discussion summarizes these measures.

Stages of Action

Ordinance No. 12 gives the Calleguas Board of Directors authority to take actions necessary to manage available supplies, including passing through to purveyors

allocations and penalties for exceeding allocated deliveries. It is important to note that the Calleguas system is complex and the ultimate actions taken by Calleguas will depend on the unique issues of each particular condition. With exception of a catastrophic failure of the Perliter Tunnel or other infrastructure failure of similar magnitude, Calleguas does not foresee imposing allocations except under Metropolitan's direction and according to Metropolitan's WSAP schedule.

Consumption Reduction Methods by Agencies

Under the most severe drought conditions and under almost any catastrophe condition, and consistent with Calleguas' Ordinance No. 12 Section 6(a), Calleguas may "apportion the available water supply among Member Agencies in an equitable manner with due regard to public health and safety, and in accordance with the provisions of the Municipal Water District Act of 1911, as amended." In the event that a mandatory reduction in water consumption is required, following are examples of measures that purveyors may implement to meet water consumption goals:

- Restrict irrigation hours to evening and early morning hours.
- Disallow non-essential irrigation (i.e., golf courses and parks) and limit water use for essential irrigation.
- Restrict or disallow irrigation entirely.
- Disallow the use of water to fill ornamental lakes, ponds, pools, and fountains.
- Limit or disallow the washing of vehicles.
- Disallow the spraying of outdoor paved surfaces and using potable water for street cleaning.
- Restrict the use of water from fire hydrants for construction purposes.
- Implement a rate structure for charges and penalties for water use restriction violations.

Determining Water Shortage Reductions

As discussed previously, with exception of a catastrophic failure of the Perliter Tunnel, Calleguas does not foresee imposing allocations except under Metropolitan's direction and according to Metropolitan's WSDM Plan and WSAP schedule.

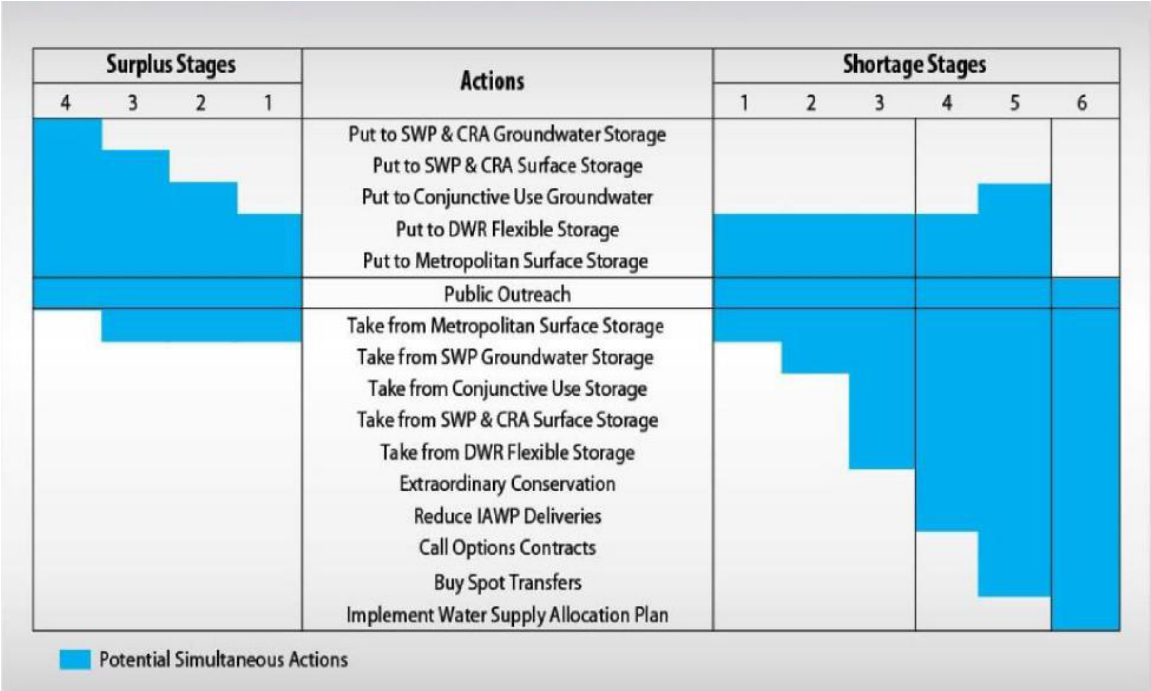
As shown in Figure 8-1, the WSDM Plan defines six shortage management stages to guide resource management activities. These stages are not defined merely by shortfalls in imported water supply, but also by the water balances in Metropolitan's storage programs. Thus, a 10 percent shortfall in imported supplies could be a stage one shortage if storage levels are high. If storage levels are already depleted, the same shortfall in imported supplies could potentially be defined as a more severe shortage.

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, Metropolitan is still able to meet all end use demands for water. For shortage stages 1 through 3, Metropolitan

will meet demands by withdrawing water from storage. At shortage stages 4 and 5, Metropolitan may undertake additional shortage management steps, including issuing public calls for extraordinary conservation and exercising water transfer options, or purchasing water on the open market.

The WSAP is enacted at shortage stage 6 and provides a formula for allocating available water supplies to the member agencies in case of extreme water shortages within Metropolitan's service area. The WSAP formula seeks to balance the impacts of a shortage at the retail level for shortages of Metropolitan supplies of up to 50 percent.

Figure 8-1. Metropolitan Resource Stages, Anticipated Actions & Supply Declarations



8.2 PROHIBITIONS ON END USES

A summary of restrictions and prohibitions on end uses for each stage of the VCWWD No. 1 WSCP is shown in Table 8-2 and is discussed as follows:

Level 1 Water Supply Shortage

A Level 1 Water Supply Shortage necessitates the following District water use restrictions:

> Exterior Water Use: The District will establish allocations and water rates, and implement water schedules to achieve the desired reduction in exterior water use.

Table 8-2: Restrictions and Prohibitions on End Uses			
Stage	Restrictions and Prohibitions on End Users	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	Landscape - Other landscape restriction or prohibition	The District will establish allocations and water rates to achieve the desired reduction in exterior water use	Yes
2	Landscape - Other landscape restriction or prohibition	The District will establish allocations and water rates to achieve the desired reduction in exterior water use	Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	Filling or re-filling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life	Yes
2	Other - Prohibit vehicle washing except facilities using recycled or recirculating water	Except by use of a hand-held bucket or container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, by high pressure/low volume wash systems, or at a commercial car washing facility that utilizes a re-circulating water system to capture or reuse water	Yes
2	Other water feature or swimming pool restriction	Re-filling of more than one foot and initial filling of residential swimming pools or outdoor spas with potable water is prohibited	Yes
3	Other	All restrictions stated for Level 2	Yes
3	Landscape - Prohibit all landscape irrigation	Watering or irrigating of lawn, landscape or other vegetated area with potable water is prohibited	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	All leaks, breaks or other malfunctions in the water user's plumbing or distribution system must be repaired within twenty-four (24) hours of notification.	Yes
3	Other	No new potable water service will be provided, no new temporary meters or permanent meters will be provided.	Yes

Level 2 Water Supply Shortage

In addition to the restrictions indicated for Level 1, the following restrictions shall apply:

Exterior Water Use: District will establish allocations and water rates to achieve the desired reduction in exterior water use.

Limits on Filling Ornamental Lakes or Ponds: Filling or re-filling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to the declaration of a supply shortage level under these Rules and Regulations.

Limits on Washing Vehicles: Using water to wash or clean a vehicle is prohibited, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, by high pressure/low volume wash systems, or at a commercial car washing facility that utilizes a re-circulating water system to capture or reuse water.

Limits on Filling Residential Swimming Pools and Spas**:** Re-filling of more than one foot and initial filling of residential swimming pools or outdoor spas with potable water is prohibited.

Level 3 Water Supply Shortage

A Level 3 Water Supply Shortage condition is also referred to as an "emergency" condition. In addition to the restrictions indicated for Levels 1 and 2, the following restrictions shall apply:

Irrigation Restrictions: Watering or irrigating of lawn, landscape or other vegetated area with potable water is prohibited. This restriction does not apply to the following categories of use, unless it is determined by the Director that recycled water is available and may be applied to the use:

a. Maintenance of vegetation, including trees and shrubs, that are watered using a hand-held bucket or similar container or handheld hose equipped with a positive self-closing water shutoff nozzle or device.
b. Maintenance of existing landscape necessary for fire protection.
c. Maintenance of existing landscape for soil erosion control.
d. Maintenance of plant materials identified to be rare or essential to the well-being of protected species.
e. Maintenance of landscape within active public parks and playing fields, day-care centers, golf course greens, and school grounds, provided that such irrigation does not exceed two (2) days per week according to the schedule established in rules and regulations.
f. Actively irrigated environmental mitigation projects.

Obligations to Fix Leaks, Breaks or Malfunctions: All leaks, breaks or other malfunctions in the water user's plumbing or distribution system must be repaired within twenty-four (24) hours of notification as set forth in Rule 1-L-2b unless other arrangements are made with the District.

No New Potable Water Service: Upon declaration of a Level 3 Water Supply Shortage Emergency, no new potable water service will be provided, no new temporary meters or permanent meters will be provided, and no statements of immediate ability to serve or provide potable water service (such as will-serve letters, certificates, or letters of availability) will be issued, except under the following circumstances:

a. A valid, unexpired building permit has been issued for the project; or
b. The project is necessary to protect the public health, safety, & welfare; or
c. The applicant provides substantial evidence of an enforceable commitment that water demands for the project will be offset prior to the provision of a new water meter(s) to the satisfaction of the District.

No New Annexations: Upon the declaration of a Level 3 Water Supply Shortage condition, the District will suspend consideration of annexations to its service area. This subsection does not apply to boundary corrections and annexations that will not result in any increased use of water.

8.3 PENALTIES, CHARGES, OTHER ENFORCEMENT OF PROHIBITIONS

The District's WSCP is detailed in the District's Rules and Regulations (Part 1 - Section K). Penalties are imposed for violations of the WSCP as described in Part 1 - Section L of the District's Rules and Regulations (see Appendix G). The penalties are based upon the number and frequency of violations and are discussed below:

a. For the first violation a written notice will be given to the customer.
b. For the second violation within the preceding twelve (12) calendar months, a penalty of one hundred dollars ($100.00) shall be imposed by written notice to the customer.
c. For the third violation within the preceding twelve (12) calendar months a penalty of two hundred and fifty dollars ($250.00) shall be imposed by written notice to the customer.
d. For the fourth violation within the preceding twelve (12) calendar months, a penalty of five hundred dollars ($500.00) shall be imposed by written notice to the customer. The District may also give written notice to the customer indicating that it will install a flow restricting device of 1 gpm capacity for services up to one and one half inch meter size, and comparatively sized restrictors for larger services, on the service of the customer at the premises at which the violation occurred for a period of not less than forty-eight (48) hours. The charge for installing such a flow restricting device will be based upon the size of the meter and the actual

cost of installation. The charge for removal of the flow restricting device and restoration of normal service shall be based on the actual cost involved.

e. If there are five violations within twelve (12) consecutive calendar months, the District may discontinue water service to the customer at the premises at which the violation occurred.

8.4 CONSUMPTION REDUCTION METHODS

A summary of consumption reduction methods undertaken by the District to reduce water demand within their service area in association with water shortage contingency planning is shown in Table 8-3.

Table 8-3: Stages of WSCP - Consumption Reduction Methods

Stage	Consumption Reduction Methods by Water Supplier	Additional Explanation or Reference
1,2,3	Expand Public Information Campaign	The District in concert with Ventura County maintains a website titled SlowYourH2O.org which provides information on methods to reduce water, water use restrictions, water rules & regulations, and tips regarding water use & conservation
1,2,3	Improve Customer Billing	District has a tiered rate structure which does not encourage increased water usage
1,2,3	Provide Rebates on Plumbing Fixtures and Devices	Calleguas Municipal Water District in the past has provided this service and is currently being revised

Public Information Campaign

The District, in concert with the County of Ventura Water and Sanitation Department maintains a website titled SlowYourH2O.org which provides water conservation information. Calleguas also maintains a water conservation section on their website (www.calleguas.com). Calleguas provides the following additional resource links that includes water conservation, rebate programs, water saving incentives and other information sources related to water conservation

Education: http://mwdh2o.com/mwdh2o/pages/education/h2o/h2o.html
Rebates: http://socalwatersmart.com/
Innovative Conservation Program: http://www.bewaterwise.com/icp.html
California Native Plant Society: http://www.cnps.org/
Gardening Classes: http://www.bewaterwise.com/training01.html:
WaterSaving:http://www.mwdh2o.com/mwdh2o/pages/yourwater/cpp/cpp.html

Customer Billing

The District has developed conservation pricing to provide economic incentives to customers to use water efficiently. The District has a tiered rate structure for water service within its service area.

Rebates or Giveaways of Plumbing Fixtures and Devices

Calleguas has made water conservation a priority and as such they have long offered rebate programs for water conservation devices. Metropolitan and Calleguas continue to try and find the best way to get these devices and rebates to the customers and end users.

Reduction of Water System Loss

The District regularly conducts water system audits, leak detection and repairs as part of its overall operations. These activities are conducted by water operations/maintenance staff, these programs aim at reducing water losses through a water agency's mains.

Implementation of Drought Rate Structure or Surcharge

The District has a tiered rate structure for water service within its service area. The tiered rate structure discourages high water use. Surcharges imposed by Calleguas may be passed through to customers.

8.5 DETERMINING WATER SHORTAGE REDUCTIONS

Under normal conditions, potable water production figures are recorded daily. Weekly and monthly reports are prepared and monitored. This data is used to measure the effectiveness of any water shortage contingency stage that may be implemented.

As stages of water shortage are declared by Metropolitan and Calleguas, the District will follow implementation of those stages and continue to monitor water demand levels. It is not until Metropolitan declares a Shortage Stage 5 that Metropolitan may call for extraordinary conservation. During this stage, Metropolitan's Drought Program Officer will coordinate public information activities with Calleguas and monitor the effectiveness of ongoing conservation programs. Monthly reporting on estimated conservation water savings will be provided.

The District will participate in member agency manager meetings with Calleguas to monitor and discuss water allocation charts. This will enable the District to be aware of imported water use on a timely basis.

8.6 REVENUE AND EXPENDITURE IMPACTS

The District receives water revenue from a commodity charge and a tiered rate structure for water service. The rates have been designed to recover the bulk of the cost of water

service in the commodity charge. An assessment of the revenue impacts as a result of the various stages of conservation previously showed that with the use of the Rate Stabilization Fund, the District would have sufficient funds to cover a water shortage without the need to increase water rates.

8.7 RESOLUTIONS OR ORDINANCE

To meet short-term water demand deficiencies, and short- or long-term drought requirements, the District has included a Water Shortage Plan, which is included as Section K of their Rules and Regulations. The District has also adopted permanent water conservation measures included in Section L of their Rules and Regulations. These two sections of the District's Rules and Regulations are included in Appendix G. In addition, the City of Moorpark has adopted the State's Model Water Efficient Landscape Ordinance that sets forth standards for landscape irrigation during drought and non-drought times, and acknowledges the constant need to establish long-term water efficiency (City Ordinance 10-383, Chapter 15.23). This ordinance covers all landscaping within new developments as well as rehabilitated landscape.

8.7.1 Permanent Water Conservation Measures

The District has passed rules and regulations that prohibit water wasting. Specifically, the District has implemented the following requirements:

Water Saving Devices: All new customers shall install and use the following water efficient plumbing fixtures:

a. Ultra-low volume toilets (1.6 gallons per flush or less).
b. Low-flow shower heads (2.0 gallons per minute or less).

Water Waste Prohibited: No person shall use or permit the use of District water as follows:

a. Watering of turf, ornamental landscape, open ground crops and trees, in a manner or to an extent which allows water to run to waste.
b. In any manner such that the escape of water through leaks, breaks, or malfunctions within the water user's plumbing or distribution system occurs for any period of time beyond which such break or leak should reasonably have been discovered and corrected. It shall be presumed that a period of forty-eight hours after the water user discovers such leak, break, or malfunction, or receives notice from the District of such condition, whichever occurs first, is a reasonable time within which to correct such condition.
c. Using water to wash or clean a vehicle, including but not limited to washing automobiles, trucks, trailers, boats, or other types of mobile equipment, without the use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle

or device. This subsection does not apply to any commercial car washing facility.

d. Operating any ornamental fountain, or similar structures, unless water for such is recycled for lawful reuse without substantial loss.

e. Washing down hard or paved surfaces, including but not limited to washing of sidewalks, walkways, driveways, parking lots or any other hard-surfaced areas by hose or flooding, except as otherwise necessary to prevent or eliminate conditions dangerous to the public health and safety or for other legitimate uses approved by the District, and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, a low-volume high-press cleaning machine equipped to recycle any water used, or a low-volume high-pressure water broom.

f. Serving water in eating or drinking establishments, including but not limited to restaurants, hotels, cafés, bars or other public places where food or drinks are sold or served, to customers without first being expressly requested by the customer.

g. For any indiscriminate running of water or washing with water not otherwise prohibited above which is wasteful and without reasonable purpose.

h. Watering of residential, commercial, industrial, and governmental outdoor irrigation from 9:00 a.m. to 4:00 p.m. except for a short duration, not to exceed 3 minutes per station, for the limited purpose of testing or making repairs to the irrigation system. Agricultural customers are exempt from this irrigation schedule, but must comply with agricultural irrigation schedules determined by the District (currently a 3 day/week watering schedule is in effect).

i. Running of water or spraying of water onto other properties.

j. Watering or irrigating of lawn, landscape or other vegetated area with potable water using a landscape irrigation system or a watering device that is not continuously attended for more than ten (10) minutes watering per day per station. This rule does not apply during the establishment period, as determined by the District, for new landscaping.

k. For laundry purposes by hotels, motels and other commercial lodging establishments, except where customers are given the option of not having towels and linens laundered daily through the prominent display of written notice of such option in each bathroom using clear and easily understood language.

l. Through the installation of single pass cooling systems in buildings requesting new water service.

m. Through the installation of non-recirculating water systems in new commercial conveyor car wash and new commercial laundry systems.

n. Through the use of non-water conserving dish wash spray valves by food preparation establishments, such as restaurants and cafes.

o. Through a commercial conveyor car wash operating without a re-circulating water system, or without first securing a waiver of this requirement from the Director.

8.8 CATASTROPHIC SUPPLY INTERRUPTION

A water shortage emergency could be the result of a catastrophic event such as result of drought, failures of transmission facilities, a regional power outage, earthquake, flooding, supply contamination from chemical spills, or other adverse conditions. These emergencies and the District's method for handling them are described below.

8.8.1 Earthquakes or Other Natural Disasters

The District is located in an earthquake zone. In the event of an earthquake or natural disaster, the District has the potential of losing its imported water supply. If such a loss occurs, the District could temporarily increase its groundwater production to meet water demand until the imported water supply facilities were repaired and the supply restored. In the event of a prolonged loss of imported water, the District could implement their established Water Shortage Plan from the Rules and Regulations to substantially reduce demands until supply is restored, as discussed below.

8.8.2 Contamination

Contamination of water supply can result from a number of different events including a water main break, cross-connection condition, water source pollution, or covert action. Water supplies for the District are generally of good quality and no foreseeable permanent contamination issues are anticipated. In the event of a toxic spill or major contamination, the District would isolate the problem and reduce the impact to the water supply. Once the problem has been isolated, the contamination would be cleaned up using chlorination or other necessary procedures and the water supply returned to service as soon as possible. In the meantime, alternative supply would be utilized to meet demand. Implementation of additional demand management measures could also be utilized if the outage is anticipated to be of longer duration.

8.8.3 Emergency Power Outage

In the event of a regional power outage, the District would follow the procedures outlined in their Emergency Procedures Manual (EPM) Section VII. The District's EPM identifies various levels of emergencies and provides examples of actions for a number of given emergencies, including power failure. Standby generators are available at each of the District's well and pump station sites to maintain operation should an interruption of power occur. Section IX of the EPM lists all of the stationary and mobile generators located at the various District facilities, with model numbers, kilowatt rating, and fuel tank capacity. In addition, the District would implement the procedures outlined in the

Rules and Regulations regarding water shortages (see Appendix G) which includes actions for any event which results in loss of supply.

8.9 MINIMUM SUPPLY NEXT THREE YEARS

The UWMP Act requires that water agencies provide an estimate of the minimum water supply available during each of the next three water years, 2016, 2017, and 2018. Table 8-4A shows the minimum water supply (imported water and recycled water) availability as estimated by Calleguas in their Draft 2015 UWMP for their water service area in 2016, 2017, and 2018. In making these estimates, Calleguas assumed that Metropolitan would continue a Level 3 WSAP allocation (15% cutback) through FY 2016 and assumed a Level 4 WSAP allocation (20% cutback) for FY 2017 and FY 2018, conservatively assuming that drought conditions would persist.

However, these estimates now appear to be even more conservative as the Metropolitan Board of Directors reduced the WSAP to a Level 2 on May 10, 2016, which is a 10% reduction in imported water deliveries, effective immediately, due to lower demands achieved through the region's water saving efforts and improved supply conditions, particularly in Northern California; and declared there would be no WSAP set forth for FY 2017.

Based on the minimum supply projections made by Calleguas in their 2015 UWMP, minimum water supply projections for VCWWD No. 1 are shown in Table 8-4. The small decrease in imported water supply estimated for VCWWD No. 1 in 2017 and 2018 (in going to an assumed worst-case 20% Level 4 reduction) is made up by the District in expanding the recycled water system from approximately 600 AFY in 2016 to 1,100 in 2017.

The District is planning the Moorpark Desalter Project, which is a groundwater production and treatment system that could provide up to 5,000 AFY of potable water for customers in the District's water service area by the end of 2018; as such, it is conservatively not included as a supply for 2018 in Table 8-4, but would be available in the next year (2019).

Table 8-4A: Minimum Supply Next Three Years for Calleguas WSA (AFY)

	2016	2017	2018
Available Water Supply	91,349	88,741	88,741

Table 8-4: Minimum Supply Next Three Years for VCWWD No. 1 WSA (AFY)

	2016	2017	2018
Available Water Supply	10,100	10,200	10,200

9 DEMAND MANAGEMENT MEASURES

The goal of the Demand Management Measures (DMM) section in a UWMP is to provide a comprehensive description of the water conservation programs that the District has implemented, is currently implementing, and plans to implement in order to meet its urban water use reduction targets. Calleguas implements many of the urban water conservation DMMs on behalf of its member agencies, including VCWWD No. 1.

9.1 DEMAND MANAGEMENT MEASURES FOR RETAIL AGENCIES

9.1.1 Water Waste Prevention Ordinances

The District has passed rules and regulations that prohibit water wasting. Specifically, the District has implement the following requirements:

Water Saving Devices: All new customers shall install and use the following water efficient plumbing fixtures:

a. Ultra-low-volume toilets (1.6 gallons per flush or less).
b. Low-flow shower heads (2.0 gallons per minute or less).

Water Waste Prohibited: No person shall use or permit the use of District water as follows:

a. Watering of turf, ornamental landscape, open ground crops and trees, in a manner or to an extent which allows water to run to waste.
b. In any manner such that the escape of water through leaks, breaks, or malfunctions within the water user's plumbing or distribution system occurs for any period of time beyond which such break or leak should reasonably have been discovered and corrected. It shall be presumed that a period of forty-eight hours after the water user discovers such leak, break, or malfunction, or receives notice from the District of such condition, whichever occurs first, is a reasonable time within which to correct such condition.
c. Using water to wash or clean a vehicle, including but not limited to washing automobiles, trucks, trailers, boats, or other types of mobile equipment, without the use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device. This subsection does not apply to any commercial car washing facility.
d. Operating any ornamental fountain, or similar structures, unless water for such is recycled for lawful reuse without substantial loss.
e. Washing down hard or paved surfaces, including but not limited to washing of sidewalks, walkways, driveways, parking lots or any other hard-surfaced areas by hose or flooding, except as otherwise necessary to prevent or eliminate conditions dangerous to the public health and safety or for other legitimate uses approved by the District, and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or

device, a low-volume high-press cleaning machine equipped to recycle any water used, or a low-volume high-pressure water broom.

f. Serving water in eating or drinking establishments, including but not limited to restaurants, hotels, cafés, bars or other public places where food or drinks are sold or served, to customers without first being expressly requested by the customer.

g. For any indiscriminate running of water or washing with water not otherwise prohibited above which is wasteful and without reasonable purpose.

h. Watering of residential, commercial, industrial, and governmental outdoor irrigation from 9:00 a.m. to 4:00 p.m. except for a short duration, not to exceed 3 minutes per station, for the limited purpose of testing or making repairs to the irrigation system. Agricultural customers are exempt from this irrigation schedule, but must comply with agricultural irrigation schedules determined by the District (currently a 3 day/week watering schedule is in effect).

i. Running of water or spraying of water onto other properties.

j. Watering or irrigating of lawn, landscape or other vegetated area with potable water using a landscape irrigation system or a watering device that is not continuously attended for more than ten (10) minutes watering per day per station. This rule does not apply during the establishment period, as determined by the District, for new landscaping.

k. For laundry purposes by hotels, motels and other commercial lodging establishments, except where customers are given the option of not having towels and linens laundered daily through the prominent display of written notice of such option in each bathroom using clear and easily understood language.

l. Through the installation of single pass cooling systems in buildings requesting new water service.

m. Through the installation of non-recirculating water systems in new commercial conveyor car wash and new commercial laundry systems.

n. Through the use of non-water conserving dish wash spray valves by food preparation establishments, such as restaurants and cafes.

o. Through a commercial conveyor car wash operating without a re-circulating water system, or without first securing a waiver of this requirement from the Director.

9.1.2 Metering

The District maintains water meters on all residential, commercial, industrial and municipal connections to the District's water distribution system. The District has an aggressive meter replacement program. Meters are re-built on a multi-year cycle to ensure accuracy and proper functioning. The District's water system is fully metered. Therefore, the District completes annual checks on the accuracy and operation of production meters by either recalibrating and reinstalling, or by replacing meters that do not fall within the required operating range of AWWA standards.

9.1.3 Conservation Pricing

The District has a tiered rate structure for water service within its service area. The tiered rate structure does not encourage high water use.

9.1.4 Public Education and Outreach

Ventura County Public Works Agency Water and Sanitation Department staff maintains a website (www.SlowYourH2O.org) that provides information regarding:

- Methods to reduce water use;
- Water use restrictions;
- Rules and regulations including fines associated with violation of watering restrictions; and
- Tips regarding water use and conservation

In addition, Calleguas maintains a website (www.calleguas.com) containing conservation information. Calleguas has made water conservation a priority and as such they have long offered rebate programs for water conservation devices. Over the years water saving technologies have advanced in both quality and effectiveness and these advancements have necessitated changes in the way they run rebate programs. Customer rebate records obtained from Calleguas showing total rebates paid to customers within the District's WSA for the period from 2010 to 2015 broken down by commercial, industrial and institutional (CII) customers and residential customers for both turf removal rebates and device rebates (low-flush toilets, clothes washers, etc.) are shown in Table 9-1A. These rebates are a combination of both Calleguas and Metropolitan funds.

Table 9-1A: Rebates Paid to VCWWD No. 1 Customers (2010-2015)	
CII Devices	$168,929
CII Turf	$147,270
Residential Devices	$777,252
Residential Turf	$553,077

Metropolitan and Calleguas continue to try and find the best way to get these devices and rebates to the customers and end users. Currently, the conservation program is undergoing a makeover. Calleguas expects to have a more streamlined approach to pass rebates and rebate information on to customers in the future.

Calleguas provides the following additional resource links that includes water conservation, rebate programs, water saving incentives and other information sources related to water conservation

Education: http://mwdh2o.com/mwdh2o/pages/education/h2o/h2o.html
Rebates: http://socalwatersmart.com/
Innovative Conservation Program: http://www.bewaterwise.com/icp.html
California Native Plant Society: http://www.cnps.org/
Gardening Classes: http://www.bewaterwise.com/training01.html:
WaterSaving:http://www.mwdh2o.com/mwdh2o/pages/yourwater/cpp/cpp.html

9.1.5 Programs to Assess and Manage Distribution System Real Loss

The District is currently using a wide range of operational policies and practices to ensure the efficient use of its water supply. The District conducts monthly monitoring of all water services. In addition, daily inspection of all facilities such as pump stations, wells, reservoirs, valve vaults, etc., is completed. On an annual basis, visual inspection of all easements and pipeline alignments is accomplished.

The District accomplishes water audits and leak detection through various District activities focused on finding and correcting water losses. Field crews visually survey the system as they travel the throughout the district service area on a daily basis. The District's telemetry system also enhances the ability to locate and correct large leaks expeditiously. Leak monitoring is accomplished by all operations field personnel. In the event of a leak, prompt response and investigation is communicated to the District by customers and other entities.

The District works diligently to confirm that the appropriate parties are billed for water loss resulting from damaged fire hydrants, air-vacuums, blow offs, dig-ins, etc. In addition, monthly monitoring of "unaccounted-for" water losses assists in identifying leaks. The AWWA Water Audit Software Version 5.0 was used to quantify distribution water loss for the District for 2015 and a water loss volume of 144 AFY was calculated for the domestic water system, which is 1.5% of the water supplied assuming 1.25% of authorized consumption (119 AFY) was unbilled and unmetered water use, i.e. water typically used for fighting fires, flushing water mains, conducting fire flow tests, etc.

The District implements programs on leak detection and repair, metering, meter replacement, system flushing, reservoir cleaning and maintenance, valve maintenance and mapping. The District proposes to review distribution system operational procedures and maintenance practices with appropriate field and administrative staff. These measures will ensure system reliability. The hydrant flushing program will be reviewed for its scope and timing, as well as to determine how much water is lost during flushing.

9.1.6 Water Conservation Program Coordination and Staffing Support

The District has designated the Water Superintendent responsible for the position of Water Conservation Coordinator. The District continues to be involved in water conservation programs and coordinates with Calleguas and MWD on an as needed basis.

9.2 IMPLEMENTATION OVER THE PAST FIVE YEARS

The District is a member of the California Urban Water Conservation Council (CUWCC). The District's 2011 and 2012 Best Management Practice (BMP) annual reports are included in Appendix H to document examples of implementation of DMMs over the past 5 years.

9.3 PLANNED IMPLEMENTATION TO ACHIEVE WATER USE TARGETS

Through the implementation of District water conservation ordinances and measures, total per-capita District water use (including agricultural water use) has significantly dropped from 314.4 gpcd in 2005 to 257.4 in 2010 to 237.4 in 2015 (a reduction of 24.4% relative to 2005). Many of the water conservation measures already implemented and being implemented by District customers such as turf removal, conversion to drought resistance landscapes, conversion to more efficient irrigation systems and ET-based irrigation controllers, retrofits to high efficiency clothes washers and toilets, implementation of weather-based irrigation controllers, etc. will have permanent effects on water use (reduction) in the future.

Lower per-capita water use is projected for new housing development (relative to existing housing and development) due to new building codes and landscape ordinances. California's newly adopted green building code will have a direct impact on home building and water conservation in the State. The new code aims to cut indoor water consumption by at least 20%, primarily through more efficient indoor water fixtures. For a three-bedroom house, the saving is estimated to be about 10,000 gallons of water per year, on average.

The California Green Building program also includes outdoor water conservation by reducing the area devoted to high-irrigation lawns and plants, emphasizing natural drought-tolerant plantings, and installing irrigation controls that respond to local weather conditions. This is consistent with the new Model Water Efficient Landscape Ordinance (MWELO), which was adopted by the State on July 15, 2015 and was adopted by the City of Moorpark (City Ordinance 10-383, Chapter 15.23) and by Ventura County on December 1, 2015, by default.

9.4 MEMBERS OF THE CALIFORNIA URBAN WATER CONSERVATION COUNCIL

On July 30, 1991, the District elected to become Signatory to the Memorandum of Understanding (MOU) Regarding Best Management Practices (BMPs) for Urban Water Conservation with the California Urban Water Conservation Council (CUWCC). As Signatory to the MOU, the District has committed to a good faith effort in implementing cost-effective BMPs. "Implementation" means achieving and maintaining the staffing, funding, and in general, the priority levels necessary to achieve the level of activity called for in each BMP's definition, and to satisfy the commitment by the signatories to use good faith efforts to optimize savings from implementing BMPs as described in the MOU.

A BMP as defined in the MOU is a "practice for which sufficient data are available from existing water conservation practices to indicate that significant conservation or conservation related benefits can be achieved; that the practice is technically and economically reasonable and not environmentally or socially unacceptable; and that the practice is not otherwise unreasonable for most water agencies to carry out."

The District's 2011 and 2012, Best Management Practice (BMP) annual reports are included in Appendix H to document examples of implementation of DMMs over the past 5 years. The submitted reports include documentation from the CUWCC that the District has met the Memorandum of Understanding (MOU) coverage requirements and is in full compliance with the MOU.

10 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

10.1 INCLUSION OF ALL 2015 DATA

The District's 2015 UWMP consists of water use and planning data for the entire year of 2015. The District is reporting on a 2015 calendar year basis.

10.2 NOTICE OF PUBLIC HEARING

The District will hold a public hearing prior to adopting the 2015 UWMP. The public hearing will provide an opportunity for the public to provide input to the plan before it is adopted. The District will consider all public input.

There are two audiences to be noticed for the public hearing; cities and counties, and the public.

10.2.1 Notice to Cities and Counties

CWC 10621

(b) Every urban water supplier required to prepare a plan shall… at least 60 days prior to the public hearing on the plan … notify any city or county within which the supplier provides waters supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.

CWC 10642

…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…

VCWWD No. 1 supplies water to the City of Moorpark and to unincorporated area of Ventura County as shown in Table 10-1.

Table 10-1: Notification to Cities and Counties

City Name	60 Day Notice	Notice of Public Hearing
Moorpark	☑	☑
County Name	**60 Day Notice**	**Notice of Public Hearing**
Ventura County	☑	☑

The City of Moorpark and Ventura County will be notified that VCWWD No. 1 will be reviewing the UWMP and considering amendments to the Plan. This notice will be sent at least 60 days prior to the public hearing. VCWWD No. 1 will provide notice of the time and place of the public hearing.

10.2.1 Notice to the Public

CWC 10642

...Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection…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…

Government Code 6066

Publication of notice pursuant to this section shall be once a week for two successive weeks. Two publications in a newspaper published once a week or oftener, with at least five days intervening between the respective publication dates not counting such publication dates, are sufficient. The period of notice commences upon the first day of publication and terminates at the end of the fourteenth day, including therein the first day.

The District's public notice of the public hearing was published in a local newspaper on May 31 and June 7, 2016. A copy of the proof of publication is included in Appendix C.

10.3 PUBLIC HEARING AND ADOPTION

As part of the public hearing, the District will provide information on their baseline values, water use targets, and implementation plan required in the Water Conservation Act of 2009. The public hearing on the UWMP will take place before the adoption of the UWMP, which will allow the District the opportunity to modify the UWMP in response to public input before adoption. The District will formally adopt the UWMP before submitting the UWMP to DWR. A copy of the District's adoption resolution is included in Appendix C.

10.4 PLAN SUBMITTAL

The District's 2015 UWMP will be submitted to DWR within 30 days of adoption and by July 1, 2016. UWMP submittal will be done electronically through WUEdata, an online submittal tool. After the UWMP has been submitted, DWR will review the plan and make a determination as to whether or not the UWMP addresses the requirements of the CWC. The DWR reviewer will contact the water supplier as needed during the review process. Upon completion of the Plan review, DWR will issue a letter to the agency with the results of the review.

Not later than 30 days after adoption, the District will submit a CD or hardcopy of the adopted 2015 UWMP to the California State Library.

10.5 PUBLIC AVAILABILITY

Not later than 30 days after filing a copy of its plan with DWR, the District will make the plan available for public review during normal business hours by placing a copy of the

UWMP at the front desk of the District's office, and by posting the UWMP on the District's website for public viewing.

10.6 AMENDING AN ADOPTED UWMP

If the District amends the adopted UWMP, each of the steps for notification, public hearing, adoption, and submittal will also be followed for the amended plan.

APPENDICES

APPENDIX A

UWMP Act as amended with SBX7-7

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

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

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.

Senate Bill No. 7

CHAPTER 4

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

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

LEGISLATIVE COUNSEL'S DIGEST

SB 7, Steinberg. Water conservation.

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

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

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

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

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

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

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

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

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION

Chapter 1. General Declarations and Policy

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(k) Advance regional water resources management.

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

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

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

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

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

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

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

Chapter 2. Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(A) Metered.

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

(C) Treated to a minimum tertiary level.

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

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

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

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

(2) The use of recycled water.

(3) The desalination of brackish groundwater.

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

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

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

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

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

Chapter 3. Urban Retail Water Suppliers

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

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

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

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

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

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

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

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

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

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

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

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

(A) Consider climatic differences within the state.

(B) Consider population density differences within the state.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(d) (1) Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.

(2) This part shall not be construed or enforced so as to interfere with the requirements of Chapter 4 (commencing with Section 113980) to Chapter 13 (commencing with Section 114380), inclusive, of Part 7 of Division 104 of the Health and Safety Code, or any requirement or standard for the protection of public health, public safety, or worker safety established by federal, state, or local government or recommended by recognized standard setting organizations or trade associations.

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

(1) Through an urban wholesale water supplier.

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

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

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

(5) By hydrologic region.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chapter 4. Agricultural Water Suppliers

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

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

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

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

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

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

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

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

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

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

(B) Conjunctive use of groundwater.

(C) Appropriate increase of groundwater recharge.

(D) Reduction in problem drainage.

(E) Improved management of environmental resources.

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

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

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

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

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

(9) Automate canal control structures.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chapter 5. Sustainable Water Management

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

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

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

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

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

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

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

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

Chapter 6. Standardized Data Collection

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

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

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

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

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

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

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

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

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

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

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

Chapter 8. Quantifying Agricultural Water Use Efficiency

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

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

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

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

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

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

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

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

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

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

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

(i) Compliance on an individual basis.

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

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

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

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

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

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

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

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

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

PART 2.8. AGRICULTURAL WATER MANAGEMENT PLANNING

Chapter 1. General Declarations and Policy

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chapter 2. Definitions

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

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

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

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

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

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

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

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

Chapter 3. Agricultural Water Management Plans

Article 1. General Provisions

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

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

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

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

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

Article 2. Contents of Plans

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

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

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

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

(1) Size of the service area.

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

(3) Terrain and soils.

(4) Climate.

(5) Operating rules and regulations.
(6) Water delivery measurements or calculations.
(7) Water rate schedules and billing.
(8) Water shortage allocation policies.

(b) Describe the quantity and quality of water resources of the agricultural water supplier, including all of the following:
(1) Surface water supply.
(2) Groundwater supply.
(3) Other water supplies.
(4) Source water quality monitoring practices.
(5) Water uses within the agricultural water supplier's service area, including all of the following:
(A) Agricultural.
(B) Environmental.
(C) Recreational.
(D) Municipal and industrial.
(E) Groundwater recharge.
(F) Transfers and exchanges.
(G) Other water uses.
(6) Drainage from the water supplier's service area.
(7) Water accounting, including all of the following:
(A) Quantifying the water supplier's water supplies.
(B) Tabulating water uses.
(C) Overall water budget.
(8) Water supply reliability.

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

(d) Describe previous water management activities.

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

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

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

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

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

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

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

Article 3. Adoption and Implementation of Plans

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

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

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

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

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

(1) The department.

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

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

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

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

(6) The California State Library.

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

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

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

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

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

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

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

Chapter 4. Miscellaneous Provisions

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

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

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

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

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

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

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

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

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

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APPENDIX B

DWR UWMP Checklist Organized by Subject

(Appendix F from DWR UWMP Guidebook)

UWMP Checklist

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

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

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

Checklist Arranged by Water Code Section

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

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

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

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

10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.5.2	
10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.5.2.2	
10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3 and 6.5.4	
10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Section 6.5.4	
10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.5.4	
10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.5.5	
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	
10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.1	
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.3	
10635(b)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	
10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	Plan Preparation	Section 2.5.2	

10642	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Plan Adoption, Submittal, and Implementation	Sections 10.2.2, 10.3, and 10.5	
10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.2.1	
10642	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	
10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4.3	
10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Sections 10.4.1 and 10.4.2	
10645	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5	

Checklist Arranged by Subject

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

	agencies, and relevant public agencies, to the extent practicable.			
10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	Plan Preparation	Section 2.5.2	
10631(a)	Describe the water supplier service area.	System Description	Section 3.1	
10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3	
10631(a)	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	
10631(a)	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.4	
10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Sections 3.4 and 5.4	
10631(e)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2	
10631(e)(3)(A)	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.3	
10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5	
10608.20(b)	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	
10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5 and App E	
10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply if the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.7.2	
10608.24(a)	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	
10608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary	Baselines and Targets	Section 5.8.2	

	events, it shall provide the basis for, and data supporting the adjustment.			
10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	Section 5.1	
10608.40	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	
10631(b)	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	
10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2	
10631(b)(1)	Indicate whether a groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.2.2	
10631(b)(2)	Describe the groundwater basin.	System Supplies	Section 6.2.1	
10631(b)(2)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	Section 6.2.2	
10631(b)(2)	For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.	System Supplies	Section 6.2.3	
10631(b)(3)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.2.4	
10631(b)(4)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Sections 6.2 and 6.9	
10631(d)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	Section 6.7	
10631(g)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years.	System Supplies	Section 6.8	
10631(h)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6	

10631(j)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) – if any - with water use projections from that source.	System Supplies	Section 2.5.1	
10631(j)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	Section 2.5.1	
10633	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.1	
10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.5.2	
10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.5.2.2	
10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3 and 6.5.4	
10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Section 6.5.4	
10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.5.4	
10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.5.5	
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	
10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.4	
10631(c)(1)	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.1	

10631(c)(1)	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.2	
10631(c)(2)	For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.	Water Supply Reliability Assessment	Section 7.1	
10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.1	
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.3	
10632(a) and 10632(a)(1)	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.1	
10632(a)(2)	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency.	Water Shortage Contingency Planning	Section 8.9	
10632(a)(3)	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.8	
10632(a)(4)	Identify mandatory prohibitions against specific water use practices during water shortages.	Water Shortage Contingency Planning	Section 8.2	
10632(a)(5)	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.4	
10632(a)(6)	Indicated penalties or charges for excessive use, where applicable.	Water Shortage Contingency Planning	Section 8.3	
10632(a)(7)	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.6	
10632(a)(8)	Provide a draft water shortage contingency resolution or ordinance.	Water Shortage Contingency Planning	Section 8.7	
10632(a)(9)	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.5	

10631(f)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Sections 9.2 and 9.3	
10631(f)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	Sections 9.1 and 9.3	
10631(i)	CUWCC members may submit their 2013-2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.	Demand Management Measures	Section 9.5	
10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	
10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.1	
10621(d)	Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.	Plan Adoption, Submittal, and Implementation	Sections 10.3.1 and 10.4	
10635(b)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	
10642	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Plan Adoption, Submittal, and Implementation	Sections 10.2.2, 10.3, and 10.5	
10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.2.1	
10642	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	
10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4.3	

10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Sections 10.4.1 and 10.4.2	
10645	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5	

APPENDIX C

Notice of Public Hearing and Resolution for Plan Adoption

VENTURA COUNTY WATERWORKS DISTRICTS

Representing: Ventura County Waterworks District Nos. 1, 16, 17, 19, and 38

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
JEFF PRATT
Agency Director

Water & Sanitation Department
David J. Sasek
Director

Eric Keller
Operations and Maintenance

Susan Pan
Planning, Design, Construction, and Development

Jozi Scholl
Customer Service, Billing, and Administration

April 11, 2016

David Bobardt, P.E.
Community Development Director
City of Moorpark – Community Development
799 Moorpark Avenue
Moorpark, CA 93021

Subject: Ventura County Waterworks District No. 1 2015 Urban Water Management Plan Preparation

Dear Mr. Bobardt:

This letter serves as notification that the Ventura County Waterworks District No. 1 is currently updating its Urban Water Management Plan (UWMP) in accordance with the Urban Water Management Planning Act of the California Water Code. The Act requires urban water suppliers supplying more than 3,000 acre feet of water annually or providing water to more than 3,000 customers to update their UWMP every five years.

A draft of Ventura County Waterworks District No. 1 2015 UWMP will be available for review prior to the public hearing, which is tentatively scheduled for June 14, 2016. Please contact us if you would like to have a draft sent to you when available.

If you would like more information or have any questions, please contact Susan Pan at (805) 378-3025 or via email at susan.pan@ventura.org.

Sincerely,

Susan Pan

Susan Pan, P.E.
Deputy Director, Engineering Division
Water and Sanitation Department

CC: David Sasek, Water and Sanitation Department Director

VENTURA COUNTY WATERWORKS DISTRICTS

Representing: Ventura County Waterworks District Nos. 1, 16, 17, 19, and 38

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
JEFF PRATT
Agency Director

Water & Sanitation Department
David J. Sasek
Director

Eric Keller
Operations and Maintenance

Susan Pan
Planning, Design, Construction, and Development

Jozi Scholl
Customer Service, Billing, and Administration

April 11, 2016

Sean Corrigan, P.E.
Public Works Director
City of Moorpark – Public Works Department
627 Fitch Avenue
Moorpark, CA 93021

Subject: Ventura County Waterworks District No. 1 2015 Urban Water Management Plan Preparation

Dear Mr. Corrigan:

This letter serves as notification that the Ventura County Waterworks District No. 1 is currently updating its Urban Water Management Plan (UWMP) in accordance with the Urban Water Management Planning Act of the California Water Code. The Act requires urban water suppliers supplying more than 3,000 acre feet of water annually or providing water to more than 3,000 customers to update their UWMP every five years.

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Sincerely,

Susan Pan

Susan Pan, P.E.
Deputy Director, Engineering Division
Water and Sanitation Department

CC: David Sasek, Water and Sanitation Department Director

VENTURA COUNTY WATERWORKS DISTRICTS

Representing: Ventura County Waterworks District Nos. 1, 16, 17, 19, and 38

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
JEFF PRATT
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David J. Sasek
Director

Eric Keller
Operations and Maintenance

Susan Pan
Planning, Design, Construction, and Development

Jozi Scholl
Customer Service, Billing, and Administration

April 11, 2016

Kim Prillhart, P.E.
Planning Director
Ventura County Resource Management Agency – Planning Division
800 S. Victoria Avenue #1740
Ventura, CA 93009

Subject: Ventura County Waterworks District No. 1 2015 Urban Water Management Plan Preparation

Dear Ms. Prillhart:

This letter serves as notification that the Ventura County Waterworks District No. 1 is currently updating its Urban Water Management Plan (UWMP) in accordance with the Urban Water Management Planning Act of the California Water Code. The Act requires urban water suppliers supplying more than 3,000 acre feet of water annually or providing water to more than 3,000 customers to update their UWMP every five years.

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Sincerely,

Susan Pan

Susan Pan, P.E.
Deputy Director, Engineering Division
Water and Sanitation Department

CC: David Sasek, Water and Sanitation Department Director

VENTURA COUNTY WATERWORKS DISTRICTS

Representing: Ventura County Waterworks District Nos. 1, 16, 17, 19, and 38

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
JEFF PRATT
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Water & Sanitation Department
David J. Sasek
Director

Eric Keller
Operations and Maintenance

Susan Pan
Planning, Design, Construction, and Development

Jozi Scholl
Customer Service, Billing, and Administration

April 11, 2016

Susan Mulligan, P.E.
General Manager
Calleguas Municipal Water District
2100 E. Olsen Road
Thousand Oaks, CA 91360

Subject: Ventura County Waterworks District No. 1 2015 Urban Water Management Plan Preparation

Dear Ms. Mulligan:

This letter serves as notification that the Ventura County Waterworks District No. 1 is currently updating its Urban Water Management Plan (UWMP) in accordance with the Urban Water Management Planning Act of the California Water Code. The Act requires urban water suppliers supplying more than 3,000 acre feet of water annually or providing water to more than 3,000 customers to update their UWMP every five years.

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Sincerely,

Susan Pan

Susan Pan, P.E.
Deputy Director, Engineering Division
Water and Sanitation Department

CC: David Sasek, Water and Sanitation Department Director

VENTURA COUNTY WATERWORKS DISTRICTS

Representing: Ventura County Waterworks District Nos. 1, 16, 17, 19, and 38

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
JEFF PRATT
Agency Director

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David J. Sasek
Director

Eric Keller
Operations and Maintenance

Susan Pan
Planning, Design, Construction, and Development

Jozi Scholl
Customer Service, Billing, and Administration

April 11, 2016

Jeff Pratt, P.E.
Executive Officer
Fox Canyon Groundwater Management Agency
800 S. Victoria Avenue
Ventura, CA 93009

Subject: Ventura County Waterworks District No. 1 2015 Urban Water Management Plan Preparation

Dear Mr. Pratt:

This letter serves as notification that the Ventura County Waterworks District No. 1 is currently updating its Urban Water Management Plan (UWMP) in accordance with the Urban Water Management Planning Act of the California Water Code. The Act requires urban water suppliers supplying more than 3,000 acre feet of water annually or providing water to more than 3,000 customers to update their UWMP every five years.

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Sincerely,

Susan Pan

Susan Pan, P.E.
Deputy Director, Engineering Division
Water and Sanitation Department

CC: David Sasek, Water and Sanitation Department Director

Certificate of Publication

Ad #1115167

In Matter of Publication of:

Public Notice

State of California)
))§
County of Ventura)

I, **Darleshia Warner**, hereby certify that the **Ventura County Star Newspaper** has been adjudged a newspaper of general circulation by the Superior Court of California, County of Ventura within the provisions of the Government Code of the State of California, printed in the City of Camarillo, for circulation in the County of Ventura, State of California; that I am a clerk of the printer of said paper; that the annexed clipping is a true printed copy and publishing in said newspaper on the following dates to wit:

May 31, 2016 & June 7, 2016

I, Darleshia Warner certify under penalty of perjury, that the foregoing is true and correct.

Dated this June 7, 2016; in Camarillo, California, County of Ventura.

Darleshia Warner

Public Notices

NOTICE OF PUBLIC HEARING TO RECEIVE INPUT ON THE DRAFT YEAR 2015 URBAN WATER MANAGEMENT PLAN FOR VENTURA COUNTY WATERWORKS DISTRICT NO. 1

NOTICE IS HEREBY GIVEN that pursuant to Government code section 6066, a hearing will be held June 14, 2016 at 10:30 a.m. in the Board of Supervisors Hearing Room, Administration Building, Government Center, 800 South Victoria Avenue, Ventura, California, concerning the adoption of 2015 Urban Water Management Plan for Ventura County Waterworks District No. 1 (Moorpark).

A copy of the Urban Water Management Plan is available for review at the office of Ventura County Waterworks District No. 1, 6767 Spring Road, Moorpark, California, and at the Moorpark Public Library, 699 Moorpark Avenue, Moorpark, California, or can be viewed on the County of Ventura WEBSTE: http://vcpublicworks.org/water-sanitation-department/water-and-sanitation-projects

All persons interested in the

Public Notices

subject matter are invited to appear before the Board of Supervisors at the above stated date and time.

Further information can be obtained by calling the Waterworks District No. 1 office at (805) 378-3020.

Michael Powers
Clerk of the Board of Supervisors

By /s/ Lori Gaines
Deputy Clerk of the Board
5/31, 6/7/16
CNS-2885340#
VENTURA COUNTY STAR
Ad No.1115167

A000004136794

Public Notices

: that all information tatement is true and (A registrant who information as true erial matter pursuant on 17913 of Business essions Code that the it knows to be false of a misdemeanor ole by a fine not to one thousand dollars

dia R. Morrison, Manember; N & R Proper-

ATEMENT WAS FILED E COUNTY CLERK OF A COUNTY ON 5-26-16 · In accordance with ion (a) of Section fictitious name statenerally expires at the five years from the which it was filed in e of the county clerk, as provided in subsection 17920 where s 40 days after any n the facts set forth atement pursuant to 17913 other than a n residence address ered owner. A NEW US BUSINESS NAME NT MUST BE FILED THE EXPIRATION. The this statement does elf authorize the use state of a fictitious name in violation of s of another under State, or Common e Section 14411 ET P Code).
May 31, June 7, 14, 21, lo.1114541

ICE OF PETITION) ADMINISTER OF: Charles William Bevans : 56-2016-00480380-PR-LA-OXN

heirs, beneficiaries, contingent creditl persons who may e be interested in r estate, or both, of William Bevans
ON FOR PROBATE has l by Dennis Bevans in rior Court of California of Ventura.
TION FOR PROBATE that Dennis Bevans ated as personal repve to administer the the decedent.
ETITION requests to administer the der the Independent ration of Estates authority will allow onal representative many actions without ining court approval taking certain very t actions, however, onal representative quired to give notice sted persons unless e waived notice or d to the proposed The independent ation authority will d unless an interested files an objection to on and shows good y the court should

Probate

a contingent creditor of the decedent, you must file your claim with the court and mail a copy to the personal representative appointed by the court within the later of either four months from the date of first issuance of letters to a general personal representative as defined in section 58(b) of the California Probate Code; or 60 days from the date of mailing or personal delivery to you of a notice under section 9052 of the California Probate Code.
Other California statutes and legal authority may affect your rights as a creditor. You may want to consult with an attorney knowledgeable in California law.
YOU MAY EXAMINE the file kept by the court. If you are a person interested in the estate, you may file with the court a formal Request for Special Notice (form DE-154) of the filing of an inventory and appraisal of estate assets or of any petition or account as provided in Probate Code section 1250. A Request for Special Notice form is available from the court clerk.
Attorney for Petitioner/Petitioner: Howard S. Bodenheimer, 15760 Ventura Blvd., Ste., 700, Encino, Ca 91436
Ph. 818-995-9434
Publish: May 24, 31, June 7, 2016 Ad No.1102611

Public Notices

NOTICE OF PUBLIC HEARING TO RECEIVE INPUT ON THE DRAFT YEAR 2015 URBAN WATER MANAGEMENT PLAN FOR VENTURA COUNTY WATERWORKS DISTRICT NO. 1

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All persons interested in the subject matter are invited to appear before the Board of Supervisors at the above stated date and time.

Further information can be obtained by calling the Waterworks District No. 1 office at (805) 378-3020.

Michael Powers
Clerk of the Board of Supervisors

By /s/ Lori Gaines
Deputy Clerk of the Board
5/31, 6/7/16
CNS-2885340#
VENTURA COUNTY STAR
Ad No.1115167

Career Care Institute, Inc. is in the process of reaffirming its accreditation with the Commission of the Council on Occupational Education (COE). Any persons wishing to make comments should write to:

Executive Director
Council on Occupational Education
7840 Roswell Road
Building 300, Suite 325
Atlanta, GA 30350

Persons making comments must provide their name and mailing address.
Publsih: May 31, June 1, 2, 3, 4, 5, 6, 2016 Ad No.1112912

NOTICE OF PUBLIC SALE
Pursuant to the California Self-Service Storage Facility Act (B&P Code 21700 et seq.) the undersigned will sell at public auction, on 06/15/2016, personal property including but not limited to furniture, clothing, tools, art, music/video production equipment, commercial shelving and/or other household items located at:
PUBLIC STORAGE
PROPERTY 20627 @ 9:30 AM
4568 E. LOS ANGELES AVE.
SIMI VALLEY, CA 93063
805-526-9013
STORED BY THE FOLLOWING PERSONS:
C011 Steve Apperson
C012 Christopher Mills
C090 jean regis
C266 Dillion Rowsell
D011 KEVIN SCOTT
D143 Chantelle Sipos
D217 joesph lautman
D221 Genia Crews
D224 Genia Crews
E012 Jorge Contreras
PUBLIC STORAGE
PROPERTY 24322 @ 10:30 AM
2167 FIRST ST.
SIMI VALLEY, CA 93065
805-526-1532
STORED BY THE FOLLOWING PERSONS:
A044 stacy persky
B035 David Mullen
C026 Karl Hawkins
C051 Mark Lyon
E045 Lillian Ruiz
F011 David Oman
F019 Warren Brooker
F052 Javontay Lindsey
F060 Patrick Russo
PUBLIC STORAGE
PROPERTY 26607 @ 11:30 AM
120 WEST EASY ST.
SIMI VALLEY, CA 93065
805-522-9429
STORED BY THE FOLLOWING PERSONS:
054 Darien Cano
166 Lesley Cukier
273 Donna Flores
302 Lorraine Hatcher
370 Janice Henry c/o Dylan Riley
397 Maricela Torres
464 Phillip Russell
PUBLIC STORAGE
PROPERTY 25753 @ 12:30 PM
875 W. LOS ANGELES AVE.
MOORPARK, CA 93021
805-553-9974
STORED BY THE FOLLOWING PERSONS:
755 Zhixian Zhong
824 Christopher Tunnell
924 Julie Marino
All sales are subject to prior cancellation. Terms, rules and regulations available at sale. Dated this 31st of May 2016 and the 7th of June 2016 by PS Orangeco, Inc., 701 Western Ave., Glendale, CA 91201, (818) 244-8080, Bond No. 5908365.
5/31, 6/7/16
CNS-2885479#
VENTURA COUNTY STAR
Ad No.1115183

NOTICE OF AVAILABILITY/ PUBLIC HEARING NOTICE
Draft Amendment to the Channel Islands Harbor Public Works Plan for the Fisherman's Wharf D evelopment (PWP)

All interested persons are invited to attend and be heard at a public hearing to be held by the VENTURA COUNTY Board of Supervisors on Tuesday, June 14, 2016, 11:30 a.m., in the Board of Supervisors Hearing Room of the County Government Center, Hall of Administration, 800 South Victoria Avenue, Ventura, on a Draft Amendment to the Channel Islands Harbor Public Works Plan for the Fisherman's Wharf Development (PWP).

ENVIRONMENTAL REVIEW: The County has considered environmental factors when preparing and evaluating this PWP Amendment for review by the California Coastal Commission under its certified regulatory program. Pursuant to state law, the Commission makes the final environmental determination.

DESCRIPTION: The proposed project requiring the amendment is the proposed Fisherman's Wharf Development at the corner of West Channel Islands Boulevard and South Victoria Avenue. The proposed 7th Amendment to the PWP is to allow for portions of the project that do not currently conform to the PWP, such as height and land use designation. The current PWP land use designation for the entire project location is Visitor Serving Harbor Oriented, which allows retail, commercial, hotels, and other visitor serving uses. The retail and commercial portion of the project, at the northern end of the property, may be replaced in part or as a whole, but will generally retain the size, height and character of the current Fisherman's Wharf, and are specifically allowed by the PWP. But, the southern portion of the project, which includes rental housing units, is not currently contemplated in the PWP, and is the subject of the proposed Amendment. The height limit for the residential portion of the project is also required to be increased to 55 feet.

Copies of the draft document are available from the Harbor Department offices, or on the County of Ventura website at http://channelislandsharbor.org/reports.htm.

If you have any questions regarding this matter, or want to be notified of the Commission's final decision, please contact the Harbor Department at 805 973 5950 or harboroutreach@ventura.org.
You can also sign up to receive automatic email notifications on all development matters in the Harbor here: http://channelislandsharbor.org/signup.html

If you challenge the action resulting from this notice in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Clerk of the Board at, or prior to, the public hearing.

NOTE: From time to time, hearings are cancelled or rescheduled; therefore, if you plan to attend this hearing and reside some distance from the Government Center, we advise that you call the Harbor Department the day before to confirm.
5/31/16
CNS-2886102#
VENTURA COUNTY STAR
Ad No.1115148

Public Notices

VENTURA COUNTY OFFICE OF EDUCATION
SCHOOL BUSINESS AND ADVISORY SERVICES
5189 Verdugo Way
Camarillo, CA 93012

Notice of Public Hearing
for the 2016-17 School District Budget

BOARD MINUTES
BOARD OF SUPERVISORS, COUNTY OF VENTURA, STATE OF CALIFORNIA

SUPERVISORS STEVE BENNETT, LINDA PARKS,
KATHY I. LONG, PETER C. FOY AND JOHN C. ZARAGOZA
June 14, 2016 at 10:30 a.m.

Public Hearing Regarding the Adoption of a Resolution for the 2015 Urban Water Management Plan; Ventura County Waterworks District No. 1, Moorpark; Supervisorial District No. 4. (Public Works Agency)

(X) All Board members are present, except Supervisor Foy is absent.

(X) The Board holds a public hearing.

(X) The following persons are heard: Susie Pan and David Sasek.

(X) The following document is submitted to the Board for consideration:
(X) PowerPoint Presentation: 2015 Urban Water Management Plan

(X) Upon motion of Supervisor Bennett, seconded by Supervisor Long, and duly carried, the Board hereby approves staff recommendations as stated in the Board letter.

I hereby certify that the annexed instrument is a true and correct copy of the document which is on file in this office.
Dated: 6/22/16
MICHAEL POWERS
Clerk of the Board of Supervisors
County of Ventura, State of California
By: _____
Deputy Clerk of the Board

By: _____
Brian Palmer
Chief Deputy Clerk of the Board

Item #26
6/14/16

RESOLUTION NO. 16-053

A RESOLUTION OF THE BOARD OF VENTURA COUNTY WATERWORKS DISTRICT NO. 1 ADOPTING THE 2015 URBAN WATER MANAGEMENT PLAN

WHEREAS, on January 1, 1983, the Urban Water Management Planning Act went into effect requiring preparation and update of Water Management Plans, by urban water purveyors serving a specified number of customers; and

WHEREAS, Ventura County Waterworks District (VCWD) No. 1 is required to comply with the requirements of the Act and must update its 2010 Urban Water Management Plan for its service area; and

WHEREAS, the Board of VCWD No. 1 continues to support water reclamation and conservation activities for VCWD No. 1; and

WHEREAS, the people served by VCWD No. 1 will benefit from the implementation of effective water reclamation and conservation programs that help to ensure a reliable water supply.

NOW, THEREFORE, BE IT RESOLVED that the Board of VCWD No. 1 adopts the 2015 Urban Water Management Plan for VCWD No. 1.

BE IT FURTHER RESOLVED that the Board of VCWD No. 1 declares its intent to continue its support of the water reclamation and conservation activities provided for in the 2015 Urban Water Management Plan for VCWD No. 1.

Upon motion of Supervisor Bennett, seconded by Supervisor Long, and duly carried, the Board hereby adopts the foregoing resolution on the 14th day of June, 2016.

By Linda Parks
Linda Parks, Chair
Board of Ventura County
Waterworks District No. 1

ATTEST: MICHAEL POWERS,
Clerk of the Board of Supervisors,
County of Ventura, State of California,

By Lori Burris
Deputy Clerk of the Board

APPENDIX D

Population Tool Worksheets for SBX7-7 Calculations

WUEdata - Ventura County Waterworks District No 01 - Moorpark

Sign Out

Please print this page to a PDF and include as part of your UWMP submittal.

Confirmation Information

Generated By	Water Supplier Name	Confirmation #	Generated On
Caitlin Bishop	Ventura County Waterworks District No 01 - Moorpark	2176053702	4/25/2016 8:31:17 AM

Boundary Information

Census Year	Boundary Filename	Internal Boundary ID
1990	ww01_sp.kml	1029
2000	ww01_sp.kml	1029
2010	ww01_sp.kml	1029
1990	ww01_sp.kml	1029
2000	ww01_sp.kml	1029
2010	ww01_sp.kml	1029

Baseline Period Ranges

10 to 15-year baseline period

Number of years in baseline period: 10

Year beginning baseline period range: 2000

Year ending baseline period range[1]: 2009

5-year baseline period

Year beginning baseline period range: 2004

Year ending baseline period range[2]: 2008

[1] The ending year must be between December 31, 2004 and December 31, 2010.

[2] The ending year must be between December 31, 2007 and December 31, 2010.

Persons-Per-SF Connection and Persons-Per-MF/GQ Connection

	Census Block Group Level	Census Block Level						
Year	% Population in SF Housing	Service Area Population	Population in SF Housing (calculated)	Population in MF/GQ Housing (calculated)	# SF Connections	# MF/GQ Connections	Persons per SF Connection	Persons per MF/GQ Connection
1990	86.08%	25,626	22,060	3,566	7035	91	3.14	39.19
1991	-	-	-	-	-	-	3.17	39.14
1992	-	-	-	-	-	-	3.20	39.09
1993	-	-	-	-	-	-	3.22	39.03
1994	-	-	-	-	-	-	3.25	38.98
1995	-	-	-	-	-	-	3.28	38.93
1996	-	-	-	-	-	-	3.31	38.88
1997	-	-	-	-	-	-	3.34	38.83
1998	-	-	-	-	-	-	3.36	38.77
1999	-	-	-	-	-	-	3.39	38.72
2000	87.28%	31,913	27,853	4,060	8140	105	3.42	38.67
2001	-	-	-	-	-	-	3.39	38.88
2002	-	-	-	-	-	-	3.37	39.08
2003	-	-	-	-	-	-	3.34	39.29
2004	-	-	-	-	-	-	3.32	39.50
2005	-	-	-	-	-	-	3.29	39.70
2006	-	-	-	-	-	-	3.26	39.91
2007	-	-	-	-	-	-	3.24	40.12
2008	-	-	-	-	-	-	3.21	40.33
2009	-	-	-	-	-	-	3.19	40.53
2010	85.59%	35,351	30,258	5,093	9572	125	3.16	40.74
2015	-	-	-	-	-	-	3.03 *	41.78 *

Population Using Persons-Per-SF Connection and Persons-Per-MF/GQ Connection

Year		# SF Connections	# MF/GQ Connections	Persons per SF Connection	Persons per MF/GQ Connection	SF Population	MF/GQ Population	Total Population
10 to 15 Year Baseline Population Calculations								
Year 1	2000	8140	105	3.42	38.67	27,853	4,060	31,913
Year 2	2001	8283	107	3.39	38.88	28,113	4,160	32,272
Year 3	2002	8426	109	3.37	39.08	28,379	4,260	32,639
Year 4	2003	8570	111	3.34	39.29	28,641	4,361	33,002
Year 5	2004	8713	113	3.32	39.50	28,892	4,463	33,356
Year 6	2005	8856	115	3.29	39.70	29,136	4,566	33,702
Year 7	2006	8999	117	3.26	39.91	29,373	4,670	34,042
Year 8	2007	9142	119	3.24	40.12	29,602	4,774	34,376
Year 9	2008	9286	121	3.21	40.33	29,827	4,879	34,706
Year 10	2009	9429	123	3.19	40.53	30,041	4,986	35,026
5 Year Baseline Population Calculations								
Year 1	2004	8713	113	3.32	39.50	28,892	4,463	33,356
Year 2	2005	8856	115	3.29	39.70	29,136	4,566	33,702
Year 3	2006	8999	117	3.26	39.91	29,373	4,670	34,042
Year 4	2007	9142	119	3.24	40.12	29,602	4,774	34,376
Year 5	2008	9286	121	3.21	40.33	29,827	4,879	34,706
2015 Compliance Year Population Calculations								
2015		10023	129	3.03 *	41.78 *	30,392	5,390	35,782

Hide Print Confirmation

QUESTIONS / ISSUES? CONTACT THE WUEDATA HELP DESK

APPENDIX E

AWWA Water Loss Reporting Worksheets

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0

? Click to access definition
+ Click to add a comment

Water Audit Report for: Ventura County Water District No. 1
Reporting Year: 2015 (1/2015 - 12/2015)

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

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

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ----------> Pcnt: Value:

					Pcnt:	Value:	
Volume from own sources:	8	1,808.000	acre-ft/yr	8			acre-ft/yr
Water imported:	8	7,717.000	acre-ft/yr	8			acre-ft/yr
Water exported:	8	0.000	acre-ft/yr				acre-ft/yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 9,525.000 acre-ft/yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

			Pcnt:	Value:	
Billed metered:	7	9,262.000	acre-ft/yr			
Billed unmetered:	8	0.000	acre-ft/yr			
Unbilled metered:	8	0.000	acre-ft/yr			
Unbilled unmetered:	7	119.063	acre-ft/yr	1.25%		acre-ft/yr

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

AUTHORIZED CONSUMPTION: 9,381.063 acre-ft/yr

Use buttons to select percentage of water supplied OR value

WATER LOSSES (Water Supplied - Authorized Consumption) 143.938 acre-ft/yr

Apparent Losses

			Pcnt:	Value:	
Unauthorized consumption:		23.813	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	8	10.000	acre-ft/yr		10.000	acre-ft/yr
Systematic data handling errors:	7	23.155	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 56.968 acre-ft/yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 86.970 acre-ft/yr

WATER LOSSES: 143.938 acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER: 263.000 acre-ft/yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	7	138.0	miles
Number of active AND inactive service connections:	8	10,944	
Service connection density:		79	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line: (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure:	8	65.0	psi

COST DATA

Total annual cost of operating water system:	8	$16,936,000	$/Year	
Customer retail unit cost (applied to Apparent Losses):	7	$5.18	$/1000 gallons (US)	
Variable production cost (applied to Real Losses):	8	$1,502.00	$/acre-ft	☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 74 out of 100 *****

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

PRIORITY AREAS FOR ATTENTION:

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

1: Water imported
2: Billed metered
3: Unauthorized consumption

AWWA Free Water Audit Software:
System Attributes and Performance Indicators

Water Audit Report for: Ventura County Water District No. 1
Reporting Year: 2015 | 1/2015 - 12/2015

*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 74 out of 100 ***

System Attributes:

	Apparent Losses:	56.968	acre-ft/yr
+	Real Losses:	86.970	acre-ft/yr
=	**Water Losses:**	**143.938**	acre-ft/yr
?	Unavoidable Annual Real Losses (UARL):	173.88	acre-ft/yr
	Annual cost of Apparent Losses:	$96,082	
	Annual cost of Real Losses:	$130,629	Valued at **Variable Production Cost**

Return to Reporting Worksheet to change this assumpiton

Performance Indicators:

Financial:	Non-revenue water as percent by volume of Water Supplied:	2.8%	
	Non-revenue water as percent by cost of operating system:	2.4%	Real Losses valued at Variable Production Cost
Operational Efficiency:	Apparent Losses per service connection per day:	4.65	gallons/connection/day
	Real Losses per service connection per day:	7.09	gallons/connection/day
	Real Losses per length of main per day*:	N/A	
	Real Losses per service connection per day per psi pressure:	0.11	gallons/connection/day/psi
	From Above, Real Losses = Current Annual Real Losses (CARL):	86.97	acre-feet/year
?	Infrastructure Leakage Index (ILI) [CARL/UARL]:	0.50	

* This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline

AWWA Free Water Audit Software: Water Balance

WAS v5.0

Water Audit Report for:	Ventura County Water District No. 1	
Reporting Year:	2015	1/2015 - 12/2015
Data Validity Score:	74	

Water Exported
0.000

Billed Water Exported

Own Sources
(Adjusted for known errors)
1,808.000

Water Supplied
9,525.000

Water Imported
7,717.000

Authorized Consumption
9,381.063

Billed Authorized Consumption
9,262.000

Billed Metered Consumption (water exported is removed)
9,262.000

Billed Unmetered Consumption
0.000

Revenue Water
9,262.000

Unbilled Authorized Consumption
119.063

Unbilled Metered Consumption
0.000

Unbilled Unmetered Consumption
119.063

Non-Revenue Water (NRW)
263.000

Water Losses
143.938

Apparent Losses
56.968

Unauthorized Consumption
23.813

Customer Metering Inaccuracies
10.000

Systematic Data Handling Errors
23.155

Real Losses
86.970

Leakage on Transmission and/or Distribution Mains
Not broken down

Leakage and Overflows at Utility's Storage Tanks
Not broken down

Leakage on Service Connections
Not broken down

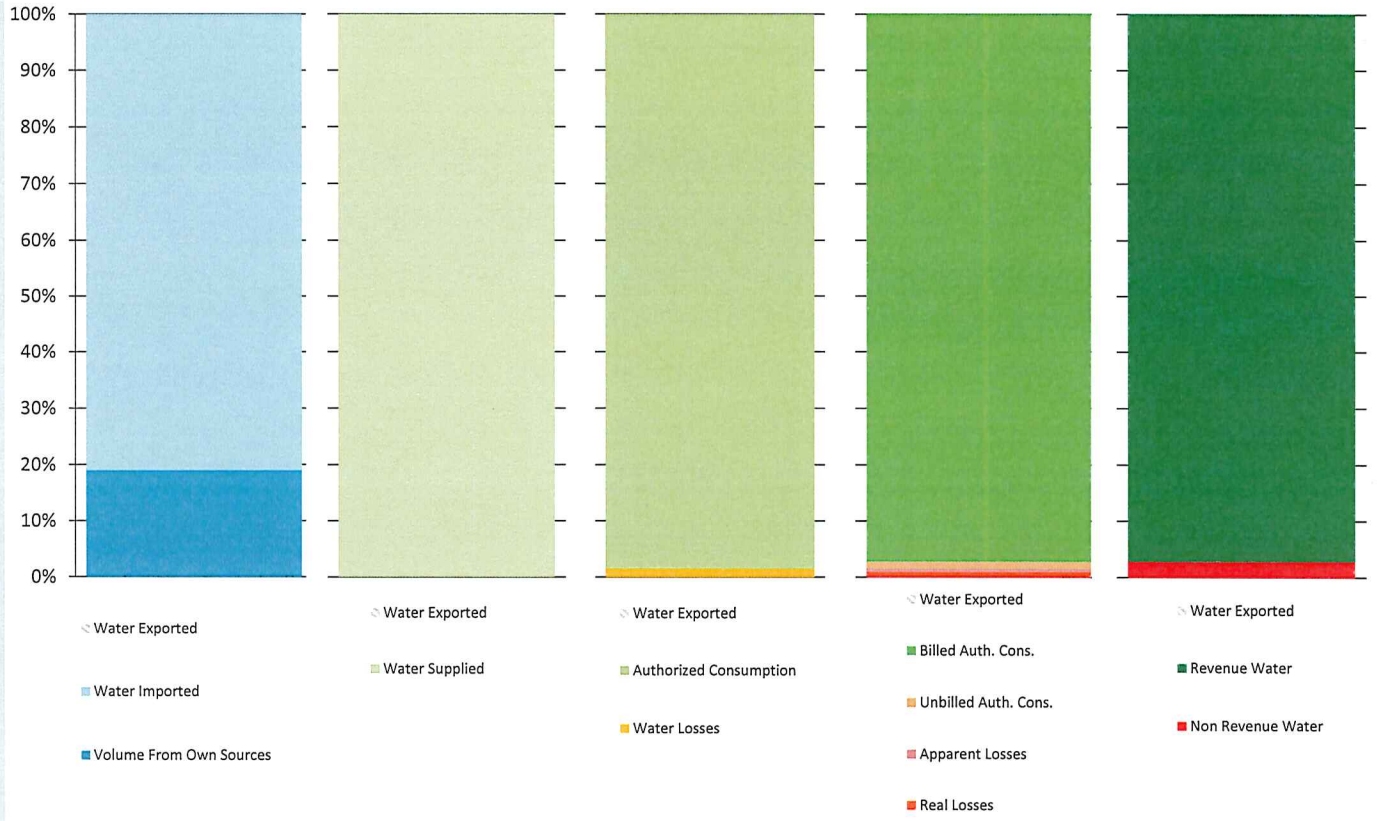
AWWA Free Water Audit Software:
Dashboard

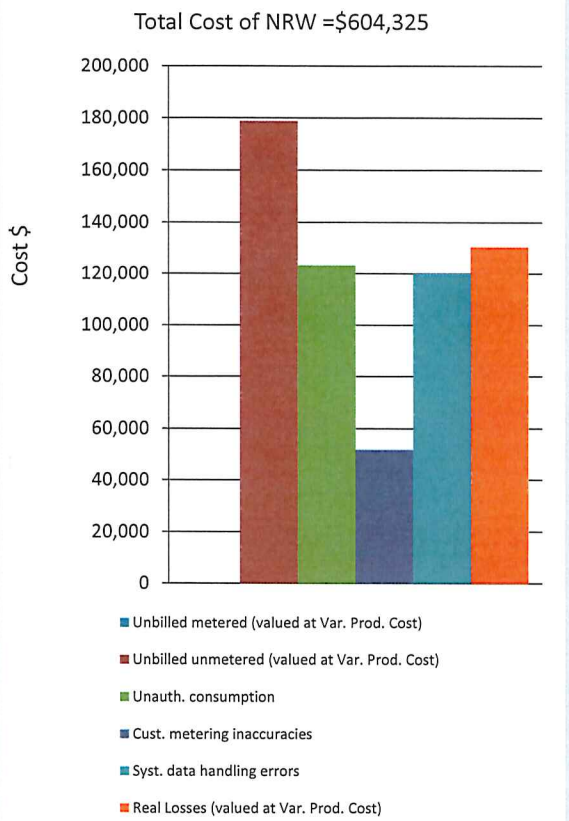
WAS v5.0

The graphic below is a visual representation of the Water Balance with bar heights propotional to the volume of the audit components

Water Audit Report for: Ventura County Water District No. 1
Reporting Year: 2015 | 1/2015 - 12/2015
Data Validity Score: 74

○ Show me the VOLUME of Non-Revenue Water
◉ Show me the COST of Non-Revenue Water





APPENDIX F

Metropolitan Supply Capability Tables

Table 2-4
Single Dry-Year
Supply Capability[1] and Projected Demands
Repeat of 1977 Hydrology
(Acre-feet per year)

Forecast Year	2020	2025	2030	2035	2040
Current Programs					
In-Region Supplies and Programs	693,000	774,000	852,000	956,000	992,000
California Aqueduct[2]	691,000	712,000	723,000	749,000	749,000
Colorado River Aqueduct					
Total Supply Available[3]	1,451,000	1,457,000	1,456,000	1,455,000	1,454,000
Aqueduct Capacity Limit[4]	*1,200,000*	*1,200,000*	*1,200,000*	*1,200,000*	*1,200,000*
Colorado River Aqueduct Capability	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Capability of Current Programs	**2,584,000**	**2,686,000**	**2,775,000**	**2,905,000**	**2,941,000**
Demands					
Total Demands on Metropolitan	1,731,000	1,784,000	1,826,000	1,878,000	1,919,000
IID-SDCWA Transfers and Canal Linings	274,000	282,000	282,000	282,000	282,000
Total Metropolitan Deliveries[5]	**2,005,000**	**2,066,000**	**2,108,000**	**2,160,000**	**2,201,000**
Surplus	**579,000**	**620,000**	**667,000**	**745,000**	**740,000**
Programs Under Development					
In-Region Supplies and Programs	43,000	80,000	118,000	160,000	200,000
California Aqueduct	20,000	20,000	198,000	198,000	198,000
Colorado River Aqueduct					
Total Supply Available[3]	155,000	125,000	75,000	25,000	25,000
Aqueduct Capacity Limit[4]	*0*	*0*	*0*	*0*	*0*
Colorado River Aqueduct Capability	0	0	0	0	0
Capability of Proposed Programs	**63,000**	**100,000**	**316,000**	**358,000**	**398,000**
Potential Surplus	**642,000**	**720,000**	**983,000**	**1,103,000**	**1,138,000**

[1] Represents Supply Capability for resource programs under listed year type.
[2] California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.
[3] Colorado River Aqueduct includes programs, IID-SDCWA transfer and exchange and canal linings conveyed by the aqueduct.
[4] Maximum CRA deliveries limited to 1.20 MAF including IID-SDCWA transfer and exchange and canal linings.
[5] Total demands are adjusted to include IID-SDCWA transfer and exchange and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.

Table 2-5
Multiple Dry-Year
Supply Capability[1] and Projected Demands
Repeat of 1990-1992 Hydrology
(Acre-feet per year)

Forecast Year	2020	2025	2030	2035	2040
Current Programs					
In-Region Supplies and Programs	239,000	272,000	303,000	346,000	364,000
California Aqueduct[2]	664,000	682,000	687,000	696,000	696,000
Colorado River Aqueduct					
Total Supply Available[3]	1,403,000	1,691,000	1,690,000	1,689,000	1,605,000
Aqueduct Capacity Limit[4]	*1,200,000*	*1,200,000*	*1,200,000*	*1,200,000*	*1,200,000*
Colorado River Aqueduct Capability	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Capability of Current Programs	**2,103,000**	**2,154,000**	**2,190,000**	**2,242,000**	**2,260,000**
Demands					
Total Demands on Metropolitan	1,727,000	1,836,000	1,889,000	1,934,000	1,976,000
IID-SDCWA Transfers and Canal Linings	274,000	282,000	282,000	282,000	282,000
Total Metropolitan Deliveries[5]	**2,001,000**	**2,118,000**	**2,171,000**	**2,216,000**	**2,258,000**
Surplus	**102,000**	**36,000**	**19,000**	**26,000**	**2,000**
Programs Under Development					
In-Region Supplies and Programs	36,000	73,000	110,000	151,000	192,000
California Aqueduct	7,000	7,000	94,000	94,000	94,000
Colorado River Aqueduct					
Total Supply Available[3]	80,000	75,000	50,000	25,000	25,000
Aqueduct Capacity Limit[4]	*0*	*0*	*0*	*0*	*0*
Colorado River Aqueduct Capability	0	0	0	0	0
Capability of Proposed Programs	**43,000**	**80,000**	**204,000**	**245,000**	**286,000**
Potential Surplus	**145,000**	**116,000**	**223,000**	**271,000**	**288,000**

[1] Represents Supply Capability for resource programs under listed year type.

[2] California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

[3] Colorado River Aqueduct includes programs, IID-SDCWA transfer and exchange and canal linings conveyed by the aqueduct.

[4] Maximum CRA deliveries limited to 1.20 MAF including IID-SDCWA transfer and exchange and canal linings.

[5] Total demands are adjusted to include IID-SDCWA transfer and exchange and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.

Table 2-6
Average Year
Supply Capability[1] and Projected Demands
Average of 1922-2012 Hydrologies
(Acre-feet per year)

Forecast Year	2020	2025	2030	2035	2040
Current Programs					
In-Region Supplies and Programs	693,000	774,000	852,000	956,000	992,000
California Aqueduct[2]	1,555,000	1,576,000	1,606,000	1,632,000	1,632,000
Colorado River Aqueduct					
Total Supply Available[3]	1,468,000	1,488,000	1,484,000	1,471,000	1,460,000
Aqueduct Capacity Limit[4]	*1,200,000*	*1,200,000*	*1,200,000*	*1,200,000*	*1,200,000*
Colorado River Aqueduct Capability	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Capability of Current Programs	**3,448,000**	**3,550,000**	**3,658,000**	**3,788,000**	**3,824,000**
Demands					
Total Demands on Metropolitan	1,586,000	1,636,000	1,677,000	1,726,000	1,765,000
IID-SDCWA Transfers and Canal Linings	274,000	282,000	282,000	282,000	282,000
Total Metropolitan Deliveries[5]	**1,860,000**	**1,918,000**	**1,959,000**	**2,008,000**	**2,047,000**
Surplus	**1,588,000**	**1,632,000**	**1,699,000**	**1,780,000**	**1,777,000**
Programs Under Development					
In-Region Supplies and Programs	43,000	80,000	118,000	160,000	200,000
California Aqueduct	20,000	20,000	268,000	268,000	268,000
Colorado River Aqueduct					
Total Supply Available[3]	5,000	25,000	25,000	25,000	25,000
Aqueduct Capacity Limit[4]	*0*	*0*	*0*	*0*	*0*
Colorado River Aqueduct Capability	0	0	0	0	0
Capability of Proposed Programs	**63,000**	**100,000**	**386,000**	**428,000**	**468,000**
Potential Surplus	**1,651,000**	**1,732,000**	**2,085,000**	**2,208,000**	**2,245,000**

[1] Represents Supply Capability for resource programs under listed year type.

[2] California Aqueduct includes Central Valley transfers and storage program supplies conveyed by the aqueduct.

[3] Colorado River Aqueduct includes programs, IID-SDCWA transfer and exchange and canal linings conveyed by the aqueduct.

[4] Maximum CRA deliveries limited to 1.20 MAF including IID-SDCWA transfer and exchange and canal linings.

[5] Total demands are adjusted to include IID-SDCWA transfer and exchange and canal linings. These supplies are calculated as local supply, but need to be shown for the purposes of CRA capacity limit calculations without double counting.

APPENDIX G

Ventura County Waterworks Districts Rules and Regulations District No. 1, 16, 17, 19, Part 1 – Section K – Water Shortage

VENTURA COUNTY WATERWORKS DISTRICTS

RULES AND REGULATIONS DISTRICTS NO. 1,16,17,19

VENTURA COUNTY WATERWORKS DISTRICTS RULES AND REGULATIONS

TABLE OF CONTENTS

RULES AND REGULATIONS DISTRICTS NO. 1,16,17,19

PART 1 - GENERAL CONDITIONS AND RULES

PART 1 - SECTION A - RULES FOR DEFINITION OF TERMS

Definitions: The following terms shall have meanings as herein defined whenever references are made thereto.

RULE

1-A-1 **DISTRICT**: Any County Waterworks District in the County of Ventura, the governing body of which is the Board of Supervisors.

1-A-2 **BOARD**: The Board of Supervisors of the County of Ventura.

1-A-3 **APPLICANT**: The person or agency applying for water service.

1-A-4 **CUSTOMER**: The person or agency of record receiving water service from the District.

1-A-5 **BILLING DATE:** The date upon which charges for services rendered by the District become effective and upon which a bill is generated. 171

1-A-5a **MAILING DATE**: The date upon which a water bill or notice is mailed or delivered personally to the customer, not to exceed three business days following the billing date.97

1-A-6 **WATER SERVICES**: The service performed by the District including the following:

1-A-6a **DOMESTIC WATER SERVICE**: The service performed by the District in supplying water for domestic use including use of water for household residential purposes, sprinkling lawns, irrigating small gardens and shrubbery, watering livestock, washing vehicles, and the ordinary use of water at residences and business or commercial establishments. 11

1-A-6b **AGRICULTURAL WATER SERVICE**: The water service provided for agricultural purposes only.

1-A-6c **PUBLIC WATER SERVICE**: The class of domestic service supplying water to any tax exempt property.

1-A-6d **CONSTRUCTION WATER SERVICE**: The service supplying water for backfilling trenches and other construction services.

1-A-6e **FIRE PROTECTION SERVICE**: Fire protection service is service performed by the District in supplying water for automatic fire sprinkling systems and maintaining water service at fire hydrant locations.

1-A-6f **METERED WATER SERVICE**: Water supplied through a meter which measures the quantity of water used.

1-A-6g **FLAT RATE WATER SERVICE**: The service of supplying unmetered water.

1-A-6h **ENGINEERING AND CONSTRUCTION SERVICES**: Those services performed by employees of the District or the County in preparation of plans and specifications, checking the plans submitted by privately employed engineers for water systems proposed to be installed within Waterworks Districts, inspecting the construction of water systems installed by private contractors, and the installation of water systems in Waterworks Districts from fees or deposits paid therefore by private contractors.

1-A-7 **RATE SCHEDULES**: The entire schedule of rates and fees established and authorized by the Board for the various types of services performed by the District.

1-A-8 **PREMISES**: Property occupied or used by a customer to which water is being supplied by the District or for which water service has been requested.

1-A-9 **SERVICE CONNECTION OR SERVICE LATERAL**: The pipe, valves, and other equipment installed in place, necessary for conducting water from the District's distribution mains to the meter or meter location, but does not include the meter or meter box.

1-A-10 **METERED SERVICE CONNECTION**: The service connection or service lateral including meter and meter box.

1-A-11 **WATER AND SANITATION DEPARTMENT:** The department of the Public Works Agency of the County of Ventura responsible for the operations, construction, repair, maintenance, budgets, and business of the District, under the direction of the following employees: [171]

1-A-11a **MANAGER:** Manager shall mean that employee of the Public Works Agency assigned to the Water and Sanitation Department to be in charge of the operations, repair, and maintenance of the Districts' facilities, under the direction of the Director.[171]

1-A-11b **DIRECTOR:** Director shall mean that employee of the Public Works Agency assigned to the Water and Sanitation Department to be in charge of the operations, budgets, construction, repair, maintenance, and business of the District.[171]

1-A-12 **ENGINEER**: Engineer shall mean the Director of the Public Works Agency or his or her authorized representative.[171]

1-A-12a DELETE[171]

1-A-13 **PUBLIC WAY**: Street, alley, highway, or walk dedicated to public use.

1-A-14 **EASEMENT**: Public way or right-of-way which the district is authorized to use for pipeline or other purposes.

1-A-15 **PRIVATE EASEMENT**: An easement in which a customer or others may have installed a water main for transportation of water furnished by the District, in which easement or pipeline the District has no interest or responsibility.

1-A-16 **MAIN EXTENSIONS**: The extension of distribution pipelines beyond existing facilities, exclusive of service connections.

1-A-17 **INTERCONNECTION**: An authorized connection of the distribution system to the distribution system of another water service agency or water system.

1-A-18 **CROSS CONNECTION**: An illegal piping connection or any connection which may cause contamination or backflow or back-siphonage.

1-A-19 **PERMANENT SERVICE CONNECTION**: A service connection intended to remain in use more than two years.

1-A-20 **TEMPORARY SERVICE CONNECTION**: A service connection requested for use for a period of time less than two years.

1-A-21 **PRIVATE CONTRACT WORK**: Construction of water mainwater mains and related facilities by subdividers or persons other than the District, within Waterworks Districts.

1-A-22 **AUTHORIZED PRIVATE CONTRACT WORK**: Private contract work authorized by the District.

1-A-23 **UNAUTHORIZED PRIVATE CONTRACT WORK**: Private contract work undertaken without authorization by the District.

1-A-24 **PRIVATE CONTRACTORS**: A person or firm, not employed by the District or County, engaged in the installation of water facilities within the service area of a Waterworks District or within territory being considered for annexation thereto.

1-A-25 **SERVICE APPLICANT**: The person, firm, or corporation subdivider, private contractor, etc., who applies for one of the services rendered by the District.

1-A-26 **STRUCTURAL IMPROVEMENTS**: Both Capital Improvements and Local System Improvements, including but not limited to, land, real estate, all classes of water mainwater mains, service connections, meter valves, hydrants, pumping plants, electrical systems, water treatment plants, and appurtenances.

1-A-27 **CAPITAL IMPROVEMENTS**: Those portions of the "Structural Improvements" of a District, the use of which is necessary to and shared in common by all of the District and shall specifically include:

(a) Real estate and rights-of-way.

(b) Wells.

(c) Reservoirs.

(d) Pumping plants and all piping thereon.

(e) Water treatment plants.

(f) Water mains which are oversized at the request of the District.

1-A-28 **LOCAL SYSTEM IMPROVEMENTS**: The following "Structural Improvements" are considered to be local system improvements:

(a) Service connections, fire hydrants, valves, and fittings.

(b) All water mains used for distribution and transmission of water within the boundaries of the proposed development.

(c) In water mains used both for the transmission and distribution of water, that portion of the cost of a water main in commercial, industrial, and residential areas, shall be classified as Local Improvements. The difference, or the cost thereof in excess of Local Improvement System, shall be classified as "Capital Improvements."

1-A-29 **CAPITAL IMPROVEMENT CHARGE**: The charge for equitable participation in the capital improvements of a District as a condition precedent to the supply of water to any residence, building, or parcel of land which has not theretofore been supplied with water by the District.

1-A-30 **RESIDENTIAL AREA**: Those land areas zoned R-1 and R-2 with the permitted use confined only to family dwelling.

1-A-31 **COMMERCIAL AND MANUFACTURING AREA**: All zone classifications and permitted use, except those defined in Rule 1-A-30.

1-A-32 **DISTRICT DIVISION DESIGNATION**: Specific areas of consolidated Districts are designated divisions and zones as follows:

(a) **DELETED**[34]

(b) Consolidated District No. 1:

The former District No. 1 shall be designated as Division 1 of Ventura County Waterworks District No. 1.

The Improvement Zone No. 1 of former District No. 1 shall be designated as Improvement Zone No. 1 of Division 1 of Ventura County Waterworks District No. 1.

The Improvement Zone No. 2 of former District No. 1 shall be designated as Improvement Zone No. 2 of Division 1 of Ventura County Waterworks District No. 1.

The former District No. 11 shall be designated as Division 2 of Ventura County Waterworks District No. 1.

PART 1 - SECTION B - SERVICE AREA MAPS AND LEGAL DESCRIPTIONS

RULE

1-B-1 Maps and legal descriptions of service areas and special zones of Waterworks Districts shall be maintained in the office of the Director of the County Surveyor.[172]

PART 1 - SECTION C - DESCRIPTION OF SERVICE

RULE

1-C-1 **WATER SUPPLY**: The District will exercise reasonable diligence and care to:

(a) Deliver a continuous supply of water to the customer at reasonable pressure, and

(b) Avoid unnecessary shortages or interruption in the service.

The District shall not be liable for:

(a) Interruptions of service, shortage, or inadequacy of supply, or

(b) Any loss or damage caused thereby.

The District shall have the right to temporarily suspend service to any customer, whenever the District deems it necessary to do so, and the District shall not be liable for any loss or damage caused thereby. The causes for temporary suspension of service will be removed by the District without unnecessary delay and with the least inconvenience to the customer. [15]

1-C-2 **WATER QUALITY**: Whenever domestic service is furnished, the District will endeavor to furnish at all times a safe and potable water supply.

1-C-3 **TYPES OF ACCOUNTS AND SERVICES** Water service provided by the District may be separated into the following account, services types:[229]

ACCOUNT TYPES: [229]

a) Residential
b) Residential Multi-Family
c) Agricultural
d) Commercial
e) Industrial
f) Institutional

SERVICE TYPE: [229]

a) Water
b) Sewer
c) Irrigation
d) Agricultural
e) Agricultural <5
f) Reclaimed
g) Load Count
h) Lift Charge
i) Fire Protection
j) Construction

PART 1 - SECTION D - APPLICATION FOR SERVICE

RULE

1-D-1 **APPLICATION FOR SERVICE:** Each applicant for water service will be required to sign a form provided by the District. The application shall show the following information:

(a) **Name** of applicant and person responsible for paying water bill.

(b) **Address** of person responsible for payment of future water bills.

(c) **Location** of proposed service, address, and brief property description.

(d) **Date** applicant desires service to begin.

(e) Whether or not the premises have heretofore been supplied with water by the District.

(f) **Class** of service.

(g) Whether or not applicant is owner, tenant, builder[231] or agent of the premises.

(h) Agreement of applicant to abide by all rules and regulations of the District.

(i) Such other information as the District may reasonably require.

The application will be regarded as merely a written request for service, and not binding upon the applicant to take service for a period of time longer than that upon which the rates and minimum charge of the selected rate schedule are based.

1-D-2 **INDIVIDUAL LIABILITY FOR JOINT SERVICE**: Two or more parties who join in one application for service shall be jointly and severally liable there under and shall be billed by means of single periodic bills.

1-D-3 **LARGE INCREASE IN USE OF WATER**: Customers making any change in operations on their premises requiring substantial increases in the rates of water flow through the District's facilities shall immediately give the District written notice of the nature of the change.

1-D-4 **CHARGE**: Payment for all required charges must accompany the meter or service installation application.

PART 1 - SECTION E - CONTRACTS

RULE

1-E-1 The District, at its discretion, may provide new or extended services by contract or agreement outside its jurisdictional boundaries as permitted by Government Code section 56133 and other applicable law. Unless the contract or agreement expressly states otherwise, the District may, with or without cause, with or without advance notice, terminate any such contract or agreement and interrupt or cease any such new or extended services. Although not required to do so, to the extent circumstances reasonably allow, the District will provide advance notice before terminating any such contract or agreement or interrupting or ceasing any such new or extended services. The District's provision of any such new or extended services shall not, and shall not be deemed to, create any rights to continuing services. Water provided pursuant to any such contract or agreement shall be charged at the rates set forth in Rule 2-B-5. [173]

PART 1 - SECTION F - SPECIAL INFORMATION REQUIRED ON FORMS FOR CUSTOMERS' WATER BILLS

RULE

1-F-1 The substance of the regulation on discontinuance and restoration of water service shall be printed on each bill sent to the District's customers.

PART 1 - SECTION G - NOTICES

RULE

1-G-1 **NOTICES TO CUSTOMERS**: Notice from the District to a customer normally will be given in writing, either delivered to him or mailed to him at his last known address. Where conditions warrant, and in emergencies, a verbal notice or a notice by telephone will be deemed adequate.

1-G-2 **NOTICES FROM CUSTOMERS**: Notice from the customer to the District may be given by him or his authorized representative, verbally or in writing, at the District's operating offices.

PART 1 - SECTION H - SERVICE RULES

RULE

1-H-1a **DOMESTIC SERVICE**: Each house or building under separate ownership must be provided with a separate service connection or connections. Two or more houses or buildings under one ownership and on the same lot or parcel of land may be supplied through one service connection, or a separate service connection may be installed for each building.

1-H-1b The District reserves the right to limit the number of houses or buildings, or the area of the land under one ownership, to be supplied by one service connection.

1-H-1c When property provided with a service connection is partitioned, the existing service connection, if any, shall be considered as being assigned to the lot or parcel of land nearest to the meter or service connection.

1-H-1d A service connection shall not be used to supply adjoining property of a different owner or to supply property of the same owner on opposite sides of a public street or alley.

1-H-2a **AGRICULTURAL SERVICE CONNECTIONS**: In Districts having special rates for agricultural purposes the water requirements of the parcel to be served shall guide the District in its determination of the proper size meter to be installed. The parcel of land must contain not less than five acres and be used exclusively for agricultural purposes. "Agricultural purposes" shall be construed to mean the growing of crops, or the raising of fowl or livestock for human consumption or market, or obtaining their products for human consumption or market. Water used for agricultural purposes shall be separately metered. [174]

Exception: In District No. 19 (Somis Area) agricultural water service may be provided to a parcel where not less than one acre is irrigated for agricultural purposes. In order for a parcel of not less than one acre to qualify for an agricultural water rate, the customer must submit to the

District an "Application for Agricultural Water Rate," including a notice of approval from Calleguas Municipal Water District. 57

Agricultural water service may be discontinued, with 30 days notice, at the option of the District. 72

An agricultural service connection shall not be used to supply adjoining property of a different owner. 79

1-H-2b The regulation by the customer of the flow of water from an agricultural meter must be effected by means of a valve installed on the outlet side of the meter, and the installation and maintenance of such a valve shall be at the customer's expense.

1-H-3a **AUTOMATIC FIRE SPRINKLER SERVICE CONNECTIONS**: When an automatic fire sprinkler service connection is installed, the control valve thereon will be left closed and sealed until a written order to turn on the water is received from the customer. After the water is turned on, the District shall not be liable for damages of any kind that may occur on or to the premises or property therein served due to the installation, maintenance, or use of such service connection, or because of fluctuation of pressure or interruption of water supply.

1-H-3b If water is used through an automatic fire sprinkler service connection for any purpose other than the extinguishing of fires, or a purpose related thereto, the District shall have the right either to place a meter on the automatic fire sprinkler service connection at the customer's expense, and to charge at metered rates for all water used, or to shut off the entire supply of water to the premises through such service connection.

1-H-3c The District shall have the right to install and connect with the automatic fire sprinkler service connection at the curb, a service connection for rendering any other type of water service to the same premises served by the automatic fire sprinkler service connection.

1-H-3d All automatic fire sprinkler service connections, installed after effective date of these regulations, shall be equipped with a check valve of a type approved by the National Board of Fire Underwriters and with a by-pass meter, all at the expense of the customer.

1-H-4 **TEMPORARY WATER SUPPLY** 174

Temporary Water Supply may be provided through:

(a) Temporary Service Connections
(b) Fire hydrants
(c) Truck loads – fills
(d) Residential - lot connections

Temporary water supply may be disconnected and/or terminated upon verbal or written notification by the District.

Water obtained on a temporary basis shall be for use only within the service boundaries of the District. Any use of the water obtained on a temporary basis for use outside district boundaries is subject to Government Code section 56133.

1-H-5a **TEMPORARY SERVICE CONNECTIONS**: Temporary service connections will be disconnected and terminated within two years after installation unless an extension of time is granted by the District.

1-H-5b Where a regular service connection of adequate size is available, it may be used for temporary service so long as such connection is not required to supply the property which it enters, provided a temporary service connection number is assigned to it for identification during such usage. A charge (see Part 2 for amount of charge) will be made for arranging temporary service. If such connection is at any time required to serve the property which it enters, said temporary service there must be discontinued.

1-H-5c A charge for the installation of a temporary service connection shall be the same as for regular service connection (see Part 2 for amount of charge). The applicant shall deposit in cash the amount specified in Part 2 hereof and shall be subject to an additional charge, or entitled to a credit, as provided herein.

1-H-5d After a temporary service connection is installed, and the District is requested by the applicant to terminate and remove the service, the cost of disconnecting and terminating the temporary service will then be estimated and added to the installation cost. From this total, the estimated salvage value of the material to be recovered will be deducted, leaving the final net estimated cost of the temporary service connection. If such net estimated cost is greater than the amount of the applicant's original charge, upon demand the applicant shall pay the District such additional sum as is required to make his aggregate payment equal to the final net estimated cost.

1-H-5e When a temporary service connection is disconnected and terminated within two years from the date of installation, the estimated cost of the disconnection and the "present value" of the material recovered shall be deducted from the deposit charge and the balance (if any) of such deposit shall be refunded to the customer if requested. If the aggregate deposit is less than the sum of the installation charge, the disconnection charge, and the present value of the material recovered, the amount of such deficiency shall be paid by the customer.

1-H-5f Where the construction of an installed "temporary service connection" conforms to the standard requirements of a permanent service connection installation, it may be designated as a permanent service connection at any time, provided all charges for permanent service at its location are paid; and the District will refund to the customer the difference in charges between the temporary service connection and permanent service connection, if the former charge was less than the latter. If the temporary service connection is not

metered when it is converted into a regular permanent service connection, and the kind of permanent service to be rendered requires metering, the regular meter charge for the appropriate size of meter shall be paid by the customer.

1-H-5g The District reserves the right at any time to set a meter on any temporary service connection and to collect the required meter deposit, and thereafter to charge the regular metered rate for the kind of service to be rendered.

1-H-5h **METER CHARGE CREDITS**: If a metered temporary service connection is disconnected and terminated and the meter is recovered within one month after its installation, upon application therefore, 95 per cent of the meter charge, less $5.00, will be refunded; if within two months, 90 per cent less $5.00; if within three months, 85 per cent less $5.00; if within four months, 80 per cent less $5.00; if within five months, 75 per cent less $5.00; and if after five months and within two years, 70 per cent less $5.00. All refunds of meter deposits shall be made to the customer, and no refund of a meter deposit shall be made if the temporary service connection is not terminated and the meter recovered within two years from its date of setting.

1-H-6a **TEMPORARY WATER SUPPLY FROM FIRE HYDRANTS**: Water may, on application, be obtained at rates determined by the Director from fire hydrants, for purposes other than extinguishing fires, in the manner prescribed as follows: When water is to be so procured from a fire hydrant, the applicant shall sign an application for a fire hydrant permit, wherein he shall specify the location of the fire hydrant to be used and shall agree to pay the required cash deposit or charge therefore to the District. The applicant must at the same time deposit with the District a sum of money to secure payment of its charges for furnishing, installing, removing, inspecting, and renting of the equipment required to be installed on a fire hydrant for such procuring of water. [174]

Water obtained on a temporary basis from a fire hydrant shall be for use only with the service boundaries of the District. Any use of water obtained on a temporary basis from a fire hydrant for use outside district boundaries is subject to Government Code section 56155. [174]

1-H-6b A minimum charge for the furnishing, installation, removal, inspection, and rental of such equipment on each fire hydrant shall be charged (see Part 3 for charges).

1-H-6c If the equipment so furnished is damaged through carelessness or abuse, the cost of repairing the same shall constitute a charge against the customer. If any such equipment is removed from the fire hydrant other than by the District's employee and is not recovered by the District, the value thereto shall constitute a charge against the customer.

1-H-6d The fact that some fire hydrants are already equipped with auxiliary valves, or that some customers may desire to furnish their own equipment for installation on fire hydrants shall not affect or vary this rule and regulation, or in any way prevent or modify its application.

1-H-7 **SERVICE CONNECTION AND METER INSTALLATION CHARGES**: Where a charge is fixed herein for the installation of the service connection and/or meter, such charge shall be paid in advance by the applicant. Where no such charge is fixed, the District reserves the right to require the applicant to pay an amount as a fixed charge equal to the estimated cost of installation of such service connection and/or meter.

1-H-8 **SERVICE CONNECTION, SIZE, AND LOCATION**: The District reserves the right to determine the size of the service connection and its location in relation to boundaries of the premises to be served. Where possible, the customer's pipe to the curb should not be laid until the service connection is installed. In the event the customer's pipe is laid to the curb prior to the time the service connection is installed, and its location at the curb does not correspond with that of the service connection at the curb, then the customer must bear the additional cost of connecting the service connection pipe with the customer's pipe.

1-H-9 **EXTENSION OF SERVICE PIPE THROUGH BASEMENT WALL**: Where the applicant requires the service connection pipe to be extended through a basement wall, the applicant shall, at his own expense, provide and seal the entrance way for such pipe and shall assume all responsibility for damage caused by leakage through such entrance way and/or by leaking pipes, fittings, or meters.

1-H-10 **SERVICE CONNECTION CURB STOP OR VALVE**: Every service connection installed by the District will be equipped with a curb stop or valve on the inlet side of the meter. Such valve or curb stop is intended for the exclusive use of the District in controlling the use of water through the service connection and/or meter. If such curb stop or valve is damaged by the customer to an extent requiring its replacement, the customer shall bear the cost for such replacement. The customer's pipe shall have a wheel valve placed at some known and accessible location between the meter and the building, to control the supply to the building.

1-H-11 **ENLARGING SERVICE CONNECTION AT TIME OF RENEWAL**: When the District replaces a service connection for any reason, such service connection may be enlarged, upon the customer's request and at his expense, the District's estimated cost of which shall constitute a fixed charge.

1-H-12a **MAINTENANCE OF SERVICE CONNECTIONS, METERS, DETECTOR CHECK VALVES, AND HOUSINGS**: All service connections, water meters, detector check valves, and housings installed by the District shall be maintained at its expense, except as may be otherwise provided herein.

1-H-12b Where a two-inch, or larger, stub pipe is laid to the curb to replace one or more old service connections, such old service connection will be disconnected, and the District will lay, connect, and maintain the necessary piping from such new stub pipe to the old location of the meter or to the customer's supply pipe.

1-H-13 **CUTTING, REFITTING, RAISING, LOWERING, OR RELOCATING WATER SERVICE CONNECTIONS, MAINS, ETC.**: Any person, firm, or corporation

making improvements or changes, including road repairs, resulting in the cutting, refitting, raising, lowering, relocating, or damaging in any way service connections, water mains, fire hydrants, stub pipes, meters, valves, or other parts of the water system, shall be liable to the District for all costs incurred by it in making such changes. 11

1-H-14 **INCREASING SIZE OF DETECTOR CHECK VALVE FOR AUTOMATIC FIRE SPRINKLER SERVICE**: In all cases in which a detector check valve on an installed service connection for automatic fire sprinkler service is recovered by the District because of the substitution therefore of a larger detector check valve, the charge to the customer for furnishing and installing such larger detector check valve shall be the estimated cost of replacement, which estimate shall include a credit for the replaced equipment; and such credit shall be the "present value," as determined in Part 3 hereof.

1-H-15 **REFUND OF CHARGES FOR DETECTOR CHECK VALVE AND BY-PASS METER UPON DISCONNECTION AND ABANDONMENT OF AUTOMATIC FIRE SPRINKLER SERVICE CONNECTION**: When an automatic fire sprinkler service connection is disconnected and abandoned and the detector check valve and by-pass meter on such service connection are recovered by the District, upon written application, a refund of the charge paid by the customer for such detector check valve and by-pass meter will be made in an amount equal to the "present value" as determined in Part 3 hereof, less the estimated costs of removing the equipment.

1-H-16a **SETTING OF DOMESTIC AND/OR AGRICULTURAL METERS**: The District may install all meters unless installation by the Contractor is authorized by the Director. 174

1-H-16b The District is the owner of all meters and appurtenances incidental thereto, installed by the District, or installed by the contractor, owner or customer with the approval of the. 79

1-H-17 **REMOVAL OF METERS FROM INACTIVE SERVICE CONNECTIONS:** District may at its option remove the meter from any service connection determined to be inactive for more than two billing cycles, for maintenance or for use in another location. The District will reinstall the meter upon the customer's request. In the case of an inactive agricultural meter, if the customer requests discontinuation of service to avoid service charges, the District will remove the meter. However, reinstatement of service shall be at the discretion of the District. 75

1-H-18 **CHARGE FOR SUBSTITUTION OF LARGER METER FOR DOMESTIC SERVICE OR FOR COMBINED AGRICULTURAL AND DOMESTIC SERVICE**: When a meter for domestic service, or for combined agricultural and domestic service, of larger size than the existing meter is to be installed on an existing service connection, or when the existing service connection is disconnected and abandoned and the meter thereon is recovered by the District and a larger service connection and a larger meter are to be installed in the place thereof, the charge required for furnishing and setting such larger

meter installation shall be the same as for a new service and meter, less the "present value" of the recoverable meter and fittings. [11]

1-H-19 **SUBSTITUTION OF SMALLER METER TO REDUCE MONTHLY MINIMUM CHARGE**: When substitution of a smaller meter is requested by the customer in order to reduce the monthly minimum charge, and when the minimum charge is related to the meter size, such substitution will be made without charge, provided the delivery of water required through such smaller meter shall not exceed its rated capacity, and provided also that such capacity conforms with the requirements of the Plumbing Code. No credit for a large meter so removed will be allowed.

The allowable change in meter size shall not be less than one size smaller than the customer's piping, except that in no case shall the meter size be reduced below the size determined by application of rules in the Plumbing Code.

1-H-20a **DAMAGE TO METERS BY HOT WATER OR STEAM**: The District will furnish, set and maintain all meters.

1-H-20b When a customer becomes responsible for the payment of water bills for any premises served, the meter at that date installed or continued on the service connection is in this rule designated as the "first meter" and any other meter installed on the same service connection, to serve the same premises in substitution for a meter damaged in service, is herein designated as "any substituted meter."

1-H-20c The District assumes the liability for the cost of changing and repairing any meter that shall have been damaged by hot water or steam emanating from the premises served in only the following cases:

1. When such damage occurs to the "first meter;"
2. When such damage occurs to "any substituted meter" more than three years after the same shall have been installed;
3. When such damage occurs to "any substituted meter" within three years after the same shall have been installed, and the customer at the date of such damage has not been continuously so responsible therefore at all times since the date of the last previous occurrence of damage to a meter, for which the District assumes liability hereunder.

1-H-20d When the "first meter" is found to have been damaged by hot water or steam emanating from the premises served, notice of such damage will be mailed to the customer responsible for the payment of the water bills, but he will not be charged with the cost of changing or repairing the "first meter."

1-H-20e If "any substituted meter" be similarly damaged (whether through the fault of such customer or otherwise) and such damage occurs within three years after the last previous meter installed on the same service connection and supplying the same premises was damaged, the cost of changing and repairing such "substituted meter" will be charged to the customer, provided such customer shall have been continuously so responsible at all times since

the date of the last previous occurrence of damage to a meter, for which the District assumes liability hereunder.

1-H-20f When a meter is replaced, a notice will be left on the premises notifying the customer that the water is being shut off for work on the water meter.

1-H-21 **CHANGE OF METER LOCATION**: When the location of a meter and/or service is changed at the customer's request, the cost of making such change will be charged to the customer, in accordance with charges established in Part 3 hereof.

NOTE: When the customer requests such change of the location of a meter because of constructing a driveway that is to be paved, instead of moving the meter, a concrete box equipped with a steel cover plate to house the meter may be installed, provided the slope of such driveway is not such as to cause the face of the steel plate to be dangerous to pedestrians walking thereon.

1-H-22 **APPLICATION FOR WATER SERVICE**: No charge will be made for the mere turning on of the water supply upon the opening of a new account for any kind of service. An application provided by the District must be signed by the applicant. Such application shall contain the following provisions:

1. Applicant shall agree to accept the services applied for subject to the rules and regulations of the District and to pay therefore at regular rates. Should the applicant subsequently cancel one or more items of service, such cancellation shall not change or affect the terms of his application in respect to the remaining item or items of service.
2. Applicant shall also agree to give at least twenty-four hours notice to the District before service is to be discontinued. The provisions of the application, obligating the applicant to accept and pay for service shall remain in force until said notice is given and all bills shall be paid in full to date of receipt of said notice by the District.
3. Applicant shall further agree to assume all liability for any damage occurring on the premises served, by reason of open faucets, faulty fixtures, or broken pipes on such premises at or after the time when service is turned on, whether or not at that time there is any responsible interested person on the premises.

1-H-23a **USE OF WATER WITHOUT REGULAR APPLICATION FOR SERVICE**: Any person, firm, or corporation taking possession of premises where the water supply has been shut off and the curb cock or valve sealed, must make proper application to the district to have the water supply turned on. In the event the customer turns on the water supply or suffers or causes it to be turned on, without first having made such application, he will be held liable for all charges for the water service rendered, the amount thereof to be determined, at the election of the District, either by the meter reading or on the basis of the estimated consumption for the length of time service was received by the customer without proper application.

1-H-23b When the District finds that water is being used without proper application, the customer will be notified and if application for such service is not made promptly thereafter and the District immediately compensated for water already used, the supply will be shut off without further notice.

1-H-24a **DISCONTINUANCE OF WATER SERVICE**: No charge will be made for shutting off water supply or for reading the meter upon closing the account.

1-H-24b When a customer makes application for water service for specified premises, he will be charged for water service on such premises until he orders the service to such premises discontinued.

1-H-25a **READING OF METER AND BILLING**: Under ordinary conditions, each continuous service meter will be read monthly on approximately 28 to 35 days for one billing cycle to the next and a bill thereupon rendered, showing the period covered by the meter reading, or service the amount of water used, and the total charge for the service rendered. Fire service meters may, at the option of the District, be read semi-annually or annually. However, monthly bills shall be rendered for the monthly fire service charge. Notice may be given by the District if large or unusual meter registration. The customer is responsible for paying all water that passes through the meter. 230

1-H-25b Where the meter is found to be out of order, or when a meter reading cannot be obtained the charge for water will be based, at the option of the District, on an estimated meter reading. Such estimates may be computer generated based on previous usage for the property, or on the consumption as registered by a substituted new meter. Consideration may also be given to the average monthly consumption adjusted to seasonal demand for current billing period. Consideration may also be given to volume of business, seasonal demand, and other factors that may assist in determining an equitable charge. 230

1-H-25c When the meter is temporarily covered by building or other material, or when a mobile construction meter has been moved to a new location without the District's knowledge, so that it cannot be read, the charge for water will be based, at the option of the District, on estimated water usage. Such estimates may be computer generated based on previous usage for the property, and a bill or series of bills for the billing period, will be rendered. Estimated water usage may be adjusted if necessary when the meter is first thereafter read. The District may notify the customer of the inaccessibility of the meter and may charge therefore the applicable fee for the notice as specified in Part 2 of these Rules and Regulations. 230

1-H-25d Unless the applicant for water service specifies otherwise, all bills will be mailed to him at the same address to which the water service is furnished.

1-H-25e Director or his authorized representative, may make adjustments or waive charges to customers' bills for those charges resulting from meter read errors,

or other discrepancies. Charges for personalized service, such as mailing or delivery of delinquent or shut-off notices, or other miscellaneous services, may also be waived at the option of the Director or his authorized representative. Water allocations for different uses may be reviewed and appropriate allocations may be approved by the Director or his authorized representative. Disincentive charges may be adjusted where incurred due to leaks.[174]

1-H-26a **PAYMENT OF WATER BILLS**: All bills for service through meters shall be due and payable in cash or check upon presentation, and shall become delinquent 22 days from the bill date and no less than[231] nineteen (19) days after mailing.[160]

The District may, at its option, accept alternative payment methods for water bills, including credit card payments, electronic fund transfers, or other methods as approved by the Director.[174] The Director, or his authorized representative, may also approve customer-selected due dates when deemed appropriate for those customers participating in an automatic payment program. The Director or his authorized representative may approve an extension of a due date as requested by a customer on a case-by-case basis. [231]

1-H-26b All bills for fire hydrant service, for sewer flushing service, for water for street washing and/or sprinkling, or for water for flushing storm drains, culverts, etc., shall be rendered either monthly or bi-monthly and shall become delinquent nineteen (19) days after mailing. [72]

1-H-26c If any bill is allowed to become delinquent the water service may be discontinued with notice.

1-H-26d Water bills may be addressed in the name of the property owner or other person in possession of the property served, or the applicant for water service. The addressee of the water bill shall be primarily responsible for payment thereof.

1-H-26e If more than one tenant on a parcel of property is served through a single meter, the District will render a single bill to the property owner or applicant, and include a minimum charge for water service based upon the number of "billing units," the number of which may be determined on any of the following methods:

1. The number of tenant units: Each house, apartment, store, trailer space, hotel room, or motel unit with water piping shall be considered a separate tenant unit for the purpose of computing minimum charge. (See Part 2 for amount of minimum charge.) [11]
2. Meter size. (See Part 2 for amount of minimum charge.)

1-H-26f The form of the bill shall be prescribed by the District[229]

1-H-26g Payments made to the customer's account will be applied to the customer's account balance, which may include a deposit due, water charges, sewer charges, lift charges, penalty/late fees, and other miscellaneous charges. If the balance is not paid within 22 days from the bill date (the "due date"), the account will be charged with a penalty/late fee, and a past due bill and a "Delinquent Notice" will be issued. At the option of the Director, the District may allow a grace period of one to six days past the delinquent date prior to charging a penalty/late fee. The amount of such penalty/late fee shall be as specified in Rule 2-B-8a. At the option of the District the "Delinquent Notice" may be incorporated into the next regular bill for service, provided current and past due charges are so specified. Fifteen days from the date of the "Delinquent Notice", if payment still has not been received, water service may be discontinued upon notification to the customer. At least 48 hours prior to termination of service, the District shall attempt to notify the customer by telephone, mail, or delivery of a door hanger notice to the service location. At the option of the District, telephone notification may be made through the use of an interactive voice response (IVR) system. A "48-Hour Notice of Pending Shut-Off" charge in the amount specified in Rule 2-B-8a will be added to the customer's account to process the notice. The customer shall be subject to the "48-Hour Notice of Pending Shut-Off" charge upon preparation of the door hanger notice by the business office.[231]

If payment is not made by the final date on the "48-Hour Notice of Pending Shut-Off" a "Shut-off Notice" will be printed for delivery and a charge will be added to the delinquent account in the amount specified in Rule 2-B-8a. If resumption of service is requested for other than regular working days or hours, payment of an additional "Service Turn-on After Business Hours" fee will be charged in the amount specified in Rule 2-B-8a. [160]

1-H-26h In the event of payment in excess of the billed amount, the Waterworks Districts shall credit the amount of over-payment thereof upon the next ensuing water bill issued to the same property. [135]

1-H-26i In the event a customer is unable to pay a water bill, the customer may contact the District's billing office and request an alternate payment plan subject to approval by the Director[174] or his authorized representative. Such arrangements for payment must be made before the shut-off date to avoid the "Shut-Off Notice" charge. If a customer fails to pay a subsequent bill by its shut-off date, service may be discontinued upon notification to the customer. At the option of the District, the District may limit the number of approved payment extensions to no more than one per customer per year.[160]

In the event of underpayment upon any water bill, where alternate payment arrangements have not been approved in accordance with this rule, such underpayment may be treated as non-payment. Where the amount of such underpayment exceeds fifty percent of the total amount of bill, the remaining balance of said bill may become a charge upon the next ensuing water bill issued to the same customer, at the option of the District. [79]

1-H-26j Adjustment shall be made on water billing charges when subsequent meter readings show that the meter was previously read in error. Also, upon the customer's verified statement, a correction may be made as to previous opening or closing billing dates.

1-H-26k At the option of the Director the District may apply a penalty/late fee to closing bill balances not paid within 22 days from the closing bill date.[231]

1-H-27a **SHUTTING OFF WATER SUPPLY FOR EMERGENCY REPAIRS OR FOR CHANGES, ETC., IN OR AFFECTING THE DISTRIBUTION SYSTEM**: The District reserves the right at any and all times to shut off the water for the repairing, extending, or altering of water mains, the repairing and placing of fire hydrants, the repairing and renewing of water service connections, or the changing and testing of water meters or detector check valves.

1-H-27b When the water supply is to be shut off for any of the above reasons, the District will make a reasonable effort to deliver a notice of the shut-off to the customer or to some responsible interested person on the premises, but it does not assume any liability for the failure of the customer to receive or to understand such notice.

1-H-27c The District will not be responsible for the maintenance of pressure, nor for the continuity of water supply, and customers dependent upon a continuous water supply should provide adequate storage for emergencies. Customers having water heaters or other devices requiring a continuous water supply should take all necessary steps to prevent damage to, or the causing of injury by such devices as a result of the shutting off of the water supply.

1-H-27d Districts shall not be responsible for water pressures for any customers located at high elevation beyond normal District water pressures. Nor is the District obligated to extend water services to those areas beyond existing District water mains and/or off the public right of ways.

1-H-27e Credit forward balances for water service normally due to a former customer shall not be credited to the account of the new customer at the same service address. Said credit balances shall be refunded to the former customer when a forwarding address is available. When there is not a forwarding address available, said credit balances shall be deposited in the Waterworks District No. ____ Water Sales Trust Fund and shall be refunded to the former customer upon written request to the District therefore. If no such request is submitted within one year, the credit forward balance shall be credited to the Waterworks District General Fund. [174]

1-H-28a **DAMAGE THROUGH LEAKING PIPES OR FIXTURES ON THE PREMISES SERVED:** The District's control and responsibility ends at the curb shut-off or meter, and the District will in no case be liable for damage caused by, or in any way arising out of, the running or escape of water from open faucets, burst pipes, or faulty fixtures on the premises.

1-H-28b Every service connection is equipped with a control valve on the inlet side of the meter which may be used by the customer when necessary to shut off the water supply from the entire premises. Upon request, day or night, the District will, without charge, shut off such control valve for emergency purposes, upon the understanding that the customer will turn on the water after repairs shall have been made.

NOTE: For convenience and safety, the water pipe on the consumer's premises shall be equipped with a wheel valve, placed at some known accessible location between the meter and the building.

1-H-29a **TAMPERING WITH DISTRICT PROPERTY:** Except as provided in "Rule and Regulation No. 1-H-28b," no person, other than an authorized District employee, shall at any time or in any manner operate, or cause to be operated, any valve in or connected with a water main, service connection, or fire hydrant, or tamper or otherwise interfere with any water meter, detector check valve, or other part of the water system. No person shall deposit, or cause to be deposited, any substance or liquid in any water main or pipe of the District, or do anything which might cause any water supplied or furnished by, or belonging to the District, to become polluted, or take water from any service without first securing permission from the District. 72

1-H-29b In the event a person, firm, or corporation for any reason digs out and damages an angle meter valve or valve controlling a water supply, or damages a meter cover or its center piece, or causes any such act to be done, such person, firm, or corporation will be held liable for any injury or damage. The District may impose a fine of up to $250.00, plus labor and materials for repairs and damages to any person, firm, or corporation found to be tampering with District property or engaged in the unauthorized operation of any part of the water system. 72

1-H-30a **RIGHT OF INSPECTION OF AND ACCESS TO CUSTOMER'S PREMISES:** By accepting service from the District, the customer agrees that the Manager, or his authorized representative, may at reasonable time enter upon customer's premises for the purpose of: 174

1. Determining the existence, operation, maintenance, and/or use in, on, or about said buildings, grounds, or premises of:

   (a) Any plumbing or water piping which may now or hereafter cause, create, or permit backflow, back-siphonage, or any other condition affecting, or likely to affect, the purity and/or potability of the water supply furnished by the Waterworks Districts.

   (b) Any source of water supply which may now or hereafter be connected with the water supply system of the Waterworks Districts.

   (c) Any source of pressure, vacua, contamination, or pollution (including any and all equipment, fixtures, or appliances connected or used therewith or therefore) affecting or likely to

affect, the purity and/or potability of said water supply for the Waterworks Districts.

2. Facilitating the enforcement, from time to time, by the County Engineer, of any and all of its applicable Rules and Regulations of the Waterworks.

1-H-30b Authorized representatives of the District shall be furnished with, and upon the request of any customer, shall display appropriate evidence of identification. [79]

1-H-30c If the District shall ascertain that a condition affecting the purity and potability of the water supply in any Waterworks District exists in, on, or about any building, grounds, or premises in violation of any health law, Rule or Regulation of this State, or any health ordinance or code of the County of Ventura, or any Rule and Regulation of the County of Ventura Waterworks Districts, the District shall:

1. Immediately notify the person, firm, or corporation owning and/or controlling such building, grounds, or premises, the existence of such condition, and;

2. Require of such person, firm, or corporation a compliance within a reasonable time (to be stated in said notice), with any such law, ordinance, code, or Rule and Regulation so violated, and;

3. Shall further notify him or it, that, for his or its failure to so comply within said described period, the District will take, or cause to be taken, by the appropriate authority, such steps to enforce such compliance, to remedy such condition, and/or to protect the interests of the Waterworks District, as shall be provided by law or by these Rules and Regulations.

1-H-31 **PROHIBITION OF CROSS-CONNECTIONS**: No physical connection shall hereafter exist or be installed, located, maintained, or operated between the water supply system of any Waterworks District (including its appurtenant mains, pipes, fixtures, equipment, or appliances), and any other supply system or any sewer or grading system, or any steam, gas, or chemical line, pipe, or conduit, or any device, boiler, tank, or container whereby any contamination or pollution or any dangerous, impure, unsanitary, or unpotable substance (solid, liquid, or gaseous, or any combination thereof) may now or hereafter be introduced to any portion of the water supply system of the Waterworks Districts by backflow, back-siphonage, or any other method, means, or cause whatsoever.

EXCEPT THAT, wherever a mechanical or other method or device (approved by the District) may be used for protecting the Waterworks District's water supply system from any such source of contamination or pollution, any customer shall at his own expense and subject to the final inspection and approval thereof by a person certified for such inspection and repair by the Health Officer, install, maintain, operate, and use the same. Maintenance

shall include inspections and operational tests once a year, or more often as required by the Engineer and/or County Health Officer.

The District shall promulgate and shall, upon request, furnish copies to the customer of lists of approved mechanical devices and information concerning the installation of said devices.

The District shall have the right to discontinue the supply of water to, and to seal or disconnect the services to the premises of customer for the latter's failure to comply with, or the violation or infraction of any Rule and Regulation of the Ventura County Waterworks Districts relative to the inspection of the customer's premises for, to the prohibition of, or to the protection of the Waterworks District's water supply against cross-connections, backflow, or back-siphonage.

A customer shall be entitled to a reasonable notice of the intent of the District to discontinue the service for his noncompliance with, or his violation of any such Rule and Regulation, and to a reasonable opportunity to comply with and/or to cease the violation thereof.

PROVIDED, HOWEVER, THAT no such notice or opportunity to comply with, or to cease a violation of any such Rule and Regulation need be given in those instances in which non-compliance or violation by the consumer has created, is creating or is likely to create in the water supply system conditions dangerous and detrimental to public health, safety, and welfare. [10]

1-H-32 In the event that the customer is unable to obtain qualified private inspection service the District will furnish competent inspection and/or repair service at the following rates:

(a) Inspection & Testing . . . . . $15.00 per hour

(b) Repair & Retesting . . . . . $15.00 per hour plus parts

PART 1 - SECTION I - CAPITAL IMPROVEMENT CHARGES

RULE

1-I-1 **CHARGES**: As a condition precedent to receiving water service for any residence or building or parcel of land which has not theretofore been supplied with water by a County Waterworks District, there shall be paid to the District a Capital Improvement Charge in accord with the schedule for the District set forth in Part 3-A-9 hereof, except as defined in Rule 1-I-6 for service within an improvement zone, in Rule 1-I-2 for service for agricultural purposes and in Rule 1-I-4 for service for a portion of a parcel of land. The Capital Improvement Charge shall not include the charges for service and meter connections, which charges shall be paid separately as required elsewhere in these rules. [11]

1-I-2 **AGRICULTURAL SERVICE:** In the case where water service is requested for any land and/or parcels for agricultural purposes only and the District has facilities available or no expenditure of District funds is required to provide such service, the District may, at its option, waive payment of the Capital

Improvement Charge. However, the Capital Improvement Charge shall be paid prior to development of the property for a use other than agricultural. [11]

1-I-3 **SERVICE TO USERS OUTSIDE DISTRICT:** The furnishing of water by any District to any residence or building or parcel of land outside the District on a "surplus water available" basis shall not constitute previously supplying such residence, building or parcel with water within the meaning of Rule 1-I-1, and such parcel, or any land upon which such residence or building is located subsequently is annexed to a District the payments of a Capital Improvement Charge shall be a condition precedent to the continuation of water service to such residence, building, or parcel.[175]

The District, at its discretion, may provide new or extended services by contract or agreement outside its jurisdictional boundaries as permitted by Government Code section 56133 and other applicable law. Unless the contract or agreement expressly states otherwise, the District may, with or without cause, with or without advance notice, terminate any such contract or agreement and interrupt or cease any such new or extended services. Although not required to do so, to the extent circumstances reasonably allow, the District will provide advance notice before terminating any such contract or agreement or interrupting or ceasing any such new or extended services. The District's provision of any such new or extended services shall not, and shall not be deemed to, create any rights to continuing services. Water provided pursuant to any such contract or agreement shall be charged at the rates set forth in Rule 2-B-3. [175]

1-I-4 **TIME OF PAYMENT**: The Capital Improvement Charge shall be paid in full prior to final approval of subdivision, Planned Development, Special Use Permit and/or prior to the commencement of any work necessary to furnish water to any residence, building or parcel.

However, in a case where an individual owns a parcel of land larger than ten acres in size but desires water service for only a small portion thereof, and if the District is financially able to do so, it may, at its option, collect Capital Improvement Charges for only that portion of the parcel that is to be developed as shown on subdivision, Planned Development or Special Use Permit improvement plans. At such time as further development of the parcel occurs, the then applicable Capital Improvement Charge shall be paid for the remainder.

1-I-5 **CONTRIBUTIONS AND GRANTS OF CAPITAL IMPROVEMENTS**: In an amount agreed upon by the grantor and the District all or any part of one or more Capital Improvement Charges may be reduced by deducting there from the actual cost of any capital improvement, or the fair market value of any real property contributed or given to the District and expressly accepted by the District in lieu of all or part of the Capital Improvement Charge due upon any residence or building.

1-I-6 **IMPROVEMENT ZONE**:[74] Capital Improvement Charges shall not be collected by the District for ministerial development on existing parcels

whenever an Improvement Zone has been established and local and capital improvements have been, or are to be financed by the proceeds of bonds issued as special obligations of said zone. The term Improvement Zone shall refer to any area within a District which has been set up pursuant to Water Code Section 55650, 55860 or 55880 to provide for financing of facilities and improvements of benefit to such zone that are not of District-wide benefit.

Effective May 2, 1995, all parcels requesting discretionary land use entitlements shall be assessed Capital Improvement Charges according to the Rules and Regulations.

Whenever the ownership of any property within such Improvement Zone is held or acquired by a non-taxable entity, such entity shall be subject to Meter and Capital Improvement Charges.

The amount of such Capital Improvement Charge shall be determined by the Director and shall be calculated in such a manner as to include only those costs of capital improvements which are required to provide adequate service for such non-taxable entity.[175]

In no event shall said Capital Improvement Charge exceed that charged non-taxable entities for lands located within said District but not within a Zone.

1-I-7 **MAIN EXTENSIONS**: Upon payment of Capital Improvement Charges, the District will extend water lines from its facilities which exist in a publicly dedicated and accepted road nearest the lot, parcel or building to be served to a point along such publicly dedicated and accepted road nearest the lot, parcel or building to be served. However, the District shall not be required to provide water service where the cost of providing such service would cause an undue financial hardship on the District as determined by the District Board.

1-I-8 **OFF-SITE CONSTRUCTION**: The developer shall extend pipelines to the District's facilities to provide the necessary service. Said improvements shall be as required by the District in accord with the District's specifications and subject to the approval and acceptance of the District. Upon completion, said improvements shall be conveyed to the District together with an adequate easement for their installation, operation and maintenance. [14]

PART 1 - SECTION J - LOCAL SYSTEM CHARGE

RULE

1-J-1 **LOCAL SYSTEM CONSTRUCTION AND CHARGE**: As a condition precedent to receiving water service for any residence or building or parcel of land which has not theretofore been supplied with water by the District, all necessary local system improvements shall be furnished and installed by the applicant at his expense or he shall be charged for said improvements and pay the District the cost thereof computed at the rates described in Part 3 hereof or as computed by the Director.[175] Said improvements shall be as required by the District, in accord with the District's specifications and subject

to the approval and acceptance of the District. Upon completion, said improvements shall be conveyed to the District together with an adequate easement for their installation, operation and maintenance.

1-J-2 **LOCAL SYSTEM CONSTRUCTION WITHIN IMPROVEMENT ZONE**: Shall be financed as prayed for in the petition to form an Improvement Zone.

PART 1 - SECTION K - WATER SHORTAGES [176]

RULE

1-K-1 **EMERGENCY RESTRICTIONS ON WATER USE:** [176]

1-K-1a **EMERGENCY RESTRICTIONS ON WATER USE DUE TO SYSTEM EMERGENCIES:** [176] If the Director determines that over-consumption of water, loss of pressure in a system, breakdown, or any similar occurrence, requires emergency restrictions upon the use of water from any system, the Director shall order such restrictions as the Director in his or her sole discretion, deems appropriate under the circumstances.

Such order may restrict the use of water for sprinkling, manufacturing, or nonessential uses. The use of water for particular purposes may be limited to specified days or hours of a day or altogether prohibited, except that the use of water for drinking, cooking, and sanitary purposes shall not be prohibited.

Notice of any such order shall be given, either in writing or orally when possible, to customers served by the affected system. Water supply to any premises upon which the use of water is being made in violation of such order may be summarily shut off.

When the Director determines that the emergency no longer exists, The Director shall, by further order, rescind the restrictions previously ordered under this section. Notice of such order shall be given to customers in the same manner in which the order imposing the restrictions was given.

1-K-1b **EMERGENCY RESTRICTIONS ON WATER USE DUE TO OTHER THAN SYSTEM EMERGENCIES:** [176] If the Engineer determines that circumstances other than those specified elsewhere in Section K (such as natural disaster, epidemic, accident, war, other violent activity, labor dispute, civil disturbance or state or federal statute or executive or judicial order) require emergency restrictions upon the use of water from any system, the Engineer shall order such restrictions as the Engineer in his or her sole discretion, deems appropriate under the circumstances, and then shall obtain ratification of the order from the Districts' Board at its first meeting following such restriction order.

Such order may restrict the use of water for sprinkling, manufacturing, or nonessential uses. The use of water for particular purposes may be limited to specified days or hours of a day or altogether prohibited, except that the use of water for drinking, cooking, and sanitary purposes shall not be prohibited.

Notice of any such order shall be given, either in writing or orally when possible, to customers served by the affected system. Water supply to any premises upon which the use of water is being made in violation of such order may be summarily shut off.

When the Engineer determines that the emergency no longer exists, The Engineer shall, by further order, rescind the restrictions previously ordered under this section. Notice of such order shall be given to customers in the same manner in which the order imposing the restrictions was given.

1-K-2 **LEVEL 1 WATER SUPPLY SHORTAGE**

1-K-2a A Level 1 Water Supply Shortage exists when the Engineer determines in his or her sole discretion that due to drought or other water supply conditions, a water supply shortage or threatened shortage exists, and a consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions. Upon the declaration by the Engineer of a Level 1 Water Supply Shortage condition, the Director shall implement the mandatory Level 1 conservation measures identified in this section, effective on the date determined by the Director. 176

1-K-2b In addition to the prohibited uses of water identified in Part 1 - Section L – Permanent Water Conservation Measures, the following water conservation measures apply during a declared Level 1 Water Supply Shortage.

(i) Exterior Water Use: The District will establish allocations and water rates to achieve the desired reduction in exterior water use. 176

1-K-3 **LEVEL 2 WATER SUPPLY SHORTAGE** 176

1-K-3a A Level 2 Water Supply Shortage exists when the Engineer determines in his or her sole discretion that due to drought or other water supply conditions, a water supply shortage or threatened shortage exists, and a consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions. Upon the declaration by the Engineer of a Level 2 Water Supply Shortage condition, the Director shall implement the mandatory Level 2 conservation measures identified in this section, effective on the date determined by the Director.

1-K-3b In addition to the prohibited uses of water identified in Part 1 – Section K – Rule 1-K-2, Level 1 Water Supply Shortage, and Part 1 – Section L – Permanent Water Conservation Restrictions, the following water conservation measures apply during a declared Level 2 Water Supply Shortage:

(i) Exterior Water Use: District will establish allocations and water rates to achieve the desired reduction in exterior water use.

(ii) Limits on Filling Ornamental Lakes or Ponds: Filling or re-filling ornamental lakes or ponds is prohibited, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior

to the declaration of a supply shortage level under these Rules and Regulations.

(iii) Limits on Washing Vehicles: Using water to wash or clean a vehicle is prohibited, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, by high pressure/low volume wash systems, or at a commercial car washing facility that utilizes a re-circulating water system to capture or reuse water.

(iv) Limits on Filling Residential Swimming Pools and Spas: Re-filling of more than one foot and initial filling of residential swimming pools or outdoor spas with potable water is prohibited.

1-K-4 **LEVEL 3 WATER SUPPLY SHORTAGE – EMERGENCY CONDITION**[176]

1-K-4a A Level 3 Water Supply Shortage condition is also referred to as an "Emergency" condition. A Level 3 condition exists when the Engineer determines that a significant reduction in consumer demand is necessary to maintain sufficient water supplies for public health and safety, declares a water shortage emergency and notifies District residents and businesses of the emergency. Upon the declaration by the Engineer of a Level 3 Water Supply Shortage condition, the Director shall implement the mandatory Level 3 emergency conservation measures identified in this section, effective on the date determined by the Director.

1-K-4b In addition to the prohibited uses of water identified in Part 1 – Section K – Rules 1-K-2, Level 1 Water Supply Shortage, and 1-K-3, Level 2 Water Supply Shortage, and Part 1 – Section L – Permanent Water Conservation Restrictions, the following water conservation measures apply during a declared Level 3 Water Supply Shortage Emergency:

(i) **No Watering or Irrigating:** Watering or irrigating of lawn, landscape or other vegetated area with potable water is prohibited. This restriction does not apply to the following categories of use, unless it is determined by the Director that recycled water is available and may be applied to the use:

a. Maintenance of vegetation, including trees and shrubs, that are watered using a hand-held bucket or similar container or hand-held hose equipped with a positive self-closing water shutoff nozzle or device.

b. Maintenance of existing landscape necessary for fire protection.

c. Maintenance of existing landscape for soil erosion control.

d. Maintenance of plant materials identified to be rare or essential to the well-being of protected species.

e. Maintenance of landscape within active public parks and playing fields, day-care centers, golf course greens, and school grounds, provided that such irrigation does not exceed two (2)

days per week according to the schedule established in Rule 1-K-3b(i) and time restrictions in Rule 1-L-2h.

f. Actively irrigated environmental mitigation projects.

(ii) **Obligations to Fix Leaks, Breaks or Malfunctions:** All leaks, breaks or other malfunctions in the water user's plumbing or distribution system must be repaired within twenty-four (24) hours of notification as set forth in Rule 1-L-2b unless other arrangements are made with the District.

(iii) **No New Potable Water Service:** Upon declaration of a Level 3 Water Supply Shortage Emergency, no new potable water service will be provided, no new temporary meters or permanent meters will be provided, and no statements of immediate ability to serve or provide potable water service (such as will-serve letters, certificates, or letters of availability) will be issued, except under the following circumstances:

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

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

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

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

1-K-5 **NO NEW ANNEXATIONS**: Upon the declaration of a Level 3 Water Supply Shortage condition, the District will suspend consideration of annexations to its service area. This subsection does not apply to boundary corrections and annexations that will not result in any increased use of water. 176

1-K-6 **DISCONTINUED SERVICE**: The Director, in his or her sole discretion, may discontinue service to consumers who willfully violate the Level 3 Water Supply Shortage provisions. 176

1-K-7 **PROCEDURES FOR DETERMINATION/NOTIFICATION OF WATER SUPPLY SHORTAGE** 176

1-K-7a **DECLARATION AND NOTIFICATION OF WATER SUPPLY SHORTAGE**: The existence of a Level 1, Level 2 or Level 3 Water Supply Shortage condition shall be declared by the District Board or Engineer. If the declaration is made by the Engineer, the Engineer shall seek ratification of the declaration from the District Board at its first meeting following the declaration. Upon such declaration, all District customers shall be notified in writing of the applicable mandatory conservation measures, the date the measures are to take effect and, by reference to rule 1-L-4a of these Rules

and Regulations, the penalties that may be imposed for failing to comply with the measures.[176]

1-K-8 **HARDSHIP WAIVER:** [176]

1-K-8a **UNDUE AND DISPROPORTIONATE HARDSHIP:** If, due to unique circumstances, a specific requirement of this section would result in undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water users, then the person may apply for a waiver to the requirements as provided in this section.

1-K-8b **WRITTEN FINDING:** The waiver may be granted or conditionally granted only upon a written finding of the existence of facts demonstrating an undue hardship to a person using water or to a property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water use due to specific and unique circumstances of the user or the user's property.

(i) Application: Application for a waiver shall be on a form prescribed by the District and shall be accompanied by a non-refundable processing fee in an amount set by the District.

(ii) Supporting Documentation: The application shall be accompanied by photographs, maps, drawings, and other information, including a written statement of the applicant

(iii) Required Findings for Waiver: An application for a waiver shall be denied unless the Approval Authority finds, based upon the information provided in the application, supporting documents, or such additional information as may be requested, and on water use information for the property as shown by the records of the District, all of the following:

a. That the waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses;

b. That because of special circumstances applicable to the property or its use, the strict application of this section would have a disproportionate impact on the property or use that exceeds the impacts to residents and businesses generally;

c. That the authorizing of such waiver will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the District to effectuate the purpose of this section and will not be detrimental to the public interest; and

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

1-K-8c **APPROVAL AUTHORITY:** The Director shall have approval authority and act upon any completed application no later than twenty (20) days after submittal

and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver shall be promptly notified in writing of any action taken. Unless specified otherwise at the time a waiver is approved, the waiver will apply to the subject property during the term of the mandatory water supply shortage condition. 176

1-K-8d **APPEALS TO THE DISTRICT:** An applicant may appeal a decision by the Director to deny or conditionally approve a waiver application by filing a written request for hearing with the Engineer within ten (10) days of Director's decision. The request for hearing shall state the grounds for the appeal. At a public hearing, the Engineer shall act as the Approval Authority and review the appeal in accordance with the standards established in this rule. The decision of the Engineer is final. 176

PART 1 - SECTION L – PERMANENT WATER CONSERVATION MEASURES

RULE

1-L-1 **WATER SAVING DEVICES:** All new customers shall install and use the following water efficient plumbing fixtures:

(i) Ultra low volume toilets (1.6 gallons per flush or less).

(ii) Low flow shower heads (2.0 gallons per minute or less).

1-L-2 **WATER WASTE PROHIBITED:** 177 No person shall use or permit the use of District water as follows:

1-L-2a Watering of turf, ornamental landscape, open ground crops and trees, in a manner or to an extent which allows water to run to waste. 177

1-L-2b In any manner such that the escape of water through leaks, breaks, or malfunctions within the water user's plumbing or distribution system occurs for any period of time beyond which such break or leak should reasonably have been discovered and corrected. It shall be presumed that a period of forty-eight hours after the water user discovers such leak, break, or malfunction, or receives notice from the District of such condition, whichever occurs first, is a reasonable time within which to correct such condition. 64

1-L-2c Using water to wash or clean a vehicle, including but not limited to washing automobiles, trucks, trailers, boats, or other types of mobile equipment, without the use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device. This subsection does not apply to any commercial car washing facility. 177

1-L-2d Operating any ornamental fountain, or similar structures, unless water for such is recycled for lawful reuse without substantial loss. 64

1-L-2e Washing down hard or paved surfaces, including but not limited to washing of sidewalks, walkways, driveways, parking lots or any other hard-surfaced areas by hose or flooding, except as otherwise necessary to prevent or eliminate conditions dangerous to the public health and safety or for other legitimate uses approved by the District, and then only by use of a hand-held

bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, a low-volume high-press cleaning machine equipped to recycle any water used, or a low-volume high-pressure water broom. 177

1-L-2f Serving water in eating or drinking establishments, including but not limited to restaurants, hotels, cafés, bars or other public places where food or drinks are sold or served, to customers without first being expressly requested by the customer. 177

1-L-2g For any indiscriminate running of water or washing with water not otherwise prohibited above which is wasteful and without reasonable purpose. 64

1-L-2h Watering of residential, commercial, industrial, and governmental outdoor irrigation from 9:00 a.m. to 4:00 p.m. except for a short duration, not to exceed 3 minutes per station, for the limited purpose of testing or making repairs to the irrigation system. Agricultural customers are exempt from this irrigation schedule, but must comply with agricultural irrigation schedules determined by the District. 177

1-L-2i Running of water or spraying of water onto other properties. 177

1-L-2j Watering or irrigating of lawn, landscape or other vegetated area with potable water using a landscape irrigation system or a watering device that is not continuously attended for more than ten (10) minutes watering per day per station. This rule does not apply during the establishment period, as determined by the District, for new landscaping. 177

1-L-2k For laundry purposes by hotels, motels and other commercial lodging establishments, except where customers are given the option of not having towels and linens laundered daily through the prominent display of written notice of such option in each bathroom using clear and easily understood language. 177

1-L-2l Through the installation of single pass cooling systems in buildings requesting new water service. 177

1-L-2m Through the installation of non re-circulating water systems in new commercial conveyor car wash and new commercial laundry systems. 177

1-L-2n Through the use of non-water conserving dish wash spray valves by food preparation establishments, such as restaurants and cafes. 177

1-L-2o Through a commercial conveyor car wash operating without a re-circulating water system, or without first securing a waiver of this requirement from the Director. 177

1-L-3 **IRRIGATION SCHEDULES**: District may impose irrigation schedules for outdoor use, including agricultural use, to address water conservation and limited water supply.

1-L-4 **FAILURE TO COMPLY**:

1-L-4a **CIVIL PENALTIES**: In addition to any other penalties or sanctions provided by law, the following civil penalties shall be imposed for violation of any of the provisions of these rules, to be paid by the customer at the premises at which the violation occurred: 177

(i) For the first violation of any of the provisions of these rules a written notice will be given to the customer.

(ii) For the second violation of any of the provisions of these rules within the preceding (12) twelve calendar months, a penalty of one hundred dollars ($100.00) shall be imposed by written notice to the customer. This penalty is payable as part of the water bill, by the customer at the premises at which the violation occurred.

(iii) For the third violation of any of the provisions of these rules within the preceding (12) twelve calendar months a penalty of two hundred and fifty dollars ($250.00) shall be imposed by written notice to the customer. This penalty is payable as part of the water bill, by the customer at the premises at which the violation occurred.

(iv) For the fourth violation of any of the provisions of these rules within the preceding twelve (12) calendar months, a penalty of five hundred dollars ($500.00) shall be imposed by written notice to the customer. This penalty is payable as part of the water bill, by the customer at the premises at which the violation occurred.

The District may also give written notice to the customer indicating that it will install a flow restricting device of 1 GPM capacity for services up to one and one half inch meter size, and comparatively sized restrictors for larger services, on the service of the customer at the premises at which the violation occurred for a period of not less than forty-eight (48) hours. The charge for installing such a flow restricting device will be based upon the size of the meter and the actual cost of installation. The charge for removal of the flow restricting device and restoration of normal service shall be based on the actual cost involved. Said charges shall be payable by the customer as part of the water bill. Restoration of normal service will be performed during the hours of 8:00 a.m. to 4:00 p.m. on regular working days. In addition, a surcharge penalty of $100.00 shall be imposed for restoration of normal service, payable by said customer as part of the water bill.

(v) If there are five violations of any of the provisions of these rules within twelve (12) consecutive calendar months, the District may, following notice to the customer as described herein, discontinue water service to the customer at the premises at which the violation occurred.

1-L-4b **NOTICE**: The District will give notice of each violation to the customer at the premises at which the violation occurred, as follows: 177

(i) For a first, second, or third violation, the District may give written notice of such violation to the customer personally or by regular mail.

(ii) If the penalty assessed is, or includes the installation of a flow restrictor or the discontinuance of water service to the customer for any period of time whatever, notice of the violation will be given in the following manner:

a. By giving written notice thereof to the customer personally; or

b. If the customer is absent from or unavailable at the customer's billing address, place of residence, or place of business, by leaving a copy with an adult at such places, and by sending a copy through the United States mail addressed to the customer at such places, via registered mail return receipts requested.

c. If notice as provided in a and b above, is not successful, notice can be given by affixing a copy in a conspicuous place on the property where the failure to comply has occurred and also by delivering a copy to a person residing at the premises, if such person can be found.

d. All notices will contain, in addition to the facts of the violation, a statement of the possible penalties for each violation, a statement informing the customer of his or her right to a hearing on the violation, a brief summary of the appeal process specified herein, copies of Rules 1-L-4c and 1-L-4d, and the date and time installation of the restrictor or discontinuance of the service will occur.

1-L-4c **HEARING:** Any customer against whom a penalty is to be levied pursuant to this section shall have a right to a hearing, in the first instance by the Director, with the right of appeal to the Engineer or his or her designee, on the merits of the alleged violation, upon the written request of that customer to the Director within fifteen (15) days of the date of giving notice of the violation. Penalties, including termination of water service, will be stayed until any such hearing is conducted and a written decision is made by the Director or his or her designee and given to the customer. [177]

1-L-4d **APPEAL OF DECISION OF DIRECTOR:** A request for an appeal must be in writing and filed with the Engineer or his or her designee. The filing by a customer of a request for an appeal for any form of relief must be made within fifteen (15) days of the giving of the decision of the Director to the customer. Filing of such a request will automatically stay the implementation of the proposed course of action, pending the decision of the Engineer or his or her designee. No other or further stay will be granted. The appeal hearing will be scheduled to occur within a reasonable, prompt period of time following the written notice of appeal. The customer may present any evidence that would tend to show that the alleged wasteful water use has not occurred. Formal rules of evidence will not apply and all relevant evidence customarily relied upon by reasonable persons in the conduct of serious business affairs will be admissible, unless a sound objection warrants its exclusion by the Engineer

or his or her designee. The decision of the Engineer or his or her designee shall be final. 177

1-L-4e **RECONNECTION**: Where water service is disconnected, as authorized above, it will be reconnected upon correction of the condition or activity and the payment of the estimated reconnection charge.

1-L-4f **PUBLIC HEALTH AND SAFETY**: Nothing contained in these rules shall be construed to require the District to curtail the supply of water to any customer when, in the discretion of the Engineer or his or her designee, such water is required by that customer to maintain an adequate level of public health and safety. 17

PART 2 - RATE SCHEDULES AND SERVICE CHARGES FOR USE OF WATER

PART 2 - SECTION A - WATER USE - DOMESTIC, INDUSTRIAL AND AGRICULTURAL

The rates to be charged and collected for water and water service supplied for domestic, commercial, industrial and agricultural uses within Waterworks Districts are established in this section. 148

2-A-1a **MINIMUM CHARGE FOR SERVICE:** Shall be made for the billing periods at rates and allowances set forth hereinafter, except when it becomes necessary to bill for a partial billing cycle. In the latter case, a daily pro-rata charge will be calculated, with the exception of residential construction accounts which will be billed for the full billing period. 161

2-A-1b **MINIMUM CHARGE FOR MULTIPLE DWELLINGS:** If more than one dwelling or parcel of property is supplied water through a single meter or service connection, the District will render a single bill to a customer, but the minimum charge for water service will be computed on the basis of the number of "Billing Units," the number of which shall be determined at the option of the District from either of the following methods, provided that the number of billing units will not exceed 7 billings units per single service for public schools.

METHOD A - THE NUMBER OF BILLING UNITS

Each house, apartment, store, trailer space, hotel room, or motel unit with water piping shall be considered one billing unit.

METHOD B - METER SIZE

Each 3/4" meter shall be equivalent to 1 billing unit.
Each 1" meter shall be equivalent to 2 billing units.
Each 1¼" or 1½" meter is equivalent to 4 billing units.
Each 2" meter is equivalent to 7 billing units.
Each 3" meter is equivalent to 15 billing units.
Each 4" meter is equivalent to 30 billing units.
Each 6" meter is equivalent to 60 billing units.

In the following schedule of rates billing units will be designated as b.u. and cubic feet of water will be designated as hcf. 178

2-A-1c **DEPOSIT FROM APPLICANTS:** A prepaid Deposit shall be required in an amount sufficient to cover an average bill for water and, if applicable, sewer service for the property. Where an average bill amount cannot be determined or is deemed inappropriate by the Director or his or her authorized representative, a minimum deposit will be charged of $25 per Billing Unit (for each month in one billing cycle) for water service in Waterworks District Nos. 1, 16, and 19, $25 per Equivalent Residential Unit (for each month in the billing cycle) for sewer service in Waterworks District Nos. 1 and 16, $50 per Billing Unit (for each month in one billing cycle) for water service in Waterworks District No. 17. Public agencies, public utility companies, public institutions, and private customers who have demonstrated an acceptable payment history may be exempted from the deposit requirement, at the option of the District.232

A customer of a District who, during the last 12 consecutive months, has paid all water bills without "Notice of Pending Disconnection" being issued for nonpayment, and who has demonstrated an overall timely payment history, and who applies for service for a new account, shall have the Trust Deposit waived. 232

The Deposit may be waived at the discretion of the Director or his or her authorized representative, for a property owner who applies for service at the property that the property owner does or intends to occupy, or for renters of a property where the property owner co-signs the application, providing the property owner has not previously had a history of delinquency with any District managed by the Department. Deposits may also be waived at the discretion of the Director or his or her authorized representative for applicants for service for a short term purpose, such as in the case of "clean and show" properties for sale or rent.232

An existing customer who has received a "Notice of Pending Disconnection," and has established a pattern of delinquency, may be required to re-establish a deposit. A customer who has received a "Shut-off Notice" for nonpayment may, at the option of the District, be required to establish a deposit equal to two times the average bill during the past twelve months. 232

Any customer who, during a 12-month period, has two or more returned checks will be required to pay all billings for a period of one year with cash, a cashier's check, a money order, or, if approved by the Director, through automatic withdrawal, and may at the option of the District be required to post a trust deposit, in an amount up to two times the average bill. The cash-only requirement may be continued indefinitely for customers with an established pattern of multiple returned checks. 232

Deposit amounts may be rounded, at the option of the District, for ease of posting and accounting purposes. At the option of the District, deposits may be charged to the account for water service and may be payable with the next ensuing water bill. Trust deposits are refunded as a credit to the account for water service at the end of one year, provided payments have been made on a timely basis or upon receipt of a satisfactory credit rating as calculated by the billing system, and are without interest. 232

2-A-1d **ACCOUNTING AND RECONCILIATION FOR AGRICULTURAL CUSTOMERS:** Agricultural customers with properties equal to or greater than five (5) acres shall be given monthly water allocations as determined by the District and calculated based on irrigated area and the District's proportional imported and local supply available to the respective District's agricultural customers. Allocation calculations will vary for customers with and without wells. [233]

At the end of each billing cycle the amount of water used during the billing cycle will be subtracted from the allocation. The unused allocation will be carried forward to the next billing cycle and will continue to be carried forward to the final billing cycle of the calendar year. At any time during the calendar year, should the usage exceed the allocation, the account will be billed at the Agricultural Tier II rate[223] for the respective District as set forth in Rule as set forth in Rule 2-A-2b(ii)[216] 2-A-3b(ii), or 2-A-9b(ii) for each hundred cubic foot (hcf) exceeding the allocation. [225]

Agricultural allocations will be reviewed each year and may be adjusted based on total irrigated area for all agricultural customers within each District, the total GMA local groundwater allocations for the District, and a five-year historical average water use throughout the respective District, at the discretion of the Director. Individual agricultural customer allocations may be appealed and, with justification, may be adjusted, at the discretion of the Director. [233]

Similar use water customers, including those with landscape irrigation meters for homeowner's associations, parks, schools, or other large landscaped areas, may also be provided monthly water allocations by District calculated based on established water requirements for landscape irrigation[219] including irrigated area, evapotranspiration rate, and effective rainfall. At each billing, disincentive rates shall be charged for water used in excess of the allocation. (See Section 2-A-2b (ii) below).[233]

2-A-1e DELETED[216]

2-A-2 **WATERWORKS DISTRICT NO. 1– MOORPARK** [239]

2-A-2a **SERVICE CHARGE PER METER MONTHLY:**

Meter Size	Agricultural [98]	Municipal & Industrial [98]
3/4 inch	5.50	7.25
1 inch	10.50	14.50
1½ inch	22.00	29.00
2 inch	38.50	50.75
3 inch	82.50	108.75
4 inch	165.00	217.50
6 inch	330.00	435.00
For each residence on a parcel of land add	7.25	7.25

2-A-2b **COMMODITY RATES:** [243]

(i) a Municipal and Industrial (M&I)

Tier I	$2.928/HCF	($1275.44/AF)
Tier II	$3.074/ HCF	($1,339.03/AF)
Tier III	$4.611/ HCF	($2,008.55/AF)
Tier IV	$7.685/ HCF	($3,347.59/AF)

(i) b DELETED[211]

(i) c DELETED[211]

(ii) a Agricultural

AG Tier I Rate	$1.696/HCF($738.78/AF)
AG Tier II Rate	$2.928/HCF($1,275.44/AF)

(ii) b DELETED[211]

2-A-2C **MONTHLY CONSUMPTION ALLOCATIONS (M&I)**[225]

The Peak Demand and Low Demand Billing Cycles will be established by the Director or authorized representative based on weather conditions, billing cycle dates, or other pertinent factors. Additional allocations may be established when determined by the Director or authorized representative to be appropriate.

(i) a TIER ALLOCATIONS (Low Demand)[241]

Adjustment Number	Meter Size	Tier I (hcf)	Tier II (hcf)	Tier III (hcf)	Tier IV (hcf)
1	3/4"	0-8	9-14 (500 gpd)	15-25	>25
2	--	0-12	13-21	22-37	>37
3	1"	0-16	17-28	29-49	>49
4	--	0-20	21-35	36-62	>62
5	--	0-24	25-42	43-74	>74
6	--	0-28	29-49	50-86	>86
7	1½"	0-32	33-56	57-98	>98
13	2"	0-56	57-98	99-172	>172
29	3"	0-120	121-210	211-368	>368
59	4"	0-240	241-420	421-735	>735
119	6"	0-480	481-840	841-1470	>1470

(i)b TIER ALLOCATIONS (Peak Demand)[241]

Adjustment Number	Meter Size	Tier I (hcf)	Tier II (hcf)	Tier III (hcf)	Tier IV (hcf)
1	3/4"	0-8	9-21 (500 gpd)	22-37	>37
2	--	0-12	13-32	33-56	>56

3	1"	0-16	17-42	43-74	>74
4	--	0-20	21-53	54-93	>93
5	--	0-24	25-63	64-110	>110
6	--	0-28	29-74	75-130	>130
7	1½"	0-32	33-84	85-148	>148
13	2"	0-56	57-147	148-259	>259
29	3"	0-120	121-315	316-555	>555
59	4"	0-240	241-630	631-1110	>1110
119	6"	0-480	481-1260	1261-2220	>2220

(ii) TIER RATES: 218

Tier I - Base Rate
Tier II - Base Rate x 1.05 238
Tier III - Tier Rate II x 1.50
Tier IV - Tier II Rate x 2.50

(iii) OTHER MONTHLY ALLOCATIONS: 225

Where the District has determined that the M&I tiered or AG allocations are not applicable to the customer, a monthly water allocation established by the District shall apply. M&I Tier II rate shall be applicable for all water used within the allocation. M&I Tier III rate shall be applicable for all water used above and beyond the allocation.

(iv) DELETED225

(v) AGRICULTURAL MONTHLY ALLOCATIONS: 225

(a) Customers' monthly allocations will be calculated by the District and will be based on the irrigated area and the local groundwater available to the District.

(b) DELETED179

(vi) AGRICULTURAL (AG) RATES**:**225

(a) AG Tier 1 Rate, as stated in Rule 2-A-2b(ii)a, shall be applicable for all water used within the monthly allocation.225

(b) AG Tier II Rate, as stated in Rule 2-A-2b(ii)a, shall be applicable for all water used beyond the monthly allocation. 225

2-A-2d **DELETED**211

2-A-2e **DELETED**211

2-A-3 WATERWORKS DISTRICT NO. 16 - PIRU

2-A-3a **MONTHLY SERVICE CHARGE PER METER:** 220

Meter Size	Domestic, Agricultural, Commercial and Others	
3/4 inch	$	35.82
1 inch		71.64
1½ inch		143.28
2 inch		250.74
3 inch		537.30
4 inch		1,074.60
6 inch		2,149.20
For each residence on a parcel of land add	$	35.82

2-A-3b **COMMODITY RATES:** 221

(i) Municipal and Industrial -

Tier I	$ 1.432/HCF ($ 623.78/AF)
Tier II	$ 2.148/HCF ($ 935.67/AF)
Tier III	$ 3.580/HCF ($1,559.45/AF

(ii) Agricultural 221

AG Rate	$1.432/HCF($ 623.78/AF)
Disincentive Rate	AG Rate Plus GMA Tier I Surcharge221

2-A-3c **TIER ALLOCATIONS (MONTHLY CONSUMPTION-ONE LEVEL ONLY)**182

The Peak Demand and Low Demand Billing Cycles will be established by the Director his authorized representative based on weather conditions, billing cycle dates, or other pertinent factors. Additional allocations may be established when determined by the Director or his authorized representative to be appropriate. 182

DELETED 222

(i) a Peak Demand Billing Cycles

Billing Adjustment Number	Meter Size	Tier 1 (hcf)	Tier II (hcf)	Tier III (hcf)
1	3/4"	0-22 (548 gpd)	23-39	>39
2	--	0-33	34-58	>58
3	1"	0-44	45-77	>77
4	--	0-55	56-96	>96
5	--	0-66	67-116	>116
6	--	0-77	78-135	>135
7	1½	0-88	89-154	>154
13	2"	0-154	155-270	>270
29	3"	0-330	331-578	>578
59	4"	0-660	661-1155	>1155
119	6"	0-1320	1321-2310	>2310

(i) b Low Demand Billing Cycles

Billing Adjustment Number	Meter Size	Tier 1 (hcf)	Tier II (hcf)	Tier III (hcf)
1	3/4"	0-14 (374 gpd)	15-25	>25
2	--	0-21	22-37	>37
3	1"	0-28	29-49	>49
4	--	0-35	36-61	>61
5	--	0-42	43-74	>74
6	--	0-49	50-86	>86
7	1½	0-56	57-98	>98
13	2"	0-98	99-172	>172
29	3"	0-210	211-368	>368
59	4"	0-420	421-735	>735
119	6"	0-840	841-1470	>1470

(ii) **TIER RATES** [222]

Tier I – Base Rate

Tier II – Base Rate x 1.50

Tier III – Base Rate x 2.50

(iii) **INDUSTRIAL, COMMERCIAL, AND OTHER ALLOCATIONS:** [222]

At the option of the District, where the tiered allocations are not applicable, a ten percent (10%) reduction from the water requirement as computed by the District shall apply.

(iv) **INDUSTRIAL, COMMERCIAL, AND OTHER RATES:**

(a) Tier I rate shall be applicable for all water used within the percentage reduction goal, established pursuant to 2-A-3c(iii) above. 222

(b) Tier I rate plus GMA Tier I surcharge shall be applicable for all water used above and beyond the percentage reduction goal established pursuant to 2-A-3c(iii).222

(v) **AGRICULTURAL ALLOCATIONS:** 222

(a) Customers annual allocations will be calculated by the District, based on irrigated area, evapotranspiration, effective rainfall, and crop factors. A 10% reduction will be applied to the baseline allocation.

(b) DELETED.

(vi) **AGRICULTURAL RATES:**

(a) AG Rate, as stated in Rule 2-A-3b(ii), shall be applicable for all water used within the percentage reduction goal.

(b) Disincentive Rate shall be AG Rate plus GMA Tier I surcharge for all water used above and beyond the percentage reduction goal. 222

2-A-4 DELETED

2-A-5 DELETED

2-A-6 DELETED

2-A-7 DELETED

2-A-8 WATERWORKS DISTRICT NO. 17 - BELL CANYON

2-A-8a **SERVICE CHARGE PER METER MONTHLY:** 183

Meter Size	Domestic & Others
3/4 inch	6.00
1 inch	12.00
1½ inch	24.00
2 inch	42.00
3 inch	90.00
4 inch	180.00
6 inch	360.00
For each residence on a parcel of land add	6.00

2-A-8b **BOEING NORTH AMERICAN, INC.** 79

Service Charge $5,300.00/month

2-A-8c **LAS VIRGENES WATER DISTRICT**

Service Charge $180.00/month

2-A-8d **COMMODITY RATES:** 244

(i) a Municipal and Industrial

Tier I $3.631/hcf ($1,581.66/af)

Tier II $5.447/hcf ($2,372.71/af)

Tier III $9.078/hcf ($3,954.38/af)

(i) b DELETED [214]

(i) c DELETED [214]

(ii) DELETED [127]

(ii) DELETED [127]

(iii) Boeing North American, Inc. [244]

Commodity Rate $3.631/HCF ($1,581.66/AF)

(iv) Las Virgenes Mutual Water District [244]

Commodity Rate $5.447/hcf ($2,372.71/af)

2-A-8e **MONTHLY CONSUMPTION ALLOCATIONS (M&I)**[234]

The Peak Demand and Low Demand Billing Cycles will be established by the Director or his authorized representative based on weather conditions, billing cycle dates, or other pertinent factors. Additional allocations may be established when determined by the Director or his or her[232] authorized representative to be appropriate. [183]

The top of Tier II range is 1.75 times Tier I. [215]

(i) a Tier Allocations Peak Demand [234]

Billing Adjustment Meter Number	Size	Tier I (hcf)	Tier II (hcf)	Tier III (hcf)
1	3/4"	0-40[234]	41-70	>70
2	--	0-60	61-105	>105
3	1"	0-80	81-140	>140
4	--	0-100	101-175	>175
5	--	0-120	121-210	>210
6	--	0-140	141-245	>245
7	1½"	0-160	161-280	>280
13	2"	0-280	281-490	>490
29	3"	0-600	601-1050	>1050
59	4"	0-1200	1201-2100	>2100
119	6"	0-2400	2401-4200	>4200

(i) b Tier Allocations Low Demand [234]

Billing Adjustment Meter Number	Size	Tier I (hcf)	Tier II (hcf)	Tier III (hcf)
1	3/4"	0-24[234]	25-42	>42

2	--	0-36	37-63	>63
3	1"	0-48	48-84	>84
4	--	0-60	61-105	>105
5	--	0-72	73-126	>126
6	--	0-84	85-147	>147
7	1½"	0-96	97-168	>168
13	2"	0-168	169-294	>294
29	3"	0-360	361-630	>630
59	4"	0-720	721-1260	>1260
119	6"	0-1440	1441-2520	>2520

(ii) **TIER RATES:** 215

Tier I - Base Rate

Tier II - Base Rate x 1.50

Tier III - Base Rate x 2.50

(iii) **AGRICULTURAL ALLOCATIONS:** 129

(a) DELETED

(b) DELETED

(iv) **AGRICULTURAL RATES:** 129

(a) DELETED

(b) DELETED

(v) **BOEING NORTH AMERICAN, INC., AND OTHER MONTHLY ALLOCATIONS AND RATES:** 234

Where the District has determined that the above stated M&I tiered allocations for Peak and Low Demand Billing Cycles are not applicable to a particular customer including but not limited to Boeing North American, Inc., a monthly allocation established by the District shall instead apply to the customer. The M&I Tier I rate, as stated in Rule 2-A-8d(i) (or for Boeing North American, Inc., the company rate stated in Rule 2-A-8d(iii)), shall apply for all water used within the monthly allocation for such customers. M&I Tier II rate, as stated in Rule 2-A-8d(i), shall apply for all water used above and beyond such customers' monthly allocation.

(vi) **LAS VIRGENES MUNICIPAL WATER DISTRICT RATES:** 234

(a) The commodity rate, as stated in 2-A-8d(iv), shall apply for all water used.

2-A-8f DELETED 215

2-A-8g DELETED 215

2-A-9 **WATERWORKS DISTRICT NO. 19 - SOMIS** 208

2-A-9a **SERVICE CHARGE PER METER MONTHLY:** 208

Meter Size	Agricultural	Domestic & Others
3/4 inch	19.25	10.25
1 inch	20.50	20.50
1½ inch	41.00	41.00
2 inch	71.75	71.75
3 inch	153.75	153.75
4 inch	307.50	307.50
6 inch	615.00	615.00
For each residence on a parcel of land add	10.25	10.25

2-A-9b **COMMODITY RATES:** 245

(i) a Municipal and Industrial

Tier I	$2.384/hcf ($1,038.47/af)
Tier II	$3.576/hcf ($1,557.71/af)
Tier III	$5.960/hcf ($2,596.18/af)

(i) b DELETED 212

(i) c DELETED 212

(ii) a Agricultural 208

For parcels less than 5 acres:

Base Rate	$2.384/hcf ($1038.47/af)

For parcels equal to or greater than 5 acres

AG Tier I Rate	$1.870/hcf ($814.57)
AG Tier II Rate	$2.384/hcf ($1,038.47)

GMA Tier 1 Surcharge. 212

(ii) b. DELETED 212

(iii) Lift Charge 208

Rate	$0.2190/hcf ($95.40/af)

2-A-9c **TIER ALLOCATIONS (MONTHLY CONSUMPTION)** 186

The Peak Demand and Low Demand Billing Cycles will be established by the Director or his authorized representative based on weather conditions, billing cycle dates, or other pertinent factors. Additional Billing Adjustment Numbers and corresponding allocations may be established when determined by the Director or his authorized representative to be appropriate.

The top of Tier II range is 1.75 times Tier I. 213

(i) a **Tier Allocations** (Peak Demand)233

Billing Adjustment	Meter	Tier I	Tier II	Tier III

Number	Size	(hcf)	(hcf)	(hcf)
1	3/4"	0-26	27-46	>46
2	--	0-39	40-68	>68
3	1"	0-52	53-91	>91
4	--	0-65	66-114	>114
5	--	0-78	79-137	>137
6	--	0-91	92-159	>159
7	1½"	0-104	105-182	>182
13	2"	0-182	183-319	>319
29	3"	0-390	391-683	>683
59	4"	0-780	781-1365	>1365
119	6"	0-1560	1561-2730	>2730

(i) b **Tier Allocations** (Low Demand)[233]

Billing Adjustment Meter Number	Size	Tier I (hcf)	Tier II (hcf)	Tier II (hcf)
1	3/4"	0-18	19-32	>32
2	--	0-27	28-47	>47
3	1"	0-36	37-63	>63
4	--	0-45	45-79	>79
5	--	0-54	55-95	>95
6	--	0-63	64-110	>110
7	1½"	0-72	73-126	>126
13	2"	0-126	127-221	>221
29	3"	0-270	271-473	>473
59	4"	0-540	541-945	>945
119	6"	0-1080	1081-1890	>1890

(ii) **TIER RATES:** [213]

Tier I - Base Rate
Tier II - Base Rate x 1.50
Tier III - Base Rate x 2.50

(iii) **INDUSTRIAL, COMMERCIAL, AND OTHER ALLOCATIONS:**

Where the District has determined that the M&I tiered or AG allocations are not applicable to the customer, a monthly water allocation established by the District shall apply. M&I Tier I rate, as stated in Rule 2-A-9b, shall be applicable for all water used within the allocation. M&I Tier II rate, as stated in Rule 2-A-9b, shall be applicable for all water used above and beyond the allocation. 233

(iv) Deleted 233

(v) **AGRICULTURAL ALLOCATIONS:**

(a) Customers' monthly allocations, for properties equal to or greater than five (5) acres, will be calculated by the District and will be based on the irrigated area and the local ground water available to the District. 233

(b) DELETED. 186

(vi) **AGRICULTURAL RATES:** 123

(a) For AG customers with properties equal to or greater than five (5) acres, the AG Tier I Rate, as stated in Rule 2-A-9b (ii)a, shall be applicable for all water sued within the monthly allocation. 233

(b) For AG customers with properties equal to or greater than five (5) acres, the AG Tier II Rate as stated in Rule 2-A-9b (ii)a, shall be applicable for all water used above and beyond the monthly allocation. 233

(c) For AG customers with properties less than five (5) acres, the M&I Tier I Rate, as stated in Rule 2-A-9b (ii)a, shall be applicable for all water used. 233

2-A-9d **DELETED** 213

2-A-9e **DELETED** 213

2-A-10 **MINIMUM TIERED ALLOCATIONS:**

When it becomes necessary to bill for a partial billing cycle, tiered allocations shall be prorated on a daily basis.72

2-A-11 **WATER ALLOCATION APPEALS:**

The Director or his designated representative may consider customer requests for increased water allocations. Increases may be approved on the basis of need - as determined by the number of residents in the household, special medical needs, livestock, fruit trees, landscape area, or other essential water requirements - and water conservation practices. 189

PART 2 - SECTION B - WATER RATES FOR MISCELLANEOUS SERVICES

2-B-1 **PUBLIC WATER SERVICE:** Charges for water service furnished governmental agencies and Districts shall be equivalent to the rates in Section A except that unmetered service may be granted, but the billing units may be estimated by the District.

2-B-2 **AGRICULTURAL WATER SERVICE:** The Engineer may establish special rates solely for agricultural purposes either metered or on a flat rate subject to approval of the Board.

2-B-3 **TEMPORARY WATER SUPPLY:** The charge for service located out of the District or other temporary water supply as defined in Rule 1-H-4 shall be determined by the Director per rates set forth in Rule 2-A-2b, 3b, 8d, or 9b.[190]

Temporary water supply is interruptible. [190]

2-B-4 **CONSTRUCTION WATER SERVICE (UNMETERED):** Unmetered water service shall be considered a temporary water supply and is interruptible. Charges for unmetered water supplies in any District for construction purposes shall be computed as follows: [190]

1. TRUCK LOADS: To be charged per Rule 2-B-3. [190]
2. RESIDENTIAL LOT CONNECTIONS: Water used for construction of residences shall be charged per Rule 2-B-3, and shall be billed either monthly or bimonthly. [190]

2-B-5 **CONSTRUCTION FIRE HYDRANT METER WATER SERVICE (METERED):**

The District may require that all water used in construction be metered, in which event, the District will furnish, install and remove the meter, valve, and fittings to be located at a fire hydrant or other convenient point in the system.

If the Ventura County Fire Protection District requests that the fire hydrant openings be unobstructed at all times, a charge of $100.00 shall be paid for the installation and removal of a tee and extra valve.

The applicant shall be responsible for the loss or damage to the meter or other equipment used.

The fire hydrant meter requires a Trust Deposit plus an installation fee payable in advance, unless waived by the Director. The trust deposit and installation fee shall be determined by the Director, and shall reflect the cost of the meter and actual labor costs for the installation. [190]

The service charge and commodity rate for construction/fire hydrant meter service, or any other temporary water supply, shall be determined by the Director. [190]

2-B-6 **AUTOMATIC FIRE SPRINKLER SERVICE/FIRE SERVICE:**

The rates to be charged for water service and water consumed by private fire lines exclusively used for fire protection, whether such lines are attached to automatic sprinkler systems, fire hydrants, or hose attachments shall be as follows: [34]

Size of Service Connection	Monthly Charge
2 inch and smaller	$ 7.00
3 inch	10.00
4 inch	15.00
6 inch	25.00

	8 inch	40.00
	10 inch	60.00

The charge for fire connection sizes not indicated shall be determined by the Director. [190]

2-B-7 DELETED

2-B-8 **MISCELLANEOUS CHARGES** [63]

Water availability letter	$ 40.00
Sewer availability letter [67]	$40.00
Water will-serve letter	$40.00
Sewer will-serve letter [67]	$40.00
Fire Flow Test and Letter	$80.00
Annual average water consumption or any other letter not specified herein	$25.00
Water and Sewer Construction Permit Issuance Fee [72]	$60.00
Ventura County Waterworks Districts Rules and Regulations (per copy) [75]	$50.00

2-B-8a **PERSONALIZED SERVICE** [166]

Penalty/Late Fee	10% of balance ($10.00 minimum)
48 Hour Notice of Pending Shut-Off	$20.00
Returned Check/Non-Sufficient Fund (NSF) Notice	$20.00
Shut-off Notice	$25.00
Service turn-on after regular business hours	$50.00

2-B-8b Returned Check Charge [166] $25.00

2-B-8c Backflow Noncompliance Notice [166] $20.00

(i)	Service turn-off due to backflow non-compliance	$60.00
(ii)	Removal and installation of meter due to backflow non- compliance.	Actual cost incurred by the District

2-B-8d Meter Inaccessible Notice (reread) [166] $20.00

2-B-8e All payment arrangements must be prearranged with the business office prior to service interruption. Service turned off for nonpayment and/or NSF checks will not be restored until full payment, including all charges, is presented in the business office. This shall not preclude the Manager or his authorized representative from approving an alternate payment arrangement for a customer experiencing an extreme financial hardship or medical emergency. The District representative will otherwise not accept partial payments, and in no event will payment for an NSF check be accepted in the form of another check, unless it is a certified or cashier's check, or unless by written statement from the customer's banking institution it is determined that the NSF check resulted from an error on the part of the banking institution or through no fault of the customer. In order to avoid the after hours turn-on charge, payment must be presented prior to the close of business on normal work days. 166

2-B-8f DELETED 166

2-B-8g No customer with a backflow device noncompliance shut-off will be turned back on other than between the hours of 8:00 a.m. and 5:00 p.m. All backflow device shut-off notices must be cleared by the District before the water can be turned on. 63

PART 3 - SECTION A – SCHEDULE OF RATES AND CHARGES FOR CONSTRUCTION SERVICE

RULE

TYPES OF CHARGES

Charges shall be made for services rendered by Waterworks Districts for the herein described classes of service. Such charges so collected shall be deposited in the General Funds of the District.

3-A-1 **INTERCONNECTION CHARGES**: The Waterworks Districts will supervise interconnections between the existing water system of the District and the system as follows:

Such connections shall not be made final until all charges therefore have been paid.

(a) For interconnections done by the developer, the District will operate all valves and directly supervise the work of the developer in making the connection between the existing system of the District and the system installed by the developer. The private contractor shall furnish all materials and other labor to make the interconnections, including performing all resurfacing and other work necessary to produce the finished result. 37

1.	For interconnection to 6" and smaller Water main	$ 75.00
2.	For 8" water main	100.00
3.	For 10" water main	125.00
4.	For 12" water main	160.00

5. For interconnection to larger sized mains, the charge will be determined based on engineering determination of current costs.

(b) For interconnection done by the District, the District will perform all work and furnish all materials to make the interconnection for a charge based on an engineering estimate of current costs.

3-A-2 **INSTALLATION CHARGES FOR PERMANENT METERS AND SERVICES FURNISHED BY THE DISTRICT**: 83

Charges for furnishing and installing service connections and meters with District forces are as follows:

(a) Meter installed on existing service connection including all necessary fittings (**NOTE: These charges do not include the installation of service connection from main to meter or meter box.)**

¾" Positive Displacement Meter	$	360
1" Positive Displacement Meter	$	395
1 ½" Positive Displacement Meter	$	620
1 ½" Turbine Meter	$	880
2" Positive Displacement Meter	$	740
2" Turbine Meter	$	950
3" Turbine Meter	$	1,250
4" Turbine Meter	$	1,935
6" Turbine Meter	$	2,970

Charges for larger and/or compound meters shall be determined by the District from current costs. A minimum charge of $2,500.00 will be required at time of request for the meter. Applicant will be billed for actual costs (including overhead).

(b) Service connections without meter, including tapping the water main, tubing from main to meter, meter box, all valves and necessary fittings, labor, jacking, or boring, excavating, backfilling, resurfacing, road encroachment permit, and all other necessary work:

A deposit based on the Director's estimate of cost will be required from the applicant at time of request for service installation. Applicant will be billed for actual costs (including overhead) after completion of installation. 191

3-A-3 **CHARGES FOR MISCELLANEOUS CONSTRUCTION SERVICES:**

The District may perform the following construction services, the charges for which shall be determined by an engineering estimate of current costs: water main extensions, meter relocations, extensions to existing service connections, and replacement of meter boxes and meter box covers. 79

3-A-4 DELETED

3-A-5 DELETED

3-A-6 DELETED

3-A-7 DELETED

3-A-8 **FIRE HYDRANT INSTALLATION CHARGES**: The District will furnish and install fire hydrants, including all necessary labor, materials, and permits for a charge based on an engineering estimate of current costs.

3-A-9 **CAPITAL IMPROVEMENT CHARGE**: The charge for Capital Improvement shall be computed, at the option of the District, from the schedule listed below for various districts. When the charge is based on acreage, it shall be computed on the gross area of the parcel which includes streets that lie within the parcel. When acreage charge is used, commercial development shall include, but not be limited to, motels, hotels, trailer parks and multiple residential developments.

NOTE: A single residential lot is considered to be 8,000 square feet or less. 35

SCHEDULES FOR DISTRICTS: The Capital Improvement Charges for various districts are as follows:

(a) **WATERWORKS DISTRICT NO. 1 - MOORPARK** 231

Due to a negative adjustment of the Construction Cost Index for the Los Angeles Region in January 2010, the CIC was not adjusted. Adjustment is based on Engineering New Record Construction Cost Index for the Los Angeles Region from January 1, 2012 (10,091.80) to January 1, 2013 (10,276.68)[3]. 233

RESIDENCES 236

Single Family	$ 2,389
Condominium Unit	2,389
Apartment Unit	2,389
Mobile Home Space	2,389

CHARGE BASED ON METER SIZE 236

5/8" or 3/4" Meter	$ 2,389
1" Meter[1]	4,778
1 ½" Meter	9,556
2" Meter	16,723

3" Meter	35,834
4" Meter	71,668
6" Meter	143,336

CHARGE BASED ON ACREAGE[2] **236**

Commercial Development	$ 8,360
Industrial Development	8,599
Public Development	4,776

[1]Where a 1" Meter is necessary for residential fire sprinklers or other means of fire protection required by the Fire Protection District, or a larger meter is needed to compensate for water system pressure, the ¾" Meter charge shall apply.

[2]Per acre or any fraction thereof.

[3]Adjustment is based on Engineering New Record Construction Cost Index for the Los Angeles Region from January 1, 2012 (10,091.80) to January 1, 2013 (10,276.68).

(b) **WATERWORKS DISTRICT NO. 16 - PIRU** 73a

RESIDENCES

Single Family, Condominium Unit, Apartment Unit and Mobile Home Space	$ 500/Each

CHARGE BASED ON METER SIZE

3/4 inch	$ 500
2 inch	1,000
1 1/2 inch	2,000
2 inches	3,500
3 inches	7,500
4 inches	15,000
6 inches	30,000

CHARGES BASED ON ACREAGE

Per Acre or any fraction thereof:	
Commercial development	$ 2,000
Industrial development	$ 2,500

These capital improvement charges will be applicable for any developer requesting a will-serve letter after December 31, 1994.

Where a 1-inch meter is necessary for residential fire sprinklers or other means of fire protection required by the Fire Protection District, the ¾" inch meter charge shall apply.

Waterworks District No. 16 (Piru) water system shall provide fire service to its customers only. A property owner may obtain fire service by becoming a customer of the District upon paying the applicable fee in accordance with the approved Rules and Regulations.

Any property owner requesting water service from the District shall obtain a "Warring Release" from Warring Water Service, Inc. from where the District receives its water supply.

(c) DELETED

(d) DELETED

(e) DELETED

(f) **WATERWORKS DISTRICT NO. 17 - BELL CANYON** [34]

RESIDENCES

Single Family	$ 180
Each Condominium Unit	180
Each Apartment Unit	180
Each Mobile Home Space	180

CHARGE BASED ON METER SIZE

5/8" or 3/4" meter	$ 180
1" meter	360
1½" meter	720
2" meter	1,260
3" meter	2,700
4" meter	5,400
6" meter	10,800

CHARGE BASED ON ACREAGE

Residential development, per acre, or any fraction thereof	$ 540
Commercial development, per acre, or any fraction thereof	630
Industrial development, per acre, or any fraction thereof	720

(g) DELETED

(h) DELETED

(i) DELETED

(j) DELETED

(k) **WATERWORKS DISTRICT NO. 19 - SOMIS** [58]

RESIDENCES

Single Family	$ 2,000
Condominium Unit	2,000
Apartment Unit	2,000

Mobile Home Space	2,000
CHARGE BASED ON METER SIZE	
5/8" or 3/4" Meter	$ 2,000
*1" Meter	4,000
1 ½" Meter	8,000
2" Meter	14,000
3" Meter	30,000
4" Meter	60,000
6" Meter	120,000
CHARGE BASED ON ACREAGE	
PER ACRE OR FRACTION THEREOF:	
Commercial Development	$ 7,000
Industrial Development	8,000

* Where a 1 inch meter is necessary for residential fire sprinklers or other means of fire protection required by the Fire Protection District, the 3/4 inch meter charge shall apply.

3-A-10 FIRE FLOW REQUIREMENTS: When any parcel of land and/or building requires a fire flow of 1,500 gpm, such additional fire flow shall be provided by the owner of the parcel or the building and at the owner's expense. 40

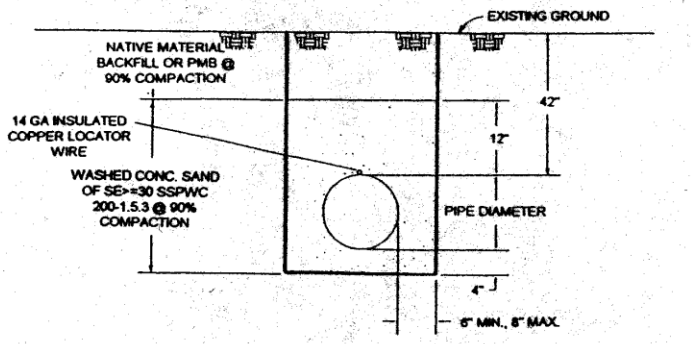
PART 4 - STANDARD PLAN NOTES FOR THE CONSTRUCTION OF WATER SYSTEMS OR IMPROVEMENTS WITHIN COUNTY WATERWORKS DISTRICTS

Section 451 of the County of Ventura Standard Land Development Specifications is incorporated herein by reference.

The attached Water Construction Standards (Plate Nos. 1-19 and 29) are incorporated herein. 77

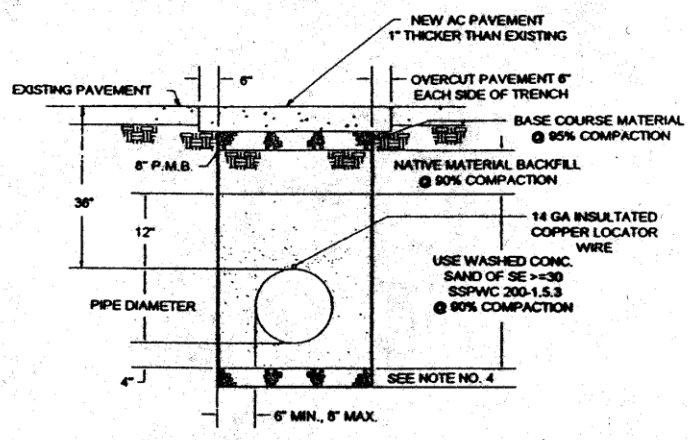
VENTURA COUNTY WATERWORKS DISTRICT NO. 1, 16, 17 & 19
WATER CONSTRUCTION STANDARDS

TABLE OF STANDARD PLATES



TYPICAL BACKFILL FOR UNPAVED AREAS

NOT TO SCALE



TYPICAL BACKFILL FOR PAVED AREAS

NOT TO SCALE

NOTES:

1. MAINTAIN 36" COVER FOR 10" AND SMALLER PIPES IN PAVED AREAS.
2. MAINTAIN 42" COVER FOR 12" AND LARGER PIPES IN PAVED AREAS, AND FOR ALL PIPES IN UNPAVED AREAS.
3. BEDDING SHALL EXTEND 4" MINIMUM BELOW PIPE IF TRENCH BOTTOM MATERIAL DOES NOT MEET S.E. 30.
4. FOUNDATION SHALL BE REQUIRED IF NATIVE MATERIAL IS SOFT, SPONGY OR UNSTABLE. FOUNDATION MATERIALS SHALL BE THE SAME AS BEDDING AND COMPACTED TO 95% RELATIVE DENSITY.

VENTURA COUNTY WATERWORKS DISTRICT NO. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR.PUB.WKS.	TRENCH DETAILS	PLATE NO. 1
RECOMMENDED BY: DPTY. DIR. PUB.WKS.		

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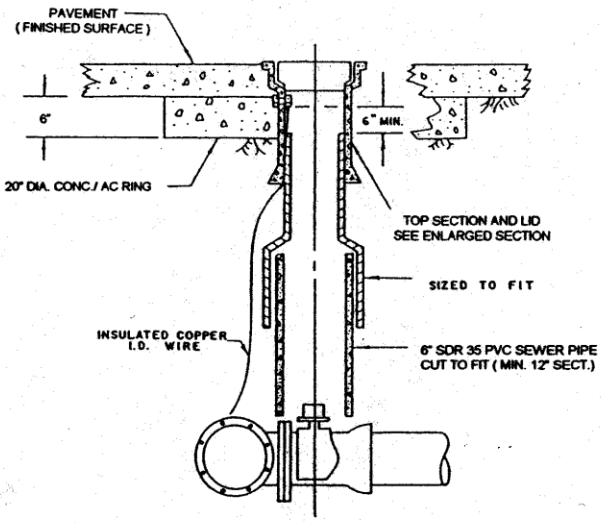

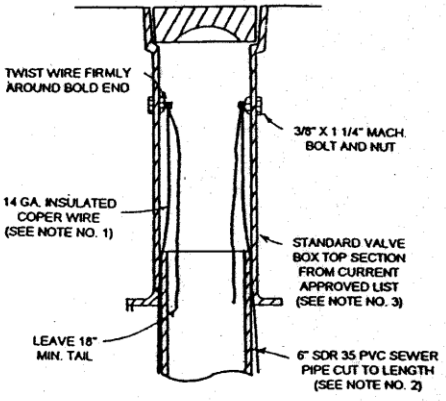

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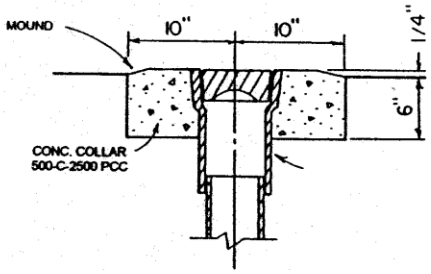

CONCRETE COLLAR
FOR VALVE BOXES

NOTES:

1. IDENTIFICATION WIRE TO BE BARED AND ATTACHED MECHANICALLY TO TEE AND VALVE.
2. IF DEPTH FROM VALVE BOX TOP TO VALVE OPERATING NUT IS GREATER THAN 42", AN APPROPRIATE VALVE EXTENSION SHALL BE INSTALLED.
3. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	VALVE BOX INSTALLATION	PLATE NO. 2
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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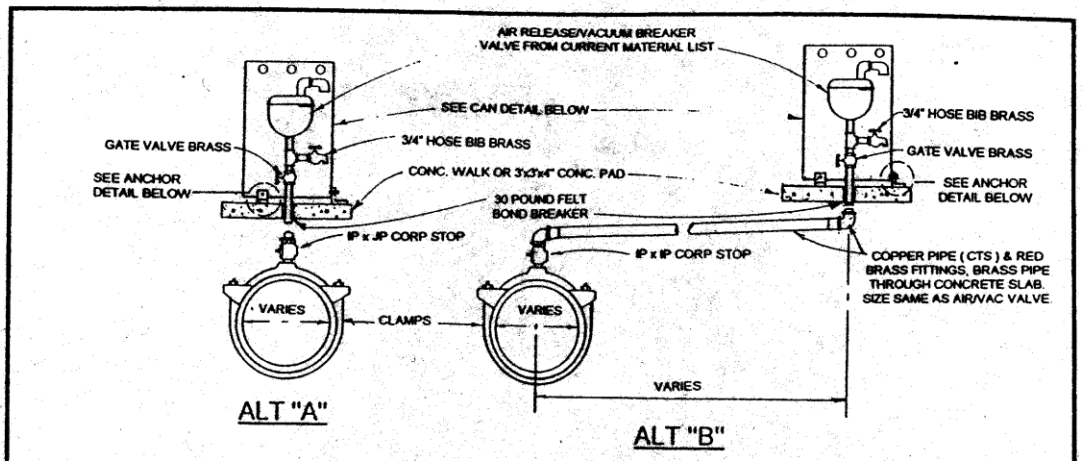
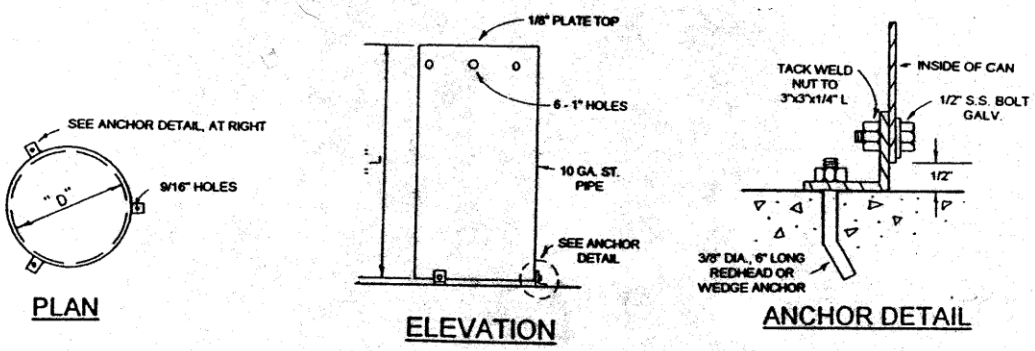
7/17/96





CAN DETAIL

NOTES:

1. MAIN TAP SHALL BE WITH AN APPROVED SERVICE CLAMP ON A.C., P.V.C. OR D. I. PIPE ON A WELDED COUPLING ON STEEL PIPE. (ALTERNATE "B" ONLY)
2. THE CAN SHALL BE PAINTED INSIDE AND OUTSIDE WITH "SAFETY" YELLOW IN ACCORDANCE WITH "AWWA C503."
3. IF AIR VALVE IS ANCHORED TO STRUCTURE, CAN SHALL BE OMITTED.
4. VALVE SIZE SHALL BE 1" FOR 10" OR SMALLER PIPE SIZE, 2" FOR 12" OR LARGER PIPE SIZE OR AS DIRECTED BY DISTRICT ENGINEER.
5. "D" FOR 1" VALVE = 12" "L" FOR 1" VALVE = 24"
   "D" FOR 2" VALVE = 18" "L" FOR 2" VALVE = 26"
6. BARRICADE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 306-10.5.
7. VALVE CAN SHALL BE LOCATED 12" CLEAR AWAY FROM THE CURB OR BEHIND SIDEWALK.
8. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19

ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS. RECOMMENDED BY: DPTY. DIR. PUB. WKS.	AIR AND VACUUM VALVE INSTALLATION 1" AND 2"	PLATE NO. 3

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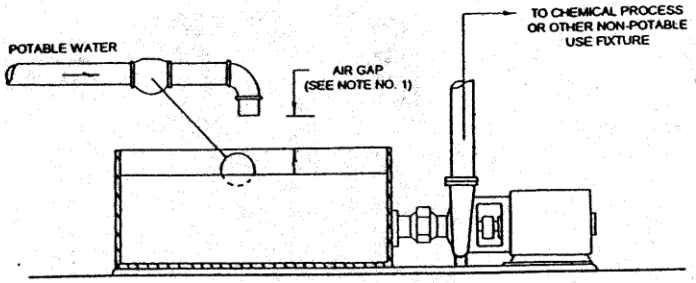

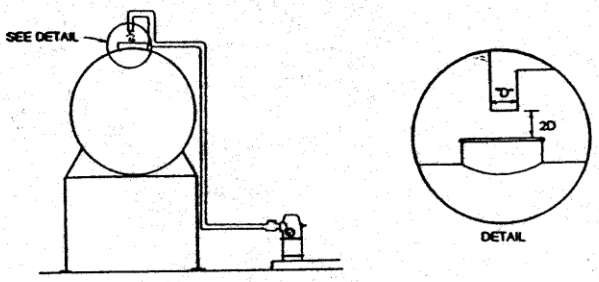

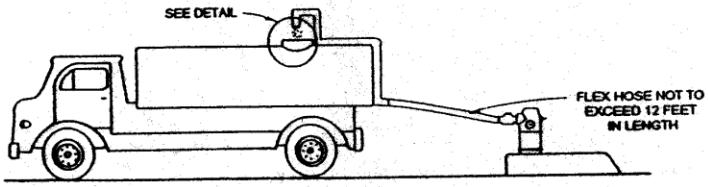

NOTES:

1. ALL WATER TANKS SHALL BE EQUIPPED WITH AN APPROVED AIR GAP. THE AIR GAP SHALL BE AT LEAST TWICE THE DIAMETER OF THE SUPPLY PIPE AND IN NO CASE LESS THAN 1".
2. PIPE LINE BETWEEN METER AND AIR GAP SHALL BE EXPOSED WITH NO CONNECTIONS BETWEEN METER AND AIR GAP.
3. APPROVED RP DEVICE SHALL BE INSTALLED IF AIR GAP CANNOT BE MADE.
4. ALL HOSES USED TO CONNECT PUBLIC WATER SYSTEM TO WATER TANKS SHALL BE KEPT IN SANITARY CONDITION AT ALL TIMES.
5. WHERE ELEVATED TANKS ARE HOOKED DIRECTLY TO FIRE HYDRANTS, AN AUTOMATIC VALVE SHALL BE REQUIRED THAT SHALL OPEN AND CLOSE AT A RATE THAT SHALL NOT CAUSE AN EXCESSIVE "HAMMER" TO THE SYSTEM.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	AIR GAP DETAIL	PLATE NO. 4
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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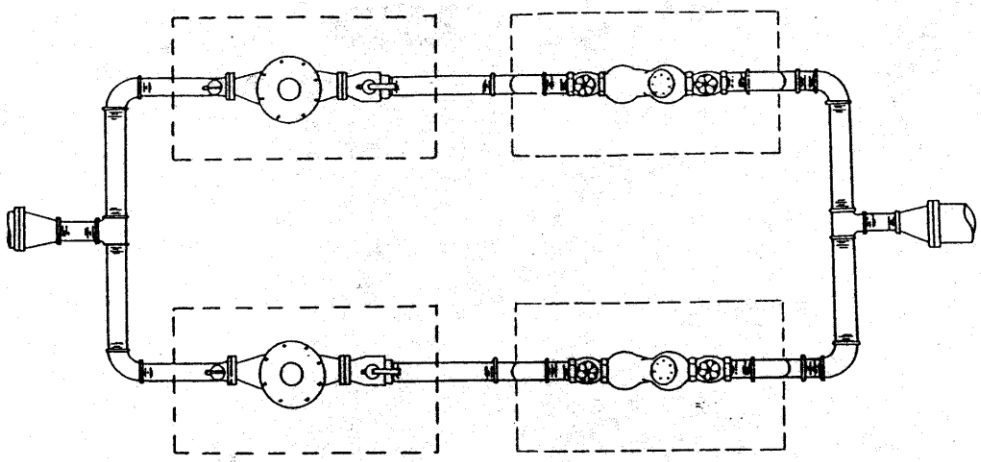
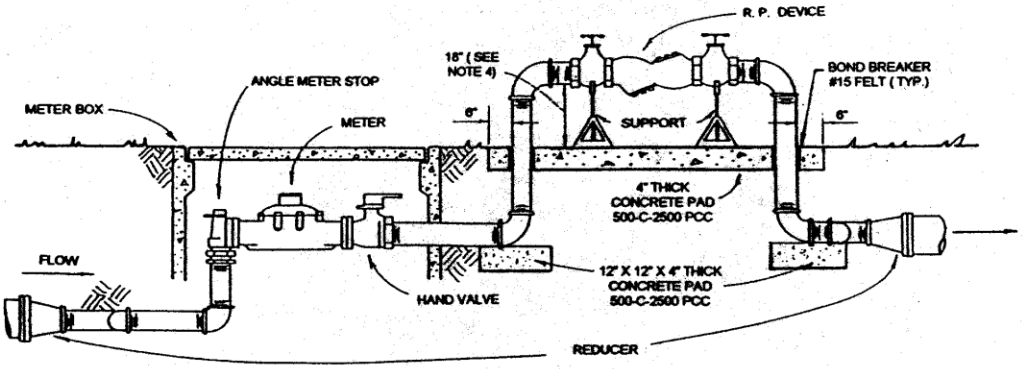
7/18/96



PLAN



SECTION

NOTES:

1. THIS DETAIL IS FOR GENERAL INSTALLATION CONDITIONS ONLY. EACH INDIVIDUAL INSTALLATION SHALL BE APPROVED BY THE DISTRICT PRIOR TO CONSTRUCTION.
2. METER SIZE AND TYPE SHALL BE DETERMINED BY THE DISTRICT.
3. AFTER INSTALLATION DEVICE SHALL BE TESTED BY A VENTURA COUNTY CERTIFIED BACKFLOW DEVICE TESTER. DEVICE SHALL BE INSPECTED AND APPROVED BY A DISTRICT REPRESENTATIVE PRIOR TO ACCEPTANCE.
4. MAINTAIN 18" CLEARANCE FROM REDUCED PRESSURE BACKFLOW DEVICE RELIEF OUTLET TO CONCRETE PAD.
5. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996 APPROVED BY: DIR. PUB. WKS. RECOMMENDED BY: DPTY. DIR. PUB. WKS.	WATER CONSTRUCTION STANDARDS DUAL METER INSTALLATION	PLATE NO. 5

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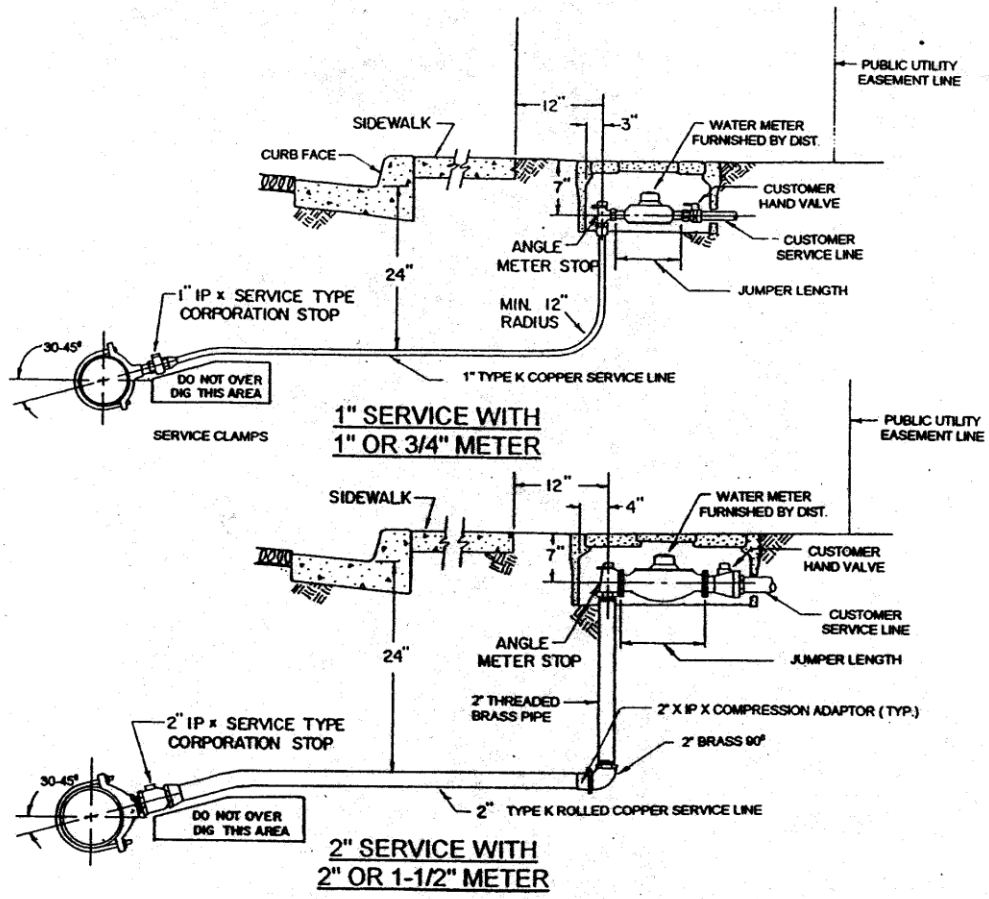
7/17/96



NOTES:

1. JUMPER SHALL BE SUPPLIED BY THE DISTRICT AND INSTALLED BY THE OWNER'S CONTRACTOR.
2. FOR PARKWAY AND SIDEWALK CONSTRUCTION, TO R/W OR WHEN SLOPE INTERFERENCE EXISTS ANGLE METER STOP SHALL BE SET 12" BEHIND CURB.
3. A 14 GA. INSULATED COPPER TRACER WIRE SHALL BE INSTALLED WITH ALL SERVICES AND CONNECTED TO EXISTING WIRE AT MAIN LINE. THE TRACER WIRE SHALL BE STRIPPED AND ATTACHED TO THE ANGLE STOP. THE TRACER WIRE SHALL BE ATTACHED TO THE TUBING EVERY 10'.
4. SOLDERING TO COPPER IS NOT ALLOWED TO EXTEND RUN ON COMPRESSION FITTINGS. USE SOLID PIECE OF PIPE.
5. CURRENT MATERIAL LIST AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	WATER METER SERVICE INSTALLATION, 3/4" - 2"	PLATE NO. 6
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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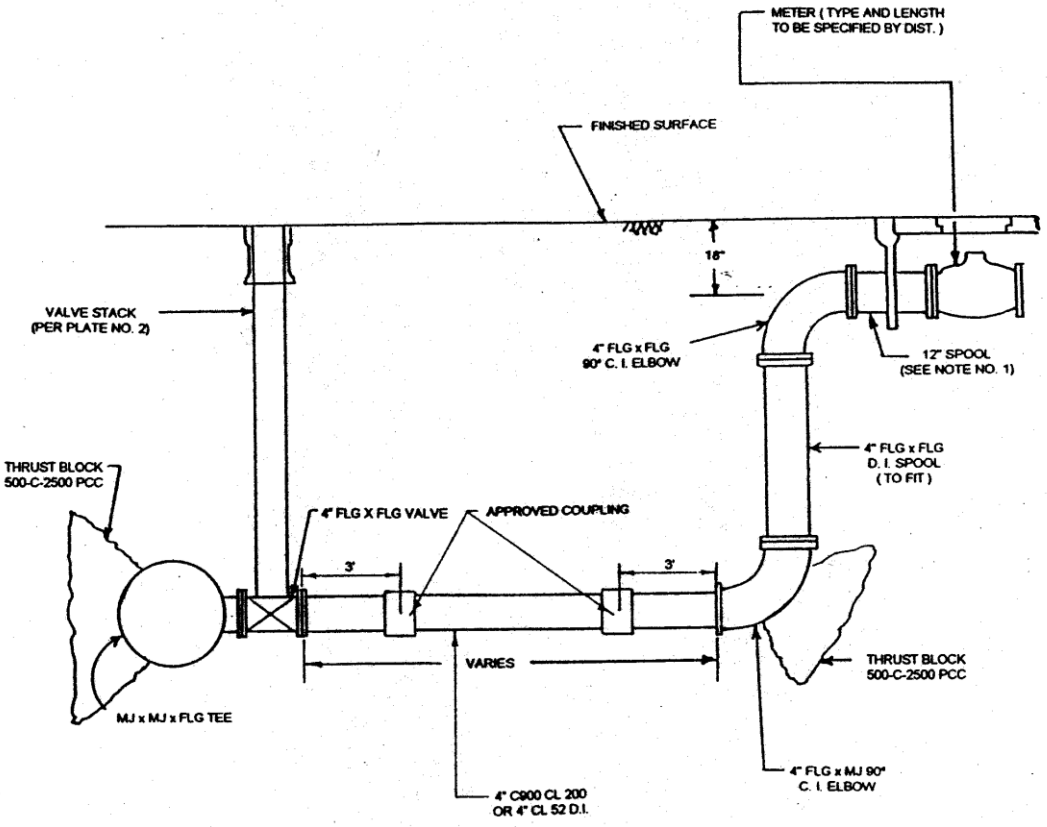
8/12/96



NOTES:

1. 3" SERVICE SHALL HAVE A 4" x 3" FLG x FLG C.I. ADAPTER AND A 3" x 6" FLG x FLG C.I. SPOOL IN PLACE OF THE 4" x 12" SPOOL.
2. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	WATER METER SERVICE INSTALLATION, 3" & 4"	PLATE NO. 7
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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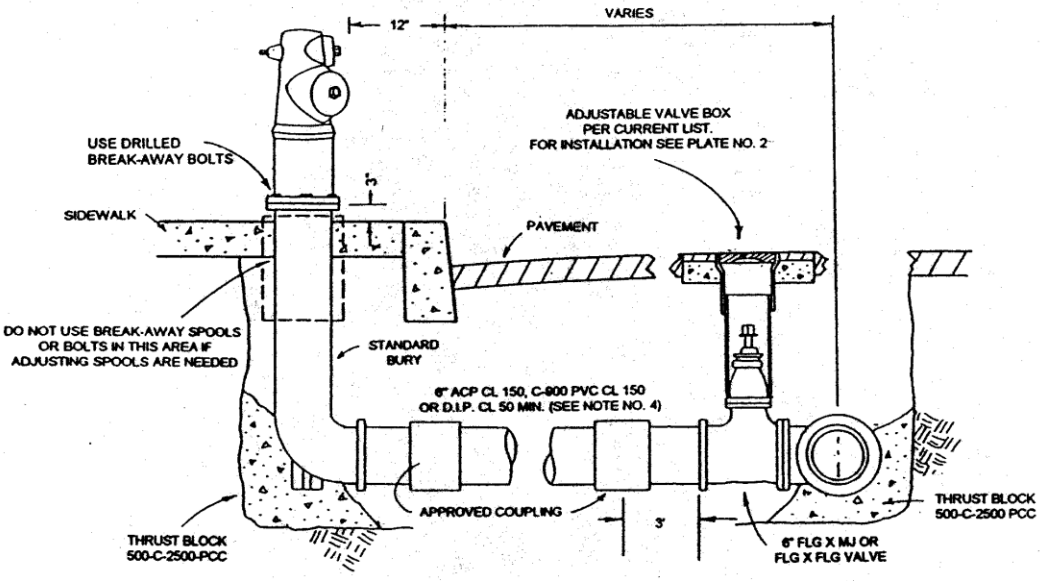
7/18/96



NOTES:

1. FIRE HYDRANT CAPS AND OPERATOR STEMS SHALL BE EQUIPPED WITH OPERATOR NUTS MEASURING 1-3/4" POINT TO FLAT.
2. FIRE HYDRANT SHALL BE PAINTED WITH SAFETY YELLOW IN ACCORDANCE WITH AWWA C503.
3. NO PART OF THE HYDRANT FLANGE, BURY FLANGE OR ADJUSTING SPOOL FLANGE SHALL BE WITHIN THE CONCRETE SIDEWALK.
4. IF THE STATIC WATER PRESSURE AT THE POINT OF HYDRANT INSTALLATION EXCEEDS 130 PSIG, PIPE SHALL BE CLASS 200 FOR ACP AND PVC AND CLASS 52 FOR D.I.P.
5. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	FIRE HYDRANT INSTALLATION	PLATE NO. 8
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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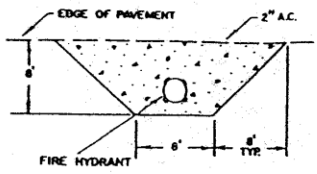
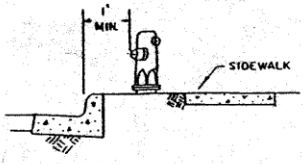
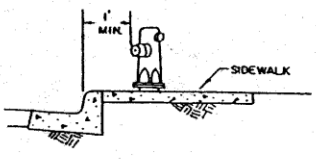
7/17/96



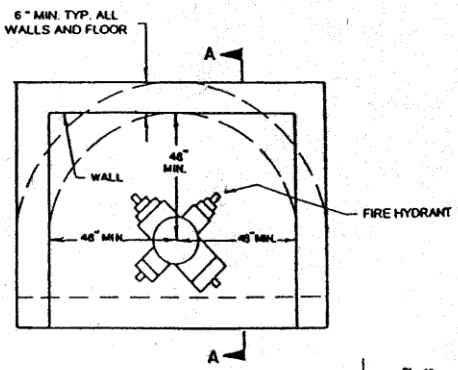
FIRE HYDRANT IN STREET SHOULDER



CASE I



CASE II



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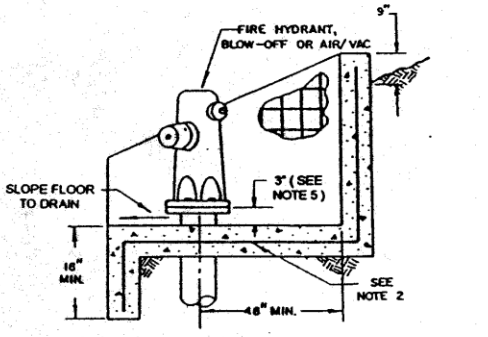
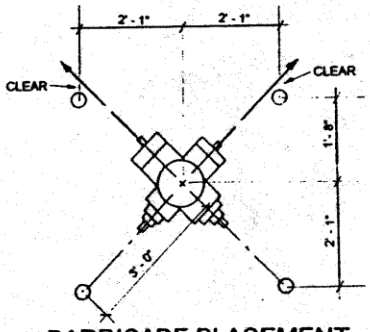


SECTION A-A
CONCRETE (OR BLOCK) RETAINING WALL
(TO BE USED WHERE GROUND SLOPE EXCEEDS 30% OR AS REQUIRED)



BARRICADE PLACEMENT
(WHEN SPECIFIED)

NOTES:

1. ALL REBARS SHALL BE NO. 4 @ 12" O.C.. CONCRETE BLOCK MAY BE SUBSTITUTED FOR WALL SECTION. CONSULT LOCAL BUILDING AND SAFETY FOR ALL WALLS HIGHER THAN 30". CONSULT LOCAL AUTHORITY FOR SIDEWALK BUMP-OUT IN CASE II.
2. BARRICADES SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 306-10.5. REFER TO PLATE NO. 8 FOR OTHER DETAILS.
3. LOCATION OF FRONT BARRICADES SHALL BE ADJUSTED TO PROVIDE CLEARANCE FOR DISCHARGE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	FIRE HYDRANT MISCELLANEOUS DETAILS	PLATE NO. 9
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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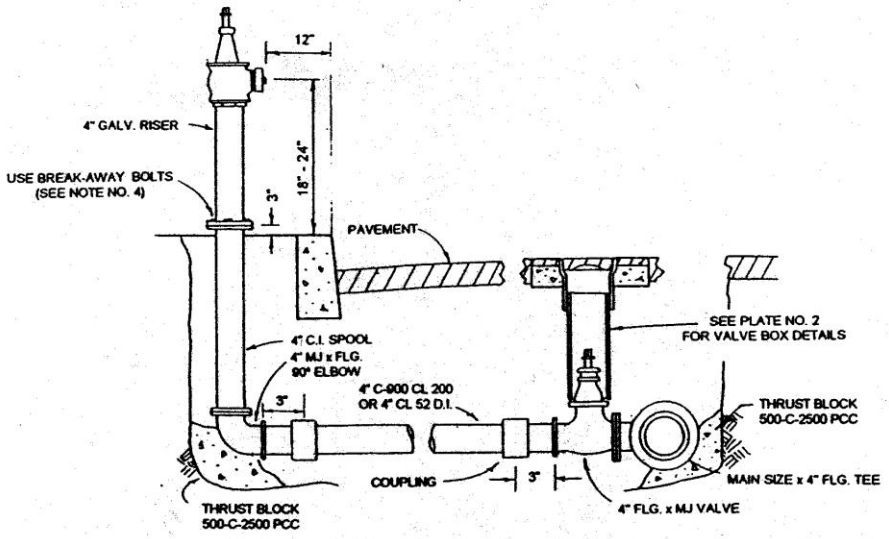
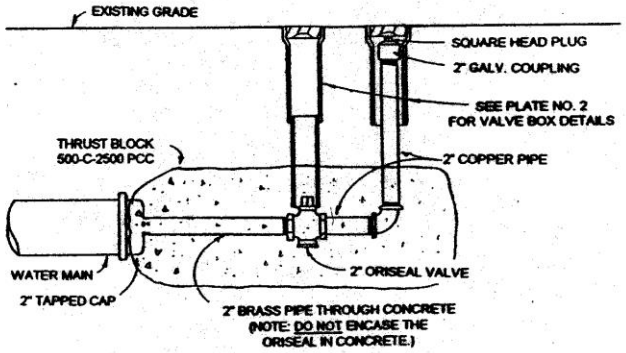


2-1/2" x 4" PERMANENT LINE BLOW-OFF



2" TEMPORARY BLOW-OFF

NOTES:

1. FOR DEAD END BLOW-OFF USE 4" REDUCER IN PLACE OF TEE. FOR ROADS WITHOUT CURBS, BLOW-OFFS SHALL BE LOCATED WITHIN THE ROAD RIGHT-OF-WAY, ONE FOOT CLEAR FROM PROPERTY LINE.
2. HYDRANT AND RISER SHALL BE PAINTED WITH SAFETY YELLOW IN ACCORDANCE WITH AWWA C503.
3. NO PART OF THE BLOW-OFF FLANGE OR ADJUSTING SPOOL FLANGE SHALL BE WITHIN THE CONCRETE SIDEWALK.
4. CURRENT MATERIAL LIST AVAILABLE AT DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19

ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	BLOW-OFF INSTALLATION, 2" & 4"	PLATE NO. 10
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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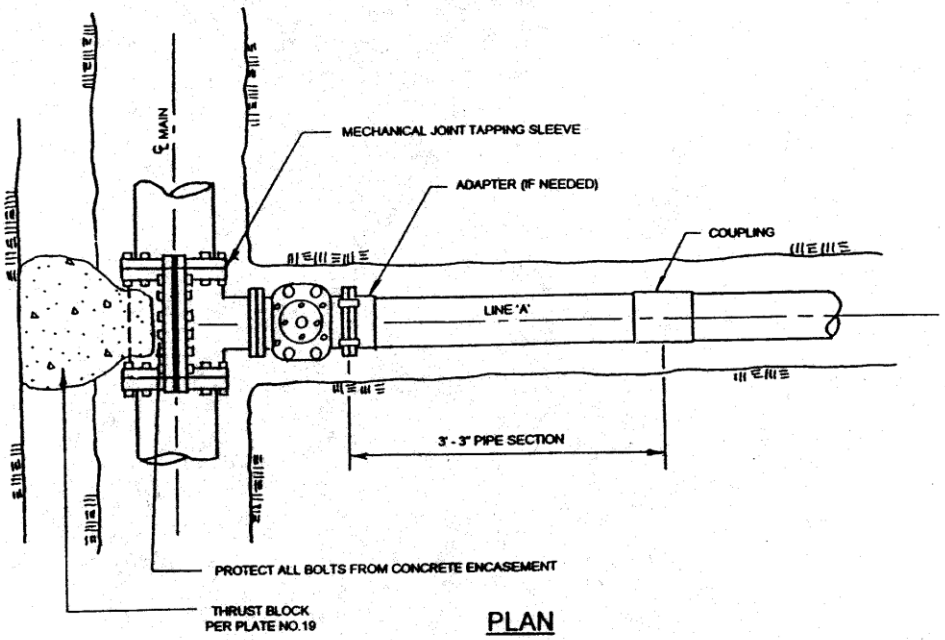
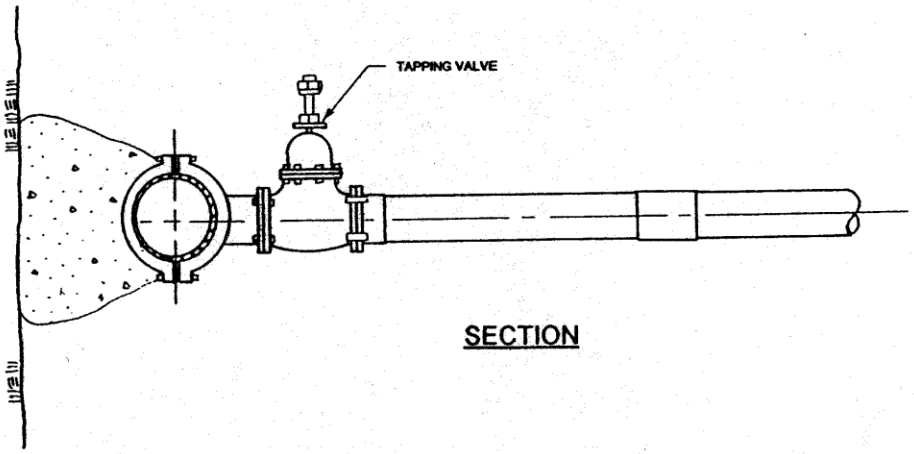
7/18/96



PLAN



SECTION

NOTES:

1. USE ONLY WHEN TAP IS ONE-HALF THE DIAMETER OR LESS THAN THE MAIN LINE.
2. CURRENT MATERIAL LIST AVAILABLE AT DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	MECHANICAL TAPPING SLEEVE DETAIL	PLATE NO. 11
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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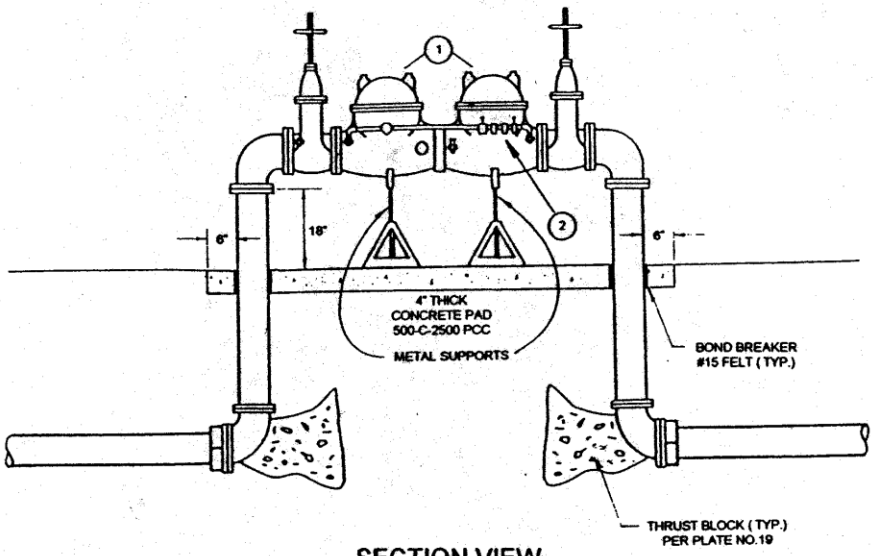
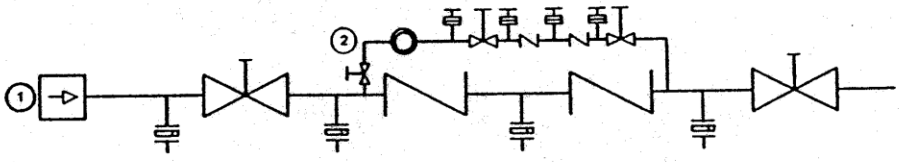
7/18/96



SECTION VIEW



PLAN VIEW

LEGEND: (1) - DOUBLE DETECTOR CHECK VALVE ASSEMBLY.
(2) - BYPASS DOUBLE DETECTOR CHECK VALVE ASSEMBLY AND METER.

NOTES:

1. THIS DETAIL IS FOR GENERAL INSTALLATION CONDITIONS ONLY. EACH INDIVIDUAL INSTALLATION SHALL BE APPROVED BY THE DISTRICT PRIOR TO CONSTRUCTION.
2. TESTING SHALL BE DONE BY A VENTURA COUNTY CERTIFIED DDCV ASSEMBLY TESTER AFTER INSTALLATION.
3. DDCV ASSEMBLY SHALL BE INSPECTED AND APPROVED BY THE DISTRICT PRIOR TO ACCEPTANCE.
4. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	DOUBLE DETECTOR CHECK VALVE	PLATE NO. 12
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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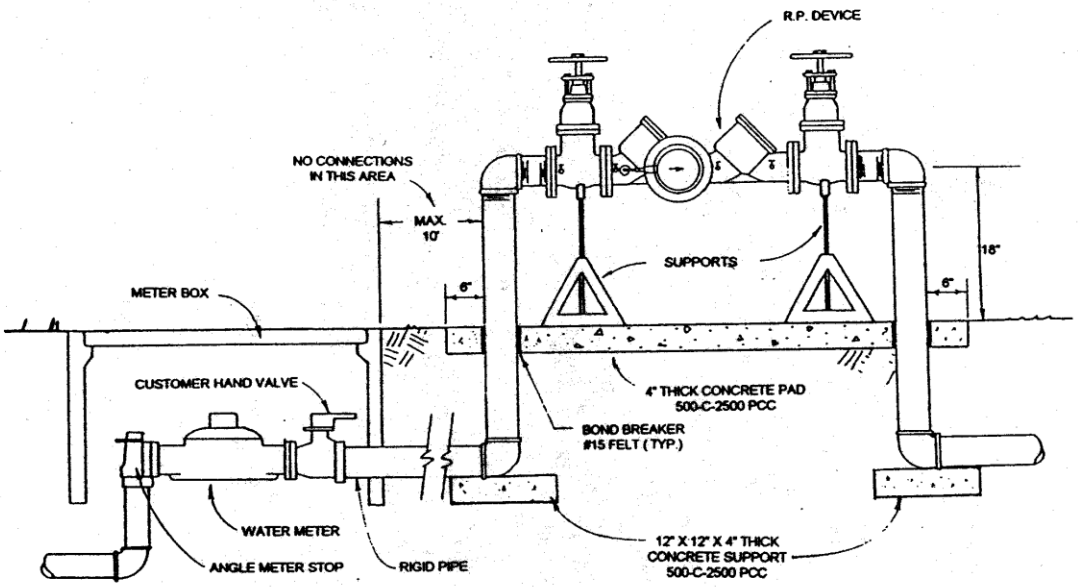

NOTES:

1. THIS DETAIL IS FOR GENERAL INSTALLATION CONDITIONS ONLY. EACH INDIVIDUAL INSTALLATION SHALL BE APPROVED BY THE DISTRICT PRIOR TO CONSTRUCTION.
2. METER SIZE AND TYPE SHALL BE DETERMINED BY THE DISTRICT.
3. THE DEVICE SHALL BE TESTED BY AN APPROVED TESTER PRIOR TO ACCEPTANCE.
4. MAINTAIN 18" CLEARANCE FROM REDUCED PRESSURE BACKFLOW DEVICE RELIEF OUTLET TO CONCRETE PAD.
5. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	REDUCED PRESSURE BACKFLOW DEVICE	PLATE NO. 13
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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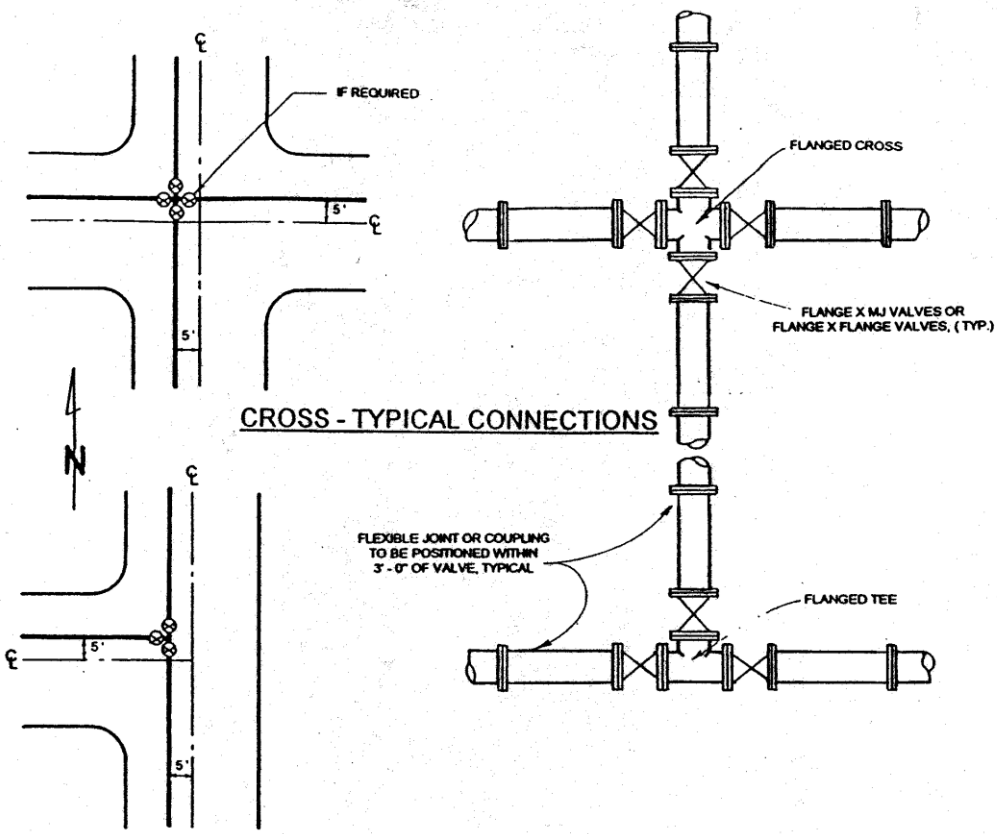

CROSS - TYPICAL CONNECTIONS

TEE - TYPICAL CONNECTIONS

NOTES:

1. WATER MAINS IN PUBLIC STREETS SHALL BE LOCATED PARALLEL TO AND 5 FT NORTH OR WEST OF THE CENTER LINE OF THE STREET.
2. SEE PLATE NO. 19 FOR ANCHOR BLOCKS AND THRUST BLOCK DETAILS.
3. SEE PLATE NO. 2 FOR VALVE BOX DETAILS.
4. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 1 0 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS. RECOMMENDED BY: DPTY. DIR. PUB. WKS.	VALVE LOCATION AT INTERSECTIONS	PLATE NO. 14

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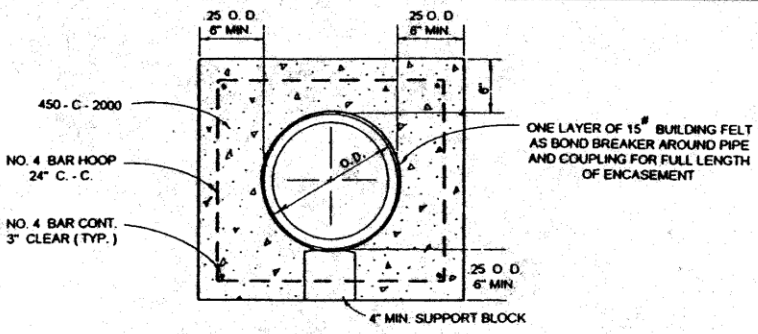
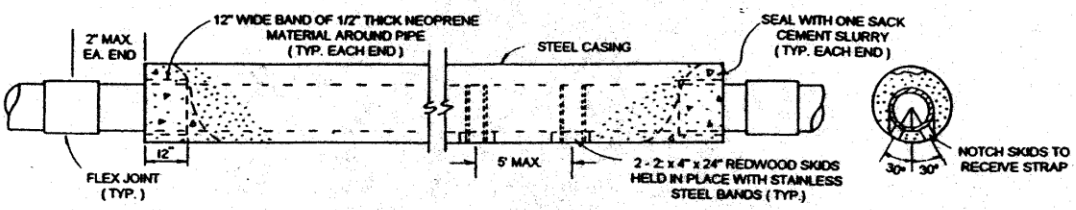
7/18/96



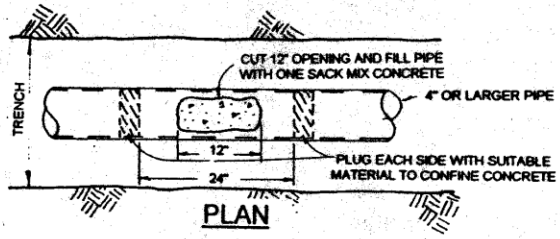
CONCRETE ENCASEMENT



TYPICAL CASING DETAIL

NOTES:

1. ALL CASING JOINTS SHALL BE FULL CIRCUMFERENTIAL BUTT WELDED.
2. AFTER PUSHING MAIN INTO PLACE, WASH IN IMPORTED SAND WITH A PRESSURE HOSE UNTIL MAIN IS COMPLETELY COVERED. CARE SHALL BE TAKEN TO ASSURE THAT EXCESSIVE WATER ACCUMULATION DOES NOT CAUSE THE PIPE TO FLOAT.



PLAN

DETAIL FOR CUTTING AND PLUGGING ABANDONED WATER MAINS

NOTES:

1. FOR PIPE WITH LESS THAN 4" DIAMETER , A SHORT SECTION SHALL BE REMOVED AND PIPE ENDS ENCASED IN CONCRETE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	PIPE ENCASEMENT, CASING & ABANDONMENT	PLATE NO. 15
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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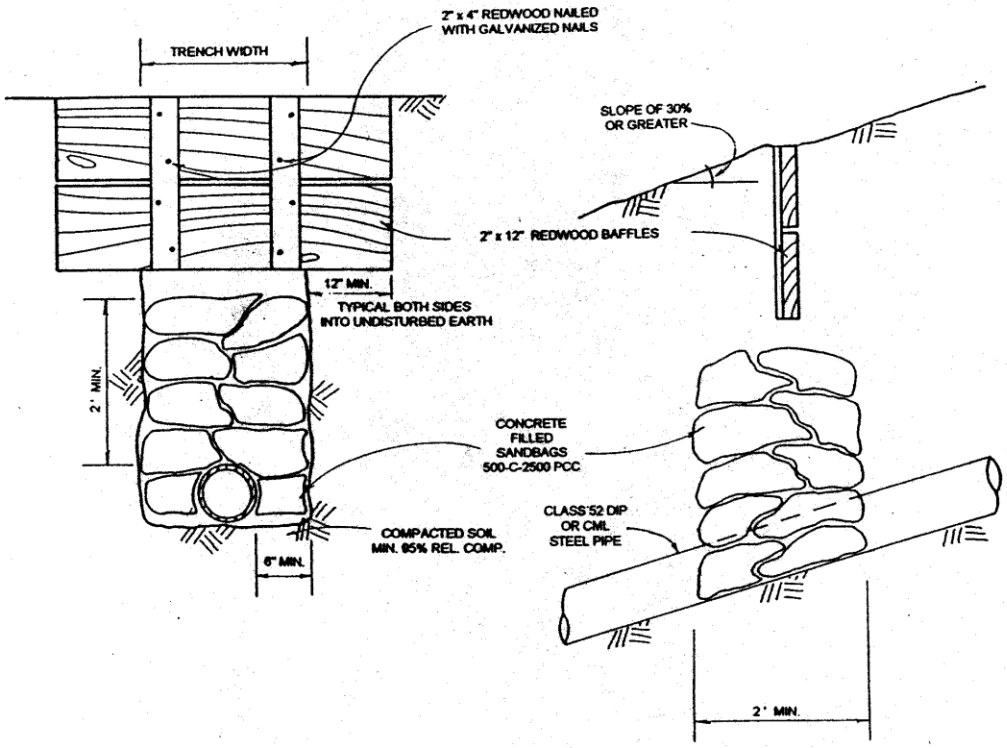

NOTES:

1. SANDBAGS SHALL BE TIGHTLY PACKED AROUND PIPE. SPACING SHALL BE 20 FT (6.0 M) MAXIMUM OR AT LEAST TWO PER SLOPE EQUALLY SPACED, WHICHEVER YIELDS THE GREATER NUMBER.
2. REDWOOD BAFFLES SHALL BE SPACED AT 10 FT (3.0 M) MAXIMUM OR AT LEAST TWO PER SLOPE EQUALLY SPACED, WHICHEVER YIELDS THE GREATER NUMBER.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	TRENCH STABILIZER DETAILS	PLATE NO. 16
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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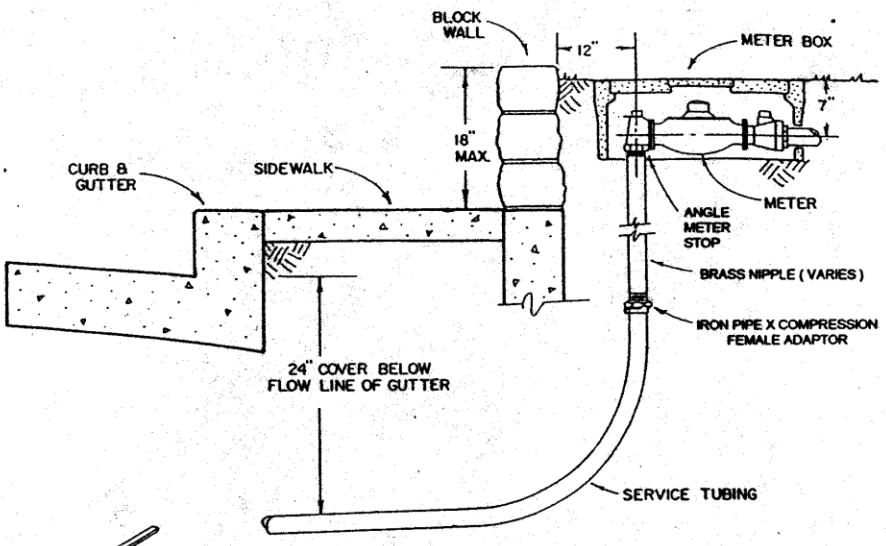
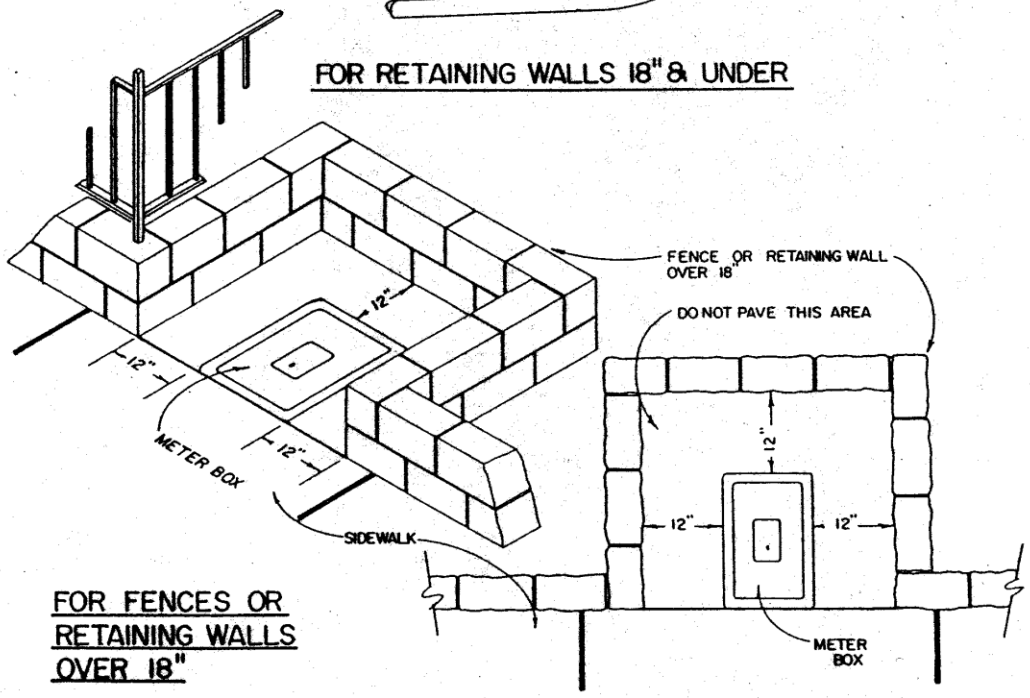


FOR RETAINING WALLS 18" & UNDER



FOR FENCES OR RETAINING WALLS OVER 18"

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	METER BOX CLEARANCE DETAILS	PLATE NO. 17
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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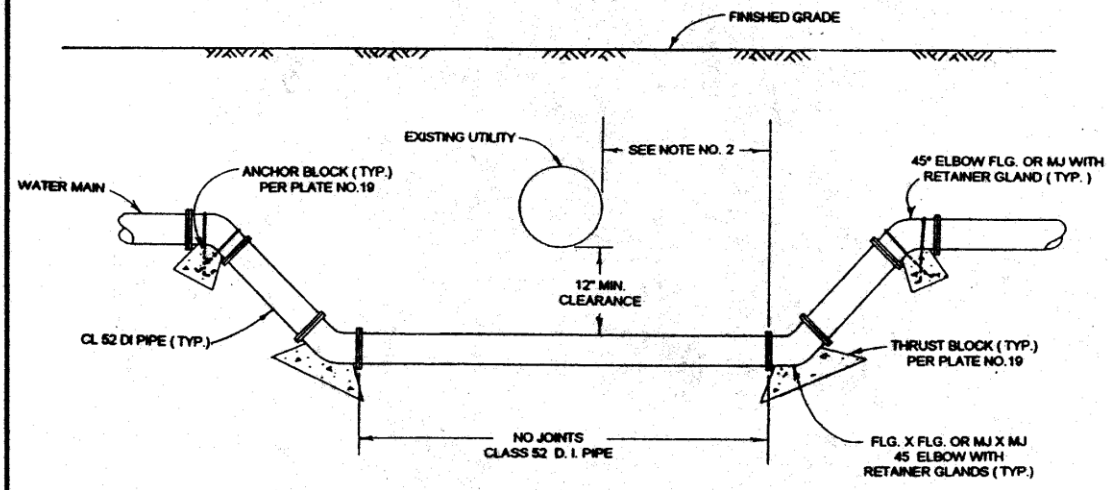

NOTES:

1. USE DUCTILE IRON RETAINER - TYPE MECHANICAL JOINT OR BOLTED C. I. FLANGE FITTINGS.
2. THIS DISTANCE IS DETERMINED BY THE TYPE OF OBSTRUCTION BEING CROSSED, FOR UTILITIES, THE DISTANCE IS 3'. FOR SEWERS, REFER TO WATER AND SEWER SEPARATION HEALTH DEPARTMENT REQUIREMENTS.
3. SEE PLATE NO. 1 FOR BACKFILL DETAILS.
4. AIR RELEASE AND VACUUM BREAKER VALVE AND/OR BLOW-OFF MAY BE REQUIRED AT THE DISTRICT'S DISCRETION.
5. REBARS SHALL BE COATED WITH APPROVED BITUMASTIC COMPOUND.
6. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	UTILITY UNDERCROSSING DETAIL	PLATE NO. 18
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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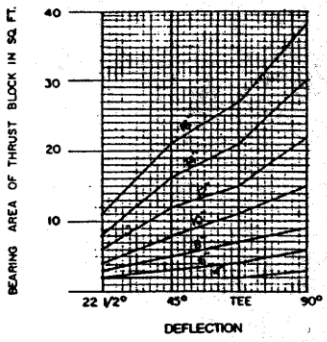
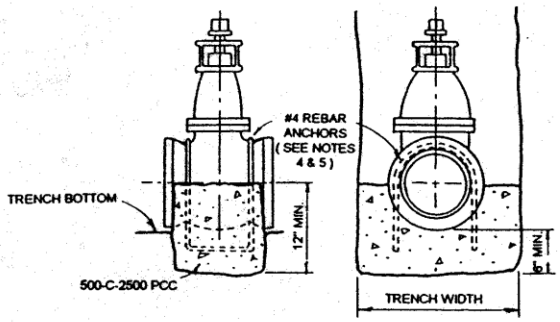
7/18/96

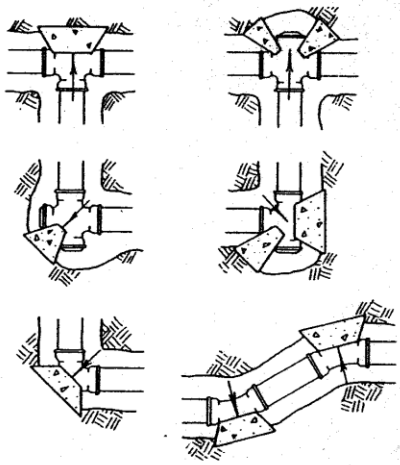




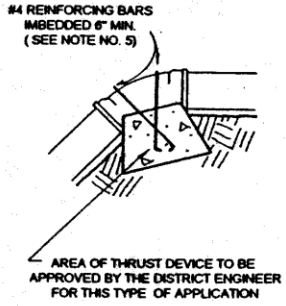
VALVE ANCHOR

NOTES:

1. BEARING AREA SHOWN ABOVE BASED ON SOIL CONSISTING OF SAND AND GRAVEL. CEMENTED WITH CLAY - SAFE BEARING LOAD = 2000 PSF.
2. FOR SOFT CLAY MULTIPLY AREA x 4.0. FOR SAND MULTIPLY AREA x 2.0.
3. FOR SAND AND GRAVEL MULTIPLY AREA x 1.5. FOR SHALE, SANDSTONE OR CONGLOMERATE MULTIPLY AREA x 0.4.



THRUST BLOCKING



ANCHOR BLOCK

NOTES:

1. IN NO CASE SHALL THE THRUST BLOCK CONTAIN LESS THAN 3 CUBIC FEET OF CONCRETE AND SHALL BEAR ON UNDISTURBED EARTH.
2. DO NOT INTERPOLATE BEARING AREA FOR FITTINGS NOT SHOWN.
3. ANCHOR IS NOT REQUIRED FOR 6" VALVES OR SMALLER.
4. COAT REBARS WITH APPROVED BITUMASTIC COMPOUND.
5. FOR FLANGED AND MECHANICAL VALVES, KEEP CONCRETE OFF BOLT.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	WATER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	THRUST AND ANCHOR BLOCK DETAILS	PLATE NO. 19
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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7/17/96

ITEM	MANUFACTURER	MODEL	TYPE
Air Vac	APCO	142, 144	1" & 2"
Air Vac	Cla-Val	33A, 33	1" & 2"
Angle Meter Stop	Ford	KV 13-444 W	1" x 1"
Angle Meter Stop	Ford	KV 43-342 W	1" x 3/4"
Angle Meter Stop	Ford	KV 43-444 W	1" x 1"
Angle Meter Stop	Ford	FV 13-77 W	2"
Angle Meter Stop	Ford	FV 43-777 W	2"
Angle Meter Stop	Jones	J - 1527	1"
Angle Meter Stop	Jones	J - 1527	1" x 3/4"
Angle Meter Stop	Jones	J - 1527 F	2"
Blow-Off	Jones	J - 334 HP	4"
Blow-Off	Mueller; Oriseal	H - 10297	2"
Copper Tubing		Type "K"	1" & 2" Roll Only
Corporation Stop	Ford	F-1100	1"
Corporation Stop	Ford	FB-1100	1"
Corporation Stop	Ford	FB-1100	2"
Corporation Stop	Jones	J-1935	2"
Corporation Stop	Jones	J-3403	1"
Customer Hand Valve	Ford	B13-332	3/4"
Customer Hand Valve	Ford	B13-444	1"
Customer Hand Valve	Ford	B13-666	1 1/2"
Customer Hand Valve	Ford	B13-777	2"
Customer Hand Valve	Ford	HB-34	
Customer Hand Valve	Jones	J-1908	3/4"
Customer Hand Valve	Jones	J-1908	1"
Customer Hand Valve	Jones	J-1913W	1 1/2"
Customer Hand Valve	Jones	J-1913W	2"
Customer Hand Valve	Jones	J-2813	3/4" & 1"
Customer Hand Valve	Jones	J-2815	1 1/2" & 2"
Fire Hydrant	Clow	500 Series	550,560,565
Fire Hydrant	Clow	800 Series	850,860
Fire Hydrant	Clow	2000 Series	2050,2060,2065
Fire Hydrant	Jones	4000 Series	4040
Fire Hydrant Bury	Clow	FE	6"
Fire Hydrant Bury	Tyler	5-180MJ 5-780 FE	6"

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19

ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996

APPROVED BY: DIR. PUB. WKS.

RECOMMENDED BY: DPTY. DIR. PUB. WKS.

WATER CONSTRUCTION STANDARDS

CURRENT MATERIAL LIST

PLATE NO. 29
Page 1 of 2

ITEM	MANUFACTURER	MODEL	TYPE
Location Wire			14" Ga. Copper-Insulated
Mech. Tapping Sleeves	Mueller, Waterous		4" - 24"
Meter Boxes	Brooks, J & R Conc, or Quazite, Armorcast		
Service Saddle for A.C.P.	Ford	202B	4" - 16"
A.C.P.	Jones	J-979	3" - 16"
P.V.C.	Ford	202B-S	4" - 30"
P.V.C.	Jones	J-969	
Valves	American Darling	AFC-2500	R.W.G.V.
Valves	AVK (S.S. Bolts)		R.W.G.V.
Valves	Clow		R.W.G.V.
Valves	M & H		R.W.G.V.
Valves	Stockhom		R.W.G.V.
Valves	Waterous		R.W.G.V.
Valves for Air Vac	Mueller	H-10291	1" & 2" Oriseal
Valve Stacks	Tyler		Cast Iron
Valve Stack Liner		SDR-35-PVC	6" Sewer Pipe

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1, 16, 17 & 19

ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996

APPROVED BY: DIR. PUB. WKS.

RECOMMENDED BY: DPTY. DIR. PUB. WKS.

WATER CONSTRUCTION STANDARDS

CURRENT MATERIAL LIST (CONTINUED)

PLATE NO. 29 Page 2 of 2

PART 5 – SECTION A - OVERSIZING AND REIMBURSEMENT AGREEMENTS [68]

RULE

5-A-1 **OVERSIZING AGREEMENT**

Only water/sewer lines greater than eight inches (8") in diameter may be considered "oversized" and subject to an agreement, provided the over sizing is required to serve other than the property being developed.

When existing water/sewer lines must be extended to serve a development, the line extension shall be the responsibility of the property owner requiring service. However, the District and the developer may agree to oversize any water/sewer lines which, in the opinion of the Engineer or his designee, benefit others. A developer anticipating reimbursement of a portion of the construction cost associated with over sizing shall enter into a written agreement with the District prior to construction of the water/sewer lines. The amount of reimbursement will be determined by the District based on pro-rata share of construction costs. This will be calculated based on installed footage of pipe multiplied by cost per linear foot. The reimbursement amount will be paid to the developer when the District accepts the facilities for maintenance. [192]

All other charges otherwise required in accordance with these Rules and Regulations shall be paid unless specifically offset against reimbursement due under the over sizing agreement.

5-B-1 **REIMBURSEMENT AGREEMENT**

A developer may be reimbursed for a portion of the cost associated with the installation of water/sewer improvements, such as pipelines and appurtenances. Reimbursement shall only be by written agreement and pursuant to the requirements outlined herein.

The District may allow for reimbursement of costs for an extension of a District water/sewer line which, in the opinion of the Engineer or his designee, benefits other properties which may be subsequently connected. The developer requesting reimbursement shall enter into a written reimbursement agreement with the District prior to construction. In no case will reimbursement be made without an agreement prior to construction. [192]

5-B-2 **PROJECT COST**

The cost of extending a water/sewer line shall be limited to the actual District approved construction contract price, including all labor and materials costs incurred.

Only that portion of the District approved project cost which benefits other properties shall be subject to reimbursement on a pro-rata basis.

Reimbursement agreements will not be considered for projects costing less than $10,000.

5-B-3 **REIMBURSEMENT AMOUNT**

The reimbursement agreement shall state the total dollar amount which is subject to reimbursement, identify the water/sewer lines subject to the agreement and describe the area benefitted by the extension of such lines. The method of determining the pro-rata distribution of costs shall be based on estimated future benefits.

5-B-4 **REIMBURSEMENT AND DURATION**

Reimbursements shall be made annually to the developer, its successors, or assignees only after pro-rata payments are received by the District from the benefiting properties, usually upon connection to the water/sewer lines. The maximum duration of the agreement shall not exceed ten (10) years following acceptance of the water/sewer improvements. The payments received by the District each calendar year shall be paid without interest to the developer, its successors, or assignees on or before June 30 of the succeeding year. Such annual payments shall continue to be made until the total reimbursement amount provided for in the agreement is paid or until the agreement expires, whichever occurs first.

5-B-5 **REIMBURSEMENT AGREEMENT ADMINISTRATIVE AND PROCESSING FEE**

The developer proposing a reimbursement agreement shall pay District a reimbursement agreement processing fee in the amount of $300.00 prior to the time the reimbursement agreement is prepared. The District shall deduct an administrative fee in the amount of $100.00 per parcel from each reimbursement made to the developer.

PART 6 - OPERATION AND MAINTENANCE OF RECYCLED WATER DISTRIBUTION SYSTEM (MOORPARK) [78]

California Water Code, Section 13510 states that the people of the State have a primary interest in the development of facilities to reclaim water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the State.

PART 6 - SECTION A - VENTURA COUNTY WATERWORKS DISTRICT NO. 1 (DISTRICT)

RULE

6-A-1 The District wishes to conserve water resources by collecting, treating and recycling wastewater and beneficially reusing the treated water.

Where the District determines recycled water service is available it shall be used for golf course irrigation, landscape irrigation, irrigation of nursery stock,

recreational impoundment, construction water and other such legal uses in lieu of potable water. District may also require use of recycled water for agricultural irrigation and industrial process water. Recycled water shall be used within the District boundaries whenever its use is economically and technically feasible, and consistent with legal requirements. Determinations on the specific uses for recycled water shall be in accordance with the standards of treatment and water quality requirements set forth in the California Code of Regulations, to protect public health, safety and welfare, and the environment.

The production and use of recycled water is currently regulated by state law and administrative regulations and requirements. Section 13521 of the Water Code requires the State Department of Health Services (DOHS) to adopt reclamation criteria (regulations) for the use of recycled water in order to protect public health. The Regional Water Quality Control Board (RWQCB) prescribes reclamation requirements for individual water reclamation projects. The requirements issued by RWQCB must include, or be in conformance with, the reclamation criteria adopted by the DOHS.

PART 6 - SECTION B - DEFINITIONS OF TERMS

RULE

6-B-1 **GENERAL:** In addition to Part 1 of the Rules and Regulations the following terms shall have the meanings as herein defined whenever references are made thereto.

AGRICULTURAL PURPOSES: Agricultural purposes shall mean the growing of field and nursery crops, row crops, vines, and sod.

AIR GAP SEPARATION: Air gap separation is a physical break between a supply pipe and a receiving vessel. The air gap shall be at least double the diameter of the supply pipe, measured vertically above the top rim of the vessel, and in no case less than one inch.

APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE: Approved reduced pressure principle backflow prevention device is a device containing two independently acting approved check valves together with a hydraulically operating, mechanically independent pressure relief valve located between the check valves, designed to maintain a reduced pressure between the check valves. The unit shall include properly located test cocks and tight closing shutoff valves at each end of the assembly, and shall be as approved by the District.

AUTOMATIC SYSTEM: Automatic system is a landscape irrigation system which includes automatic controllers, valves, and associated equipment required for the programming of effective water application rates when using recycled water.

AUXILIARY WATER SUPPLY: Auxiliary water supply shall mean any water supply on or available to the premises other than the District's potable water and recycled water supplies.

BUILDING: Building shall mean any structure used for human habitation, business, recreation, or other uses requiring sanitary facilities.

CONTRACTOR: Contractor shall mean any individual, firm, partnership, association or corporation currently licensed by the State of California to perform the type of work required by permit.

CUSTOMER: Customer shall mean any person, firm, association, partnership, corporation, or governmental public agency supplied or entitled to be supplied with water by the District for compensation.

DESIGN AREA: Design area shall mean the specific land area designated to be irrigated through on-site facilities using recycled water.

OFF-SITE FACILITIES: Off-site facilities shall mean facilities under the control of the District including recycled water pipelines, reservoirs, pumping stations, manholes, valves, treatment facilities and other appurtenances and property up to the point of connection with the customer's facilities. For recycled water service, the off-site facilities shall be those upstream of the District's recycled water meter.

ON-SITE FACILITIES: On-site facilities shall mean facilities under the control of the applicant, owner or customer including, but not limited to, residential or commercial landscape irrigation systems, and agricultural irrigation system. For recycled water service, the on-site facilities shall be those downstream of the District's recycled water meter.

ON-SITE RECYCLED WATER SUPERVISOR: On-site recycled water supervisor shall mean a qualified person designated by a recycled water applicant and approved by the District. This person shall be knowledgeable in the construction and operation of irrigation systems and in the application of the guidelines, criteria, standards and rules and regulations governing the proper use of recycled water.

PERSON: Person shall mean any human being, individual, form, company, partnership, association; private, municipal or public corporations, districts, the United States of America, the State of California, and all political subdivisions and governmental agencies thereof.

POTABLE WATER: Potable water shall mean water which conforms to the federal, state and local standards for human consumption.

RECREATIONAL IMPOUNDMENT: Recreational impoundment shall mean a body of water used for recreational activities including, but not limited to, fishing, boating, and water hazards in golf courses. Allowable uses usually depend on treatment level of the water.

RECYCLED WATER DISTRIBUTION SYSTEM: Recycled water distribution system shall mean a piping system intended for the collection, storage and delivery of recycled water only and which is separate from any potable water distribution system.

RECYCLED WATER: Recycled water as defined in Title 22, Chapter 4 of the California Code of Regulations means water which, as a result of tertiary treatment of domestic and industrial wastewater, is suitable for a direct beneficial use or a controlled use that otherwise would not occur.

RECYCLED WATER SERVICE CONNECTION: Recycled water service connection shall mean the piping necessary to conduct recycled water from the District's recycled water distribution system to particular property designated in the application for recycled water service including the meter, meter box, valves and piping equipment within the meter box.

SERVICE: Service shall mean the delivery of recycled water.

STREET: Street shall mean any public highway, road, street, avenue, alley, way, easement or public place dedicated and accepted by the County of Ventura or the City of Moorpark, and any easement accepted by the District.

WASTE DISCHARGE: Waste discharge means water deposited, released or discharged into a sewer system from any commercial, industrial or residential source which contains levels of any substance or substances which may cause substantial harm to any water treatment or reclamation facility or which may prevent any use of recycled water authorized by law.

PART 6 - SECTION C - DESCRIPTION OF SERVICE

RULE

6-C-1 **RECYCLED WATER SUPPLY:**

a. The District will exercise reasonable diligence and care to:

   1. Deliver a continuous supply of recycled water to the customer at reasonable pressure, and
   2. Avoid unnecessary shortages or interruption in the service.

b. The District shall not be liable should the overall recycled water demand exceed the overall supply. In that case, the District will supplement the recycled water distribution system with other sources of water such as groundwater, imported water, and seasonally stored water. Should the supplementing sources not be sufficient to meet the demand, recycled water use will be rationed just as potable water would be rationed when its supply cannot meet demand.

c. Current District customers will be provided three months written notice prior to the District making recycled water available.

d. The District shall have the right to temporarily suspend service to any customer, whenever the District deems it necessary to do so, and the District shall not be liable for any loss of damage caused thereby. The causes for temporary suspension of service will be removed by the District without unnecessary delay and with the least inconvenience to the customer.

6-C-2 **RECYCLED WATER QUALITY**: When recycled water service is furnished, the District will endeavor to furnish at all times, treated domestic and industrial wastewater suitable for direct beneficial use or a controlled use that otherwise would not occur.

6-C-3 **MANDATED USE OF RECYCLED WATER:**

a. Where the District has determined recycled water use is feasible for a certain property and use, and the customer declines to use recycled water, the District may continue to provide potable water use at a rate 2.0 times the prevailing potable water rate. The change in rate will apply 60 days after the District has notified the customer of the availability of recycled water or the day when the customer declined use of recycled water, whichever occurs first.

b. A customer may request a waiver from the recycled water use requirement for agricultural irrigation and industrial process water, and from the 2.0 times surcharge, by submitting written justification explaining why recycled water use would constitute an undue hardship. Examples of undue hardship include, but are not limited to:

1. Where the quality of reclaimed water will detrimentally affect the productivity of the agricultural land being irrigated.
2. Where the quality of reclaimed water will unduly affect the industrial process.
3. Where the cost of retrofitting onsite water systems is estimated to exceed the total estimated savings from utilizing recycled water for a period of three (3) years.

PART 6 - SECTION D - COMMENCEMENT OF SERVICE

RULE

6-D-1 **APPLICATION FOR SERVICE**

No person shall make connection to recycled water distribution system of the District without a permit issued by the District.

Persons desiring or required to obtain service shall make application for a recycled water permit by providing such information as the District deems appropriate to evaluate the request, including, but not limited to:

a. Name of applicant and person responsible for paying recycled water bill.

b. Address of person responsible for payment of recycled water bill.

c. Applicants and on-site recycled water supervisor's name.

d. Location of proposed service, address and brief description of property.

e. Property owner's name and address.

f. Intended use of recycled water by the customer.

g. Design area.

h. On-site irrigation piping plan.

i. Any additional information the District may require for service.

6-D-2 **APPLICATION PROCEDURE**

An application for a permit shall be made in writing, signed by the applicant, owner, or customer, if they are not one and the same.

The applicant for a permit must agree to comply with the requirements of any and all applicable federal, state and local statutes, ordinances, regulations, and other requirements. Current requirements are available at the District Office on request. The District may, at its discretion, require specific prior approval of any permit by the federal, state, or local agency having jurisdiction over or an interest in the operation of the District's facilities.

Upon receipt of an application, the District shall review the application and make such investigation relating thereto as necessary. The District may prescribe requirements in writing to the applicant as to the facilities necessary to be constructed, the point of connection, financial responsibility, and the use of the service, including the availability of adequate on-site recycled water facilities to insure initial and future continued compliance with the District's regulations and any other applicable requirements.

6-D-3 **PERMIT**

If the District approves an application, the District shall issue a recycled water permit for recycled water service. The permit shall entitle the applicant to receive recycled water service upon the terms and conditions of these rules and regulations.

The permit shall include the following:

a. Name and address of applicant.

b. A drawing of the proposed system showing the location and size of all valves, pipes, outlets, and appurtenances.

c. A statement that no changes in the proposed system will be undertaken without application and approval of an amended permit.

d. A statement recognizing potential penalties for violation of District rules and regulations.

6-D-4 **MANDATORY SERVICE CONDITIONS**

When, in the judgment of the District, recycled water service can be feasibly provided to a particular parcel of land for certain uses, not including land used for row crops, the Director shall require the use of recycled water for those uses. A notice of the determination, including the proposed conditions and time schedule for compliance, and a recycled water permit application shall be sent to the water customer by certified mail. As used herein, the term "feasible" means: [193]

a. The District expects the recycled water service to a particular parcel of land for a certain use will be at least as reliable in terms of supply availability and delivery system maintenance as the potable water supply. Certain use being any use allowed by law.

b. The recycled water can be delivered to the property in compliance with all federal, state and local laws, ordinances and regulations at an overall cost to the customer which does not exceed ninety percent (90%) of the overall cost of current potable and agricultural rates.

c. The notice will include information about recycled water quality, the responsibilities of the customer, the price of the recycled water along with a 12 month bill projection based on previous potable water usage, and the on-site retrofit facilities requirements.

6-D-5 **RECYCLED WATER RATE** [228]

The recycled water rate of $860/AF was set based on the cost of providing recycled water to customers in fiscal year 2012. The recycled water rate will be reviewed each year and may be adjusted based on the cost, at that time, of providing recycled water to customers.

PART 6 - SECTION E - CONDITIONS OF SERVICE

6-E-1 **GENERAL**

Service will be provided to property within the District which is contiguous to existing recycled water distribution lines for the uses specified herein. Service will be provided to property not contiguous to existing distribution lines the line is extended to the applicant's property, at their expense.

6-E-2 **GENERAL REQUIREMENTS - PERMIT USES**

a. The use of recycled water shall include, but not be limited to golf course irrigation, landscape irrigation, irrigation of nursery stock, recreational impoundment and construction water. Each such use must be considered for approval by the District on a case-by-case basis, and the District shall determine at its discretion whether it is necessary or desirable to furnish recycled water for the specific use involved. Determination as to specific uses to be allowed shall be in accordance with the standards of wastewater treatment and water quality requirements set forth in the California Code of Regulations. Prior to approving such uses, the District shall, in its discretion, set forth specific requirements as conditions to providing such services and/or require specific proper approval from the appropriate regulatory agencies.

b. Recycled water shall be provided once the following conditions are met:

1. Obtained approval from the regulatory agencies.

2. Obtain District approval for the design and construction of the private irrigation system.

3. Owner and operator of the system shall obtain a permit to receive such recycled water and use it only for approved purposes.

6-E-3 **OTHER LIMITATIONS**

The District shall not be liable for any damage by recycled water or otherwise resulting from defective plumbing, broken or faulty services or recycled water mains. All applicants for recycled water service shall be required to accept such conditions of pressure and service as provided by the distribution system at the location of the proposed service connection and to hold the District harmless from the damage arising from low pressure or high pressure conditions or from interruptions of service.

6-E-4 **SIZE, LOCATION AND INSTALLATION OF SERVICE LINE**

The District reserves the right to determine the size of the service lines, the service connections and the meters and shall also have the right to determine the kind and size of backflow protection devices for potable water service, in accordance herewith, and any and all other appurtenances to the service. The service lines shall be installed to a curb or property line of the customer's property abutting upon a public street, highway, alley, easement, lane or road (other than a freeway) in which the District's recycled water mains are installed.

a. The District reserves the right to limit the area of land to be supplied by one service connection to one ownership. A service connection shall not be used to supply adjoining property of a different owner.

b. When property provided with a service connection is subdivided, such connection shall be considered as serving the lot or parcel of land that it directly or first enters. Additional mains and/or recycled water service lines will be required for all subdivided area in accordance with the rules and regulations.

c. All recycled water used on any premises where a meter is installed must pass through the meter. Customer shall be held responsible and charged for all recycled water passing through the meter serving the property.

d. Every recycled water service line shall be equipped with a curb stop or wheel valve on the inlet side of the meter; such valve or curb stop being intended exclusively for the use of the District in controlling the recycled water supply through the service line. If the curb stop or wheel valve is damaged by the customer's use to an extent requiring replacement such replacement shall be at the customer's expense.

6-E-5 **RELOCATION OF RECYCLED WATER SERVICE LINE**

Should a service line installed pursuant to the request of the applicant, owner or customer be of the wrong size or installed at a wrong location, the cost of relocation shall be paid by the applicant, owner or customer. All services provided prior to final street improvements shall be considered temporary and the costs for all repairs or changes required to be performed by the District shall be paid by the applicant, owner or customer.

6-E-6 SCHEDULING RECYCLED WATER

The District reserves the right to control and schedule the use of recycled water if, in the opinion of the District, scheduling is necessary for purposes including, but not limited to, the maintenance of an acceptable working pressure in the recycled water system and providing for reasonable safeguards in relation to public health.

6-E-7 EMERGENCY CONNECTIONS TO RECYCLED WATER SYSTEM

If, in the opinion of the District, an emergency exists whereby recycled water is not available, the District may provide water from alternate sources, through the recycled water system.

PART 6 - SECTION F - EXTENSION OF FACILITIES

RULE

6-F-1 GENERAL

All off-site recycled water facilities and all on-site recycled water facilities shall be designed and constructed according to the requirements, conditions and standards as adopted and revised by the Board of Supervisors from time to time, which documents are on file at the District office and by this reference are incorporated herein. The recycled water system, including both off-site and on-site facilities, shall be separate and independent of any potable water system.

6-F-2 ON-SITE RECYCLED WATER FACILITIES

a. Any on-site recycled water facility shall be provided by the applicant, owner or customer at the applicant's expense. The applicant, owner or customer shall retain title to all such on-site facilities.

b. On-site facilities, in addition to conforming to applicable District guidelines, shall conform to local governing codes, rules and regulations.

c. Plans and specifications and record drawings, in accordance with District requirements, shall be prepared and submitted to the District for on-site facilities. Plans and specifications must be approved by the District prior to commencing construction. When the facilities are being converted from potable to recycled water and record drawings are not available, testing and a schematic plan may substitute for construction drawings.

d. Irrigation schedules must be prepared by the applicant and approved by the District, in accordance with the above referenced specifications. Prior to commencement of service to any on-site system using recycled water, record drawings shall be provided to the District and the installed system shall be tested under active conditions to ensure that the operation is in accordance with these rules and regulations.

e. In those areas where recycled water is not immediately available for use when the design area is ready for construction, and if the District has determined that recycled water will be supplied in the future, on-site facilities shall nevertheless be designed to use recycled water. Provisions shall be made and these regulations followed to allow for connection to the District's off-site recycled water facilities when available. In the interim, potable domestic water will be supplied to the on-site facilities through a temporary connection. A backflow preventer will be required on the temporary connection as long as the on-site facilities are using potable water. The backflow preventer shall be downstream of the meter and a part of the on-site facilities.

6-F-3 **OFF-SITE RECYCLED WATER FACILITIES**

a. Any off-site recycled water distribution facilities that are required to serve the applicant's property shall be provided by the applicant, owner or customer at his expense, unless the District determines it is a District benefit to construct these capital facilities.

b. The District may require the construction of off-site facilities including meters, pipe lines, pressure reducing stations, reservoirs, pumping facilities and treatment capacity. The required facilities may be larger than needed to serve just the property described in the application submitted to the District. In such cases, the District may enter into a reimbursement agreement in accordance with Part 5 of the rules and regulations.

c. The terms and provisions of such reimbursement agreement shall be determined by the District in its discretion. In no event shall interest be paid on any such amounts. The amount so advanced for facilities available to lands outside the area described in the application for service shall be taken into account when development occurs for which such facilities are constructed; and the District reserves the right to impose and charge additional connection charges, initial charges and costs, if necessary, to cause equitable reimbursement in any such instances.

d. Plans and specifications for off-site facilities shall be submitted to and approved by the District in advance of construction.

e. Necessary easements shall be provided to the District. All easements shall be in a form acceptable to the District and not subject to outstanding obligations to relocate such facilities or any deeds of trust, except in instances where such is in the best interests of the District.

6-F-4 **CONVERSIONS OF EXISTING FACILITIES FOR RECYCLED WATER**

Where it is planned that an existing water system be converted to a recycled water facility, the facilities to be converted to recycled water shall be investigated in detail, including a review of any record drawings, preparation of required reports, and determinations by the District of measures necessary to bring the system into full compliance with these rules and regulations. No existing potable water facilities shall be connected to or incorporated into the recycled water system without District approval.

PART 6 - SECTION G - CONTINUATION OF SERVICE

RULE

6-G-1 **FACILITIES OPERATIONS: OFF-SITE RECYCLED WATER FACILITIES**

Operation and surveillance of all the District's off-site recycled water system facilities, including, but not limited to recycled water pipelines, reservoirs, pumping stations, fire hydrants, manholes, valves, connections, treatment facilities and other appurtenances and property up to and including the District's meter, shall be under the jurisdiction and control of the District. No other person except authorized employees of the District shall have any right to enter upon, inspect, operate, adjust change, alter, move or relocate any portion of the foregoing, or any of the District's property. If such should occur, all charges and penalties shall be applicable and collected. Such action may also be in violation of any and all applicable federal, state and local statutes, ordinances, regulations and other requirements.

6-G-2 **FACILITIES OPERATIONS: ON-SITE FACILITIES**

a. The operation and maintenance of on-site recycled water distribution facilities are the responsibility of the applicant, owner or customer.

b. The operation and maintenance of all on-site recycled water system facilities including, but not limited to, landscape irrigation systems, agricultural irrigation systems, irrigation systems for nursery stock, systems utilized in relation to use of recycled water for industrial process or construction purposes, or recreational impoundment systems using the District's recycled water shall be under the management of an "on-site Recycled Water Supervisor" as stated in Rule 6-H-4.

c. The District shall monitor and inspect the entire recycled water system, including on-site and off-site facilities, and for these purposes shall have the right to enter upon the customer's premises during reasonable hours or any time in the event of an emergency, such as a break in the system causing a hazard to life or property. Where necessary, keys and/or combinations shall be issued to the District to provide such access.

d. The applicant, owner or customer shall have the following responsibilities in relation to operation of on-site facilities:

1. To make sure that all operations personnel are trained and familiarized with the use of recycled water.

2. To furnish their operations personnel with maintenance instruction, irrigation schedules and record drawings or schematic drawings, in the case of a conversion from potable to recycled water use, to ensure proper operation in accordance with the on-site facilities design and these rules and regulations.

3. To prepare and submit to the District one (1) set of record drawings on Mylar or schematic drawings, in the case of a conversion from potable to recycled water use.

4. To notify the District of any and all updates or proposed changes, modifications or additions to the on-site facilities, such changes shall be approved by the District and shall be designed and constructed in accordance to all Federal, State and local standards. In accordance with the above referenced requirements, conditions and standards, changes must be submitted to the District for plan check and approval prior to construction. The construction shall be inspected by the District and revised record drawings and controller charts shall be approved by the District. The District may, if it deems such to be in the best interest of the District, waive or modify any of the foregoing.

5. To ensure that the recycled water facilities remain in accordance with these rules and regulations.

6. To operate and control the system in order to prevent direct human consumption of recycled water and to control and limit runoff. The applicant, owner, or customer shall be responsible for any and all subsequent uses of the recycled water. Operation and control measures to be utilized in this regard shall include where appropriate, but not be limited to, the following:

    a. On-site facilities shall be operated to prevent or minimize discharge into areas not under control of the customer. Part circle sprinklers shall be used adjacent to sidewalks, roadways and property lines to confine the discharge from sprinklers to the design area.

    b. The operation of the on-site facilities shall be during he periods of minimal public use of the service area. Allow a maximum dry-out time before the service area will be used by the public.

    c. Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the on-

site facilities shall be compatible with the lowest infiltration rate present.

d. Automatic systems shall be utilized and programmed to prevent or minimize the ponding and runoff of recycled water. The sprinkler system shall not be allowed to operate for a time longer than the landscape's water requirement. If runoff occurs before the landscape's water requirements are met, the automatic controls shall be reprogrammed to lessen water cycles to meet the requirements. This method of operation is intended to control and limit runoff.

e. Reporting to the District any and all failures in their systems that cause an unauthorized discharge of recycled water.

7. To comply with any and all applicable federal, state and local statutes, ordinances, regulations, contracts, these rules and regulations and all requirements prescribed by the District and the Board of Supervisors. In the event of violation, the charges and penalties shall be applied and collected.

6-G-3 **WATER CONSERVATION**

It is the desire of the District to effect conservation of water resources whenever possible, such measures being consistent with legal responsibilities to seek to wisely utilize the water resources of the State of California and District.

No irrigation of new or existing parks, median strips, landscaped public areas or landscaped areas, lawns or gardens surrounding single family homes, condominiums, townhouses, apartments and industrial parks shall occur in such a way as to waste water. The rate and extent of application of water shall be controlled by the consumer so as to minimize runoff from the irrigated areas.

Applicable sections of Part 1 - Section L are incorporated herein and shall apply.

6-G-4 **METER READING AND BILLING**

The applicable rules from Part 1 - Section D - H are incorporated herein and shall apply to recycled water.

PART 6 - SECTION H - PROTECTIVE MEASURES

RULE

6-H-1 **CROSS CONNECTION PREVENTION: GENERAL**

The purpose of these provisions is to protect the potable water supply against actual or potential cross-connection by isolating within the premises, contamination or pollution that may occur because of some undiscovered or

unauthorized cross-connection in the premises, and to prevent cross-connections from occurring in the future, in accordance with Title 17, Chapter 5, Sections 7583-7622, of the California Code of Regulations. These provisions shall be in addition to and not in lieu of the controls and requirements of other regulatory agencies, such as local governmental agencies and local health department and State DOHS. These regulations are intended to protect the potable water supply and are not intended to provide regulatory measures for protection of users from the hazards of cross-connections within their own premises.

Backflow prevention devices, on the potable water service to the premises, as required in these provisions, shall be provided by the applicant, owner or customer at his expense. Such devices shall be owned and maintained by the applicant.

6-H-2 **INSPECTION OF PROTECTIVE DEVICES**

The customer shall have the backflow prevention devices inspected at least once a year, or more often in those instances where successive inspections indicate repeated failure. All inspections and testing shall be performed by a tester certified by the local health department. These devices shall be repaired overhauled, or replaced at the expense of the water user whenever they are found to be defective. Records of all such tests, repairs, and overhauls shall be mailed to the District and the local health department. Nothing contained herein shall relieve a potable water customer from the duty to install, test and maintain backflow prevention devices.

6-H-3 **MARKING OF EXPOSED POTABLE AND NON-POTABLE WATER LINES**

Where the premises contain dual or multiple water systems and piping the exposed portions for recycled water pipelines shall be painted, banded, or marked at sufficient intervals. All outlets from secondary or other potentially contaminated systems shall be posted as being contaminated and unsafe for drinking purposes.

6-H-4 **ON-SITE RECYCLED WATER SUPERVISOR**

The “On-site Recycled Water Supervisor” designated by the applicant, owner or customer shall be approved by the District. The District may from time to time, request that an “On-site Recycled Water Supervisor” obtain instruction in the use of recycled water, such instruction being provided by or approved by the District.

The District, in turn will notify the local health department and State DOHS and the RWQCB, of the identity of the person responsible for the water piping on all premises concerned with these regulations. At each premise where it is necessary, in the opinion of the regulatory agency and/or the District, a Recycled Water Supervisor shall be designated who shall be responsible for the installation and the use of pipelines and equipment and for the prevention of cross-connections.

In the event of contamination or pollution of the drinking water system due to a cross-connection on the premises, the local health officer and the District shall be promptly advised by the person responsible for the water system so that appropriate measures may be taken to overcome the contamination or pollution.

6-H-5 **REGULATION OF WASTE DISCHARGE TO SEWERAGE SYSTEMS**

Waste discharge to the sewage system shall be in accordance with Part 12 of these Rules and Regulations.

PART 6 - SECTION I - SANCTIONS

RULE

6-I-1 **PUBLIC NUISANCE**

Use of recycled water in any manner in violation of these rules and regulations or of any permit issued hereunder is hereby declared a public nuisance and shall be corrected or abated as directed by the District. Any person creating such a public nuisance is guilty of a misdemeanor.

6-I-2 **INJUNCTION**

Whenever use of recycled water is in violation of these rules and regulations otherwise causes or threatens to cause a condition of nuisance, the District may seek injunctive relief as may be appropriate to enjoin such or use.

6-I-3 **PERMIT REVOCATION**

In addition to any other statute or rule authorizing termination of water service, the District may revoke a permit issued hereunder if a violation of any provision of these rules and regulations is found to exist or if a discharge of waste or use of recycled water causes or threatens to cause a nuisance.

6-I-4 **PENALTY**

Any owner and/or operator who violate these rules and regulations shall, for each day of violation, or portion thereof, be subject to a fine not exceeding $1,000.00. In addition, water service to the property may be discontinued.

PART 7 - OPERATION AND MAINTENANCE OF SEWAGE COLLECTION SYSTEM - (MOORPARK)

The California State Water Code Division 16, Section 55335.5, provides for a waterworks district to construct, maintain, and operate sewage collection and treatment facilities and dispose of the effluent therefore in any lawful manner and also do all that is necessary or proper to accomplish such powers. The Rules and Regulations of Part 7 of this publication are based on this authority.

PART 7 - SECTION A - VENTURA COUNTY WATERWORKS DISTRICT NO. 1 (MOORPARK)

RULE

7-A-1 The District shall observe all existing ordinances of the Moorpark County Sanitation District in carrying out its responsibilities for the operation and maintenance of the sewage collection system.

The District shall observe all provisions of the "Public Sewage Joint Powers Agreement" dated March 7, 1967, entered into by the District and the Moorpark County Sanitation District.

PART 7 - SECTION B - DEFINITION OF TERMS

RULE

7-B-1 **DISTRICT**: District shall mean the Ventura County Waterworks District No. 1 (Moorpark).

BOARD: Board shall mean the Board of Directors of Ventura County Waterworks District No. 1 (Moorpark).

ENGINEER: Engineer shall mean the Director of the Public Works Agency or his authorized representative. 194

MANAGER: Manager shall mean that employee of the Public Works Agency assigned to the Water and Sanitation Department to be in direct responsible charge of the operations, construction, repair, and maintenance, of Waterworks District No. 1 (Moorpark) facilities, under the direction of the Director. 194

DIRECTOR: Director shall mean that employee of the Public Works Agency assigned to the Water and Sanitation Department to be in direct responsible charge of the operations, budgets, constructions, repair, maintenance, and business of the Districts.194

PERSON: Person shall mean any human being, individual, firm, company, partnership, association; private, municipal or public corporations, the United States of America, the State of California, districts and all political subdivisions, governmental agencies and mandatory's thereof.

PERMIT: Permit shall mean any written authorization required pursuant to the Moorpark County Sanitation District ordinances or the Rules and Regulations of the District for the installation or connection of any sewage works.

BUILDING: Building shall mean any structure used for human habitation, business, recreation, or others uses requiring sanitary facilities.

CONTRACTOR: Contractor shall mean any individual, firm, partnership, association or corporation currently licensed by the State of California to perform the type of work required by permit.

STREET: Street shall mean any public highway, road, street, avenue, alley, way, or public place dedicated and accepted by the County.

SEWAGE: Sewage shall mean a combination of water carried wastes from a residence, a business, an institutional or industrial establishment.

SEWAGE WORKS: Sewage Works shall mean all facilities for the collection, transportation, pumping, treatment, and disposal of sewage.

SINGLE RESIDENTIAL: Single residential sewer connection shall mean a sewer to serve a single residence.

MULTIPLE RESIDENTIAL: Multiple residential sewer connection shall mean a sewer connection to serve more than one residential unit. [79]

COMMERCIAL: Commercial shall mean a site or building used for the exchange or buying and selling of commodities and shall also mean a hotel or motel. [13]

INSTITUTIONAL: Institutional shall mean any educational institution supported by state or local taxes.

INDUSTRIAL: Industrial shall mean a fraternal organization or private school; it shall also mean any site, structure, building or works which is, or which is designed, to be used for the manufacture, processing, or distribution of materials, equipment, supplies, food, or commodities of any description; or which is used or designed as a sanitarium, hospital, penal institution, or charitable institution; together with all appurtenances thereto and the surrounding premises under the same ownership or control.

SEWER CONNECTION FEE: Shall mean a fee to obtain permission to connect to the District sewer, to have flow capacity rights and to use the trunk sewer, sewage treatment facilities and appurtenances, provided that the District's prevailing service charges have been paid. [13]

SEWAGE TREATMENT PLANT: Sewage Treatment Plant shall mean any device, facilities, or structures used for the treatment of sewage.

SEWER: Sewer shall mean any pipe or conduit for the transportation of sewage.

PRIVATE SEWER: Private Sewer shall mean a sewer serving an independent sewage disposal system not connected with a public sewer.

PUBLIC SEWER: Public Sewer shall mean a sewer lying within a public way or easement under the jurisdiction of the District.

SANITARY SEWER: Sanitary Sewer shall mean a sewer to which storm, surface, and ground waters are not intentionally admitted.

HOUSE LATERAL SEWER: House Lateral Sewer shall mean that portion of a public sewer within a public way or easement which connects a building sewer to the main sewer.

BUILDING SEWER: Building Sewer shall mean that portion of any sewer which begins at the plumbing or drainage outlet of a building or industrial facility and runs to the property line or a private sewage disposal system.

SIDE SEWER: Side Sewer shall mean the sewer line which begins at the foundation wall of a building and terminates at the main sewer and includes both the building and house lateral sewer.

MAIN SEWER: Main sewer shall mean a public sewer which is designed to accommodate more than one lateral sewer.

PART 7 - SECTION C - GENERAL

RULE

ORIGINAL CONNECTIONS ON COMMENCEMENT OF OPERATION SEWAGE COLLECTION SYSTEM

7-C-1 DELETED

7-C-2 DELETED

7-C-3 DELETED

7-C-4 DELETED

FEES

7-C-5 **SEWER CONNECTION FEES**:

Effective April 1st, 2013, the sewer connection fee shall be as shown in 7-C-5.4 and shall be collected at the time of issuance of a Sewer Will-Serve Letter and after a project has received tentative approval from the appropriate legislative body.[237]

7-C-5.1 SINGLE RESIDENTIAL LOT SEWER CONNECTION:

A fee as shown in Section 7-C-5.4 shall be paid for each residential lot.[13]

7-C-5.2 MULTIPLE RESIDENTIAL SEWER CONNECTION:

A fee as shown in Section 7-C-5.4 shall be paid for each equivalent residential unit, or fraction thereof. Each apartment unit or similar type dwelling unit, including a mobile home, shall be considered 0.80 equivalent residential unit and each trailer space shall be considered one-half (½) of an equivalent residential unit. The number of equivalent residential units for recreational and/or other miscellaneous facilities within the multiple residential complex shall be computed per Method A or Method B in Section 7-C-5.3. No connection fee shall be charged for laundry room facilities within the complex open to use only by residents of the complex.[63]

7-C-5.3 COMMERCIAL, INDUSTRIAL, INSTITUTIONAL OR MISCELLANEOUS SEWER CONNECTION: A fee computed, at the option of the District, by use of Methods A, B, or C below, shall be paid.[13]

Method A: Based on Water Meter Size

Each 5/8" or 3/4" meter shall equal one (1) equivalent residential unit.

Each 1" meter shall equal two (2) equivalent residential units.

Each 1 ¼" or 1 ½" meter shall equal four (4) equivalent residential units.

Each 2" meter shall equal seven (7) equivalent residential units.

Each 3" meter shall equal fifteen (15) equivalent residential units.

Each 4" meter shall equal thirty (30) equivalent residential units.

Each 6" meter shall equal sixty (60) equivalent residential units.

Fee for each equivalent residential unit or fraction thereof, shall be as shown in Section 7-C-5.4.

Method B: Based on number of plumbing fixtures. Each twenty-five (25) plumbing fixture units as defined in the Uniform Plumbing Code under the section entitled "Drainage Systems" shall be considered equal to one (1) equivalent residential unit. The fee for each equivalent residential unit, or fraction thereof, shall be as shown in Section 7-C-5.4.

Method C: Based on flow and waste characteristics. Where flow and waste characteristics are of an unusual nature, the equivalent residential unit (ERU) is determined based on the following formula: [63]

$$\frac{\text{Daily Flow}}{210}\left[0.576 + \frac{\text{BOD Concentration}}{240}(0.228) + \frac{\text{TSS Concentration}}{300}(0.196)\right]$$

7-C-5.4 SCHEDULE OF SEWER CONNECTION FEES

Sewer connection fees shall be in accordance with the following schedule:

FEE SCHEDULE [237]

Residential, per Residential Lot.	$ 4,595
Multiple Residential, per Equivalent Residential Unit, or fraction thereof.	$ 4,595
Commercial, Industrial, Institutional or Miscellaneous, computed by Method A or B in Sec. 7-C-5.3 per Equivalent Residential Unit, or fraction thereof.	$ 4,595
Commercial, Industrial, Institutional or Miscellaneous, computed by Method C in Sec. 7-C-5.3	To be determined by District

7-C-5.5 DELETED

7-C-6 **SEWER SERVICE CHARGES**[167] Sewer service charges shall be in accordance with the following schedule:

7-C-6.1 TYPE OF SEWER CONNECTION[242]	Monthly Charge

Single residential, per each residential lot.	$ 26.00/ERU
Multiple residential, per each Equivalent Residential Unit (ERU) or fraction thereof.[242] Each single family residence, duplex, or similar type dwelling unit shall be considered one Equivalent Residential Unit. Each apartment unit, condominium, townhouse, or similar type dwelling unit, including a mobile home, shall be considered 0.80 Equivalent Residential Unit and each trailer space shall be considered one-half (1/2) of an Equivalent Residential Unit. The number of Equivalent Residential Units for recreational and/or other miscellaneous facilities within the multiple residential complex shall be computed per Method A or B in Section 7-C-5.3. No monthly sewer service charge shall be made for laundry room facilities within the complex open to use only by residents of the complex. For dwellings not specifically described herein, the number of Equivalent Residential Units will be determined by the Director. [194]	$ 26.00/ERU
Commercial, Industrial, Institutional or Miscellaneous, when Equivalent Residential Units are computed per Method A or B in Section 7-C-5.3 per Equivalent Residential Unit.	$ 26.00/ERU
Commercial, Industrial, Institutional or Miscellaneous, per Equivalent Residential Unit, when flow and waste characteristics are of unusual nature and Equivalent Residential Units are computed on the basis of strength of the five (5) day Biochemical Oxygen Demand (B.O.D.) suspended solids, quantity of flow and other factors of the waste discharge that affect the sewage transmission, sewers, treatment, and disposal.	$26.00/ERU

7-C-6.2 Billing shall be made monthly and submitted with the water service charges for the same period. If circumstances warrant, at the option of the District, separate bills may be issued. [242]

The Director[194] or his authorized representative may make adjustments or waive charges to customer bills for those charges resulting from billing errors or other discrepancies.

The sewer service charge for property located within the boundaries of Ventura County Waterworks District No. 1 shall be collected by Ventura County Waterworks District No. 1 in the amount, as set forth herein.[242]

For an initial connection of any building, structure, or other facility to the District sewer, the charge for sewer service shall begin with the first day of the month following the date of issuance of the appropriate Building and Safety Department's Certificate of Occupancy and shall continue until a request for discontinuance of service is received by the District. Said sewer service charge shall be billed to the recipient of the Certificate of Occupancy in a manner provided elsewhere in these Rules and Regulations.

When it becomes necessary to bill for a partial billing period of less than 23 days or greater than 37 days, a daily pro-rata billing charge will be calculated. [242]

Bills for sewer service charges shall be due and payable in cash or check on presentation and shall become delinquent nineteen (19) days after mailing. [72]

Non-payment of either water or sewer service charges shall cause water service to be shut off. Delinquent notices shall first be presented by mail or by person.

If more than one tenant on a parcel of property is served through a single sewer service, the District will render a single bill to the property owner or applicant of record. Said bill shall include a charge for sewer service to be computed in accordance with Section 7-C-6 of these Rules and Regulations.

No sewer service charge will be made upon notification to the District that the property is vacant and does not require service. The District may at its option require verification that the property is not receiving water service. [79]

7-C-7 **DELETED** [83]

7-C-8 **DELETED** [83]

PUBLIC SEWER USE

7-C-9 **WASTE DISPOSAL**: It shall be unlawful for any person to place, deposit, or permit the deposit in an unsanitary manner upon public or private property within the District or in any area within the jurisdiction of the District, any human excrement or other objectionable waste, except chemical toilets on a construction site may be used during the construction period.

7-C-10 **TREATMENT OF WASTE**: It shall be unlawful to discharge into any drainage conduit, stream or water course any sewage, industrial waste, or other polluted waters except where suitable treatment has been provided in accordance with the provisions of Moorpark County Sanitation District's ordinance, except emergency or temporary overflows from sewage lift stations may be permitted by the Engineer[194] for use during temporary outages of power at the lift station.

7-C-11 **UNLAWFUL DISPOSAL**: Except as provided herein, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, sewage pit or other facility intended for the disposal of sewage.

7-C-12 **OCCUPANCY PROHIBITED**: No building, structure, or other facility shall be occupied until the owner of the premises has complied with the provisions of the Moorpark County Sanitation District ordinances and these Regulations.

SEWER CONSTRUCTION

7-C-13 **SEWER REQUIRED**: Any building or structure located on property which abuts any easement or right of way in which there is a present or planned public sewer of the District shall, at the expense of the owner of said building or structure, and, in accordance with the provisions of the Moorpark County Sanitation District Ordinances, be connected to the public sewer provided that said public sewer in within two hundred (200) feet of the property line of the site of the building or structure; and that said building or structure is not in excess of four hundred (400) feet from the District sewer. Said sewer connection shall be completed within 60 days following receipt of official notification to proceed. [13]

7-C-14 **PERMIT**: Prior to construction of a building sewer, lateral sewer, or any connection with a public sewer, a written Permit shall be obtained, and all fees and connection charges paid in accordance with the provisions of Section C of these Rules and Regulations.

7-C-15 **CONSTRUCTION REQUIREMENTS**: The requirements of the Ordinances and Rules and Regulations of the Moorpark County Sanitation District shall govern the construction of all building and lateral sewers. [13]

7-C-16 **SEPARATE SEWERS**: Except as provided in Section 7-C-16.1 for condominium projects, no two adjacent lots fronting on the same street shall be permitted to join in the use of the same side sewer, and every building or industrial facility shall be separately connected with a public sewer if such sewer is available. However, one or more buildings located on property belonging to the same owner may be served with the same side sewer during the period of said ownership. The District shall render a single bill to the property owner, or applicant of record, which shall include the sewer service charge for the entire property. Upon subsequent subdivision and sale of the portion of a lot, that portion not directly connected with a public sewer shall be separately connected with the public sewer. It shall be unlawful for the owner to continue to use or to maintain such indirect connection. [13]

7-C-16.1 **CONDOMINIUM PROJECTS:** In condominium projects, two or more units of the condominium may, at the option of the District, be permitted to join in the use of the same side sewer. The responsibility for maintenance of such side sewer shall be as defined in Section 7-E-4 of these Rules and Regulations. The District shall render a single bill to the management body of the project, or its authorized representative, which shall include the sewer service charge for the entire condominium project as computed in accordance with Section 7-C-6 of these Rules and Regulations. [13]

7-C-17 **PERMIT REQUIRED**: Prior to uncovering, connecting to, opening into, using, altering, or disturbing any public sewer or appurtenance, a written permit shall be obtained and all fees, connection charges, and bonds shall be furnished in accordance with the provisions of these Rules and Regulations and Moorpark County Sanitation District's ordinances.

Permission to connect any lot or parcel of land outside the District to any public sewer under the jurisdiction of the District shall be optional with the Board and if approved shall be granted by Permit after subject lot or parcel has been annexed to the Moorpark County Sanitation District and Waterworks District No.1.

The applicant shall enter into a written contract satisfactory to the District whereby he shall bind himself, his heirs, successors and assigns to abide by all ordinances, rules, and regulations regarding the use of such sewer, the connection, and the draining therewith. The applicant shall pay all permit fees and a monthly service charge set by the District for the use of such sewer. 13

7-C-18 **SUBDIVISIONS**: Prior to the approval by the governing body of any final subdivision map the requirements of Rule 7-C-14 shall be fully complied with. Said map shall provide for the dedication for public use of all streets, easements, or rights of way in which public sewer lines are to be constructed. The developer shall construct the sewers in the subdivision or tract and dedicate the in-tract facilities to the District.

7-C-19 **INCOMPLETE CONSTRUCTION**: If the map as provided for in Section 7-C-18 is recorded, and the sewer construction of the tract is not completed within the time limit granted by permit, the governing body may extend the time limit, or may complete the work and take appropriate action to enforce the provisions of the bond furnished by the sub-divider. 13

7-C-20 **EASEMENTS OR RIGHTS OF WAY**: Where an easement is required for the extension of the public sewer or a connection thereof an acceptable easement or right of way shall be procured by the applicant and shall be dedicated to the District. Such easement or right of way shall be legally sufficient in form, and approved by the Engineer194 prior to the laying and maintenance of such extension or connection.

7-C-21 **PERSONS AUTHORIZED**: Public sewer construction within the District shall be performed by authorized contractors, currently licensed by the State of California or by the District forces. All terms and conditions of the District Permit shall be binding on the contractor. The requirements of this section shall also apply to side sewers installed concurrently with public sewer construction.

PERMITS

7-C-22 **PERMIT REQUIRED**: No unauthorized person shall uncover, connect with, open into, use, alter, or disturb any public sewer or appurtenance, or perform work on any drainage system without first obtaining a written Permit from the District. Such Permit shall be posted at the worksite and shall be shown upon the demand of any District authorized representative.

7-C-23 **APPLICATION FOR PERMIT**: Any person legally entitled to apply for and receive a Permit shall make application to the District on the form provided. The location, ownership, occupancy and use of the premises and a description of the proposed nature of the work to be performed shall be provided by the applicant. Specifications, plans, drawing and other information shall be supplied to the Engineer as deemed necessary. 194

7-C-24 **PERMIT COMPLIANCE**: The approval of the application is evidenced by the issuance of a Permit. Thereafter, no change shall be made in the location of the sewer, the grade, materials, or other details described in the Permit or as shown on the approved plans and specifications, unless prior written permission is obtained from the District, the Engineer or other authorized representative. [194]

7-C-25 **AGREEMENT**: The signature of the applicant on an application for a Permit shall constitute an agreement to comply with all provisions, terms, and requirements of these Rules and Regulations and the Moorpark County Sanitation ordinances. The signature shall constitute an agreement to comply with the approved plans and specifications and any further corrections, or modifications as may be required by the District. Such agreements shall be binding upon the applicant and may be modified by the District after the receipt and consideration of a written request for modification submitted by the applicant.

7-C-26 **PERMIT CLASSES**: There shall be five classes of permits.[13]

(a) Single Residential Lot sewer permit.

(b) Multiple Residential, Institutional, Commercial, Miscellaneous sewer permit.

(c) Industrial sewer permit.

(d) Private sewage disposal permit.

(e) Subdivision Final Map or Parcel Map sewer permit.

7-C-27 **INDUSTRIAL WASTE TESTING FEES**

7-C-27.1 DELETED [83]

7-C-27.2 **INDUSTRIAL WASTE TESTING FEE**: The testing fee shall be based upon actual costs of the tests. The District Engineer[194] shall estimate the cost of testing and shall require a cash deposit equal to the estimated cost of the test from the applicant prior to start of the testing.

7-C-27.3 If a refund of the construction inspection fee is requested within ninety (90) days after the fee has been paid and no construction work has commenced, 80% of the fee may be refunded to the applicant.

7-C-28 **BONDS - PUBLIC SEWAGE WORKS CONSTRUCTION**

7-C-28.1 BONDS: A faithful performance bond and materials and labor bond or cash each in the amount equivalent to the total estimated cost of the work shall be furnished by the applicant to the District, prior to the issuance of any permit for public sewer construction. Such bond shall be secured by a surety bond or sureties satisfactory to the District. The faithful performance bond or cash deposit shall be conditioned upon the full performance of all the terms and conditions of the permit. It shall guarantee correction of faulty workmanship and replacement of defective materials for a period of one (1) year after date of acceptance of the work by the District.

7-C-28.2 **LIABILITY:** The applicant shall be solely liable for any defects or failure during performance of the work or any failure which may develop therein. The District, its officers, agents, and employees, shall not be answerable for any liability, death or injury to persons, property damage, due to or arising out of the performance of the work by the applicant. The applicant shall answer for and save the District, its officers, agents, and employees, from all liabilities imposed by law, including all costs, expenses, fees, and interest incurred in seeking to enforce this provision.

PART 7 - SECTION D - ENFORCEMENT

7-D-1 **TIME LIMIT - PERMITS**: If the work granted by the permit is not commenced within six (6) months from date of issuance, or is discontinued for a period of 90 days after partial completion, the Permit shall be void. No further work shall be undertaken until a new permit has been secured by proper application and payment of a new fee. The work shall be completed within the calendar days for completion as specified by the new permit.

7-D-2 **VIOLATION**: Any person found to be in violation of any provision of these Rules and Regulations of the District, (except Rule 7-E-1) shall be served with written notice by the Engineer or other authorized representative. Such written notice shall state the nature of the violation and provide a reasonable time limit for correction thereof. Said time limit shall not be less than two (2) nor more than seven (7) working days. Within the time period stated in the notice all violations shall permanently cease. All persons shall be strictly liable for the acts of their agents and employees performed under the provisions of this or any other ordinance, rule or regulation of the District. Upon notification by the Engineer of any defect arising in any sewer, or notification of any violation of this ordinance, corrections shall immediately be effected by the person or persons in charge of said work.[195]

7-D-3 **PUBLIC NUISANCE**: Continued habitation of any building, or continued operation of any industrial facility in violation of the provisions of this or any other ordinance, rule, or regulation is hereby declared a public nuisance. Proceedings may be brought by the District to abate such nuisance during the period of violation.

7-D-4 **DISCONNECTION**: The alternate method of enforcing the provisions of this or any other ordinance, rule, or regulation of the District shall be as follows: The Engineer shall have the power to disconnect the user or subdivision sewer system from the sewer mains of the District. Upon disconnection, the Engineer shall estimate the cost of disconnection and reconnection. Such user shall deposit said estimated cost prior to reconnection to the system. The District shall refund any part of the deposit remaining after payment of the aforementioned costs.[195]

7-D-5 **PUBLIC NUISANCE, ABATEMENT**: During the period of disconnection, human habitation of such premises shall constitute a public nuisance whereupon the District shall initiate proceedings for the abatement of said nuisance during the disconnection. Reasonable attorney's fees and costs of suit of any action brought shall be paid the District as a condition precedent to reconnection.

7-D-6 **MEANS OF ENFORCEMENT**: The District declares the foregoing procedures are established as a means of enforcing the provisions of this and any other ordinance, rule, or regulation of the District, and not as a penalty.

7-D-7 **MISDEMEANOR**: In accordance with Section 55334 of the California State Water Code, any violation of a regulation or ordinance of the District is a misdemeanor punishable by fine not to exceed $500.00, or imprisonment not to exceed six months, or both.

7-D-8 **LIABILITY FOR VIOLATION**: The violation of any provision of these rules and regulations, by any person, shall cause him to be liable to the District for any expense, loss, or damage, caused the District by reason of the violation.

7-D-9 **TAMPERING WITH DISTRICT PROPERTY:** No person shall at any time install an unauthorized sewer connection to, or tamper with, or otherwise interfere with the sewer system.

In the event a person, firm, or corporation for any reason digs out and damages any part of the sewer system, or causes any such act to be done, such person, firm, or corporation will be held liable for any injury or damage. The District may impose a fine of up to $250.00, plus labor and materials for repairs and damages, to any person, form or corporation found to be tampering with District property or engaged in the unauthorized operation of any part of the sewer system. [72]

PART 7 - SECTION E - MISCELLANEOUS PROVISIONS

7-E-1 **PROTECTION FROM DAMAGE**: No unauthorized person shall maliciously, willfully, or negligently, break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which constitutes a part of the District sewerage works. Any person in violation of this provision shall be subject to the penalties provided by law (See Rule 7-D-2).

7-E-2 **POWER AND AUTHORITY OF INSPECTORS**:[196] The Officers, Inspectors, Engineer, or any other duly authorized employee of the District shall wear or carry an official badge of office, or other evidence, which establishes his position as such. Upon the exhibition of proper credentials and identification he shall be permitted to enter into residential, commercial, institutional, and industrial facilities for the purposes of inspection, observation, measurement, sampling, testing, or otherwise performing the necessary duties pursuant to the enforcement of the provisions of the Moorpark County Sanitation District ordinances or rules and regulations of this District.

7-E-3 **ORIGINAL CONNECTIONS ON COMMENCEMENT OF OPERATION OF SEWAGE SYSTEM**: Notwithstanding any statement to the contrary herein, the owner of any building situated within the District, and under the terms of the Moorpark County Sanitation District Ordinance, is required to connect such building to the proper public sewer and shall have sixty (60) days after such date as the Board proclaim, that the District is ready to receive sewage into the District sewage system, to connect such building directly with the proper public sewer, costs of such connection to be at the expense of the owner. Where the cost of providing sewer service to any lot, parcel, or building within the District would cause an undue hardship on the District, the District reserves the right to delay sewer service to said lot, parcel, or building until such time as the District is financially able to provide such service. [13]

7-E-4 **OWNER'S RESPONSIBILITY**: The owner shall be responsible for maintaining the side sewer from the building connection to the public sewer line connection. The District is not responsible for damage caused by line breaks or leaks occurring on the owner's property. [13]

7-E-5 **SEWER TOO LOW**: In all buildings in which any building sewer is too low to permit gravity flow to public sewer, sanitary sewage carried by such building sewer shall be lifted by artificial means, provided by the owner, approved by the Inspector, and discharged to the public sewer at the expense of the owner.

7-E-6 **DESIGN AND CONSTRUCTION STANDARDS**: Minimum standards for the design and construction of sewers within the District shall be in accordance with the **SPECIFICATIONS FOR SEWER CONSTRUCTION** heretofore and hereafter adopted by District, copies of which are on file in the District office. The Engineer may permit modifications or may require higher standards where unusual conditions are encountered.[196]

"As-built" drawings showing the actual location of all mains, structures, Y's, laterals, and cleanouts shall be filed with the District before final acceptance of the work.

7-E-7 **SWIMMING POOLS**: It shall be unlawful for any person to discharge the contents of a swimming pool into a sanitary sewer except in the manner specified herein. The size of pipe carrying discharge water shall not be larger than 2" and shall not be under a head to exceed 20'. If the water is discharged by pumping, the rate of flow shall not exceed 100 gallons per minute. Each swimming pool discharging to a sanitary sewer shall be equipped with an approved separator to preclude any possibility of a backflow of sewage into the swimming pool or piping system.

$1,000.00. In addition, water service to the property may be discontinued.

PART 8 – DELETED

PART 9 - STANDARD CRITERIA FOR THE PREPARATION AND PROCESSING OF PLANS AND ALL SUPPLEMENTAL DOCUMENTS FOR WATER AND SEWER SYSTEM IMPROVEMENTS UNDER THE JURISDICTION OF VENTURA COUNTY WATERWORKS DISTRICTS NO. 1, 16, 17 & 19 [83]

RULE

PART 9 - SECTION A - GENERAL

9-A-1 The owner/developer shall determine if the proposed development is entirely within a Ventura County Waterworks District. Any portion of the development not within the District shall be annexed to the District or other arrangements made to obtain water service. This determination shall be made at the earliest possible date as plans shall not be approved by the District until annexation is complete.

9-A-2 The owner/developer shall secondly determine if the proposed development is outside of or within an improvement zone of the District. Developments outside improvement zones shall be processed in accordance with Part 9, Section B hereof. Developments within improvement zones shall be processed in accordance with Part 9, Section C hereof.

9-A-3 All financial arrangements shall be completed with the District before "Will-Serve" letters and letters to the Department of Real Estate will be issued.

PART 9 - SECTION B - WATER SYSTEMS FOR DEVELOPMENTS WITHIN THE DISTRICT WHICH ARE NOT IN AN IMPROVEMENT ZONE

9-B-1 The water system improvements for developments not within an improvement zone of the District shall be designed, furnished and installed by the owner/developer at his expense or he shall be charged for said improvements and pay the District the cost thereof computed at the rates set forth in Part 3 hereof or as computed by the Engineer. Said improvements shall be as required to meet the design criteria and standards of the District set forth in this and other sections of the Rules and Regulations as stipulated by the Engineer.[197]

9-B-2 The water system improvements shall be designed and plans shall be prepared by a Civil Engineer registered in the State of California, said engineer to be hereafter referred to as the Owner's Engineer.

9-B-3 For design of the distribution system and for establishing pipe sizes, one of the following formulas shall be used, whichever gives the larger value for peak demand rate:

1. Peak demand rate (gpm) =

Number of residential units x 1.65

2 + Fire Flow

The amount of fire flow required by the District shall be 1000 gpm for residential development, 1500 gpm for commercial development, and 2000 gpm for industrial development. A higher fire flow may be required by the Fire Department.

2. Peak demand rate (gpm) =

Number of residential units x 1.65

9-B-4 The District shall be contacted to obtain the water pressure that is available at points where the new system will be tied into the existing system. The District strives to maintain a minimum pressure of 40 psi but under extenuating circumstances a waiver may be obtained from the Engineer. In no case shall the pressures allowed be less than the County Minimum Standards. 197

9-B-5 Water improvements plans shall be twenty-two inches by thirty-six inches (22" x 36") in size with a two inch (2") margin on the left and a one-half inch (1/2") margin on each of the other sides, and shall be prepared on a permanent-type reproducible material suitable for microfilming. Each sheet shall contain a north arrow. The horizontal scale shall be one inch to forty feet (1" to 40') and the vertical scale shall be one inch to four feet (1" to 4'). All scales shall be graphically shown. 32 Under unusual circumstances, a variation in scale may be approved by the Engineer. 197

9-B-6 The plans shall contain an overall plan at a preferred scale of one inch to two hundred feet (1" to 200') showing general layout of water lines, fire hydrants, proposed and existing valves, named streets, development boundary, and sheet index. All bench marks shall be graphically shown on this overall plan and the elevations, descriptions, locations, etc., shall be illustrated as below:

B.M. No. ____ Elev. ____ F.B. ____ Page

Type of Marker

Location

The elevations used shall be based on U.S.C. and G.S. mean sea level, 1929 datum, with the tract engineer specifying what adjustment was used. When practical, the 1970 adjustment shall be used.

9-B-7 If these water improvement plans are not part of a set of plans which include a vicinity map, a vicinity map shall be shown on the water plans showing the development site in relation to one of the major communities of the County.

9-B-8 The water system shall be shown in plan and profile and shall include, but not be limited to, adequate stationing, curve data, location in regard to survey lines and structures, easement limits and pipe size, type, class, and cover. In addition, a detail of any radical change in vertical alignment shall be shown. All sewer facilities shall be shown and labeled on the plan view. Any pipelines

two inches (2") or more in diameter which cross the water main (especially gas, storm, irrigation, sewer, telephone, power, television, and oil lines) shall be shown and labeled on the profile.

9-B-9 All drawing sheets shall be provided with title and signature blocks that agree with those currently in use by the Ventura County Department of Public Works or by the applicable governing body if the development is in an incorporated area. In addition, the following signature block shall appear on each water system sheet:

Approved by
Ventura County Waterworks District No.

_____
Engineer[197] Date

9-B-10 The General Notes shall include a note stating that the water system shall be constructed in accordance with the Rules and Regulations of the applicable Ventura County Waterworks District. There shall be a note on the plans stating that the District Manager [197] shall be notified 48 hours prior to the construction of tie-ins to existing lines.

9-B-11 Ventura County Waterworks Districts' Standard Designs No. 78 through 83 and any additional standard designs that may hereafter be adopted by the District shall be included as part of the improvement plans. Reproducibles of these Standard Designs are on file in the Water and Sanitation Division of the Ventura County Department of Public Works from which the owner/developer can obtain reproducibles for inclusion in the water plans.

9-B-12 **EASEMENTS AND LANDS IN FEE**

9-B-12.1 Whenever possible, any easement or land in fee required for installation of the water system improvements shall be dedicated and accepted on the final map. The owners of land included within the development shall offer to dedicate for public use the water line easements and/or lands in fee so designated on the final map. The form of dedication shall be as follows:

"We also grant to Ventura County Waterworks District No. ___ all water line easements (and lands in fee*) delineated and designated on the map."

***** Add if applicable

The form of acceptance shall be as follows:

"Ventura County Waterworks District No. ____ hereby accepts for public use all water line easements (and lands in fee*) delineated and designated on the map, when said map is approved and recorded."

***** Add if applicable

The limits of these easements and/or lands in fee shall be shown and labeled on the map.

9-B-12.2 If there are easements or lands in fee required for installation of the water system improvements which do not fall within the limits of the final map, these easements shall be granted to the District by deeds of conveyance on a form as approved by the District. The developer shall work with the Management Services Division of the Ventura County Public Works Department to have these deeds written in proper form and dedicated to the District.

9-B-13 **CHECKING OF IMPROVEMENT PLANS AND FINAL MAP**

9-B-13.1 The above mentioned plans shall be submitted to the District for checking and approval before any final map is approved or before construction is commenced, whichever occurs first. The submittal of these plans for checking shall include the following:

1. Approved tentative map (if not previously submitted). (1 print)
2. Final map including title sheet. (1 print)
3. Development improvement plan title sheet. (1 print)
4. Water improvement plans. (2 prints)
5. Street, sewer, and drainage improvement plans. (1 sheet)
6. Grading plan. (1 sheet)
7. Cost estimate of water system improvements. (1 copy)
8. Hydraulic calculations (signed by a Registered Civil Engineer for this specific unit of development or for the entire tract/development if plans submitted are for one unit of the tract/development only. (1 copy)
9. Plan check fees computed in accordance with Section 9-D.
10. Construction inspection fees computed in accordance with Section 9-E.

9-B-13.2 The plans, cost estimate, and calculations shall be checked by the Engineer[197] who shall, within ten (10) days, approve them as filed or require them to be modified as he deems necessary. Any corrections required on the water plans or final map will be marked in red by the District. When the Owner's Engineer submits his plans for rechecking he shall include the check prints with his resubmittal.

9-B-13.3 All corrections, all financial arrangements, and all arrangements for dedication of easements to the District shall be completed and the "Certificate of Adequacy of Water Supply System" (if required) shall be signed by the Owner's Engineer before the plans will be approved and signed by the Engineer.[197]

9-B-14 **APPROVAL AND ACCEPTANCE OF PLANS, SECURITY, AND AGREEMENTS**

9-B-14.1 The District requires that construction of the water system improvements be covered by a written agreement, a soils engineering and good and sufficient security of the type specified in Section 66499 of the Government Code for faithful performance, materials and labor, each in the amount equivalent to the total estimated cost of the work. Such security shall be satisfactory to the District. It shall guarantee correction of faulty workmanship and replacement of defective materials for a period of one (1) year after date of acceptance of the work by the District.

Upon request of the subdivider, the Engineer[197] may, at his discretion, reduce the amount of the water and sewer improvement security by partial exoneration in an amount not exceeding 50% of the initial amount of such security when a corresponding percentage amount of improvements has been fully completed to the satisfaction of the Engineer.[197]

9-B-14.2 The Owner's Engineer shall submit the following items to the District:

1. Tracings of the final map (if applicable).
2. Three copies of the agreement (Form No. WW-166).
3. Three copies of security (Labor and Materials).
4. Three copies of security (Performance).
5. Three copies of Agreement to Pay for Soils Engineering (Form No.WW-169).
6. Separate deeds of conveyance for easements and/or lands in fee if these are not conveyed on the final map.
7. The number which the County has assigned to the Environmental Impact Report for the development.

9-B-14.3 The District shall take all necessary action to have said water system improvement plans, agreement and security approved and accepted by the Board of Directors of the District and shall forward copies of same to the proper agency for processing. [25]

9-B-15 **INSPECTION:** The District shall contract with the County of Ventura or other governmental agency or shall employ a qualified person or persons to inspect the installation and testing of said water system improvements.

9-B-16 **ACCEPTANCE OF WATER SYSTEM IMPROVEMENTS BY THE DISTRICT**

9-B-16.1 The actual location of all water system improvements, including but not limited to the stationing of each water service, shall be accurately determined after construction and shall be recorded on "As Built" plans. If water services are not at right angles to the water main, the stationing at the property line shall also be shown.

9-B-16.2 A permanent-type reproducible set of these "As Built" plans, which have been certified as being correct, signed and dated by the Owner's Engineer, shall be submitted to the Director.

9-B-16.3 The District shall take the necessary action to have the improvements accepted by the Board of Directors and to have the security exonerated under the terms set forth in the agreement. [25]

PART 9 - SECTION C - WATER SYSTEMS FOR DEVELOPMENTS WITHIN AN IMPROVEMENT ZONE

9-C-1 The owner/developer shall give the District in writing the tentative dates of required installation of water system improvements to furnish water to his development six months in advance of such required installation to

9-C-2 The District will prepare the water improvement plans and will take the necessary action to have the system installed with the exception of construction staking which will be furnished by the owner/developer at no cost to the District. To initiate this design of the system, the owner/developer shall, at least one month prior to recordation of the final map, or, if no final map is required, at least ninety days prior to start of construction, submit prints of the following to the District:

1. Approved tentative map (if not previously submitted).
2. Final map including title sheet.
3. Street, sewer, and drainage improvement plans.
4. Grading plan.
5. Overall plan for the entire development if system is to be designed for one unit of development only.

9-C-3 Said plans and final map will be used as a basis for the design of the water system and any subsequent change in these tentative plans which requires any major change in the water system shall be the responsibility of the owner/developer and any resulting costs shall be paid for by the owner/developer.

9-C-4 **EASEMENTS:** The procedure for conveying easements and lands in fee shall be as set forth in Section 9-B-12 hereof.

9-C-5 The development General Notes shall include a note stating that the water system shall be constructed in accordance with the Rules and Regulations of the applicable Ventura County Waterworks District.

9-C-6 If the development is a subdivision in which certain lots will be dedicated to a nontaxable entity, the developer shall pay Capital Improvement Charges on these lots before the District approves recordation of the final map.

9-C-7 In some cases, such as in planned developments, parcel maps, special use permits, and conditional use permits, the owner may desire that certain on-site facilities, such as fire lines, be accepted by the District for operation and

maintenance. If the District agrees to accept these facilities, the facilities shall be designed, furnished, and installed at the owner's expense subject to prior approval of the improvement plans by the District. The installation of facilities shall be inspected and approved by the District at the owner's expense.

PART 9 - SECTION D - PLAN CHECK FEES FOR DISTRICT WATER AND SEWER SYSTEM IMPROVEMENTS [83]

9-D-1 The plan check fees for District water and sewer system improvements shall be as set forth below:

9-D-1.1 **SINGLE RESIDENTIAL WATER AND SEWER SERVICE PLAN CHECK FEE:** There shall be no plan check fee for a single residential water and sewer service connection.

9-D-1.2 **MULTIPLE RESIDENTIAL, COMMERCIAL, INSTITUTIONAL, INDUSTRIAL, OR MISCELLANEOUS WATER AND SEWER SYSTEM IMPROVEMENTS PLAN CHECK FEE:** The multiple residential, commercial, institutional, industrial, or miscellaneous water and sewer system improvement plan check fee shall be based on actual cost (including overhead) to the District.

A fee deposit in the amount of one and one-half percent (1½%) of the District's approved estimate of the cost of the water and sewer system improvements to be constructed shall be deposited with the District at the time improvement plans are submitted for plan check.

If the actual cost to plan check (including overhead) exceeds the deposit, the applicant shall pay the additional amount due prior to District approval of the plans. If the actual cost to plan check (including overhead) is less than the deposit, District will refund the balance to the applicant within 90 days from the District's approval of the plans.

9-D-1.3 **SUBDIVISION FINAL MAP OR PARCEL MAP WATER AND SEWER SYSTEM IMPROVEMENTS PLAN CHECK FEES**: The water and sewer system improvements to be constructed as a condition of approval by the Governing Body of a final tract map or parcel map, require the payment for plan check based on actual cost (including overhead) to District in order for the water and sewer system improvements to be constructed in a publicly dedicated street, waterline easement, or right of way dedicated to the District.

A fee deposit of one and one-half percent (1½%) of the District's approved estimate of the cost of the water and sewer system improvements to be constructed shall be deposited with the District at the time improvement plans are submitted for plan check.

If the actual cost to plan check (including overhead) exceeds the deposit, the applicant shall pay the additional amount due prior to District approval of the plans. If the actual cost to plan check (including overhead) is less than the deposit, District will refund the balance to the applicant within 90 days from the District's approval of the plans.

PART 9 - SECTION E - CONSTRUCTION INSPECTION FEES FOR DISTRICT WATER AND SEWER SYSTEM IMPROVEMENTS [83]

9-E-1 The construction inspection fees for District water and sewer system improvements shall be as set forth below:

9-E-1.1 **SINGLE RESIDENTIAL WATER AND SEWER SERVICE CONSTRUCTION INSPECTION FEE:** The water and sewer service construction inspection fee shall be $125.00.

9-E-1.2 **MULTIPLE RESIDENTIAL, COMMERCIAL, INSTITUTIONAL, INDUSTRIAL, OR MISCELLANEOUS WATER AND SEWER SYSTEM IMPROVEMENTS CONSTRUCTION INSPECTION FEE:** The water and sewer system improvements construction inspection fee for multiple residential, commercial, institutional, industrial, or miscellaneous developments shall be based on actual cost (including overhead) to District. The following fee deposit shall be deposited with the District prior to District approval of improvement plans:

a. A fee deposit of 5% of the first $20,000 of the District's approve estimate of the cost of the water and sewer system improvements.

b. A fee deposit of 3 1/2% of the next $80,000 of the District's approved estimated water and sewer system improvement costs.

c. A fee deposit of 3% of the District's approved estimated water and sewer system improvement costs over $100,000.

If the actual cost of inspection (including overhead) exceeds the deposit, the applicant shall pay the additional amount due prior to District's acceptance of the improvements. If the actual cost of inspection (including overhead) is less than the deposit, District will refund the balance to the applicant within 90 days from District's acceptance of the improvements.

9-E-1.3 **SUBDIVISION FINAL MAP OR PARCEL MAP WATER AND SEWER SYSTEM IMPROVEMENTS CONSTRUCTION INSPECTION FEES:** The construction inspection fees for water and sewer system improvements to be constructed as a condition of approval by the Governing Body of a final tract map or parcel map shall be computed on the same basis as those fees set forth in Section 9-E-1.2a, 9-E-1.2b, and 9-E-1.2c hereof.

PART 9 - SECTION F - ANNEXATION PROCEDURES [72]

9-F-1 Application procedures for annexation to a Waterworks District are as follows:

(i) The proposed annexation will first be considered by Waterworks District Advisory Committee.

(ii) The District staff will prepare a Resolution of Application Initiating the Proceedings for Annexation for transmittal to the Board of Supervisors to initiate the annexation process.

(iii) Upon Board approval, the application material will be forwarded to the Local Agency Formation Commission (LAFCO) (including an

Assessor's Parcel Map of the annexation area and metes and bounds description).

(iv) LAFCO will conduct a public hearing and either approve or deny the annexation.

(v) The LAFCO's resolution, if approved, will then be submitted to the Board of Supervisors for final approval.

(vi) The Board of Supervisors' resolution of approval is then returned by the Clerk of the Board to the LAFCO office for recordation and filing with appropriate State and local agencies, which completes the annexation procedures.

9-F-2 **FEES:** The applicant shall pay the District a fee of $315.00 to process the Resolution of Application Initiating the Proceedings for Annexation and deposit an amount, estimated by the District, to reimburse the District for actual costs incurred in processing the annexation. Said deposit shall be required to be submitted after approval of the Resolution of Application and prior to the District forwarding the Resolution to LAFCO. If the actual cost exceeds the initial deposit, the remaining balance shall be paid prior to final approval. If the actual cost is less than the deposit, the balance will be refunded to the applicant.

PART 10 - OPERATION AND MAINTENANCE OF SEWAGE COLLECTION SYSTEM (PIRU) 23b

The California State Water Code Division 16, Section 55335.5, provides for a waterworks district to construct, maintain, and operate sewage collection and treatment facilities and dispose of the effluent there from in any lawful manner and also do all that is necessary or proper to accomplish such powers. The rules and regulations of Part 10 of this publication are based on this authority.

PART 10 - SECTION A - VENTURA COUNTY WATERWORKS DISTRICT NO. 16 (PIRU)

Purpose: These Rules and Regulations are intended to govern the use and construction of sanitary sewer facilities hereafter installed, operated, altered, or repaired within the District. These Rules and Regulations shall not apply retroactively and, in the event of any alteration or repair hereafter made, it shall apply only to the new materials and methods used therein. These Rules and Regulations shall not conflict in any way with any other ordinance, rules, or regulations of the District.

PART 10 - SECTION B - DEFINITION OF TERMS

RULE

10-B-1 **DISTRICT**: District shall mean the Ventura County Waterworks District No. 16 (Piru).

BOARD: Board shall mean the Board of Supervisors of Ventura County, acting as the Board of Directors of Ventura County Waterworks District No. 16 (Piru).

ENGINEER: The Engineer shall mean the Director of the Public Works Agency of Ventura County or his authorized representative.[198]

MANAGER: The Manager shall mean that employee of the Public Works Agency assigned to the Water and Sanitation Department to be in direct responsible charge of the operations, construction, repair, and maintenance, of the District's facilities, under the direction of the Director.[198]

DIRECTOR: Director shall mean that employee of the Public Works Agency assigned to the Water and Sanitation Department to be in direct responsible charge of the operations, budgets, construction, repair, maintenance, and business of Waterworks District No. 16 (Piru).[198]

PERSON: Person shall mean any human being, individual, firm, company, partnership, association; private, municipal or public corporations, the United States of America, the State of California, districts and all political sub-divisions, governmental agencies and mandatory's thereof.

PERMIT: Permit shall mean any written authorization required pursuant to the Rules and Regulations of the District for the installation or connection of any sewage works.

DESIGN ENGINEER: The engineer who designs the sewerage facilities or appurtenances thereto under the direction of a Civil Engineer registered in the State of California.

REGISTERED CIVIL ENGINEER: A Civil Engineer registered in the State of California employed by a sewer agency, owner, or developer.

INSPECTOR: The Sewer Inspector for the District duly authorized by the Engineer and responsible for the particular duties delegated to him.[198]

DEVELOPER: The person or persons, firm, partnership, corporation, or combination thereof, who have entered into an agreement with the governing body of the district, as party or parties of the second part of his or their legal representative.

SERVICE APPLICANT shall mean the person making application for a permit for a sewer (or application for sewer service) and shall be the owner, tenant, or agent of the premises to be served by the sewer for which application is made.

CUSTOMER shall mean the person or agency of record receiving sewer service from the District.

UNIFORM PLUMBING CODE shall mean the Plumbing Code adopted by Ventura County Board of Supervisors for unincorporated areas or the Uniform Plumbing Code as adopted by the local city if the area is located in the city.

PLUMBING SYSTEM shall mean all plumbing fixtures and waste and vent pipes, and all sanitary sewer pipes within a building and extending to the building sewer connection three feet (3') outside the building wall.

EASEMENT shall mean the public way or right-of-way which the District is authorized to use for pipeline, sewer, or other purposes.

PRIVATE EASEMENT shall mean an easement in which a customer or others may have installed a sewer line for the transportation of sewage to the District sewers, in which easement or sewer the District has no interest or responsibility.

MAIN SEWER EXTENSION shall mean the extension of the Main Sewer beyond the existing facilities, exclusive of sewer service connections.

PRIVATE CONTRACT WORK shall mean construction of sewer lines or mains and related facilities within the District by a land developer or persons other than the District.

AUTHORIZED PRIVATE CONTRACT WORK shall mean Private Contract work authorized by the District.

PRIVATE CONTRACTOR shall mean a person or firm, not employed by the District or County, engaged in the installation of sewer facilities within the sewer service area of the District or within territory being considered for annexation thereto.

INTERCONNECTION shall mean an authorized connection of the District sewer system to the sewer system of another sewer agency.

DOMESTIC SEWAGE shall mean the waterborne wastes derived from the ordinary living processes, free from commercial, institutional, or industrial wastes, and of such character as to permit satisfactory disposal, without special treatment, into the public sewer or by means of a private sewage disposal system.

INDUSTRIAL WASTE shall mean any and all commercial, institutional, or industrial waste substances, liquid or solid, except domestic sewage and including, but not limited to, radioactive wastes and explosives, noxious, toxic, or corrosive gases or liquids when present in the sewerage system.

B.O.D. shall mean Biochemical Oxygen Demand as described in Standard Methods for the Examination of Water and Wastewater.

STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER shall be performed in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, except where the Engineer[198] approves other procedures necessary for unusual wastes.

BUILDING: Building shall mean any structure used for human habitation, business, recreation, or other uses requiring sanitary facilities.

CONTRACTOR: Contractor shall mean any individual, firm, partnership, association, or corporation currently licensed by the State of California to perform the type of work required by permit.

STREET shall mean any public highway, road, street, avenue, alley, way, or public place dedicated and accepted by the County.

SEWAGE shall mean a combination of water-carried wastes from a residence, a business, an institution, or an industrial establishment.

SEWAGE WORKS shall mean all facilities for the collection, transportation, pumping, treatment, and disposal of sewage.

SINGLE RESIDENTIAL sewer connection shall mean a sewer to serve a single residence.

MULTIPLE RESIDENTIAL sewer connection shall mean a sewer to serve more than one single family residence.

COMMERCIAL shall mean a site or building used for the exchange or buying and selling of commodities and shall also mean a hotel or motel.

INSTITUTIONAL shall mean any educational institution supported by state or local taxes.

INDUSTRIAL shall mean a fraternal organization or private school; it shall also mean any site, structure, building, or works which is, or which is designed, to be used for the manufacture, processing, or distribution of materials, equipment, supplies, food, or commodities of any description; or which is used or designed as a sanitarium, hospital, penal institution, or charitable institution; together with all appurtenances thereto and the surrounding premises under the same ownership or control.

SEWER CONNECTION FEE shall mean a fee to obtain permission to connect to the District sewer, to have flow capacity rights and to use the trunk sewer, sewage treatment facilities and appurtenances, provided that the District's prevailing service charges have been paid.

SEWAGE TREATMENT PLANT shall mean any devices, facilities, or structures used for the treatment of sewage.

SEWER shall mean any pipe or conduit for the transportation of sewage.

PRIVATE SEWER shall mean a sewer serving an independent sewage disposal system not connected with a public sewer.

PUBLIC SEWER shall mean a sewer lying within a public way or easement under the jurisdiction of the District.

SANITARY SEWER shall mean a sewer to which storm, surface, and ground waters are not intentionally admitted.

HOUSE LATERAL SEWER shall mean that portion of a public sewer within a public way or easement which connects a building sewer to the main sewer.

BUILDING SEWER shall mean that portion of any sewer which begins at the plumbing or drainage outlet of a building or industrial facility and runs to the property line or a private sewage disposal system.

SIDE SEWER shall mean the sewer line which begins at the foundation wall of a building and terminates at the main sewer and includes both the building and house lateral sewer.

MAIN SEWER shall mean a public sewer which is designed to accommodate more than one lateral sewer.

STRUCTURAL IMPROVEMENTS shall mean both Capital Improvements and Local System Improvements, including land, real estate, all classes of sewers, sewer service connections, pumping plants, treatment plants, electrical systems, and appurtenances.

CAPITAL IMPROVEMENTS shall mean those portions of the "Structural Improvements" of a District, the use of which is necessary to and shared in common by the entire District and shall specifically include:

a. Real estate and rights-of-way.

b. Sewer mains which are not classified as (belonging to) local system improvements.

c. Pumping plants and all piping thereon, on main line sewers.

d. Force main piping.

e. Sewage treatment plants.

f. Sewage storage structures.

LOCAL SYSTEM IMPROVEMENTS shall mean the following structural improvements:

a. Lateral sewer lying within the public way from the fitting at the main sewer to the property line.

b. All sewer mains used for the collection of sewage from a local area, land division, or subdivision.

REFERENCE TO STANDARDS AND PUBLICATIONS: Any reference made in these standard specifications or on the drawings to any specifications, standard methods, or publications or any scientific or technical society or other organization shall, in the absence of a specific designation to the contrary, be understood to refer to the specifications, standard method, or publication in effect on the date the work is approved.

GRADE shall mean the ratio of vertical rise to one unit of horizontal distance and with the vertical rise and horizontal distance in the same units.

PART 10 - SECTION C - GENERAL

RULE

10-C-1 **SERVICE AREA MAPS AND LEGAL DESCRIPTIONS**: Maps and legal descriptions of service areas and special zones of District shall be maintained in the office of the County Surveyor[199] and may also be maintained in the office of the Director of Public Works Agency of Ventura County.

10-C-2 **DESCRIPTION OF SERVICE:**

SEWER SERVICE: The District will exercise reasonable diligence and care to:

Provide a continuous service of receiving sanitary sewage from the customer, and

Avoid unnecessary stoppages or interruptions of the flow of sewage in District's sewers.

10-C-3 **ORIGINAL CONNECTIONS ON COMMENCEMENT OF OPERATION OF SEWAGE COLLECTION SYSTEM**: The District will provide house laterals to the property lines for existing homes, buildings, and structures within the District completed prior to October 25, 1974 if the subject property abuts a public dedicated street or sewer easement.

The above provisions shall apply to homes, buildings, and structures for which there has been issued a valid building permit on or before October 25, 1974.

10-C-4 **BUILDING SEWERS, LATERAL SEWERS, AND CONNECTIONS**:

10-C-4.1 **MINIMUM SIZE AND GRADE**: The minimum size of a building sewer shall be four inches (4") in diameter. A building sewer serving a duplex shall be not less than four inches (4") in diameter. A building sewer serving a multiple dwelling of three or more units shall be not less than six inches (6") in diameter. When more than one building sewer shall be connected to a single side sewer, the side sewer from the point of intersection of two or more units shall be not less than six inches (6") in diameter and shall have an approved cleanout at the property line. The minimum grade of a building sewer shall have a fall of not less than two feet (2') per one hundred feet.

10-C-4.2 **OLD BUILDING SEWERS** may be used in connection with new buildings only when they are found, upon examination and test by the Engineer, to meet all requirements of the District. The examination and testing fee shall be determined by the Engineer and shall be paid by the applicant.

10-C-4.3 **CONNECTIONS TO PUBLIC SEWERS**: The connection of the building sewer into the public sewer shall be made at the lateral or tee branch, if such lateral or tee branch is available at the suitable location. Where no properly located tee branch is available, a neat hole may be cut into the public sewer and a tee saddle or a sewer stub nipple adaptor installed to receive the lateral sewer. In no case shall the pipe protrude beyond the inside diameter of the main sewer. The invert of the building or lateral sewer at the point of connection shall be at a higher elevation than the invert of the public sewer.

The connection to the public sewer shall be made in the presence of the Inspector and under his supervision and direction. Material removed by the

neat hole cutting shall be removed from the sewer. Any damage to the public sewer shall be repaired at the cost of the applicant and to the satisfaction of the Inspector.

10-C-4.4 **CLEANOUTS**: Cleanouts in building sewers shall be provided in accordance with the Uniform Plumbing Code. Cleanouts shall be the same diameter as the building sewer and shall be watertight.

10-C-4.5 **PROTECTION OF EXCAVATION**: All excavations for a side or lateral sewer installation shall be adequately guarded with barricades and lights so as to protect the public from hazard. Streets, sidewalks, parkways, and other property disturbed in the course of the work shall be restored in a manner satisfactory to the Engineer$_{199}$. All excavations including shoring and trench protection shall be performed in accordance with Federal, State, and local regulations.

10-C-4.6 **LARGE INCREASE IN THE USE OF SEWER**: Customers making any change in operations on their premises requiring substantial increases in the sewage flow through the District's facilities shall immediately give the Engineer$_{199}$ written notice of the nature of the change.

10-C-5 **ORIGINAL FEES ON COMMENCEMENT OF OPERATION OF SEWAGE COLLECTION SYSTEM**

10-C-5.1 **CONNECTION FEE:** No fee will be collected from persons within the District who have private sewer systems as of October 25, 1974, or who possess valid building permits prior to said date. Subsequent to October 25, 1974, the connection fee shall be determined periodically by the District.

10-C-5.2 Up to and including October 25, 1974, the District shall provide all lateral sewers, necessary to connect the individual building sewer lines of residences and buildings to the District main sewer line providing the subject property abuts a public street dedicated and accepted by the County.

10-C-5.3 Subsequent to October 25, 1974, persons other than those qualifying in paragraph 10-C-5.2 above shall be required to finance and install at their own expense the necessary lateral sewer to connect with the District's collection system's line in order to serve their property. This installation shall be in addition to the building sewer line which connects with the lateral sewer.

10-C-5.4 The following shall apply for each equivalent residential unit sewer service charge:

Any property owners with a private sewer system, who will make application for sewer service before March 1, 1975 and pay $22.00, will have until October 1, 1975 to make the physical connection between his existing system and the District's system. A property owner who has not made application by March 1, 1975, nor paid $22.00, the owner then must pay $83.00 by April 1, 1975, or $77.00 by May 1, 1975, in order to be connected. If the property owner has not made application or connected his system to the District's system by May 1, 1975, he would then be subject to the then prevailing connection fee, plus an appropriate amount for monthly service charges.

10-C-6 **FEES**

10-C-6.1 **SEWER CONNECTION FEES** as outlined below shall be paid in full prior to final approval of any Subdivision, Planned Development, Land Division, Special Use Permit and/or prior to the commencement of any work necessary to furnish sewer service to any residence, building, or parcel.

However, in a case where an individual owns a parcel of land larger than ten acres in size but desires sewer service for only a small portion thereof, and if the District is financially able to do so, it may, at its option, collect sewer connection fees for only that portion of the parcel that is to be developed as shown on Subdivision, Planned Development, or Special Use Permit improvement plans. At such time as further development of the parcel occurs, the then applicable sewer connection fees shall be paid for the remainder.

Said sewer connection fee shall be in accordance with the rate effective on the date of issuance of the permit or, in the case where a final map is required, the fee shall be in accordance with the rate effective on the date of the recordation of the final map.

10-C-6.2 **SINGLE RESIDENTIAL LOT SEWER CONNECTION**: A fee as shown in Section 10-C-6.5 shall be paid for each residential lot.

10-C-6.3 **MULTIPLE RESIDENTIAL SEWER CONNECTION**:[238] A fee as shown in Section 10-C-6.5 shall be paid for each Equivalent Residential Unit, or fraction thereof. Each apartment unit, or similar type dwelling unit, including a mobile home, shall be considered 0.80 Equivalent Residential Unit and each trailer space shall be considered one-half (1/2) of an Equivalent Residential Unit. The number of Equivalent Residential Units for each recreational and/or other miscellaneous facilities, within the multiple residential complex shall be computed per Method A or Method B in Section 10-C-6.4. No connection fee shall be charged for laundry room facilities within the complex open to use only by residents of the complex.

10-C-6.4 **COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, OR MISCELLANEOUS SEWER CONNECTION**: A fee computed, at the option of the District, by use of Methods A, B, or C below, shall be paid.

Method A: Based on Water Meter Size.

Each 5/8" or 3/4" meter shall be one (1) equivalent residential unit.

Each 1" meter shall equal two (2) equivalent residential units.

Each 1 ¼" or 1 ½" meter shall equal four (4) equivalent residential units.

Each 2" meter shall equal seven (7) equivalent residential units.

Each 3" meter shall equal fifteen (15) equivalent residential units.

Each 4" meter shall equal thirty (30) equivalent residential units.

Each 6" meter shall equal sixty (60) equivalent residential units.

Fee for each equivalent residential unit or fraction thereof, shall be shown in Section 10-C-6.5.

Method B: Based on Number of Plumbing fixtures. Each twenty-five (25) plumbing fixture units as defined in the Uniform Plumbing Code under the Section entitled "Drainage Systems" shall be considered equal to one (1) equivalent residential unit. The fee for each equivalent residential unit, or fraction thereof, shall be as shown in Section 10-C-6.5.

Method C: Based on Flow and Waste Characteristics. Where flow and waste characteristics are of an unusual nature, the sewer connection fee shall be determined on the basis of strength of the five (5) day Biochemical Oxygen Demand (BOD), suspended solids, quantity of flow and other factors of the waste discharge that affect the sewer transmission and sewers, treatment and disposal. Determination of the strength of waste shall be conducted in accordance with the latest edition of "Standard Methods for the Examination of Water & Wastewater," as published by the American Public Health Association, except where wastes of unusual character make other procedures necessary.

10-C-6.5 **SCHEDULE OF SEWER CONNECTION FEES**: Sewer connection fees shall be in accordance with the following schedule: 210

FEE SCHEDULE 239

Residential, per Residential Lot	$ 4,213
Multiple Residential, per Equivalent Residential Unit, or fraction thereof.	$ 4,213
Commercial, Industrial, Institutional, or Miscellaneous, computed by Method A or B in Section 10-C-6.4 per Equivalent Residential Unit, or fraction thereof.	$ 4,213
Commercial, Industrial, Institutional, or Miscellaneous, computed by Method C in Section 10-C-6.4	To be determined by District

10-C-7 **SEWER SERVICE CHARGES** shall be in accordance with the following schedule: 224

Type of Sewer Connection	Annual Charge
Single Residential, per each residential lot.	$ 707.88
Multiple residential, per each equivalent residential unit or fraction thereof. (Each apartment, mobile home, or similar type dwelling unit shall be considered one (1) equivalent residential unit and each trailer space shall be considered one-half (1/2) of an equivalent residential unit. The number of equivalent residential units for recreational and/or other miscellaneous facilities within the multiple residential	$ 707.88

complexes shall be computed per Method A or B in Section 10-C-6.4.)	
Commercial, Industrial, Institutional, or Miscellaneous, when equivalent residential units are computed per Method A or B in Section 10-C-6.4 per equivalent residential unit, or fraction thereof.	$ 707.88
Commercial, Industrial, Institutional, or Miscellaneous, when flow and waste characteristics are of unusual nature, each ser-vice charge shall be computed on the basis of strength of the five day Bio-chemical Oxygen Demand (BOD), suspended solids, quantity of flow, and other factors of the waste discharge that effect the sewage transmission, sewers, treatment and disposal.	To be Calculated

10-C-7.2 **METHOD OF COLLECTION**: Billing for sewer service charges shall be made bi-monthly and shall be due and payable in cash on presentation and shall become delinquent nineteen (19) days after mailing date. Non-payment of sewer service charges shall cause service to be shut off. Delinquent notices shall first be presented by mail on in person. [79]

10-C-7.2.1 For an initial connection of any building, structure, or other facility to the District sewer, the charge for sewer service shall begin with the first day of the month following the date of issuance of the appropriate Building and Safety Department's Certificate of Occupancy and shall continue until a request for discontinuance of service is received by the District. Said sewer service charge shall be billed to the recipient of the Certificate of Occupancy in a manner provided elsewhere in these Rules and Regulations.

10-C-7.2.2 When it becomes necessary to bill for a period other than two months, a daily prorated charge will be calculated. [79]

10-C-7.2.3 If more than one tenant on a parcel of property is served through a single sewer service, the District will render a single bill to the property owner or applicant of record. Said bill shall include a charge for sewer service to be computed in accordance with Section 10-C-6 of these Rules and Regulations.

10-C-7.2.4 The Director[199] or his authorized representative may make adjustments or waive charges to customer bills for those charges resulting from billing errors or other discrepancies.[79]

No sewer service charge will be made upon notification to the District that the property is vacant and does not require service. The District may at its option require verification that the property is not receiving water service.[79]

10-C-7.3 **ALTERNATIVE METHOD OF COLLECTION**: Pursuant to Section 5473 of the Health and Safety Code of the State of California, the sewer service charge for any sewer service connections covered by a permit issued

pursuant to Section 10-E-1 of these Rules and Regulations for any lot, building, or parcel of land shall be collected on the tax roll in a manner provided for in Ordinance Waterworks District No. 16-1 adopted by the Board.

10-C-7.4 **SEWER SERVICE STANDBY CHARGES**: Pursuant to Section 55507 of the State of California Water Code, a sewer service standby or immediate availability charge shall be applied, on a parcel basis, within the District, to be charged to such parcels which sewer service is made available by the District, whether the sewer service is actually used or not and shall be collected on the tax roll in the same manner, by the same persons, and at the same time as, together with, and not separately from, the general county taxes upon approval of the Board.

10-C-8 **DELETED** 83

10-C-9 **DELETED** 83

10-C-10 **DELETED** 83

10-C-11 **INDUSTRIAL WASTE TESTING FEE**: The testing fee shall be based upon actual costs of the tests. The District Engineer199 shall estimate the cost of testing and shall require a cash deposit equal to the estimated cost of the test from the applicant prior to start of the testing.

PART 10 - SECTION D - PUBLIC SEWER USE

RULE

10-D-1 **WASTE DISPOSAL**: It shall be unlawful for any person to place, deposit, or permit the deposit in an unsanitary manner upon public or private property within the District, or in any area within the jurisdiction of the District, any human excrement or other objectionable waste, except chemical toilets on a construction site may be used during the construction period.

10-D-2 **TREATMENT OF WASTE**: It shall be unlawful to discharge into any drainage conduit, stream, or water course any sewage, industrial waste, or other polluted waters.

10-D-3 **UNLAWFUL DISPOSAL**: Except as provided herein, it shall be unlawful to construct any privy, privy fault, septic tank, cesspool, sewage pit or other facility intended for the disposal of sewage.

10-D-3.1 **BRINE PROHIBITED**: Salt brines from on-site regenerated water softeners shall not be permitted to discharge into the laterals or other sewer lines connected with the District sewerage system.

10-D-4 **OCCUPANCY PROHIBITED**: No building, structure, or other facility shall be occupied until the owner of the premises has complied with the provisions of these Rules and Regulations.

10-D-5 **LIMITATIONS ON INDUSTRIAL DISCHARGES AND WASTES**: Limitations as outlined below are placed on certain wastes and discharges into the District sewers.

10-D-5.1 Material which will settle out in the sewers, such as sand or metal filings; any garbage that has not been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particles greater than one-half inch (1/2") in any dimension; any ashes, cinders, mud, straw, glass, rags, feathers, tars, plastics, wood, paunch manure, hair, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works shall not be discharged to the sewers.

10-D-5.2 Moderate amounts of dispersed grease and oil can usually be tolerated, but sewer stoppages occur from grease accumulations, and excessive amounts of oil cause difficulties at the treatment plant. Industries therefore may not use the sewers as a means of disposal of oil and grease, and steps must be taken to remove these substances from waste waters insofar as practicable. In the case of industries with large volumes of waste waters containing oils of a hydrocarbon nature, the floatable oil content will be limited to 10 parts per million. Industries with wastes containing animal or vegetable oils or fats mixed with other suspended matter rendering separation difficult, may in some cases be allowed higher concentration of floatable oil or grease, up to 25 parts per million. Dispersed oil and grease will in general be allowed in concentrations up to 100 parts per million provided that dilution of the waste in sewage does not cause the oil or grease to separate on the surface or collect on the walls of the sewer. Definition of floatable oil and grease, and instructions for determination of same, are available on request from the District's office.

10-D-5.3 Any discharges and wastes containing unreasonable or unnecessarily large amounts of suspended solids shall not be discharged into the sewers unless, and at the option of the District, they are pretreated to reduce the suspended solids to 350 parts per million by weight or the industry discharging the same shall be charged the prorated cost of corrective treatment in the sewage works of the District.

10-D-5.4 High B.O.D. wastes may in some cases cause excessive putrefaction or sulfide formation. In such cases, and at the discretion and option of the District, these wastes shall be pretreated to reduce the five-day Biochemical Oxygen Demand to 300 parts per million before discharge into the sewers or the industry discharging the same shall be charged the pro-rata cost of corrective treatment in the sewage works of the District.

10-D-5.5 Any noxious or malodorous gas or substance capable of creating a public nuisance shall not be discharged to the sewers.

10-D-5.6 Dissolved sulfides in wastes discharged into the sewer shall not exceed a concentration of 0.1 parts per million.

10-D-5.7 Acids shall not be discharged into the sewer unless neutralized to a pH value not lower than 6.0 or higher than 9.0. Highly alkaline wastes shall usually be accepted, except where they may cause encrustation of sewers. Nitric acid

requires special consideration; the Engineer shall be consulted prior to making such discharges.

10-D-5.8 Compounds which may give off toxic, explosive, or flammable liquid, solid or gas, in amounts considered dangerous by the District shall not be permitted in the sewers. The concentration of cyanide in any waste (including HCN and CN) shall not exceed 10 parts per million. Wastes containing radioactive material shall require special consideration and a permit therefore issued by the District.

10-D-5.9 Contaminated cooling water blow-down, or bleed, from cooling towers or other evaporative coolers equaling not more than half of the evaporation loss (one-third of the make-up) are acceptable in the sewer. Where cooling is done by using only heat exchange, without utilizing evaporative cooling, the waste water shall not be discharged into the sewer. Toxins or pollutants exceeding Federal or State requirements shall not be discharged to the District sewer.

10-D-5.10 The sanitary sewers in the District are not designed to carry storm waters. Industries shall, therefore, segregate sewage and industrial wastes with roof and yard run-off going to suitable storm water channels.

10-D-5.11 As it is important to keep the temperature of the sewage as low as possible, the temperatures of discharges shall be no higher than 150°F. Where the quantity of discharge represents a significant portion of the flow in a particular sewer, the allowable temperature may, at the discretion of the Engineer$_{200}$ be lowered to reduce sulfide generation in the sewer.

10-D-5.12 Chemical solutions containing nitric acid or salts thereof in concentrations above 5% by weight, and volumes in excess of 300 gallons per day, shall not be discharged into the sewer as they interfere with sewage treatment processes.

10-D-5.13 Wastes containing boron, fluoride, chlorides and sodium or potassium or other dissolved solids or chemicals which will cause the effluent of the District's treatment facilities to exceed the requirements of the Water Quality Control Board of the State of California or the Federal Government shall not be discharged into the sewers.

10-D-5.14 Any septic tank or cesspool sludge or any overflow from cesspools, manure pits or other receptacles storing organic wastes shall not be discharged into the District sewers.

10-D-5.15 Any liquid and/or pulp, being residue resulting from reducing of lemons, oranges or other citrus fruits, to the juice state shall not be discharged to the sewers without pretreatment and as approved by the Engineer.

10-D-5.16 Any salt water or brine solutions in concentrations that are detrimental to domestic sewage treatment and disposal of effluent shall not be discharged to the sewers.

10-D-6 **INTERCEPTORS REQUIRED**: Grease, oil, and sand interceptors shall be provided when, in the opinion of the Engineer$_{200}$, they are necessary for the proper handling of liquid wastes containing grease and in excessive amounts

or any flammable wastes, sand, and other harmful ingredients, except that such interceptors shall not be required for buildings used for residential purposes. All interceptors shall be of a type and capacity approved by the Engineer$_{200}$, and shall be so located as to be readily and easily accessible for cleaning and inspection.

10-D-6.1 MAINTENANCE OF INTERCEPTORS: All grease, oil, and sand interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times.

10-D-7 **PRE-TREATMENT OF COMMERCIAL, INSTITUTIONAL, OR INDUSTRIAL WASTES**: The admission into the public sewers of any waters or wastes containing an unacceptable quantity of any substance having the character described in Section 10-D-5 or having an average daily flow greater than two percent (2%) of the average daily sewage flow of the District, shall be subject to the review and approval of the Engineer.$_{200}$ Where necessary, in the opinion of the Engineer,$_{200}$ the owner shall provide, at his expense, such pre-treatment as may be necessary to reduce the objectionable characteristics or constituents to within the maximum limits provided for in Section 10-D-5 or control the quantities and rate of discharge of such waters or wastes. Plans, specifications, and any other pertinent information relating to proposed pre-treatment facilities, including metering devices where necessary, shall be submitted for the approval of the Engineer$_{200}$, and construction of such facilities shall not be commenced until said approval is obtained in writing.

10-D-7.1 MAINTENANCE OF PRE-TREATMENT FACILITIES: Where pre-treatment facilities including metering devices are provided or required for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at his expense and to the satisfaction of the Engineer.$_{200}$

10-D-8 **CONTROL MANHOLES**: When required by the Engineer, $_{200}$ the owner of any property served by a side sewer carrying commercial, institutional, or industrial wastes shall install a suitable control manhole in the side sewer to facilitate observation, sampling, and measurement of wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the Engineer.$_{200}$ The manhole shall be installed by the owner at his expense, and shall be maintained by him so as to be safe and accessible at all times. In the event that no special manhole has been required, the control manhole shall be considered to be the downstream manhole in the public sewer nearest to the point at which the side sewer is connected.

10-D-9 **MEASUREMENTS AND TESTS**: All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in Section 10-D-5 shall be determined at the control manhole provided for in Section 10-D-8, or upon suitable samples taken at said control manhole and shall be determined by the procedures described in the "Standard Methods for the

Examination of Water and Wastewater." A program of tests and reporting of test results shall be submitted for approval of the Engineer.[200]

10-D-10 **SPECIAL AGREEMENT**: No statement contained in this article shall be construed as preventing any special agreement or arrangement between District and any industrial concern whereby an industrial waste of unusual strength of character may be accepted by the District for transportation, treatment, and disposal, subject to payment therefore by the industrial concern and subject to such terms and conditions, as might be required by the District. The unit payment for sewer service shall in no case be less than required by Federal, State, or other local agencies.

PART 10 - SECTION E - PUBLIC SEWER CONSTRUCTION

10-E-1 **PERMITS**

10-E-1.1 **PERMIT REQUIRED**: No unauthorized person shall uncover, connect with, or open into, use, alter, or disturb any public sewer or appurtenance, or perform work on any drainage system without first obtaining a written Permit from the District. Such Permit shall be posted at the worksite and shall be shown upon the demand of any authorized District representative.

10-E-1.2 **APPLICATION FOR PERMIT**: Any person legally entitled to apply for and receive a Permit shall make an application to the District on the form provided. The location, ownership, occupancy and use of the premises and a description of the proposed nature of the work to be performed shall be provided by the applicant. Specifications, plans, drawings and other information shall be supplied to the Engineer[201] as deemed necessary.

10-E-1.3 **PERMIT COMPLIANCE**: The approval of the application is evidenced by the issuance of a Permit. Thereafter, no change shall be made in the location of the sewer, the grade, materials, or other details described in the Permit or as shown on the approved plans and specifications, unless prior written permission is obtained from the Engineer[201].

10-E-1.4 **AGREEMENT**: The signature of the applicant on an application for a Permit shall constitute an agreement to comply with all provisions, terms, and requirements of these Rules and Regulations and all Federal, State, and local regulations. The signature shall constitute an agreement to comply with the approved plans and specifications and any further corrections, or modifications as may be required by the Engineer. Such agreements shall be binding upon the applicant and may be modified by the Engineer after the receipt and consideration of a written request for modification submitted by the applicant.

10-E-1.4.1 The applicant shall enter into a written contract satisfactory to the District whereby he shall bind himself, his heirs, successors and assigns to abide by all ordinances, rules, and regulations regarding the use of such sewer, the connection, and the draining therewith. The applicant shall pay all permit fees and a monthly service charge set by the District for the use of such sewer.

10-E-1.5 **PERMIT CLASSES**: There shall be five (5) classes of permits.

a) Single Residential Lot sewer permit.
b) Multiple Residential, Institutional, Commercial, and Miscellaneous sewer permit.
c) Industrial sewer permit.
d) Private sewage disposal permit.
e) Subdivision Final Map or Parcel Map sewer permit.

10-E-2 **SEWER REQUIRED**: Any building or structure located on property which abuts any easement or right of way in which there is a present or planned public sewer of the District shall, at the expense of the owner of said building or structure, and, in accordance with the provisions of the District, be connected to the public sewer provided that said public sewer is within two hundred (200) feet of the property line of the site of the building or structure; and that said building or structure is not in excess of four hundred (400) feet from the district sewer. Said sewer connection shall be completed within sixty (60) days following receipt of official notification to proceed.

10-E-3 **CONSTRUCTION REQUIREMENTS**: The requirements of the Rules and Regulations of the District shall govern the construction of all building and lateral sewers.

10-E-4 **SEPARATE SEWERS**: Except as provided in Section 10-E-4.1 for condominium projects, no two adjacent lots fronting on the same side street shall be permitted to join in the use of the same side sewer, and every building or industrial facility shall be separately connected with a public sewer if such sewer is available. However, one or more buildings located on property belonging to the same owner may be served with the same side sewer during the period of said ownership. The District shall render a single bill to the property owner, or applicant of record which shall include the sewer service charge for the entire property. Upon subsequent subdivision and sale of the portion of a lot, that portion not directly connected with a public sewer shall be separately connected with the public sewer. It shall be unlawful for the owner to continue the use of or to maintain such indirect connection.

10-E-4.1 **CONDOMINIUM PROJECTS**: In condominium projects, two or more units of the condominium may, at the option of the District, be permitted to join in the use of the same side sewer. The responsibility for maintenance of such side sewer shall be as defined in Section 10-G-4 of these Rules and Regulations. The District shall render a single bill to the management body of the project, or its authorized representative, which shall include the sewer service charge for the entire condominium project as computed in accordance with Section 10-C-6 of these Rules and Regulations.

10-E-5 **SUBDIVISIONS**: Prior to the approval of the governing body of any final subdivision map the requirements of Rule 10-E-1 shall be fully complied with. Said map shall provide for the dedication for public use of all streets,

easements, or rights of way in which public sewer lines are to be constructed. The developer shall construct the sewers in the subdivision or tract and dedicate the in-tract facilities to the District.

10-E-6 **INCOMPLETE CONSTRUCTION**: If the map as provided for in Section 10-E-5 is recorded, and the sewer construction of the tract is not completed within the time limit granted by permit, the governing body may extend the time limit, or may complete the work and take appropriate action to enforce the provisions of the bond furnished by the subdivider.

10-E-7 **EASEMENTS OR RIGHTS OF WAY**: Where an easement is required for the extension of the public sewer or a connection thereof, an acceptable easement or right of way shall be procured by the applicant and shall be dedicated to the District. Such easement or right of way shall be legally sufficient in form, and approved by the Engineer[201] prior to the laying and maintenance of such extension or connection. Minimum easement widths are defined in Table 10-H-15.1.

10-E-8 **PERSONS AUTHORIZED**: Public sewer construction within the District shall be performed by authorized contractors, currently licensed by the State of California or by the District forces. All terms and conditions of the District Permit shall be binding on the contractor. The requirements of this section shall also apply to side sewers installed concurrently with public sewer construction.

10-E-9 **SECURITY**: Good and sufficient security of the type specified in Section 66499 of the Government Code for faithful performance, materials, and labor, each in the amount equivalent to the total estimated cost of the work shall be furnished by the applicant to the District, prior to the issuance of any permit for public sewer construction. Such security shall be satisfactory to the District. The security shall be conditioned upon the full performance of all terms and conditions of the permit. It shall guarantee correction of faulty workmanship and replacement of defective materials for a period of one (1) year after date of acceptance of the work by the District.[25]

10-E-10 **LIABILITY**: The applicant shall be solely liable for any defects or failure during performance of the work or any failure which may develop therein. The District, its officers, agents, and employees, shall not be answerable for any liability, death or injury to persons, property damage, due to or arising out of the performance of work by the applicant. The applicant shall answer for and save the District, its officers, agents, and employees, from all liabilities imposed by law, including all costs, expenses, fees, and interest incurred in seeking to enforce this provision.

PART 10 - SECTION F - ENFORCEMENT

10-F-1 **TIME LIMIT - PERMITS**: If the work granted by the permit is not commenced within six (6) months from date of issuance, or is discontinued for a period of ninety (90) days after partial completion, the Permit shall be void. No further work shall be undertaken until a new permit has been secured by proper

application and payment of a new fee. The work shall be completed within the calendar days for completion as specified by the new permit.

10-F-2 **VIOLATION**: Any person found to be in violation of any provision of these Rules and Regulations of the District (except Rule 10-G-1), shall be served with written notice by the Engineer$_{202}$ or other authorized representative. Such written notice shall state the nature of the violation and provide a reasonable time limit for correction thereof. Said time limit shall not be less than two (2) nor more than seven (7) working days. Within the time period stated in the notice all violations shall permanently cease. All persons shall be strictly liable for the acts of their agents and employees performed under the provisions of this or any other ordinance, rule, or regulation of the District. Upon notification by the Engineer$_{202}$ of any defect arising in any sewer, or notification of any violation of this ordinance, corrections shall immediately be effected by the person or persons in charge of said work.

10-F-3 **PUBLIC NUISANCE**: Continued habitation of any building, or continued operation of any industrial facility in violation of the provisions of any ordinance, rule, or regulation is hereby declared a public nuisance. Proceedings may be brought by the District to abate such nuisance during the period of violation.

10-F-4 **DISCONNECTION**: The alternate method of enforcing the provisions of any ordinance, rule, or regulation of the District shall be as follows: The Engineer$_{202}$ shall have the power to disconnect the user or subdivision sewer system from the sewer mains of the District. Upon disconnection, the Engineer$_{202}$ shall estimate the cost of disconnection and reconnection. Such user shall deposit said estimated cost prior to reconnection to the system. The District shall refund any part of the deposit remaining after payment of the aforementioned costs. During the period of disconnection, human habitation of such premises shall constitute a public nuisance whereupon the District shall initiate proceedings for the abatement of such nuisance during the disconnection. Reasonable attorney's fees and costs or suit of any action brought shall be paid the District as a condition precedent to reconnection.

10-F-5 **MEANS OF ENFORCEMENT**: The District declares the foregoing procedures are established as a means of enforcing the provisions of any ordinance, rule, or regulation of the District, and not as a penalty.

10-F-6 **MISDEMEANOR**: In accordance with Section 55334 of the California State Water Code, any violation of a regulation or ordinance of the District is a misdemeanor punishable by fine not to exceed five hundred dollars ($500.00), or imprisonment not to exceed six (6) months or both.

10-F-7 **LIABILITY FOR VIOLATION**: The violation of any provision of these Rules and Regulations, by any person, shall cause him to be liable to the District for any expense, loss, or damage, caused the District by reason of the violation.

10-F-8 **TAMPERING WITH DISTRICT PROPERTY:** No person, other than an authorized District employee, shall at any time install an unauthorized sewer connection to, or tamper with, or otherwise interfere with the sewer system.

In the event a person, firm, or corporation for any reason digs out and damages any part of the sewer system, or causes any such act to be done, such person, firm, or corporation will be held liable for any injury or damage. The District may impose a fine of up to $250.00, plus labor and materials for repairs and damages to any person, firm, or corporation found to be tampering with District property or engaged in the unauthorized operation of any part of the sewer system. [72]

PART 10 - SECTION G - MISCELLANEOUS PROVISIONS

10-G-1 **PROTECTION FROM DAMAGE**: No unauthorized person shall maliciously, willfully, or negligently, break, damage, destroy, uncover, deface, or tamper with any structure, appurtenance, or equipment which constitutes a part of the District sewerage works. Any person in violation of this provision shall be subject to the penalties provided by law. (See Rule 10-F-2).

10-G-2 **POWER AND AUTHORITY OF INSPECTORS**: The Officers, Inspectors, Engineer [203], or any other duly authorized employee of the District shall wear or carry an official badge of office, or other evidence, which establishes his position as such. Upon the exhibition of proper credentials and identification he shall be permitted to enter into residential, commercial, institutional and industrial facilities for the purposes of inspection, observation, measurement, sampling, testing, or otherwise performing the necessary duties pursuant to the enforcement of the provisions of the Rules and Regulations of this District.

10-G-3 **ORIGINAL CONNECTIONS ON COMMENCEMENT OF OPERATION OF SEWAGE SYSTEM**: Notwithstanding any statement to the contrary herein, the owner of any building situated within the District is required to connect such building to the proper public sewer and shall have sixty (60) days after such date as the Board shall proclaim, that the District is ready to receive sewage into the District sewage system, to connect such building directly with the proper public sewer, costs of such connection to be at the expense of the owner.

Where the cost of providing sewer service to any lot, parcel, or building within the District would cause an undue hardship on the District, the District reserves the right to delay sewer service to said lot, parcel, or building until such time as the District is financially able to provide such service.

10-G-4 **OWNER'S RESPONSIBILITY**: The owner shall be responsible for maintaining the side sewer from the building connection to the public sewer line connection. The District is not responsible for damage caused by line breaks or leaks occurring on the owner's property.

10-G-5 **BUILDING SEWER TOO LOW**: In all buildings in which any building sewer is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building sewer shall be lifted by artificial means, approved by the Engineer, and discharged to the public sewer at the expense of the owner. Where there is possibility of reverse sewage flow due to construction of plumbing in structures in areas such as low lots in hilly areas and where hydraulic relief is not afforded in the upstream manhole and sewage may flow

backwards and overflow the plumbing fixtures in a building, the owner shall at his expense provide, maintain, and operate all necessary and approved backflow protection measures and devices.

10-G-6 **DESIGN AND CONSTRUCTION STANDARDS**: Minimum standards for the design and construction of sewers within the District shall be in accordance with the SPECIFICATIONS FOR SEWER CONSTRUCTION as noted on Sewerage Standard Design 50 through 54 inclusive, copies of which are on file in the District office. The Engineer$_{203}$ may permit modifications or may require higher standards where unusual conditions are encountered.

"As-built" drawings showing the actual location of all mains, structures, wyes, laterals, and cleanouts shall be filed with the District before final acceptance of the work.

10-G-7 **SWIMMING POOLS**: It shall be unlawful for any person to discharge the contents of a swimming pool into a sanitary sewer except in the manner specified herein. The size of pipe carrying discharge water shall not be larger than two inches (2") and shall not be under a head to exceed twenty feet (20'). If the water is discharged by pumping, the rate of flow shall not exceed one hundred (100) gallons per minute. Each swimming pool discharging to a sanitary sewer shall be equipped with an approved separator to preclude any possibility of a backflow of sewage into the swimming pool or piping system.

10-G-8 **REIMBURSEMENT FOR OVERSIZING SEWER MAINS**: Whenever it is proposed to install sewer mains in a District by an owner other than the District, for dedication to public use, and the District determines that said dedication is in the best interest of the District, acceptance of said dedication shall be conditioned upon the installation of a sewer main with sufficient capacity to serve present and future service areas. The Board may contract with the owner for reimbursement of costs of oversizing. Reimbursement costs and method of payment shall be determined by the Engineer$_{203}$.

PART 10 - SECTION H - STANDARD CRITERIA FOR THE DESIGN OF SEWER SYSTEMS AND IMPROVEMENTS

RULE

10-H-1 **GENERAL REQUIREMENTS**

10-H-1.1 **SCOPE**: The design and construction of sanitary sewers, sewage treatment plants and other appurtenances in Ventura County Waterworks District No. 16 shall comply with these standard specifications, or permit requirements of various governing bodies, except where specific modifications have been approved by the Engineer in writing. All work shall be in accordance with good engineering practice.

10-H-1.2 These "Standard Criteria for the Design of Sewerage Systems, etc." shall be used with Ventura County Public Works Agency "Sewerage Manual,"

approved by the Board of Supervisors on July 6, 1965 and the latest revisions thereto. Wherever there are differences between these "Standard Criteria" and the Sewerage Manual, or other County, State or Federal regulations, the most stringent or highest requirements shall govern.

10-H-1.3 **INTERPRETATION**: The Engineer shall decide all questions of interpretation of "good engineering practice" being guided by "Design and Construction of Sanitary and Storm Sewers" (ASCE Manual of Engineering Practice No. 37 or WPCF Manual of Practice No. 8) both prepared by joint committees of the American Society of Civil Engineers and the Water Pollution Control Federation.

10-H-1.4 **PLUMBING CODE**: All work on house laterals and house sewers outside of public rights of way or sewer easements shall be governed by the provisions of the Uniform Plumbing Code as amended by the Ventura County Ordinance in unincorporated areas or the Ordinance of the Governing body in the incorporated areas and other applicable ordinances of the local sewerage agency.

10-H-2 **ENFORCEMENT**: Provisions of these Rules and Regulations shall be enforced by the Engineer$_{204}$.

10-H-3 **PLANS, PROFILES, AND SPECIFICATIONS REQUIRED**: The application for a permit for public sewer construction shall be accompanied by two sets of complete plans, profiles, and specifications, complying with all applicable Ordinances, Rules, and Regulations of District, prepared by a Registered Civil Engineer showing all details of the proposed work based on an accurate survey of the ground. At the time of completion of the work, the applicant shall file approved "As-built" reproducible tracings with the District Engineer. The application, together with the plans, profiles, and specifications shall be examined by the Engineer who shall, within ten (10) days, approve them as filed or require them to be modified as he deems necessary for proper installation. Where applicable, the applicant shall secure a road or street encroachment permit. Where the District requires plans, bonds, and an agreement and after examination and approval by the Engineer, the application, plans, profiles, bonds, agreements, and specifications shall be submitted to the Board at its next regular meeting for its considerations. When the Board is satisfied that the proposed work is proper and the plans, profiles, bonds, agreements, and specifications are sufficient and correct, it shall order the issuance of a permit predicated upon the payment of all connection charges and fees and the furnishing of agreement and bonds as required by the District. The owner's engineer shall submit the following items to the District:

1. Tracings of the final map (if applicable).
2. Three copies of the agreement (Form No. WW-16).
3. Three copies of Surety Bond (Labor and Materials - Form No. WW-167).
4. Three copies of Surety Bond (Performance - Form No. WW-168).

5. Three copies of Agreement to Pay for Soils Engineering (Form No. WW-169).
6. Separate deeds of conveyance for easements and/or lands in fee if these are not conveyed on the final map.
7. The number which the County has assigned to the Environmental Impact Report for the development.

The permit shall prescribe such terms and conditions as the District finds necessary in public interest.

10-H-4 **DISTRICT INSPECTOR**: The District may contract with Ventura County, or employ some fit and qualified person or persons to perform the duties of inspecting the installation, connection, maintenance, and use of all side sewers, public sewers, private sewers, and facilities in connection therewith in said District. Said Inspector shall report to and be responsible to the Engineer$_{204}$.

10-H-5 **COMPLIANCE WITH LOCAL REGULATIONS**: Any person or persons constructing a sewer within a public way or easement shall comply with all Federal, State, County, City, or District laws, ordinances, rules, and regulations pertaining to the cutting of pavement, opening, barricading, lighting, and protecting trenches, backfilling and repaving thereof and shall obtain all permits and pay all fees required by the governing body having jurisdiction prior to the issuance of a permit by the District.

10-H-6 **PROTECTION OF EXCAVATION**: The applicant shall maintain such barriers, lights and signs as are necessary to give warning to the public at all times that a sewer is under construction and of each dangerous condition to be encountered as a result thereof. He shall also likewise protect the public in the use of the sidewalk against any such conditions in connection with the construction of the sewer. Streets, sidewalks, parking, and other property disturbed in the course of the work shall be replaced in a manner equal to or better than existing conditions prior to construction.

10-H-7 **GRADE STAKES**: Grade and line stakes shall be set by a Registered Civil Engineer, or by a Licensed Surveyor, prior to the start of work on public sewer construction. The contractor shall be responsible for accurately transferring grades to grade bars and sewer invert.

10-H-8 **DESIGN AND CONSTRUCTION STANDARDS**: Minimum standards for the design of sewers within the District shall be accordance with Section H Standard Criteria for the Design of Sewer Systems and Improvements heretofore or hereafter adopted by District, copies of which are on file in the District office. The Engineer may permit modifications or may require higher standards where unusual conditions are encountered. "As-built" original reproducible tracings showing the actual location by plan and elevation of all mains, structures, wyes, tees, laterals, and cleanouts and appurtenances shall be filed with the District before final acceptance of the work.

10-H-9 **COMPLETION OF SEWER REQUIRED**: Before the acceptance of any sewer line by the District and prior to the admission of any sewage into the

system, the sewer line shall have been completed, tested and inspected in full compliance with all requirements of Standard Specifications for Construction of Sewerage Systems and to the satisfaction of the Engineer. If the testing of the sewer line is satisfactory, the Engineer shall issue a Certification of Satisfactory Completion.

10-H-10 **NOTIFICATION**: It shall be the duty of the person doing the work authorized by permit to notify the District in writing that said work is ready for inspection. Such notification shall given not less than twenty-four (24) hours before the work is to be inspected. It shall be the duty of the person doing the work to make sure that the work will stand the tests required by the District before giving the above notification.

10-H-11 **CONDEMNED WORK**: When any work has been inspected and the work condemned, and no Certification of Satisfactory Completion given, written notice to that effect shall be given instructing the owner of the premises, or the agent of such owner, to repair the sewer or other work authorized by the permit in accordance with the Ordinances, Rules, and Regulations of the District.

10-H-12 **CONSTRUCTION PLANS**

10-H-12.1 **SHEET SIZE**: Overall dimensions 20" x 30"

10-H-12.2 **MARGINS**: 2" on left, all others ½"

10-H-12.3 **SCALE**: Preferred Horizontal 1" = 50 feet
Vertical 1" = 5 feet

A permanent type reproducible tracing shall be filed with the District.

10-H-12.4 **APPROVAL**: All drawing sheets shall be provided with title and signature blocks that agree with those currently in use by the Ventura County Public Works Agency. The approval of a representative of the District shall appear on each sheet of sewer construction plans.

10-H-12.5 **TITLE SHEET**: Title sheet, other than subdivision or land divisions to be approved by the Board, shall be the same or similar to that currently in use by the Ventura County Public Works Agency. This sheet shall include a vicinity map showing the job site in relation to one of the major communities of the county and a project location map of a sufficient scale to show the project clearly related to named streets or roads adjacent to the job site.

10-H-12.6 **KEY MAP SHEET**

10-H-12.6.1 This sheet shall contain an overall plan at a scale of 1" = 200 feet (preferred) showing general layout of sewer lines, manhole locations, flow direction arrows, named streets, lot lines, lot numbers, tract boundaries, and a sheet index.

10-H-12.6.2 All bench marks used in the project shall be graphically shown on this sheet and the elevations, descriptions, locations, etc., spelled out as illustrated below:

B. M. No. ___ Elev. ___ F.B. ___ Page

Type of Marker _____

Location _____

All elevations used in preparation of standard plans shall be based on U.S.C. & G.S. mean sea level datum adjusted to 1961.

10-H-12.6.3 Certificate of Adequacy shall be signed by the Developer's Engineer and shall also appear on this sheet.

10-H-12.6.4 The General Notes shall be shown on the Key Map sheet and need not be shown on the other sheets. The General Notes shall include a note requiring compliance with District Construction Standards.

10-H-13 PLANS AND PROFILE SHEETS

10-H-13.1 **GRAPHIC SCALE AND NORTH ARROW**: All scales on the plans shall be illustrated graphically so that a true representation is produced when the plans are reduced in size. Every plan drawing shall include a north arrow.

10-H-13.2 **PLAN OF SEWER**: Plan drawings shall show location of sewer mains and other structures in relation to survey lines and stations. Provide all data for horizontal deflections or curves and indicate limits of easements, if any. Minimum easement widths shall be determined from Table 10-H-15.1.

10-H-13.3 **UNDERGROUND PIPES AND UTILITIES**: Show and label on the plans the size and ownership of all existing underground utilities that cross or parallel the sewer. Any pipe line two inches (2") or more in diameter that crosses the sewer and especially water, gas, telephone, power, television, and oil lines, shall be shown and labeled on the profile.

The District is not responsible for the accuracy of the location of these underground lines, and approval of sewer plans by the District does not constitute a representation as to the accuracy the location of, or the existence or non-existence of any underground utility, pipe, or structure within the limits of the project.

10-H-13.4 **STATIONING AND STAKING**: Stationing shall start at the lower end of the sewer and proceed to the upper end of the sewer. Stationing shall be independent of street stationing. Start stationing with 1 plus 00 at the center line of existing sewers when connecting to existing sewers. If an existing District trunk is extended, use the District stationing, taken from their "As-built" profile. If a connection is to be made to an existing sewer by constructing a new manhole, show a tie distance to the nearest existing manhole. Stationing for the new collecting sewer shall begin at the center of the new manhole with station 1 plus 00.

10-H-13.5 **PROFILE OF SEWER**: Show the grade, including vertical curve data, if any, size and strength of pipe and the distances between manholes as other structures. The type of bedding or encasement required to carry loads on the pipe shall also be shown and specified. For each section of sewer the profile shall show alternate acceptable pipe materials that are permissible or whether

only one material is acceptable. Show elevations to nearest 0.01 foot of sewer invert.

10-H-14 **SEWER LOCATION IN EASEMENT**: The sanitary sewer shall be located off the center line of the easement to prevent unauthorized property line fences, etc., being built over the manholes.

Where easements follow common lot lines, the full easement width shall be on one lot, in such a manner that access to manholes will not be obstructed by walls, trees, or permanent improvements. Where this requirement cannot be met without interfering with existing buildings, easements may straddle lot lines.

Deeds for easements shall provide for restrictions of permanent construction within easement to provide ingress and egress for maintenance.

Width of easements shall be adequate for the purpose of construction and operation and maintenance of the sewer and shall not be less than the minimum width specified in Table 10-H-15.1.

10-H-15 **DEDICATION OF EASEMENTS**: Easements shall be provided as follows:

a) For subdivision tracts - The owners of land included within the subdivision shall offer to dedicate for public use the sanitary sewer easements so designated on the final map. The form of dedication shall be as follows:

"We also grant to the Ventura County Waterworks District 16 all sanitary sewer easements delineated and designated on the map."

The form accepting the sanitary sewer easements shall be provided on the map as follows:

"The Ventura County Waterworks District 16, hereby accepts for public use all sanitary sewer easements delineated and designated on the map, when said map is approved and recorded."

Ventura County Waterworks District 16

Signature

Chairman of the Board

b) For other than subdivision tracts:

Dedication of sewer rights of way shall occur by means of deeds of conveyance to Waterworks District 16 for all dedications other than those dedications created by subdivision tract maps on a form and as approved by the Engineer.

10-H-15.1 **EASEMENTS**: The minimum width of sanitary sewer easement shall be equal to or greater than the width shown in the following Table:

TABLE 10-H-15.1 MINIMUM EASEMENT WIDTH (IN FEET)

Sewer	Depth (Surface to Sewer Invert - In Feet)				
Size	0-15	15-20	20-25	25-30	30+
6"	12	--	--	--	--
8"	12	15	20	25	--
10"	12	15	20	25	--
12"	15	15	20	25	--
15"	15	20	20	25	30
18"	20	20	20	25	30
21"	20	20	20	25	30
24"	20	20	20	25	30
27"	20	20	25	30	35
30"	20	20	25	30	35
33"	20	20	25	30	35
36"	20	20	25	30	35

Over 36" as approved by the Engineer

10-H-16 **SEWER LOCATION IN ROADS OR STREETS**: The centerline of sewers constructed in City or County roads shall be five feet from the centerline of the road. Exceptions to this location requirement may be made only on approval of the Engineer. On divided highways a separate sewer shall be installed to serve each side of the highway.

10-H-17 **SEWER CAPACITIES AND SIZES**

10-H-17.1 **QUANTITY OF FLOW**: Sewage flows shall be determined from maximum potential population of the tributary area. The criteria on Table 10-H-17.1 shall be used unless otherwise approved by the Engineer.

Peak flow shall be determined by Ratio of Peak to Average Flow chart shown on Plate No. 1. An additional amount for infiltration shall be added when sewer is to be constructed below the ground water level. This amount shall be approved by the Engineer[204].

10-H-17.2 **HYDRAULICS**: Sewers shall be designed to accommodate future tributary flows, in addition to those from the project.

Pipe capacities shall be determined for peak flow rates by Manning's Formula using an "n" of 0.013. Sewers less than 18" in diameter shall be designed to flow half full at peak flow rates. Sewers 18" and larger shall be designed to flow three-quarters full at peak flow rate.

10-H-17.3 **VELOCITY**: A main line sewer shall be designed to provide a mean velocity of not less than two (2) feet per second for vitrified clay pipe flowing one-half full except that the District may approve a gradient that will develop a velocity of less than two (2) feet per second in unusual circumstances.

10-H-17.4 **MINIMUM STREET SEWER SIZE**: Sewers shall be 8", except that 6" sewers may be used where all of the following conditions are met:

a) The minimum grade shall be at least 0.008 ft/ft.

b) The length does not exceed 200 feet with no possibility of extension.

c) Not more than 10 house laterals contribute to the 6" portion.

10-H-17.5 **OVERSIZING AND EXTRA DEPTH**: Oversizing of certain tract sewers may be required where such sewers can logically serve an upstream tributary area.

10-H-17.6 **WATER-SEWER SEPARATION ORDINANCE**: The provisions of Ventura County Ordinance Code Section 8600 et. seq. shall be met in locating sewers. See Plate No. 2.

10-H-18 **SEWER MINIMUM DESIGN VELOCITIES**

10-H-18.1 **MINIMUM GRADES**: The minimum grades for commonly used pipe sizes shall be as follows:

TABLE 10-H-18.1

Pipe Size	V=2.0 ft/sec Clay Pipe, Grade Foot per Foot	V=2.0 ft/sec P.V.C. Pipe Foot per Foot	V=2.8 ft/sec AC Pipe Unlined, Foot per Foot
6"	.0063	.0063	.0100
8"	.0040	.0040	.0060
10"	.0028	.0028	.0052
12"	.0022	.0022	.0040
15"	.0016	.0016	.0030
18"	.0014	.0014	.0024
21"	.0010	.0010	.0020

The higher velocities listed for Asbestos Cement pipe are required because of chemical action of the sewage gas on the unwetted perimeter of the pipe during periods of low flow.

10-H-18.2 **SUBSTANDARD GRADES**: Grades below the standard minimum may be used in order to avoid pumping only upon specific approval of the Engineer. Such approval should be solicited well in advance of completion of design.

10-H-18.3 **PIPE FOR SUBSTANDARD GRADES**: If grades below the standard minimum must be used in order to avoid pumping, the designer shall advise the Engineer before proceeding with design. Pipe, in substandard grade areas and in all areas downstream from substandard grade areas to the point where the number of equivalent dwelling connections is four times that in the section with substandard grade, shall be vitrified clay pipe (VCP) or other corrosion-resistant pipe approved by the Engineer.

10-H-18.4 **FUTURE EXTENSIONS**: When an area outside the tract can be logically served by future extension of a tract sewer, the tract sewer shall extend to the tract boundary or to the end of a paved street in a manner to facilitate the future extension.

10-H-19 **CURVED SEWER REQUIREMENTS**: Minimum radius = 100 feet for horizontal curve.

10-H-19.1 Minimum invert grade of horizontally curved sewers shall be 0.01 foot per foot except that sewers with a horizontal radius of 200 feet or more will have the same requirements as straight sewers.

10-H-19.2 Vertical curves may be used in combination with horizontal curves where invert grades exceed 0.01 foot per foot throughout the reach between manholes. Reverse curves will not be permitted.

10-H-19.3 Maximum combined horizontal and vertical deflection at any joint shall be as recommended by the manufacturers. Maximum horizontal deflections shall be in accordance with Table 10-H-19.5.

10-H-19.4 The arithmetical sum of all horizontal and vertical deflections in curved sewers between adjacent manholes shall not exceed 60 degrees.

10-H-19.5 **JOINT DEFLECTIONS FOR CURVED SEWER LINES**

TABLE 10-H-19.5

Pipe Size Inches	Max. Def. at Each Joint	Approx. Max. Def. Per Foot of Pipe	MINIMUM RADIUS OF CURVATURE IN FEET: 2 Foot Pipe Length	3 Foot Pipe Length	4 Foot Pipe Length	4 1/3 Foot Pipe Length	4½ Foot Pipe Length	5 Foot Pipe Length	6 Foot Pipe Length	13 Foot Pipe Length
4	2½°	½"	46'	69'	92'	90'	103'	115'	138'	298'
6	"	"	"	"	"	"	"	"	"	
8	"	"	"	"	"	"	"	"	"	
10	"	"	"	"	"	"	"	"	"	
12	"	"	"	"	"	"	"	"	"	
15	2°	3/8"	57'	86'	115'	124'	129'	143'	172'	373'
18	"	"	"	"	"	"	"	"	"	
21	"	"	"	"	"	"	"	"	"	
24	"	"	"	"	"	"	"	"	"	
27	1½°	¼"	76'	115'	153'	166'	172'	191'	229'	497'
30	"	"	"	"	"	"	"	"	"	
33	"	"	"	"	"	"	"	"	"	
36	"	"	"	"	"	"	"	"	"	
39	"	"	"	"	"	"	"	"	"	
42	1°	3/16"	115'	172'	229'	248'	258'	286'	344'	745'

10-H-20 **DEPTH OF SEWERS**

10-H-20.1 **BASIC REQUIREMENTS**: Sewers shall be installed at a depth which shall provide suitable service to the properties connected and will allow subsequent installation of water lines, in accordance with the Water Sewer Separation Ordinance with a minimum of special construction of the water lines other than joint spacing.

10-H-20.2 **STANDARD DEPTHS**: Compliance with Subsection 10-H-20.1 will usually be assured if: the main sewer is located at a depth of 7 feet to top of pipe below the flow line of the existing or proposed gutter, or where no gutter exists, from the elevation of the outermost edge of the traveled way; and the house laterals are located either: (1) six feet to top of pipe below the ground surface at the property line, or (2) at a depth below the ground surface at the property line that will provide for the construction of a straight run of private sewers at a minimum grade of 0.02 foot per foot from one foot below the surface at any point within the established building setback lines, excluding any areas steeper than five horizontally to one vertically, whichever depth is greater.

10-H-20.3 **EXCEPTIONS**: Designs not in accordance with Subsection 10-H-20.2 shall be submitted to the Engineer for approval together with evidence that it complies with Subsection 10-H-20.1.

10-H-21 **STRUCTURES**

10-H-21.1 **UNDER ROADS**: All structures and pipe placed under public roads shall be of sufficient strength to support with an adequate factor of safety the backfill, road surfacing, and H-20 truck loading with impact.

10-H-21.2 **MANHOLES**

10-H-21.2.1 **SPACING**: Manholes shall be constructed in accordance with District Standards at all abrupt grade changes, at all changes in horizontal alignment, at the point of reverse curve (except on curves), at all changes in pipe size, at the terminal end of all lines exceeding 200 feet in length from the next downstream manhole, and at all junctions of sewers. The maximum distance between manholes shall be approximately 350 feet but not to exceed 400 feet for sewer pipe smaller than 18 inches in diameter, and 600 feet for sewers 18 inches and larger.

10-H-21.2.2 **GRADE DIFFERENCE**: Grades of sewers from centerline of manhole to centerline of the next manhole shall show the flow line elevation of inlet - and outlet elevation if different than inlet flow line elevation at the centerline of the manhole, the size, lateral sewer grade, bedding, type of material and class of pipe and the position of the stub out relative to the alignment of Main Sewer.

10-H-21.2.3 **DROP MANHOLES**: Drop manholes shall be used only when vertical curves cannot be used. Drop manholes shall be provided where the drop in the manhole exceeds one (1) foot. Drop manholes shall be constructed in compliance with Sewerage Standard Design 51.

10-H-21.2.4 **RIM ELEVATIONS OF MANHOLES**: Elevations for tops of all manholes shall be shown on the profile. In paved areas the manhole rim elevation shall match the finished grade. In other than paved areas or traveled way the height of the manhole rim will normally be 18 inches above the finished grade, high water mark, or above the top of future fill areas. The elevations shown for the tops of manholes on the design plans shall not relieve the contractor from making final adjustments to match street surfaces.

10-H-21.2.5 **IDENTIFICATION ON COVERS**: The manhole covers shall have 1½ inch high letters cast in the top designating the owner of the sewer followed by the word "sewer" indicating the use of the manhole. Example: "V.C.W.W.D. 16 SEWER."

10-H-21.3 **CLEANOUTS**

10-H-21.3.1 **REQUIREMENTS**: Dead end sewers not over 200 feet in length shall terminate in standard manholes or cleanouts. Dead ends over 200 feet long shall terminate in standard manholes unless future extension of said dead end will include a manhole within 400 feet of the uppermost manhole, in which case a temporary cleanout is permitted. Where dead ends are on a slope of 0.01 feet per foot, or greater, the length for use of a cleanout may be extended to 300 feet.

10-H-21.3.2 **LOCATION**: End structures for sewers shall be ten (10) feet up grade from the down grade lot line of the last lot served unless greater length is necessary to serve the property.

10-H-21.3.3 **DESIGN**: Cleanouts shall be constructed in accordance with Sewerage Standard Design 51.

10-H-21.4 **SERVICE LATERALS**

10-H-21.4.1 **REQUIREMENTS**: Wherever it is known or can be reasonably assumed that a building sewer connection is required, a service lateral shall be shown on the plans and installed to the property line as a part of the street sewer construction, prior to paving. Service laterals shall be installed whenever possible during construction of the sewer main using prefabricated fittings.

10-H-21.4.2 **SIZE**: Service laterals shall not be less than 6" inside diameter with the exception that for single dwellings a 4" lateral may be used providing the Uniform Plumbing Code does not require the building sewer to be larger than 4".

10-H-21.4.3 **DESIGN**: Service laterals shall be constructed in general conformity with Sewerage Standard Design 50.

10-H-21.4.4 **BACKFLOW PREVENTION**: It is the designer's responsibility to recognize the possibility of reverse flow in service laterals serving low lots in hilly areas or in buildings with plumbing fixtures below the upstream sewer manhole rim. Where hydraulic relief is not afforded by upstream manholes or cleanouts, he shall provide suitable protective measures which are subject to the approval of the Engineer and the Director of Building and Safety.

10-H-21.5 **FORCE MAINS AND LIFT STATIONS**

10-H-21.5.1 **REQUIREMENTS**: All sewage shall reach the system by gravity flow, in a fresh condition susceptible to conventional sewage treatment processes. Where extreme hardship conditions prevail and a substantial area cannot be sewered by gravity sewers, in accordance with these requirements, a sewage

lift station may be installed. No pumping facilities shall be incorporated in sewer plans without prior approval of the Engineer.

10-H-21.5.2 **LIFT STATION DESIGN**: Lift stations, where permitted, shall be of the dry-pit type incorporating the following features:

a) Pumps or other devices shall be provided in duplicate, arranged for positive priming.

b) Capacity shall be provided to handle ultimate peak flow from the tributary area with the largest pump out of service. Stage installation of pumps may be permitted if space is provided for future pump units.

c) Access shall be provided to site for removal and repair of equipment.

d) A means for dewatering force mains shall be provided.

e) An overflow to natural channel or storm drain shall be provided for use in case of power failure or other emergency.

f) Bottom of wet well shall slope to suction lines at least 1.75 vertical to 1.0 horizontal. It is recommended that the width of the flat bottom in the wet well not exceed twice the diameter of the suction pipes.

g) Lift station for newly developed areas shall not be located in road right-of-way but shall be located on a separate parcel of land and shall include fence, gates, landscaping, etc. Lift station located in road right-of-way will only be considered when it can be demonstrated to the governing body of the road right-of-way and the Engineer that no other site out of the road right-of-way is possible.

h) Lift station shall have suitable forced air ventilation system, humidity control equipment, sump pump and alarm system.

i) Pump and fittings shall be designed to permit the passage of a three (3) inch diameter sphere through the pump.

j) Standby power with automatic pump drive transfer shall be provided, except on approval of the Engineer. Consideration should be given to using natural gas engines.

10-H-21.5.2 **FORCE MAINS**: Force mains shall be laid on a continuous positive grade and to grades designed to eliminate air pockets in the line wherever possible.

10-H-21.6 **CONSTRUCTION OF SPECIAL STRUCTURES**: Design criteria for special facilities (i.e., junction boxes, etc.) that are not covered in previous Sections are to be prepared individually for each specific job, and shall be approved by the Engineer.

10-H-21.7 **SEWAGE TREATMENT PLANT AND DISPOSAL SYSTEM**: Design of these facilities shall be in accordance with criteria approved by the Engineer, and plans, specifications, and construction shall be approved by the Engineer.

10-H-22 **AS-BUILT PLANS**

10-H-22.1 **PLANS**: The actual location and grade of all sewers shall be accurately determined after construction and shall be recorded on "As-Built" plans. Accurate locations and elevations of all service laterals, manholes, cleanouts, lift stations, and other sewer appurtenants shall also be marked on the "As-Built" plans.

10-H-22.2 **CERTIFICATION**: A set of "As-Built" plans, which have been certified as being correct, signed and dated by a Registered Civil Engineer, shall be submitted to and approved by the District prior to exoneration of the Performance Bond.

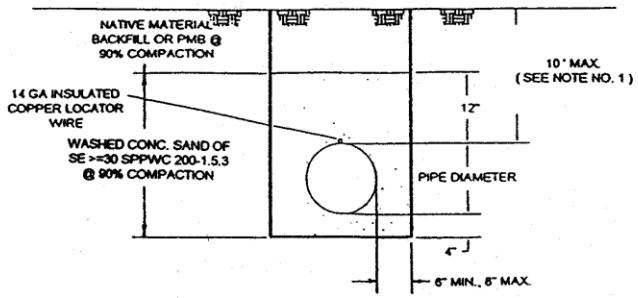
10-H-22.3 **FILING**: A permanent-type of reproducible set of the "As-Built" plans shall be approved and filed with the Engineer.

PART 11 - STANDARD DESIGNS AND PLAN NOTES FOR THE CONSTRUCTION OF SEWER SYSTEM IMPROVEMENTS [77]

Section 461 of the County of Ventura Standard Land Development Specifications is hereby adopted and incorporated as Part 11 by reference. The attached Sewer Construction Standards are also hereby adopted and incorporated as Part 11by reference. Plate Nos. 200-1, 201-0, 202-0, 204-0, 205-0, 206-0, 208-0, 220-1 and 221-0 of the Standard Plans for Public Works Construction are hereby adopted and incorporated as Part 11 by this reference. Manhole frame and covers for Plate Nos. 200-1 and 201-0 shall be per approved material list.

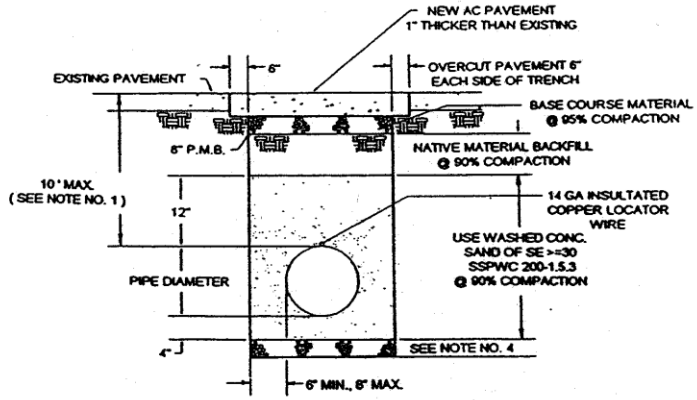
VENTURA COUNTY WATERWORKS DISTRICT NO. 1 & 16
SEWER CONSTRUCTION STANDARDS

TABLE OF STANDARD PLATES



TYPICAL BACKFILL FOR UNPAVED AREAS

NOT TO SCALE



TYPICAL BACKFILL FOR PAVED AREAS

NOT TO SCALE

NOTES:

1. IF DEPTH EXCEEDS 10', SAND BEDDING SHALL BE SUBSTITUTED WITH 3/8" ROCK.
2. EXCAVATED TRENCHES SHALL BE OF MINIMUM WIDTH FOR PROPER PIPE LAYING.
3. BEDDING SHALL EXTEND 4" MINIMUM BELOW PIPE, IF TRENCH BOTTOM MATERIAL DOES NOT MEET S.E. 30.
4. FOUNDATION SHALL BE REQUIRED IF NATIVE MATERIAL IS SOFT, SPONGY OR UNSTABLE. FOUNDATION MATERIALS SHALL BE THE SAME AS BEDDING AND COMPACTED TO 95% RELATIVE DENSITY.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1 & 16		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	SEWER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	TRENCH DETAILS	PLATE NO. 30
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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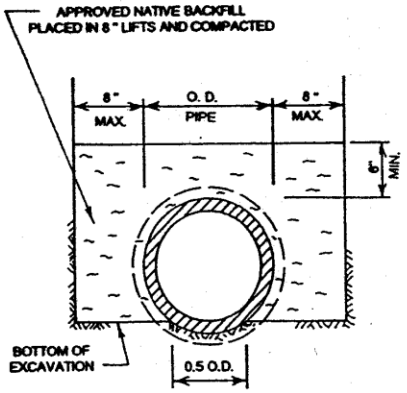
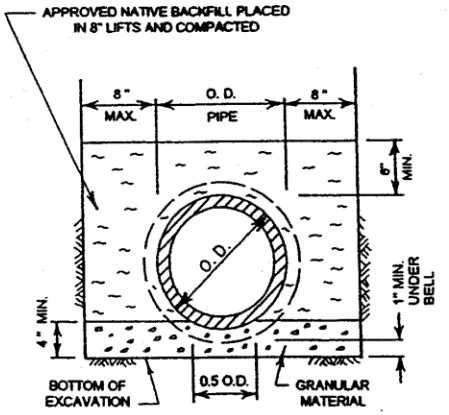
7/18/08



NOTES:

1. HAND SHAPED FROM UNDISTURBED SOIL, PERMITTED WHEN EXISTING SOIL IS GRANULAR.
2. BALANCE OF BACKFILL PER CITY OR VENTURA COUNTY STANDARD LAND DEVELOPMENT SPECIFICATIONS (TYPICAL ALL BEDDING TYPES)

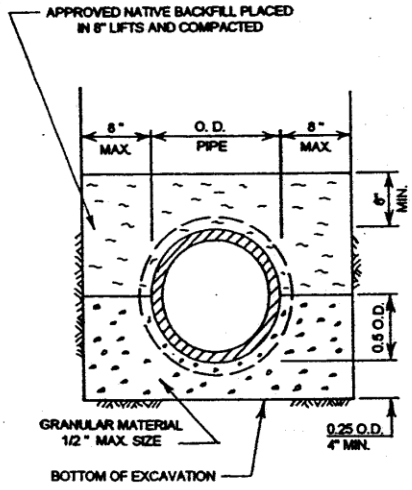
NORMAL BEDDING - L. F. 1.5



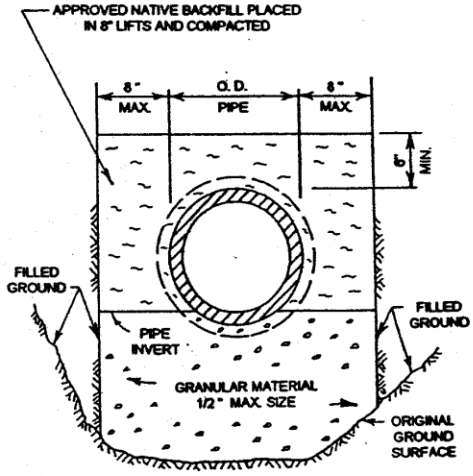
NOTES:

1. HAND SHAPED FROM GRANULAR MATERIAL, 1/2" MAX. SIZE.

BEDDING - L. F. 1.5



BEDDING - L. F. 1.9



NOTES:

1. WHERE NATURAL GROUND IS AT AN EXCESSIVE DEPTH BELOW PIPE INVERT, CONSTRUCTION SHALL COMPLY WITH SPECIAL NOTE ON PLANS.

BEDDING FOR FILLED GROUND
(LESS THAN 90% COMPACTION)

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1 & 16

ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	SEWER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	PIPE BEDDING DETAILS	PLATE NO. 31
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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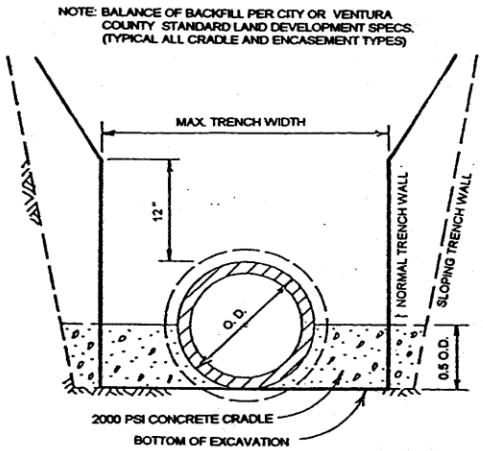
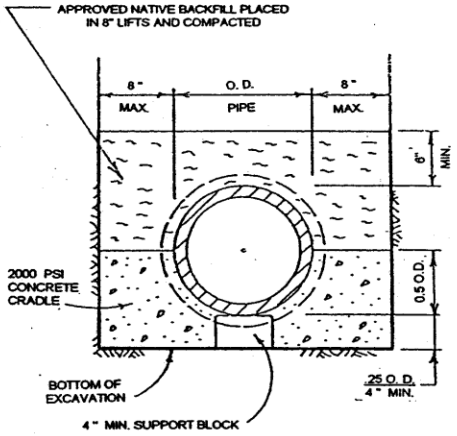
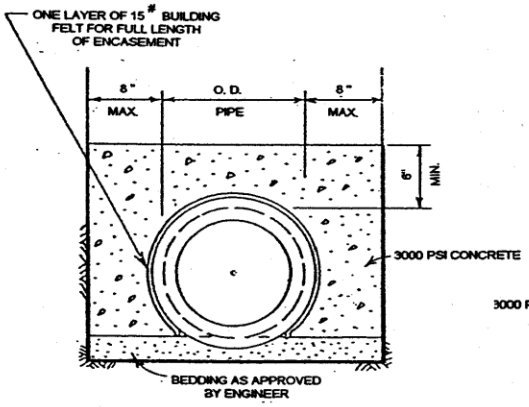


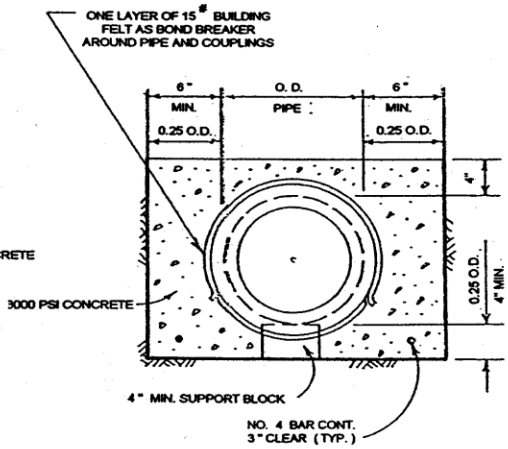
CRADLE FOR EXCESSIVE TRENCH BOTTOM WIDTH - L. F. 2.3



CONCRETE CRADLE - L. F. 3.0



CONCRETE JACKET - L. F. 3.2



CONCRETE ENCASEMENT - L. F. 4.5

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1 & 16

ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996 APPROVED BY: DIR. PUB. WKS. RECOMMENDED BY: DPTY. DIR. PUB. WKS.	SEWER CONSTRUCTION STANDARDS	PLATE NO. 32
	PIPE CRADLES AND ENCASEMENT	

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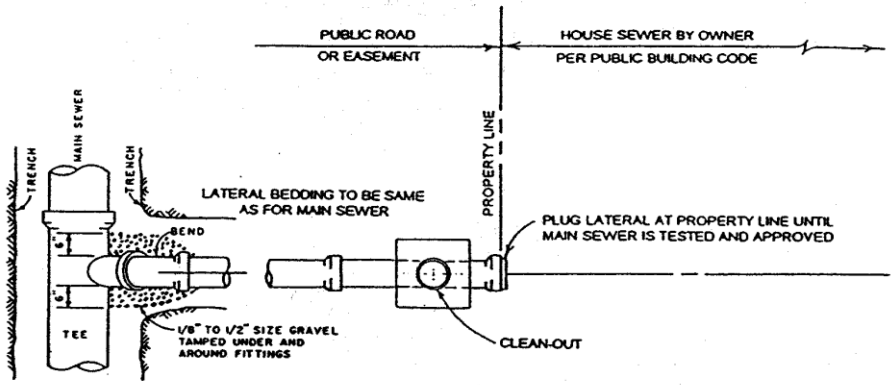
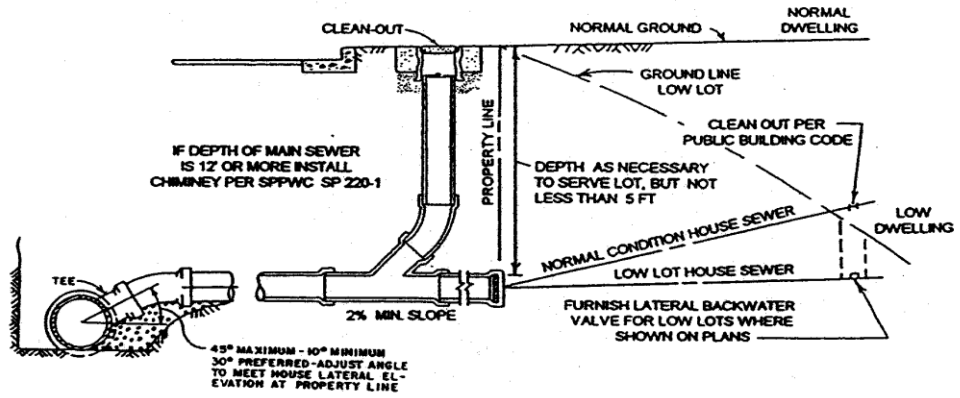
7/18/96



PLAN



ELEVATION

NOTES:

1. TO CONNECT SIX INCH AND SMALLER SEWER LATERALS TO AN EXISTING SEWER, INSTALL TEE SADDLE IN MAIN SEWER WITH DISTRICT'S APPROVAL.
2. LOCATE LATERAL IN ACCORDANCE WITH DEPARTMENT OF HEALTH WATER/SEWER SEPARATION REQUIREMENTS.
3. LATERAL SEWERS LARGER THAN SIX INCHES SHALL BE CONNECTED WITH A MANHOLE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1 & 16		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	SEWER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	SERVICE LATERAL	PLATE NO. 33
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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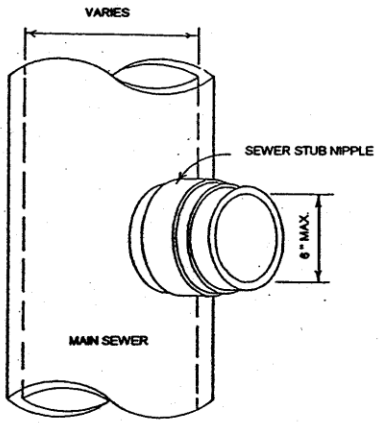
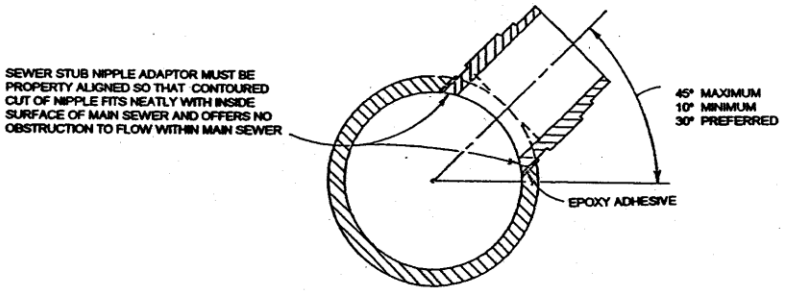
7/18/96



PLAN



SECTION

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1 & 16		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	SEWER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	SEWER STUB NIPPLE ADAPTOR	PLATE NO. 34
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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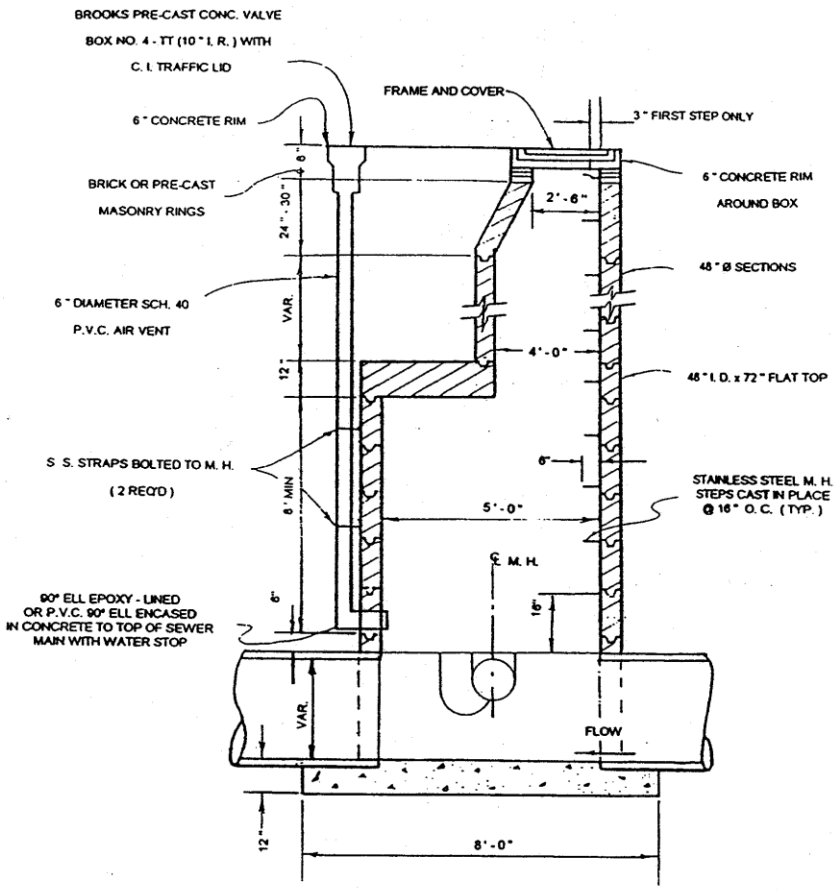
7/18/96



5' DIAMETER MANHOLE

NOT TO SCALE

NOTES:

1. MANHOLE FOR 18' OR DEEPER.
2. MANHOLE FIRST STEP SHALL BE INSTALLED IN 6" GRADE RING.
3. CURRENT MATERIAL LIST IS AVAILABLE AT THE DISTRICT OFFICE.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1 & 16		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	SEWER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	DEEP MANHOLE	PLATE NO. 35
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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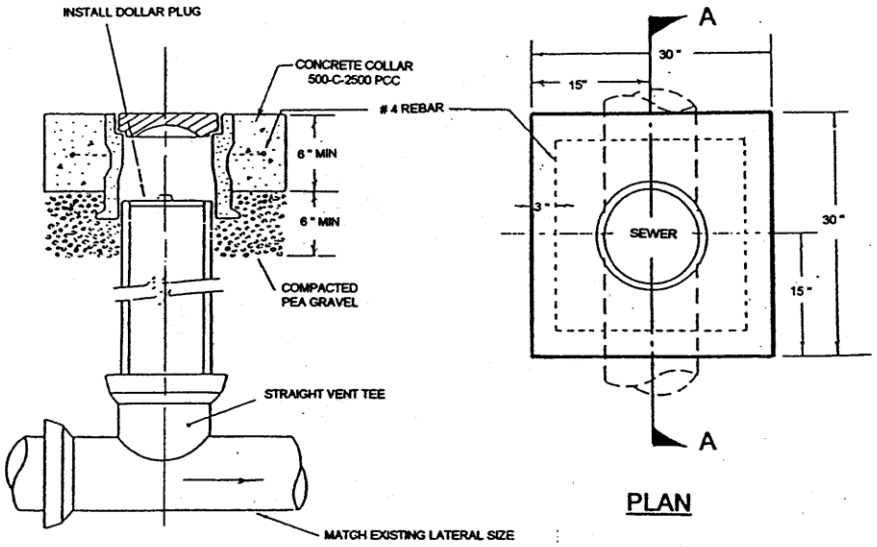

SECTION A - A

PLAN

NOTES:

1. SAMPLING WELL SHALL BE INSTALLED 18" TO CENTERLINE BEHIND CURB OR SIDEWALK, WHENEVER POSSIBLE. WHEN THIS IS NOT POSSIBLE SAMPLING WELL SHALL BE LOCATED AT THE DISTRICT ENGINEER'S DISCRETION.
2. SAMPLING WELL BOX SHALL BE BROOKS 3RT WITH CAST IRON COVER OR ALHAMBRA 1-1240.. LID SHALL BE MARKED "SEWER".
3. STRAIGHT VENT TEE AND RISER SHALL BE VITRIFIED CLAY. DO NOT USE A WYE IN PLACE OF VENT TEE. TEE AND RISER SHALL BE THE SAME SIZE AS THE LATERAL RISER. RISER SHALL BE VERTICALLY PLUMB.
4. SAMPLING WELL INSTALLATIONS AND EXISTING LATERALS MUST BE APPROVED AS TO MATERIAL AND METHOD PRIOR TO INSTALLATION.
5. CONCRETE COLLAR SHALL BE PLACED BELOW PAVEMENT ON PAVED AREAS.

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1 & 16		
ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996	SEWER CONSTRUCTION STANDARDS	
APPROVED BY: DIR. PUB. WKS.	SAMPLING WELL	PLATE NO. 36
RECOMMENDED BY: DPTY. DIR. PUB. WKS.		

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8/13/96

ITEM	MANUFACTURER	MODEL	TYPE
Cleanout	Alhambra; Neenah		
Manhole Frame/Cover	Alhambra; Neenah	A-1254, A-1252	24", 30" Traffic

VENTURA COUNTY WATERWORKS DISTRICT NOS. 1 & 16

ADOPTED BY BOARD OF SUPERVISORS: SEP 10 1996

APPROVED BY: _____ DIR. PUB. WKS.

RECOMMENDED BY: _____ DPTY. DIR. PUB. WKS.

SEWER CONSTRUCTION STANDARDS

CURRENT MATERIAL LIST

PLATE NC 49

PART 12 - RULES AND REGULATIONS FOR SEWAGE DISPOSAL [120]

SECTION A - RULES FOR DEFINITIONS OF TERMS

RULE

12-A-1 **Definitions:** Unless the context specifically indicates otherwise, the following terms and phrases, as used in these rules and regulations, shall have the meanings hereinafter designated:

Act or "The Act": The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251 et. seq.

Approval Authority: California State Water Resources Control Board or California Regional Water Quality Control Board.

Authorized Representative of Industrial User: A responsible corporate officer or a duly authorized representative of that person in control of the property or premises from which the sewage discharge originates.

Biochemical Oxygen Demand: The quantity of oxygen, expressed in milligrams per liter, utilized in the biochemical oxidation of organic matter as determined by the appropriate procedures set forth in "Standard Methods."

Building Sewer: A sewer conveying wastewater from the premises of a User to the public sewer.

CFR: Code of Federal Regulations.

Cesspool: A lined excavation in the ground**,** which receives wastewater and so constructed that the solid matter is retained and the liquid portion is permitted to seep away.

Chemical Oxygen Demand: The measurement of wastewater strength in terms of the total quantity of oxygen required for oxidation of organic matter as determined by the appropriate procedure set forth in "Standard Methods."

Chlorine Demand: The difference between the amount of chlorine added to sample of wastewater and the amount remaining at the end of a 30**-** minute period, as determined by the appropriate procedures set forth in "Standard Methods."

Collector Sewer: A public sewer, usually eight inches or larger in diameter, used to collect wastewater from house connection sewers and industrial connection sewers to transport it to trunk sewers.

Cooling Water: The water discharged from any use such as air conditioning, cooling or refrigeration, or to which the only pollutant added is heat.

Compatible Pollutant: Biochemical Oxygen Demand, organic carbon, suspended solids, ammonia-nitrogen, and total coliform bacteria, plus additional pollutants identified in the District's National Pollution Discharge Elimination System (NPDES) Permit if the District's Wastewater Treatment Plant was designed to treat such pollutants and if such pollutants do not interfere with the operations of the wastewater treatment plant and if in fact the wastewater treatment plant does remove such pollutants to a substantial degree.

Compliance Schedule: The time period allowed by the District in which an industry shall comply with permit conditions, or prohibitions, limitations, and/or requirements of these rules and regulations or any other order issued by the District.

Connection: That part of any sewer extending from a sewer main in a public easement or right of way to private property for exclusive use of the property.

Contaminated Water: Any water impaired in quality by waste to the degree which creates a hazard to the public health through poisoning or through spread of disease; "contamination" includes any equivalent effect resulting from the disposal of industrial waste.

Customer: A person who is, or who has agreed to be, responsible for the payment of sewer service charges as defined or levied by the District.

Director: The enforcing authority of the Ventura County Waterworks District No. 1 or 16 (District) or his designee.

District: Ventura County Waterworks District No. 1 or 16 of Ventura County, California.

District Board of Directors: The District's Board of Directors is the County of Ventura Board of Supervisors. This Board has enforcement capabilities as the governing board of the District.

Domestic Wastewater: The liquid and water borne waste derived from the ordinary living processes, free from industrial waste, and susceptible to satisfactory disposal without special treatment into the public sewer or by means of a private wastewater disposal system. The District has on file the parameters and concentration of constituents that, for the purpose of these rules and regulations, define domestic wastewater.

Effluent: The liquid outflow and/or discharge to the District's sewerage system from any treatment plant or facility designated to treat, convey, or store wastewater.

Enforcing Authority: The Director of the Ventura County Waterworks District No. 1 or 16 (District) or his designee.

Fee: Any charge assessed to a user for the use, or continued use, of any portion of the District's sewerage system. "Fee" includes but is not limited to a charge(s) for: connection or tap for new customers; monthly sewer service; industrial wastewater discharge permit; excess capacity connection; industrial wastewater treatment; excessive industrial wastewater treatment capacity; laboratory testing; waste hauler's permit; oversize sewer and non-compliance penalty.

Floatable Oil and Grease: The oil and grease floating on the surface of a sample of water as determined by the appropriate procedures set forth in "Standard Methods."

Formula Users: Those Users who are regulated under the Industrial Wastewater Discharge Permit system and billed according to a formula based on the measured or set strength and volume of their wastewater discharged.

Garbage: The putrescible animal and vegetable wastes resulting from the handling, preparation and consumption of foods.

Grab Sample: A sample**,** which is taken from a wastestream on a one-time basis with no regard to the flow in the waste stream and without consideration of time.

Gravity Separation Device: A device designed, constructed, and operated for the purpose of retaining sand, silt, grit, mineral material, and oil and grease by gravity-differential separation from wastewater.

Grease: The definition is set forth in "Standard Methods," and includes waxes, fats, oils and other non-volatile materials tested as determined by appropriate procedures set forth in "Standard Methods."

Grease Interceptor (Interceptor): A device of at least 750**-**gallon capacity designed, constructed, and operated to separate and retain grease while permitting the wastewater to be discharged into the District's sewerage system.

Ground Garbage: The residue from the preparation, cooking and dispensing of food that has been shredded to such a degree that all particles will be carried freely in suspension under the flow conditions normally prevailing in public sewers with no particle greater than one-half inch in any dimension.

Industrial Connection Sewer: The sewer connecting a building sewer or building wastewater drainage system to a District sewer for the purpose of conveying industrial wastewater.

Industrial User: Any producing, manufacturing, processing, institutional, commercial, agricultural or similar person (as defined herein) that discharges, directly or indirectly, wastewater into the District's sewerage system of which the solid, liquid or gaseous waste discharge has pollutants different than or stronger than or with constituents other than those defined for domestic wastewater or any categorical industrial user as defined in 40 CFR Chapter I, Subchapter N, Parts 401-471.

Industrial Waste: Any solid, liquid, gaseous or radioactive substance that is discharged, flowing, or permitted to escape from any producing, manufacturing, processing, institutional, commercial, agricultural or similar operation from the development, recovery, or processing of any material resource which will enter into the District's sewerage system.

Industrial Wastewater: The liquid and wate-carried industrial waste, whether treated or untreated, which is permitted to enter the District's sewerage system.

Industrial Wastewater Discharge Permit: A conditionally written authorization to allow an Industrial User to utilize the District's sewerage system for the discharge of industrial wastewater.

Inspector: The person authorized by the District to inspect any raw material, waste or wastewater generation, conveyance, processing, storage, and/or disposal facilities within the District's jurisdiction.

Interceptor Main: A sewer main which is ten inches or greater in size and is intended to collect wastewater from a large area.

Interceptor Sewer: A closed conduit whose primary purpose is to transport rather than collect wastewater and which performs one or more of the following functions as its primary purpose:

1. Intercepts wastewater from a final point in a collection system and conveys the wastewater directly to the wastewater treatment plant;
2. Serves in place of a potential treatment plant and transports the collected wastewater to an adjoining collection system or interceptor and thence to treatment;
3. Transports the wastewater from one or more municipal collection systems to another municipality or to the wastewater treatment plant for treatment; or
4. Intercepts an existing major discharge of raw or inadequately treated wastewater for transport directly to another interceptor or to the wastewater treatment plant.

Interference: The discharge by an Industrial User which, alone or in conjunction with discharges by other sources, inhibits or disrupts the District's wastewater treatment plant, its treatment processes or operations, water reclamation, or its sludge processes, use or disposal, and which is a cause of a violation of any requirement of the District's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sludge use or disposal by the District's wastewater treatment plant in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Title 22, Section 405 of the Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in the State's sludge management plan prepared pursuant to Subtitle D or the SWDA), the Clean Air Act, the Toxic Substance Control Act, and the Marine Protection Research and Sanctuaries Act.

Mass Emission Rate: Mass emission rate shall mean the weight of material discharged to the District's sewerage system during a given time interval. Unless otherwise specified, the mass emission rate shall mean pounds per day of a particular constituent or combination of constituents.

National Categorical Pretreatment Standard: Any regulation containing pollutant discharge limits applying to a specific category of industrial users which is promulgated by the EPA in accordance with 40 CFR, Chapter I, Subchapter N, Parts 401-471, and specifically, the accordance with Sections 307(b) and (c) of the Act (33 U.S.C. 1317).

National Pollution Discharge Elimination System or NPDES Permit: A permit issued pursuant to Section 402 of the Act (33 U.S.C. 1342).

National Prohibitive Discharge Standard or Prohibitive Discharge Standard: Any regulation developed under the authority of 307(b) of the Act and 40 CFR, Section 403.5.

New Source: Any building, structure, facility or installation from which there is a discharge of pollutants, the construction of which is commenced after the publication of proposed Pretreatment Standards under Section 307(c) of the Act and as further defined in 40 CFR 403.3(1).

Non-Compatible Pollutant: Any pollutant, which is not a compatible pollutant.

Nuisance: Anything**,** which is injurious to health or is indecent or offensive to the senses, or an obstruction to the free use of property so as to interfere with the comfortable enjoyment of life or property.

Pass Through: The discharge of pollutants through the District's wastewater treatment plant into navigable waters in quantities or concentration which, alone or in conjunction with discharges from other sources, is a cause of a violation of any requirement of the District's NPDES permit (including an increase in the magnitude or duration of a violation).

Peak Flow Rate: The maximum discharge rate over a 30 minute period between the hours of 7:00 a.m. and 10:00 p.m. and determined by averaging a maximum of ten substantiated peak flow rate measurements of the accrual period in gallons per minute; in the absence of actual peak flow rate data, peak flow rate may be computed in the manner set forth by the District.

Person: Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal representatives, agents, or assigns. The masculine gender shall include the feminine, the singular shall include the plural where indicated by the context.

pH: The logarithm (base 10) of the reciprocal of the hydrogen-ion concentration expressed in moles per liter as determined by the appropriate procedures set forth in "Standard Methods."

Pollutant: Any dredged soil, solid waste, incinerator residue, garbage, sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water.

Polluted Water: Any water altered in quality by waste to a degree**,** which unreasonably affects:(1) the water for beneficial use; or (2) the facilities**,** which serve the beneficial use.

Pollution: The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water. The term "pollution" may include "contamination."

Pretreatment: The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into the District's wastewater treatment plant. The reduction or alteration can be obtained by physical, chemical, or biological processes, or by process changes, except as prohibited by 40 CFR 403.6(d).

Pretreatment Facility: Any works or device for the treatment or flow limitation of sewage, liquid waste, or industrial waste prior to discharge into a public sewer.

Pretreatment Requirements: Any substantive or procedural requirement related to pretreatment, other than a National Pretreatment Standard, imposed on an industrial discharger.

Pretreatment Standard: Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) et. seq. of the Act which applies to industrial users. These include "categorical standards" which establish specific concentration limits for certain pollutants and total prohibitions of other pollutants as specified in 40 CFR 403 et. seq.

Private Sewer: A sewer, other than a connection, laid by a private party to serve one or more buildings which are not immediately adjacent to a public sewer, so as to connect a building to a public sewer and irrespective of whether the sewer is constructed on public or private property.

Public Sewer: Any sewer dedicated to public use and which is controlled by a public authority.

Radioactive Material: Material containing chemical elements that spontaneously change their atomic structure by emitting any particles, rays, or energy forms in excess of normal background radiation.

Regional Users: Those users of the District's sewerage system having a written agreement with the District, other than an industrial wastewater discharge permit, whereby the District guarantees treatment and disposal of their wastewater at an agreed upon price.

Sampling Well: An approved opening to a building sewer for the purpose of inspection, sampling, and/or flow measurement.

Sanitary Sewer: A conduit that conveys wastewater or industrial wastes, or a combination of both, and into which storm waters, surface and groundwaters, and unpolluted waters are not normally admitted.

Seepage Pit: A lined excavation in the ground which receives the discharge of a septic tank and designed to permit the effluent from the septic tank to seep through its bottom and side.

Septic Tank: A watertight receptacle which receives the domestic wastewater discharge of a building and is designed and constructed to separate solids from the liquid, digest organic matter through a period of detention, and allow the liquid to discharge into the soil outside of the tank through a system of open joint or perforated piping or a seepage pit.

Settleable Solids: Any solids that will settle out of a liquid in a specified interval of time as determined by appropriate procedures set forth in "Standard Methods."

Sewage: The wastewater of the community derived from domestic, agricultural, commercial, institutional, or industrial sources, together with such surface water, groundwater, and storm water as may be present.

Sewerage System: All the facilities used for collection, pumping, transportation, treatment, and final disposal of wastewater. For the purposes of these rules and regulations, this shall also include any sewers that convey wastewater from persons outside the District who are, by contract or agreement with the District, users of the District's sewerage system.

Sewer: A pipe or conduit together with appurtenances for carrying wastewater.

Sewer Main: The same as "interceptor main."

Significant Change: Plus or minus 20 percent in a user's typical discharge pattern: flow rate, peak flow rate, constituents, concentration of constituents, or characteristics.

Significant Industrial Wastewater User: All industrial users subject to catagorical pretreatment standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N, Parts 401-471; and any industrial user of the District's sewerage system that: (1) has a discharge flow of 10,000 gallons or more per average work day; (2) has in its wastewater toxic pollutants as defined pursuant to Section 307 of the Act or State statutes and rules; (3) contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or (4) is found by the District or the U.S. EPA to have significant impact, either singly or in combination with other contributing industries, on the sewerage system, the quality of sludge, quality of reclaimed water, the system's effluent quality, or air emissions generated by the system with the potential to adversely affect the treatment plant's operation or to violate any pretreatment standard or requirement.

Standard Industrial Classification (SIC): A classification pursuant to the Standard Industrial Classification Manual (latest edition) issued by the Executive Office of the President, Office of Management and Budget.

Standard Methods: The current edition of "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association. All tests shall be conducted in accordance with these procedures except where the District approves other procedures necessary for unusual wastes.

State: State of California.

Storm Water: Any flow occurring during or following any form of natural precipitation and resulting there from.

Suspended Solids: The solid matter suspended in wastewater as determined by appropriate procedures set forth in "Standard Methods."

Total Dissolved Solids (TDS): The solid matter in solution in wastewater, as determined by evaporation of a wastewater sample from which all suspended matter has been removed by filtration as determined by the appropriate procedures set forth in "Standard Methods."

Total Toxic Organics (TTO): TTO is the summation of all quantifiable values greater than 0.01 milligrams per liter (mg/L) for those toxic organics listed in Section 12-C-3 and 40 CFR 413.02 (i).

Toxic Pollutant: Any pollutant or combination of pollutants listed as toxic in regulations promulgated by the Administrator of the EPA under the provision of Section 307(a) of the Act or other Acts or designated toxic by either the State or District.

Trunk Sewer: A sewer constructed, maintained, and operated by the District that conveys wastewater to District's wastewater treatment plant and into which the interceptor, lateral, and collecting sewers discharge.

Uncontaminated Water: Any wastewater not contaminated or polluted with sewage and which is suitable for discharge into the storm water drainage system, excluding unlined natural watercourses.

United States Environmental Protection Agency (EPA): The EPA, or where appropriate, the term may also be used as a designation for the administrator or other duly authorized official of said agency.

User: Any person, facility, business, or entity who contributes, causes, or permits the contribution of industrial and/or domestic wastewater discharge to the District's sewerage system.

Waste: All materials, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from or related to any producing, manufacturing, or processing operation of whatever nature, including such materials placed within containers of whatever nature prior to, and for purposes of, disposal.

Wastewater: The liquid and water-carried waste, whether treated or untreated, which is permitted to enter the District's sewerage system.

Wastewater Treatment Plant: An assemblage of devices, structures, and equipment for treatment of wastewater.

If the application of any definition to a specific situation is without utility or creates ambiguity, reference may be made to the definitions of Uniform

Plumbing Code to resolve the issue created.

Abbreviations

* **BOD_5** Biochemical Oxygen Demand, 5 Day
* **CFR** Code of Federal Regulations
* **COD** Chemical Oxygen Demand
* **EPA** Environmental Protection Agency
* **L** Liter
* **mg** Milligrams
* **mg/L** Milligrams per Liter
* **Lb/d** Pounds per Day
* **KLb** Thousand of Pounds
* **KLb/d** Thousands of Pounds per Day
* **SS** Suspended Solids
* **O & G** Oil and Grease

12-A-2 **PURPOSE OF RULES AND REGULATIONS**

It is the purpose of these rules and regulations to guide the District administration of its sewerage system and to control and regulate wastewater discharges into the system. This chapter enables the District to comply with all applicable Federal and State laws required by the Act and the Pretreatment Regulations contained in 40 CFR 403 et. seq.

PART 12 - SECTION B - ADMINISTRATION OF SYSTEM

RULE

12-B-1 **ADMINISTRATION AND ENFORCEMENT**

The Director shall administer, implement, and enforce the provisions of these rules and regulations. Any ministerial powers granted to or duties imposed upon the Director may be delegated.

12-B-2 **ADMINISTRATIVE REGULATIONS**

The Director is authorized to promulgate regulations and standards reasonably necessary to protect the District's sewerage system, to comply with all applicable Federal and State laws required by the Act and the Pretreatment Regulations contained in 40 CFR 403 et. seq., to control and regulate the proper use thereof, to prevent overflow, and to provide for the issuance, suspension, or revocation of industrial wastewater discharge permits, provided, however, the regulations shall be consistent with the provisions of these rules and regulations and formulated to result in the uniform control of the total sewerage system within the District. The Director is authorized to promulgate, as he deems necessary, reasonable regulations relating to the rate of flow and the quality and quantity of wastewater discharges to the sewerage system of the District, which shall be consistent with and implement the purposes of these rules and regulations.

12-B-3 **INSPECTION AND SAMPLING**

12-B-3a The Director, through a program of inspection and sampling will ensure compliance with the provisions of these rules and regulations, the user's industrial wastewater discharge permit, and all applicable Federal and State laws and regulations. The program shall include, but is not limited to, the review of self-monitoring reports, inspections, sampling, flow verification, and the retention of all necessary records.

12-B-3b The Director through his staff or designee shall inspect the facilities of any person to ascertain whether the purpose of these rules and regulations is being met and all prohibitions, limitations and requirements are being complied with. Upon presentation of proper identification, persons or occupants of premises where waste or wastewater is created or discharged will allow inspectors ready access, at all reasonable times, to all parts of the premises for the purposes of inspection, sampling, records examination, evidence gathering, or in the performance of any of their other duties. In addition, the District's staff or designee may enter the property at any hour under emergency circumstances involving the District's sewerage system. The District, Approval Authority, and the EPA shall have the right to set up on the user's property such devices as are necessary to conduct sampling inspection, compliance monitoring, and/or metering operations.

12-B-3c During the inspection and compliance-monitoring activities, the inspector shall observe all reasonable security, safety, and sanitation measures. In addition, the inspector shall observe reasonable precautionary measures specified by the user.

12-B-3d Where a user has security measures in force which would require proper identification and clearance before entry into their premises, the user shall make necessary arrangements with their security guards so that upon presentation of suitable identification, personnel from the District, Approval Authority, or EPA will be permitted to enter, without delay, for the purposes of performing their specific responsibilities.

12-B-3e No persons shall interfere with, delay, resist, or refuse entrance to an authorized inspector attempting to inspect any raw material, waste or wastewater generation, conveyance, treatment, or storage facility.

12-B-3f A report listing any deficiencies and/or violations found during the inspection shall be prepared by the inspector and shall be kept on file at the District office. A copy of the report shall be provided to user.

12-B-3g If corrections are needed, the user shall provide to the District an approved compliance schedule (see Rule 12-E-5).

12-B-3h When obtaining samples, the inspector shall allow the user to collect replicate samples for separate analysis.

12-B-4 **CONNECTIONS TO MAINS TO BE MAINTAINED BY OWNER:** All connections, including the wye or saddle at the sewer main and lateral, shall be maintained at the expense of the property owner.

12-B-5 **AVAILABILITY OF FACILITIES: RESTRICTION OF DISCHARGE RATE**

12-B-5a If sewerage system capacity is not available, the Director may restrict discharge until sufficient capacity can be made available. The District shall advise any person desiring to locate a new facility of the areas where wastewater of the proposed quantity and quality can be received by available sewerage system capacity. The District may refuse immediate service to any new facility located in an area where there is insufficient capacity in the District's sewerage system to accommodate the proposed quality and quantity of the wastewater.

12-B-5b The District may restrict the rate of discharge into any sanitary sewer during the peak flow hours (8:00 a.m. to 10:00 p.m.) or at any other time when required to prevent the overloading of the sewerage system. A user so restricted shall be required either to curtail the rate of discharge or to provide approved storage or retention facilities for the wastewater. Wastewater so retained may be discharged into a sanitary sewer between the hours of 10:00 p.m. and 8:00 a.m., or during other periods prescribed by the District, at a rate of flow**,** which the sewerage system can accommodate.

12-B-6 **EXCESSIVE SEWER MAINTENANCE EXPENSE:** Any person who discharges or causes to be discharged into the District's sewerage system either directly or indirectly, any waste or wastewater which creates a stoppage, plugging, breakage, permanent reduction in the capacity of a sewer, or any other damage to the District's sewerage system shall be liable for the damage and for excessive sewerage system maintenance expense occasioned thereby. The expense and the damage shall be deemed a debt to the District and will be charged to the user by the District. Any excessive maintenance expense or any other expenses attributable thereto shall be charged to the offending user by the District.

12-B-7 **DAMAGE TO DISTRICT'S SEWERAGE SYSTEM: CREATION OF OTHER LIABILITY:** Any person who discharges or causes to be discharged into the District's sewerage system, either directly or indirectly, any prohibited waste or wastewater which causes damage to the system, causes detrimental effects upon District's wastewater treatment plant processes, or causes the violation of a discharge requirement or regulation imposed by a regulatory agency shall be liable for all damages and costs occasioned thereby, including any penalty assessed by a regulatory agency. The damages, costs, or penalty assessed shall be deemed a debt to the District and shall be charged to the user by the District.

12-B-8 **CONFIDENTIAL INFORMATION:** Information and data on a user obtained from reports, questionnaires, permit applications, permits, and monitoring programs and from inspections shall be available to the public or other governmental agency without restriction unless the user specifically requests and is able to demonstrate to the satisfaction of the District that the release of such information would divulge information, processes, or methods of production entitled to protection as confidential information of the user.

When requested by the person furnishing a report, the portions of the report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available upon written request to governmental agencies for uses related to these rules and regulations and/or the National Pollutant Discharge Elimination System; provided however, that such portions of a report shall be available for use by the State or any State agency in judicial review or enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics will not be recognized as confidential information.

12-B-9 **RECONSIDERATION:** Any person unsatisfied with an action, decision, or determination of the Director under these rules and regulations may file a written request for reconsideration. The request shall specify the action, decision, or determination complained of and shall state the reasons upon which the request for reconsideration is based. The Director will consider the request, rule thereon, and give notice of the ruling within 30 calendar days following the filing of the request with the District.

12-B-10 **APPEAL TO THE BOARD OF DIRECTORS**

12-B-10a Within ten calendar days following the date that notice of the Director's ruling on reconsideration is given, the person who initiated the request for reconsideration may appeal the ruling to the District Board of Directors.

12-B-10b An appeal shall be perfected by filing with the Clerk of the Board an original and two copies of a notice of appeal**,** which states with particularity the grounds of appeal and the specific relief requested. The Clerk shall note on the original notice the date and time of filing and shall transmit copies of the notice to the District and County Counsel.

12-B-11 **NOTICE AND HEARING FOR APPEAL**

12-B-11a A hearing on appeal shall be held by the District no more than 35 calendar days following the date of filing of the notice of appeal.

12-B-11b At the meeting of the District Board of Directors succeeding the filing of notice, the Clerk shall fix the date, place, and time of hearing on appeal. Written notice thereof shall be given by the Clerk to the appellant, to the District, and to any person of record directly affected by the appeal. The written notice of the date, place, and time shall be given at least five calendar days prior to the date of the hearing.

12-B-11c The consideration of the District Board of Directors at hearing on appeal shall be restricted to the issues raised by the grounds specified in the notice of appeal. The appellant may appear personally and by counsel, may examine opposing witnesses and may present witnesses and evidence in his own behalf.

12-B-11d The Board of Directors shall announce its decision resolving an appeal within 14 calendar days following the conclusion of public hearing on the matter. The decision of the Board shall comport with the purpose of these rules and regulations, shall do substantial justice, and shall serve the public interest, health, safety, and welfare.

12-B-12 **NOTICE OF DECISION:** Not later than 10 calendar days following the date on which the decision of the District Board of Directors is rendered, the Clerk shall mail notice of or a copy of the decision to the appellant and to the District.

12-B-13 **NOTICE: TIME LIMITS**

12-B-13a Unless otherwise provided herein, any notice required to be given by the District pursuant to these rules and regulations shall be in writing and served in person or by registered or certified mail. If served by mail, the notice shall be sent to the last address known to the District.

12-B-13b Notice by mail shall be deemed to have been given at the time of deposit, registered or certified postage prepaid, in a collection facility regularly serviced by the United States Postal Service; and notice personally served shall be effective at the time the written notice is served upon the person or served in any other manner permitted by the California Code of Civil Procedure.

12-B-13c Any time limit provided in a written notice or in any provision of these rules and regulations may be extended in writing by or at the direction of the Director.

12-B-14 **PUBLIC NOTIFICATION:** Public notification will be made at least annually in the largest daily local newspaper listing all local industries who, during the previous 12 months, were in significant non-compliance with applicable Federal pretreatment standards or other pretreatment requirements. For the purposes of this provision, a significant non-compliance would be those violations that meet one or more of the criteria as outlined in 40 CFR 403.8 (f) (2) (viii) (D).

PART 12 - SECTION C - WASTEWATER DISCHARGE INTO DISTRICT SEWERAGE SYSTEM

RULE

12-C-1 **WASTEWATER DISCHARGE POLICY**

12-C-1a Domestic and industrial wastewater originating within the District will be accepted into the District's sewerage system if there is capacity in the system and the wastewater will not:

1. Menace public health;
2. Detrimentally affect the local environment;
3. Create a nuisance, including odor and infestation;
4. Impose excessive collection, treatment, or disposal costs upon the District;
5. Significantly interfere with or impede wastewater treatment processes;
6. Interfere with or impede wastewater reclamation processes;
7. Exceed quality limits and quantity requirements established by these rules and regulations promulgated thereunder;
8. Significantly contaminate the sludge from the treatment process;
9. Cause the District to violate its NPDES permit.

12-C-1b These rules and regulations provide specific limits for prohibited constituents only where they are now reasonably well established. Other constituents will be brought under regulation when specific limits are established. In some cases, the concentration or amount of any particular constituent which will be judged to be excessive or unreasonable cannot be foreseen, but will depend on the results of technical determinations relating to the particular situation and the actions of regulatory agencies.

12-C-1c No person shall discharge any domestic or industrial wastewater to the ground, into any surface drainage conduit, storm drain or channel, or stream or other watercourse.

12-C-2 **DISTRICT DISCHARGE PROHIBITIONS:** No user shall contribute or cause to be contributed, directly or indirectly, any pollutant or wastewater which will interfere with the operation or performance of the District's sewerage system. These District prohibitions apply to all such users of the District's sewerage system whether or not the user is subject to National Categorical Pretreatment Standards or any other Federal, State, or local Pretreatment Standards or Requirements. A user may not contribute the following substances, directly or indirectly, to the District's sewerage system:

12-C-2a Any liquids, solids, or gases which by reason of their nature or quantity are or may be sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any other way to the District's sewerage system, its operation or personnel. At no time shall two successive readings on an explosion hazard meter at the point of discharge into the system (or at any point in the system) be more than five percent nor any single reading over ten percent of the Lower Explosive Limit (LEL) of the meter. Prohibited materials include but are not limited to: gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, sulfides, or any other substances which the District, the State, or EPA has notified the user is a fire hazard or a hazard to the system.

12-C-2b Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the District's sewerage system, or exceed the limitation set forth in Categorical Pretreatment Standards or Rule 12-C-3 of these rules and regulations. A toxic pollutant shall include but not be limited to any pollutant identified pursuant to Section 307(a) of the Act.

12-C-2c Any wastewater having a pH less than 5.5 or a pH higher than 10.5 or wastewater having any other corrosive or detrimental characteristics capable of causing damage or hazard to structures, equipment, and/or personnel of the District's sewerage system.

12-C-2d Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment plant such as but not limited to: grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshings, entrails, whole blood and/or components, feathers, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud, and glass grinding, or polishing wastes.

12-C-2e Rain water, storm water, groundwater, street drainage, sub-surface drainage, roof drainage, swimming pool and/or spa water, yard drainage, water from yard fountains, ponds or lawn sprays or other uncontaminated water, or water added for the purpose of diluting wastes which exceed maximum concentration limitations.

12-C-2f Non-biodegradable oils commonly called soluble oils which may form persistent water emulsions or oil, petroleum oil, or refined petroleum products beyond a concentration set forth under "Specific Pollutants Limitations," disposal of oils and fats including lard, tallow, or vegetable oil in concentrations which may be detrimental to the District's sewerage system or which violate the District's NPDES permit.

12-C-2g Any noxious or malodorous liquids, gases, or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers for maintenance and repair.

12-C-2h Any substance which may cause the District's wastewater treatment plant's effluent or any other product such as residues, sludges, or scum's to be unsuitable for reclamation and reuse or to interfere with the reclamation process. In no case shall a material be discharged which causes the District's wastewater treatment plant to be in non-compliance with sludge use or disposal criteria, guidelines, or regulations developed under Section 405 of the Act. Any criteria, guidelines, or regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, the Clean Air Act, the Toxic Substances Control Act, or State criteria applicable to the sludge management method being used.

12-C-2i Any substance in concentration sufficient to cause the District's wastewater treatment plant to violate its NPDES permit or the receiving water quality standards.

12-C-2j Any wastewater with objectionable color including, but not limited to, dye wastes and vegetable tanning solutions.

12-C-2k Any wastewater having a temperature which will inhibit biological activity in the District's wastewater treatment plant resulting in interference but in no case wastewater with a temperature at the introduction into the District's sewerage system which exceeds 104□F.

12-C-2l Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the District in compliance with applicable State or Federal regulations.

12-C-2m Any wastewater which causes a hazard to human life or creates a public nuisance.

12-C-2n Deionized or distilled water in excess of laboratory usage, single pass cooling water, blow-down or bleed water from cooling towers or other evaporation coolers exceeding 1/3 of the make-up water. (Quantities in excess of 1/3 of the make-up water may be discharged into the District's sewerage system, subject to Rule 12-B-5b, during off-peak hours if hydraulic sewer capacity is available.)

12-C-2o Any wastewater with amounts of TDS which may be detrimental to the District's sewerage system.

12-C-2p No person shall discharge or cause to be discharged into the District's sewerage system any waste or wastewater if in the opinion of the District the discharge may have an adverse or harmful affect on sewers, maintenance personnel, wastewater treatment plant personnel or equipment, treatment plant effluent quality, public or private property or may otherwise endanger ecological systems or create a public nuisance. In determining the acceptability of specific wastewater under this section, the District shall consider, in addition to the foregoing, the nature of the wastewater, the adequacy and nature of the collection, the treatment and disposal system available to accept the wastewater, and the District policy embodied in these rules and regulations. Upon such consideration, the District shall adopt new rules and regulations and upon appropriate application shall establish terms and conditions appropriate to specific users.

12-C-2q **LIMITATIONS ON WATER SOFTENERS:**

LARGE COMMERCIAL SIZED WATER SOFTENERS: The discharge of wastewater into a public sewer main resulting from the regeneration of any water softener unit or combination of units larger than 1.2 cubic feet capacity in any concentration is specifically prohibited. In this regard, all such wastewater resulting from the on-site regeneration of water softener units for which the discharge of wastewater into a public sewer main is prohibited by this subsection shall be disposed of by, and at the exclusive expense of, the involved owner or rental water softening service operator by hauling such waste to an approved disposal facility.

RESIDENTIAL SIZED WATER SOFTENERS: The discharge of wastewater into a public sewer main from the regeneration of a residential water softener smaller than 1.2 cubic feet capacity may be allowed subject to all of the following conditions:

(a) The appliance is certified to control the quantity of salt used per regeneration by a preset device and the settings of such device are limited so that a salt efficiency rating of no less than 2850 grains of hardness removed per pound of salt used in regeneration is achieved and;

(b) The installation of the appliance is accompanied by the simultaneous installation of the following softened or conditioned water conservation devices on all fixtures using softened or conditioned water, unless such devices are already in place:

1) Faucet flow restrictors

2) Ultra low flow showerhead with capacity of 2.5 gallons per minute

3) Ultra low flow toilet using 1.6 gallons per flush

4) A piping system installed so that untreated (unsoftened or unconditioned) supply water is carried to hose bibbs and sill cocks which serve water to the outside of the house.

(c) The user shall pay applicable fee and obtain a permit from the District.

12-C-3 **SPECIFIC DISCHARGE LIMITATIONS FOR INDUSTRIAL USERS**

No industrial discharger shall discharge wastewater containing pollutants in excess of:

VENTURA COUNTY WATERWORKS DISTRICT NO. 1 (MOORPARK)

Daily Maximum

Parameter	**Concentration (mg/L)**
Arsenic	1.1
Biochemical Oxygen Demand-5 day	700
Boron	1.0
Cadmium	0.15
Chloride	150
Chromium (total)	1.1
Copper	4.1
Cyanide (Total)	1.2
Lead	0.18
Mercury	0.01
Nickel	3.8
Oil and Grease	250
Phenolic Compounds	0.05
Silver	3.2
Sulfate	250
Sulfide (dissolved)	0.20
Suspended Solids (lbs./day)	813**/**500
Total Dissolved Solids	2040
Total Toxic Organics (TTO)[1]	2.17
Zinc	6.0

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The following pollutants must be analyzed as part of the District's TTO limit by approved methodologies listed in 40 CFR Part 413.02 (i):

Acenaphthene	N-nitrosodiphenylamine
Acrolein	N-nitrosodi-n-propylamine
Acrylonitrile	Pentachlorophenol
Benzene	Phenol
Benzidine	Bis (2-ethylhexyl) phthalate
Carbon tetrachloride (tetrachloromethane)	Butyl benzyl phthalate
Chlorobenzene	Di-n-butyl phthalate
1,2,4-trichlorobenzene	Di-n-octyl phthalate
Hexachlorobenzene	Diethyl phthalate
1,2-dichloroethane	Dimethyl phthalate
1,1,1-trichloroethane	1,2-benzanthracene (benzo(a)anthracene)
Hexchloroethane	Benzo(a)pyrene (3,4-benzopyrene)
1,1-dichloroethane	3,4-Benzofluoranthene (benzo(b)fluoranthene)
1,1,2-trichloroethane	11,12-benzofluoranthene (benzo(k)fluoranthene)
1,1,2,2-tetrachloroethane	Chrysene
Chloroethane	Acenaphthylene
Bis (2-chloroethyl) ether	Anthracene
2-chloroethyl vinyl ether (mixed)	1,12-benzoperylene (benzo(ghi)perylene)
2-chloronaphthalene	Fluorene
2,4,6-trichlorophenol	Phenanthrene
Parachlorometa cresol	1,2,5,6-dibenzanthracene (dibenzo(a,h)anthracene)
Chloroform (trichloromethane)	Indeno (1,2,3-cd pyrene) (2,3-o-phenylene pyrene)
2-chlorophenol	Pyrene
1,2-dichlorobenzene	Tetrachloroethylene
1,3-dichlorobenzene	Toluene
1,4-dichlorobenzene	Trichloroethylene
3,3-dichlorobenzidine	Vinyl chloride (chloroethylene)
1,1-dichloroethylene	Aldrin
1,2-trans-dichloroethylene	Dieldrin
2,4-dichlorophenol	Chlordane (technical mixture and metabolites)
1,2-dichloropropane	4,4-DDT
1,3-dichloropropylene (1,3-dichloropropene)	4,4-DDE (p,p-DDX)
2,4-dimethylphenol	4,4-DDD (p,p-TDE)
2,4-dinitrotoluene	Alpha-endosulfan
2,6-dinitrotoluene	Beta-endosulfan
1,2-diphenylhydrazine	Endosulfan sulfate
Ethylbenzene	
Fluoranthene	
4-chlorophenyl phenyl ether	
4-bromophenyl phenyl ether	

Bis (2-chlorolsopropyl) ether	Endrin
Bis (2-chloroethoxy) methane	Endrin aldehyde
Methylene chloride (dichloromethane)	Heptachlor
Methyl chloride (chloromethane)	Heptachlor epoxide
Methyl bromide (bromomethane)	(BHC-hexachorocyclohexane)
Bromoform (tribromomethane)	Alpha-BHC
Dichlorobromomethane	Beta-BHC
Chlorodibromomethane	Gamma-BHC
Hexachlorobutadiene	Delta-BHC
Hexachlorocyclopentadiene	(PCB-polychlorinated biphenyls)
Isophorone	PCB-1242 (Arochlor 1242)
Naphthalene	PCB-1254 (Arochlor 1254)
Nitrobenzene	PCB-1221 (Arochlor 1221)
2-nitrophenol	PCB-1232 (Arochlor 1232)
4-nitrophenol	PCB-1248 (Arochlor 1248)
2,4-dinitrophenol	PCB-1260 (Arochlor 1260)
4,6-dinitro-o-cresol	PCB-1016 (Arochlor 1016)
N-nitrosodimethylamine	Toxaphene
	2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)

It is the District's intent that the summation of all quantifiable pollutants greater than 0.01 mg/L from the above list of TTO pollutants be used as the daily maximum concentration of TTO.

In lieu of TTO analysis following an initial analysis to prove the absence of TTO material in the wastewater, the user may submit a certification statement pursuant to 40 CFR 413.03(a).

All analysis shall be performed in accordance with procedures established by the Administrator pursuant to section 304(h) of the Act and contained in 40 CFR Part 136 and amendments thereto.

When the District determines that the user is contributing to the District's sewerage system any of the above-enumerated substances in amounts in excess of these limitations, the District shall notify the user(s) of the violation. (See Rule 12-E-8)

VENTURA COUNTY WATERWORKS DISTRICT NO. 16 (PIRU)

Daily Maximum

Parameter	Concentration (mg/L)
Arsenic	0.32
Biochemical Oxygen Demand-5 day	450
Boron	1.5

Cadmium	0.01
Chloride	100
Chromium (total)	0.05
Copper	0.86
Lead	0.10
Nickel	1.8
Oil and Grease	65.0
Silver	1.4
Sulfate	650
Sulfide (dissolved)	0.20
Suspended Solids	380
Total Dissolved Solids	1150
Zinc	0.60

12-C-4 **LIMITATIONS ON THE USE OF GARBAGE GRINDERS**

Waste from garbage grinders shall not be discharged into the District's sewerage system except:

A. Wastes generated in preparation of food in a residence or

B. Wastes from existing commercial grinders used in the preparation of food or food products. Such grinders must shred the waste to a degree that all particles will be carried freely under normal conditions prevailing in the public sewer. Providing that the use of such grinders does not cause the user to exceed the foregoing specific discharge limitations.

C. All grinders shall be kept in proper working order and will be subject to inspection.

D. At any time the commercial property or business changes ownership, excluding residential property, any existing garbage grinders installed on the property must be removed and no new garbage grinders may be installed as a condition of continued District sewer service to the property.

12-C-5 **VARIANCE FROM SPECIFIC DISCHARGE LIMITATIONS**

12-C-5a A variance from a specific compatible pollutant limitation may be obtained from the District. Granting of such a variance shall be determined on a case by case basis. The District shall take into account the following factors when making this determination:

1. The industrial user's ability to meet the existing limitations.
2. The industrial user's wastewater discharge volume.
3. The industrial user's current wastewater constituent concentrations.
4. The impact of increased constituent concentrations on the District's sewerage system, the wastewater treatment plant's processes, effluent, and/or sludge quality.

5. The impact of increased constituent concentrations on the wastewater treatment plant's NPDES**,** WDR, and WRR permit requirements.

Any other factor the District deems applicable.

Prior to issuing such a variance, the District shall verify with RWQCB staff and EPA staff that the variance will not allow the user to exceed applicable categorical standards.

12-C-5b The District may require the user to increase its effluent monitoring frequencies when it is deemed necessary to properly enforce any variance granted under this section.

12-C-5c The District reserves the right to impose requirements which are stricter than, or are additive to, those specified in Rule 12-C-2 and 12-C-3 should the quantity or quality of the user's effluent merit unique consideration by virtue of its impact on the District's sewerage system or the public health and welfare.

12-C-5d The District reserves the right to revoke the variance at any time.

12-C-5e The District reserves the right to charge additional fees as related to the granting of a variance.

12-C-6 **DILUTION OF DISCHARGE:** For those industrial users not regulated by Federal Categorical Pretreatment standards, pollutant discharge limits enforced as concentration limits (mg/L) shall be modified when the industrial user consistently attempts to use dilution of the waste stream as a means of meeting the concentration limits. In such a case and/or at the discretion of the District, said user will be required to meet a maximum mass emission rate, based on the user's average process water usage for the past three years and the applicable pollutant concentration discharge standards.

12-C-7 **STATE REQUIREMENTS:** State requirements and limitations on users shall apply in any case where they are more stringent than Federal requirements and limitations or those in these rules and regulations.

12-C-8 **FEDERAL REQUIREMENTS:** Upon the promulgation of a Federal District Pretreatment Standard or the Categorical Pretreatment Standards for a particular industrial sub-category, the Federal Standard(s), if more stringent than limitations imposed under these rules and regulations, shall immediately supersede the less stringent limitations. The District shall notify all affected users of the new standards and the applicable reporting requirements under 40 CFR 403.12 and these rules and regulations.

PART 12 - SECTION D - PRETREATMENT REQUIREMENTS RULE

12-D-1 **REGULATORY ACTIONS:** If wastewater containing excess concentrations of a substance or a prohibited substance referred to in Rule 12-C-3 or 12-C-4 respectively of these rules and regulations is discharged or proposed to be discharged to the District's sewerage system, the Director may at his option do any of the items set forth in 12-D-1a through 12-D-1e or any combination thereof:

12-D-1a Prohibit the discharge of the wastewater;

12-D-1b Require the user to demonstrate that in-plant modifications and/or treatment would reduce or eliminate the discharge in conformance with prohibitions, limitations, and requirements of these rules and regulations;

12-D-1c Require pretreatment to reduce, eliminate or alter the nature of pollutants to a less harmful state prior to their discharge to the District's sewerage system;

12-D-1d Require the person making, causing, or allowing the discharge to pay non-compliance penalties as referenced in Rule 12-G-6; and/or

12-D-1e Implement any other remedial action as may be deemed necessary to achieving the purpose and requirements of these rules and regulations.

12-D-2 **PRETREATMENT FACILITIES AND OPERATION**

1) A wastewater pretreatment device or system may be required by the District to pretreat industrial wastewater flows prior to discharge to the District's sewerage system. Pretreatment may be necessary to restrict or prevent the discharge of certain waste constituents, to distribute more equally over a longer time period any peak discharges of industrial wastewaters, or to accomplish any pretreatment results subject to the requirements of these rules and regulations.

2) Pretreatment facilities as required by the Director, shall be maintained in good working order and operated as efficiently as possible at the expense of the user, and are subject to the requirement of these rules and regulations and all other applicable codes and laws.

12-D-2a Where pretreatment or flow equalization prior to discharge into the District's sewerage system is required, plans, specifications, and other pertinent data or information relating to such pretreatment or flow control shall first be submitted to the District for approval. Such approval shall not exempt the user of said facilities from compliance with any applicable rule or ordinance of any other governmental authority. Any alterations or additions to such pretreatment facilities shall not be made without due notice to the District for prior review and approval.

12-D-2b All Federal pretreatment standards applicable to local industry which specify quantities or concentrations of pollutants that may be discharged by a specific industrial subcategory will be enforced by the District as required in Section 309(e) and (f) et. seq. of the Act. Compliance by existing industrial users with categorical pretreatment standards shall be within one (1) year of the date the standard is promulgated unless a shorter time is specified by the EPA.

12-D-2c All domestic wastewaters including, but not limited to, those from restrooms, showers, and drinking fountains shall be kept separate from industrial wastewaters until the industrial wastewaters have passed through any required pretreatment and/or monitoring device or system.

12-D-3 **SPILL PREVENTION CONTROL AND COUNTERMEASURES:** Each industrial user shall provide protection from accidental discharge of prohibited materials, other regulated wastes or wastewater called out in these rules and regulations, or any other materials in concentration or quantities of which could be detrimental to the District's sewerage system, its operation or personnel. Each floor drain or floor sink located in an area where regulated chemicals are stored or used shall be protected in a manner approved by the District to prevent uncontrolled or accidental discharges of these regulated constituents from directly entering the District's sewerage system. Facilities to prevent accidental discharge shall be provided and maintained at the owner's and/or operator's expense. Detailed plans in the form of a Spill Prevention Control and Countermeasures Plan (showing facilities and operating procedures to provide this protection) shall be submitted to the Director for review and approval prior to construction of said facilities. Such review and approval of plans and operating procedures shall not relieve the industrial user from the responsibility of modifying said facilities as necessary to meet the other requirements of these rules and regulations.

A notice shall be permanently posted by the user in a prominent place advising employees whom to call in the event of a dangerous discharge.

Any person who causes or discovers an uncontrolled or accidental discharge of regulated wastes or wastewater into the District's sewerage system shall immediately telephone the District office in order that corrective action may be taken to protect the District's sewerage system, its operation or personnel. In addition, the person responsible for the discharge of said wastes or wastewater shall file a written report to the Director detailing the date, time, and cause of the accidental discharge, the quantity and characteristics of the discharge, and corrective action(s) taken to prevent future discharges. The report shall be filed within five (5) days of the occurrence of the uncontrolled or accidental discharge.

12-D-4 **GREASE INTERCEPTORS AND GRAVITY SEPARATING DEVICES**

12-D-4a **RESTAURANTS**: All restaurants or similar establishments shall install an approved grease interceptor**,** which is of sufficient size so as to prevent excessive discharges of grease into the District's sewerage system. The grease interceptor shall be easily accessible for inspection by the District. Exceptions to the installation of a grease interceptor may be determined on a case-by-case basis by the Director. The Director shall take into account the following items when determining exceptions: (1) size of restaurant; (2) meals served per day; (3) seating capacity; (4) dishwashing and garbage disposal facilities; and (5) any other criteria the Director deems applicable.

12-D-4b **CAR WASHES, VEHICLE SERVICE STATIONS, AND GARAGES:** Car washes and vehicle service stations or garages shall be required to install a gravity separating device designed to prevent the discharge of sand, silt, oil and grease to the District's sewerage system.

12-D-4c **LAUNDRIES AND DRY CLEANERS:** After the effective date of these rules and regulations all new laundries and dry cleaners or similar establishments shall install a gravity separating device of a size and design approved by the District. They shall also install any other pretreatment facility required by the District to ensure their compliance with all requirements and specifications of these rules and regulations. Establishments in existence prior to this date shall install an appropriate pretreatment system if in the opinion of the Director the system is warranted.

12-D-4d **EXISTING GRAVITY SEPARATING DEVICE AND GREASE INTERCEPTORS:** If the Director finds that a grease interceptor or gravity separating device installed prior to the effective date of these rules and regulations is incapable of retaining adequately the grease or sand and oil in the wastewater flow from a service station, car wash, or restaurant or similar establishment, the Director may give the proprietor a written notice requiring that an adequate interceptor or gravity separating device be installed within a reasonable time period.

12-D-4e **APPROVED DESIGNS**: The Director may maintain an information file available for public use of acceptable designs of grease interceptors and gravity separating devices. The installation of a design shown in such file or of any design meeting the size requirement set forth in these rules and regulations or any recommendation of requirements made by the Director shall not impute any liability to the District for the adequacy of the interceptor or gravity separating device under the actual conditions of use. Such installation shall not relieve the owner or proprietor of responsibility for keeping prohibited substances or substances above the limitations of these rules and regulations out of the District's sewerage system. If the interceptor, gravity separating device, or other pretreatment facility is not adequate under the conditions of use, one shall be constructed which is effective in accomplishing the intended purpose.

12-D-5 **MAINTENANCE OF GREASE INTERCEPTORS AND GRAVITY SEPARATING DEVICES:** Any grease interceptor or gravity separating device required by these rules and regulations shall be readily accessible for inspection and properly maintained to assure that the accumulations of grease**,** sand**,** and**/**or oil do not impair its efficiency or pass through with the effluent. All users required to use and maintain a grease interceptor or gravity separating device shall maintain a maintenance record. This record shall include the date, the name of the person who cleaned it, and the disposal site of the waste. The report will be reviewed by the District at each routine inspection. Persons hauling wastes and wastewater removed from these interceptors or gravity separating devices shall be registered to do so by the proper permitting agency. An interceptor or gravity separating device shall not be considered properly maintained if material accumulations total more than 25 percent of the operating fluid capacity. The District will endeavor to inspect all grease interceptors and gravity**-**separating device at least annually. If it is found that it is improperly maintained or adequate records are not being kept, a warning will be issued to the owner and/or user of the property. If on subsequent inspections it is found that one of the above conditions continues to exist, a fine shall be levied against the owner and/or user of the property. (See Rule 12-G-6).

PART 12 - SECTION E - INDUSTRIAL DISCHARGE PERMIT SYSTEM RULE

12-E-1 **CONNECTION TO SEWER LINES:** No person shall connect and/or discharge into the District's sewerage system without first obtaining a "Will Serve" letter issued by the Director or without first paying all applicable fees.

12-E-2 **INDUSTRIAL WASTEWATER DISCHARGE PERMITS:** All persons proposing to connect and/or discharge industrial wastewater into any part of the District's sewerage system must first apply for and obtain an industrial wastewater discharge permit. The District may deny or condition new**,** existing, or increased contributions of pollutants or changes in the nature of pollutants from industrial users based on industry's violations of applicable pretreatment standards or the limitations imposed by these rules and regulations or where such contributions could cause a wastewater treatment plant NPDES permit violation. In addition, each permit upon renewal or each application for a permit shall be accompanied by the fees as required by these rules and regulations.

12-E-3 **PERMIT APPLICATION:** The user seeking an industrial wastewater discharge permit shall complete an application provided by the District and file it with the Director accompanied by the required fee. In support of this application, the applicant shall supply the following information:

A. Name and address of applicant and Standard Industrial Classification (S.I.C.) number of the operations to be carried out by user.

B. The location of the discharge, if known.

C. Time and duration of discharge, if known.

D. Estimated average and peak flow rates including any expected daily, monthly, and seasonal variations.

E. Major constituents and characteristics including but not limited to those regulated by these rules and regulations and any applicable categorical standards as determined by a certified analytical laboratory.

F. Site plans, floor plans, plumbing plans and details to show all public sewers and appurtenances by size, location, and elevation.

G. Description of toxic or hazardous materials stored/or used on the premises which are or could be discharged to the District's sewerage system.

H. Each product by type and production process.

I. Identification of applicable regulating pretreatment standards.

J. Number of employees and normal hours of operation of the facility.

K. Any other information which may be deemed necessary by the District to evaluate the permit application.

12-E-4 **PERMIT CONDITIONS:** The industrial wastewater discharge permit shall constitute the performance specification to which each industrial user must conform in order to maintain authorization to use the District's sewerage system. Industrial wastewater discharge permits shall be expressly subject to all provisions of these rules and regulations, Federal Pretreatment Standards and Regulations pursuant to Section 307 et. seq. of the Act, and all other regulations, user charges, and fees established by the District. Permit conditions shall be uniformly enforced in accordance with these rules and regulations and applicable State and Federal regulations. Permit conditions may include but are not limited to the following:

12-E-4a Limits on the average and/or maximum wastewater constituent concentrations and other relevant qualitative characteristics. (See Section C.)

12-E-4b Mass emission discharge rates or any more stringent Federal Pretreatment Standards and user's average daily wastewater discharge for the past three years. When not available, data for a year or that which is mutually acceptable to the user and the District will be used.

12-E-4c Limits on rate and time of discharge or requirements for flow regulations and equalization. (See Rule 12-B-5).

12-E-4d Requirements for installation of inspection and sampling facilities and specifications for monitoring and reporting programs.

12-E-4e Requirements for maintaining and submitting technical self-monitoring reports and plant records relating to industrial wastewater discharges and related activities.

12-E-4f Compliance schedules. (See Rule 12-E-5.)

12-E-4g Applicable Federal Pretreatment Standards which are more stringent than local limitations. (See Section C and D.)

12-E-4h Other conditions to ensure compliance with these rules and regulations.

12-E-5 **COMPLIANCE SCHEDULES:** A compliance schedule required as a result of an industrial user's non-compliance with applicable Federal and/or local Pretreatment Standards shall be based on the following:

12-E-5a A list of the expected increments of progress in the form of dates for the commencement and completion of major events leading to consistent compliance with applicable Federal and/or local Pretreatment Standards.

12-E-5b No increment referred to above shall exceed three months.

12-E-5c Not later than 14 days following each date in the schedule and the final date for compliance, the industrial user shall submit a progress report to the District including as a minimum, whether or not the user complied with the latest increment of progress and, if not, the date on which the user expects to comply with this increment of progress, the reason for the delay, and the steps taken by the user to return to the schedule established.

12-E-6 **DURATION AND REVISION OF PERMITS**

12-E-6a Permits will be issued for a period of five years or less. The terms and conditions of the permit may be subject to modification as limitations or requirements in Rule 12-C-1 and 12-C-2 are modified or as a result of pretreatment standards and/or requirements promulgated pursuant to Section 307 et. seq. of the Act. The user will be informed of the proposed changes in his permit 30 days prior to the effective date of the change. Any new conditions in the permit will include a reasonable compliance schedule to be proposed by the industrial user and approved by the District. Such compliance schedule will allow the user time to modify the industrial process sufficiently to comply with the new permit changes.

12-E-6b Permits issued to each industrial user shall be based on the user's typical discharge rate, peak discharge rate, and wastewater constituents and characteristics as described in the user's permit application or through the District's knowledge of the history of the user's discharge. The user is required to promptly notify the Director of any significant changes in the user's operation that may affect his discharge rate, peak flow rate, wastewater constituents or characteristics.

12-E-7 **TRANSFER OF A PERMIT:** Industrial wastewater discharge permits are issued to a specific user for a specific operation. A permit shall not be reassigned or transferred or sold to a new owner, new user, different premises or a new or changed operation.

12-E-8 **VIOLATION OF THE PERMIT:** When the District determines that a specific condition and/or discharge is in violation of any provision of these rules and regulations or in violation of any permit condition or limitation imposed, the industrial user will be issued a Notice of Violation (See Rule 12-H-4a) by the Director which will specify the violation or designate the deficiencies and will specify a period of time within which the discharge shall be brought into conformity with all requirements. The period of time specified by the District will be reasonably related to the character of the violation, to the quality and quantity of the discharge, and to the risk imposed upon the District's sewerage system or threatened to the public health, safety, and welfare. The user shall submit in writing, to the District, the following:

A. An explanation as to the cause of violation.

B. A compliance schedule which outlines the methods undertaken to remedy the violation and to assure a repetition of the violation does not occur.

12-E-9 **SUSPENSION OF PERMIT**

12-E-9a The District may suspend a permit if the suspension is necessary to terminate a discharge which is in violation of any provision of these rules and regulations provided that a Notice of Violation has been served on the user and the time designated therein to correct the violation has transpired.

12-E-9b The District may suspend a permit, upon informal notice only, if suspension is necessary to terminate a discharge which presents an imminent hazard to the local environment, to the District's sewerage system or to District personnel, or the termination of which is reasonably required to preserve the public health, safety, or welfare. (See Rule 12-H-4d.)

12-E-9c Any person notified of the suspension of the industrial wastewater discharge permit shall immediately stop or eliminate the discharge of the specified wastewater or other material into the District's sewerage system. In the event of a failure of the person to comply voluntarily with the suspension order, the District will take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the District's sewerage system or endangerment of any individuals.

12-E-9d The District will reinstate a permit suspended hereunder upon proof of the user's compliance with the Notice of Violation and with the requirements of these rules and regulations. A detailed written statement submitted by the user describing the causes of the harmful contribution and the measures taken to prevent any future occurrence shall be submitted to the District within 30 days of the date of occurrence.

12-E-10 **REVOCATION OF PERMIT:** Any industrial user who violates the conditions of his permit or provisions of these rules and regulations or applicable Federal and State regulations is subject to having his permit revoked. Violations subjecting a user to possible revocation of the permit include, but are not limited to, the following:

12-E-10a Failure of a user to factually report their wastewater constituents or concentrations or to comply with their self-monitoring requirements;

12-E-10b Failure of the user to report significant changes in operations or wastewater constituents and characteristics;

12-E-10c Refusal of reasonable access to the user's premises for the purpose of inspection or monitoring;

12-E-10d Violation of conditions of the user's permit; or

12-E-10e Failure of the user to comply with the terms of his compliance schedule.

PART 12 - SECTION F - INDUSTRIAL WASTEWATER MONITORING AND REPORTING

RULE

12-F-1 **RECORDS AND MONITORING**

12-F-1a All industrial users discharging or proposing to discharge industrial wastewater to the District's sewerage system shall maintain records of its raw materials and usage, processes, effluent flows, pollutant concentrations, and related factors. These records shall be necessary to demonstrate compliance with the requirements of these rules and regulations and any applicable Federal or State pretreatment standards. Any industrial user subject to the reporting requirements of these rules and regulations shall be required to retain for a minimum of three years any records of monitoring activities and results. This period of retention shall be extended during the course of any unresolved litigation regarding the industrial user of POTW or when requested by the Director or the approval authority.

12-F-1b All such records relating to compliance with pretreatment standards shall be made available for inspection and copying at the company facility or other location to officials of the EPA, Approval Authority, and the District.

12-F-1c The owner and/or occupant of any premises or facility discharging industrial wastewater into the District's sewerage system shall install at his own expense suitable monitoring equipment as may be required by these rules and regulations to facilitate the accurate observation, sampling, and measurement of regulated constituents. Such equipment shall be maintained in proper working order and kept safe and accessible at all times.

12-F-1d If the District requires or the owner or operator chooses to install a flow meter, the flow meter must be calibrated every six months, and a photocopy of the calibration must be sent to the District. The calibration must be performed by one of the following: 1) the manufacturer; or 2) a qualified Civil Engineer. Flow charts are to be held by the user for a minimum of three years and made available to the District upon request. Totalizer readings shall be recorded daily, and every month a report shall be submitted to the District showing total daily flows and total monthly flow.

12-F-1e All industrial users required to periodically sample and analyze their wastewater shall use sampling methods and sampling locations approved by the District. For each sample collected and analyzed the user shall maintain a record of:

1. The date, exact place, method, and time of sampling and the names of the person or persons taking samples.
2. The dates when analyses were performed.
3. Who performed the analysis.
4. The analytical techniques/methods used.
5. The results of such analyses.

12-F-1f Whether constructed on public or private property, the approved sampling point shall be constructed in accordance with the District's requirements. An industry may request approval from the District for sampling stations installed prior to the effective date of these rules and regulations, which meet the design and accessibility requirements for sampling purposes.

12-F-2 **SAMPLING STATION**

12-F-2a Sampling station(s) of a design approved by the District shall be furnished and installed by designated industrial user(s) to facilitate inspection, sampling, and flow measurements. The sampling stations(s) shall be located in an accessible location and the location shall be approved by the District.

12-F-2b Unrestricted access to the sampling station(s) shall be provided to authorized personnel of the District at all times.

12-F-3 **SAMPLING AND ANALYSIS**

12-F-3a Compliance determinations will be made by the District with respect to Rule 12-C-2 and 12-C-3 on the basis of either grab or composite sampling of the wastewater. Grab samples may be taken as deemed necessary by the District to meet the needs of the specific circumstances. If routine grab or composite sampling reveals non-compliance by the user with the mass loading rates or conditions specified in the user's permit, then the user shall pay to the District fees as specified in Section G and may be assessed all other costs incurred during the subsequent evaluation period for sampling and analysis, including labor, equipment, materials, and overhead.

12-F-3b All analyses will be performed in accordance with procedures established pursuant to Section 304(g) et. seq., of the Act and contained in 40 CFR 136 and amendments thereto.

12-F-3c Sampling of industrial wastewater and wastes for the purpose of compliance determination will be conducted at intervals specified by the District. It is the intention of the District to conduct compliance sampling for all industrial users at least once per year, for the constituents set forth in the user's industrial wastewater discharge permit.

12-F-4 **SELF-MONITORING REPORTS**

12-F-4a All industrial users required to do so by the District shall monitor and report on the quantity and quality of their industrial wastewater discharge. The items to be included in the report and the frequency with which this report shall be submitted to the District will be detailed in the user's industrial wastewater discharge permit. The frequency of self-monitoring and reporting for those industrial dischargers not regulated by Federal pretreatment regulations will be based on the following factors:

1. The effect of the wastewater on the District's sewerage system.
2. The degree of toxic material which may pass through the treatment plant.
3. The quantity, nature, and type of the industrial wastewater discharge.
4. The extent to which the discharge could contribute to violation of the District's NPDES permit.

12-F-4b All reports submitted by the industrial user shall be required to be signed by an authorized representative of the user.

12-F-4c These reports shall be subject to the provision of 18 U.S.C. Section 1001 relating to false statements and fraud and the provisions of Section 309(c)(2) of the Act governing false statements.

12-F-4d Each self-monitoring report and all reports as required within this Division, shall contain the following completed declaration: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted."

"Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Executed on the day of at .

(Signature)
(Typed Name)
(Title)

12-F-4e The following reports will be required pursuant to promulgation of Section 307 et. seq. of the Act and the establishment of any pretreatment standards and regulations:

1. One hundred and eighty (180) days after the promulgation of pretreatment standards all existing industries subject to such standards shall be required to submit to the District a report containing:

a. The name and address of the user.

b. The location of the discharge.

c. The nature, average production rate, and standard industrial classification of the operations carried out by such user.

d. The average and maximum flow of the discharge in million gallons per day.

e. The nature and concentration of pollutants in the discharge from each regulated process and identification of applicable pretreatment standards. The concentration shall be reported as a maximum or average as provided for in applicable pretreatment standards.

f. A statement reviewed by an authorized representative of the industrial user and certified by a qualified professional indicating whether the pretreatment standards are being met on a consistent basis and, if not, whether operation and maintenance improvements or additional pretreatment is required for compliance.

g. If additional pretreatment or operation and maintenance improvements are required, the shortest schedule by which such operation or maintenance improvements or additional pretreatment will be completed. The completion date submitted shall not be later than the compliance date established in the applicable pretreatment standard.

2. New sources and existing sources that become industrial users subsequent to the promulgation of applicable categorical standards shall be required to submit to the District the information listed in (a) through (e) above at least 90 days prior to commencement of discharge.

Within 30 days following the final date of compliance with a pretreatment standard, the industrial user subject to pretreatment standards and requirements shall submit a report to the District indicating the nature and concentration of all pollutants regulated by the pretreatment standards, including the average and maximum daily flow for the industrial process units. The report shall also state whether pretreatment standards or requirements are being met and, if not, the operation and maintenance and/or pretreatment that will be necessary to bring the discharge into compliance.

3. After the final compliance report for a pretreatment standard, the object industrial user shall periodically submit a report to the District indicating the nature and concentration of pollutants in the effluent which are limited by the pretreatment standard. These reports shall be submitted in June and December unless required more frequently by the District.

PART 12 - SECTION G - FEES

RULE

12-G-1 **AUTHORIZED FEES**

To provide for the recovery of District costs associated with the discharge of industrial wastewater to the District's sewerage facilities and for the enforcement of the provisions of these rules and regulations, the District will impose the following Fees**:**

(1)	Permit Application Fees (Industrial)	$ 600.00
(2)	Plan Check Fees	$ 60.00
(3)	Certificate of Occupancy Fees	$ 50.00
(4)	Review Meeting**/**Appeal Fees	$ 300.00
(5)	Notice of Violation Fees	$ 145.00
(6)	Late and/or Unsigned Report Fees	$ 100.00
(7)	Failure to Permit Inspection Fees	$ 80.00
(8)	Informal Enforcement Response Fees	$ 60.00

The District may amend its fee amounts at any time by subsequent resolution of the District Board of Directors.

12-G-2 **PAYMENT OF CHARGES AND DELINQUENCIES:** All fees are due and payable upon receipt of notice thereof. All such charges shall become delinquent 15 days after mailing or delivering notice thereof to the mailing address of the person subject to charges.

All delinquent fees shall be deemed a violation of these rules and regulations, and each day any such charge remains delinquent shall be deemed a separate violation.

12-G-3 **RECORD OF FEES:** The District will keep a record of all fees collected under these rules and regulations. The record will reflect the names and addresses of the persons on whose account the fees were paid, the date, the amount of payment, and the purpose for which fees were paid or the premises affected.

12-G-4 **ESTIMATED QUANTITIES AND VALUES:** Unless otherwise provided herein, whenever the fees required by these rules and regulations are based on estimated values or estimated quantities, the District will make such determination in accordance with established estimating practices and as required by state law.

12-G-5 **FEES FOR UNUSUAL OR EXCESSIVE STRENGTH WASTEWATERS:** An additional fee for wastewater of such quality or character as to impose upon the District unusual operation and maintenance or capital cost whether or not related to flow volume, BOD, SS, or peak flow rates may be set by the District and shall be paid by the user. These fees shall be reasonably calculated to defray cost attributable to such wastewater.

12-G-6 **COLLECTION OF FEES:** The amount of any fee imposed by the provisions of these rules and regulations shall be deemed a debt owed to the District. An action in the name of the District may be commenced in any court of competent jurisdiction for the amount of any delinquent fees, and if legal action is brought by the District or its assignee to enforce collection of any amount charged and due under these rules and regulations, any judgment rendered in favor of the District shall include costs of suit incurred by the District or its assignee, including a reasonable attorney's fee.

PART 12 -SECTION H - ENFORCEMENT RESPONSES

RULE

12-H-1 In accordance with 40 CFR 403.8(f)(5), the District has developed this Enforcement Response Plan (ERP). District Rules and Regulations for Sewage Disposal (Rules) authorize the Director to regulate and enforce Publicly Owned Treatment Works (POTW) user compliance. As established in Section 12-B-1 of the Rules, the Director has delegated to a designee those ministerial powers granted to or imposed upon the Director in the Rules. This document identifies the District's staff roles and responsibilities; methods for identifying new Industrial Users (IU); and procedures used to identify and respond to instances of IU non-compliance. For the purposes of this ERP, an IU is any sanitary sewer user so defined by the Rules, Part 12, Section A, Rule 12-A-1. The ERP is intended for the use of District personnel to address enforcement actions concerning pretreatment violations. It is not intended to create any rights or obligations and may be deviated from when deemed necessary by the Director or his designee.

The ERP was developed using guidance from the Environmental Protection Agency (EPA) Pretreatment Compliance Monitoring and Enforcement Guidance (July 1986); Guidance for Developing Control Authority Enforcement Response Plans (September 1989) and is intended to serve three main purposes:

- To provide guidance in enforcement responses that may be appropriate in relation to the nature and severity of the violation and the overall degree of non-compliance
- To establish guidelines that encourage fair and uniform application of enforcement responses to comparable levels and types of violations

As a mechanism to review the appropriateness of response

12-H-2 **DECLARATION OF PUBLIC NUISANCE:** Discharges of wastewater, in any manner, in violation of the provisions of these rules and regulations or of any order issued by the District as authorized by these rules and regulations are hereby declared a public nuisance. The District has the authority to take necessary measures (informal notice may suffice) to immediately and effectively correct or abate a public nuisance and may be enjoined by order or process of a court of competent jurisdiction.

12-H-3 **ENFORCEMENT PROVISIONS:** The District can require compliance with permit conditions or limitations, or any provision of these rules and regulations by issuing administrative orders that shall be enforceable in a court or by direct court action. (See Rule 1-B-1).

12-H-4 ADMINISTRATIVE ORDERS

12-H-4a **NOTICE OF VIOLATION**: When the District finds that a discharge to the District's sewerage system has taken place in violation of the prohibitions, limitations, requirements, or provisions of these rules and regulations or the conditions of an industrial wastewater discharge permit, the District will issue a Notice of Violation to the user. A Notice of Violation is official recognition of violation of the prohibitions, limitations, requirements, and/or provisions of these rules and regulations or conditions of an industrial wastewater discharge permit. (See Rule 12-E-8).

This is a formal enforcement response to a permit or Rule violation. The Notice of Violation:

- Notifies the user of the violation or defines the deficiencies
- Specifies the time period within which the correction must be made
- Specifies when the user must respond in writing as to the cause of the violation
- Requires the user to submit a compliance schedule outlining the methods to be undertaken to remedy the violation and assure long-term compliance and the dates of completing major events leading to full compliance
- The user is typically asked to respond to the Notice of Violation within 10 days. The user is also required to submit a progress report to the District within 14 days following each date specified in the schedule and the final compliance date.

12-H-4b **CEASE AND DESIST ORDERS**: When the District finds that after the issuance of a Notice of Violation a discharge of wastewater has taken place in violation of the prohibitions, limitations, requirements, or provisions of these rules and regulations or the conditions of an industrial wastewater discharge permit or upon a plan approval related thereto, the District may issue a Cease and Desist order and direct that those persons:

1. Comply immediately, or
2. Comply in accordance with a compliance schedule as set forth by the District. (See Rule 12-E-5 and 12-E-8).

A Cease and Desist Order (Order) is issued after a Notice of Violation and continued user violation. The Order will direct a user to immediately comply in accordance with a compliance schedule. The District may issue the Order to require the user to make major modifications or install completely new facilities. The user may be required to install source control, spill containment, wastewater collection or wastewater treatment system, or implement a spill control or TOMP. Using a Compliance Schedule (Section 12-E-5 of the Rules), the Order specifies dates for completing major events leading to consistent compliance with the permit and/or Rules. The Order may also specify payment of penalties and assessment of future non-compliance charges if the user does not comply with the conditions set forth in the Order.

12-H-4c **TERMINATION OF SERVICE ORDER**: The District may revoke any industrial user's industrial wastewater discharge permit or terminate wastewater or water service to any premise if the user is in violation of any provisions of these rules and regulations, or if the user presents, or may present an endangerment to the environment or the District's sewerage system. Twenty-four hours prior to taking any action to terminate wastewater or water service, the violation user will receive written notification of the proposed termination. All costs for terminating service and for reinstating service shall be paid by the user before any reconnection is made.

Termination of wastewater service is the revocation of a user's privilege to discharge industrial wastewater into the District's wastewater system. Termination may be accomplished by physical severance of the industry's connection to the wastewater system or ordering the user to plug their industrial sewer. Termination of wastewater service can be considered an appropriate response to industries that have not responded adequately to previous enforcement remedies. A notice to the user will be issued 24 hours in advance of taking any District actions to terminate water or wastewater service. The user can then halt production in time to avoid back flows, spills, and other harm to the user's facility, as well as time to look for alternative means of wastewater disposal. All termination and reinstatement costs will be paid by the user.

12-H-4d **EMERGENCY NON-COMPLIANCE AUTHORITY:** The District has the authority to take necessary measures (informal notice may suffice) to immediately and effectively halt or prevent any discharge of materials to the District's sewerage system which reasonably appears to present an imminent danger to the District's sewerage system, District personnel, or the health, safety, and/or welfare of the public.

The Order will be utilized in situations where the discharge could cause interference or pass-through at the treatment plant, or otherwise cause an emergency situation in either the treatment plant or collection system. The District can order immediate cessation of any discharge to the collection system, regardless of a user's compliance status. If the user fails to comply with the order, the District may take independent action to halt the discharge, such as terminating water service or blocking the user's connection point.

12-H-5 **JUDICIAL ACTION**

12-H-5a **INJUNCTION:** Whenever a discharge of wastewater is in violation of the provisions of these rules and regulations, the District may petition the Superior Court for the issuance of a temporary restraining order or a preliminary injunction or a permanent injunction or any or all of these, as may be appropriate to restrict the continuance of such discharge. Furthermore, the District may petition the Superior Court for the issuance of a temporary restraining order or a preliminary injunction or a permanent injunction or any or all of these, as may be appropriate, for non-discharge violations, or such other noncompliance with the rules and regulations set forth herein.

The petition to the Superior Court may seek a court order that will direct parties to follow an established procedure and/or to refrain from specific actions. A temporary restraining order or preliminary injunction may be sought if the delays involved in filing a suit would result in irreparable harm. A permanent injunction may be sought for an egregious and continuing violation. A Cease and Desist Order may be used in place of injunctive relief.

12-H-6 **SUPPLEMENTAL ENFORCEMENT RESPONS**ES

12-H-6a **PUBLIC NOTICE:** As a requirement of 40 CFR 403.8(f)(2)(viii), an annual publication of a list of users which were significantly violating applicable pretreatment standards or requirements during the calendar year will be employed. Publication of the list is scheduled on or about January 30th of each year and is intended to deter users from committing pretreatment violations. Publishing the list also satisfies the public's right-to-know of violations affecting the immediate environment and causing additional expenditures of public funds to operate and maintain the wastewater collection and treatment system.

12-H-6b **INCREASED MONITORING AND REPORTING.** When a user demonstrates a history of non-compliance, they may be subjected to increased surveillance (i.e., sampling and inspections) by the District. Additional self-monitoring and reporting may also be required of the user until the problem is corrected and consistent compliance is demonstrated. The increased monitoring shall continue for a specified period of time or until continued compliance has been achieved.

12-H-7 **UNLAWFUL DISCHARGES: DAMAGES AND LIABILITY:** If the District finds that any person has discharged any wastes or wastewater into the District's sewerage system in violation of the provisions of these rules and regulations, or of the user's industrial wastewater discharge permit, and that such discharge caused increased operating costs or diminished the efficiency of the treatment process, the District will estimate the value of the damage and add that sum to that person's next regular sewer bill. The items the District will consider include but are not limited to:

A. The cost of repairs to the District's sewerage system.

B. The depreciation of the system due to damages not repaired.

C. The extra operating costs.

D. The value of the loss of wastewater treatment plant operating efficiency based upon the District's normal operating costs and the extent to which the performance of the plant was reduced below normal as a result of such improper discharge to the sewer.

All charges made pursuant to this subsection are due and payable upon receipt of notice thereof. All such charges shall become delinquent 15 days after mailing notice thereof to the mailing address of the user subject to such charges. This remedy is non-exclusive and may be asserted in addition to any other remedy available to the District under law.

12-H-8 **FALSIFYING INFORMATION:** No person shall knowingly make any false statements, representation, or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to these rules and regulations or industrial wastewater discharge permit. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under these rules and regulations, shall upon conviction, be punished by a fine of not more than $1,000 or by imprisonment for not more than six months or by both.

12-H-9 **SEVERAILITY:** If any provision or clause of these rules and regulations or the application thereof to any person or circumstance is held to be unconstitutional or to be otherwise invalid by a final judgment of any court or competent jurisdiction, such invalidity shall not affect other provisions or application, and to this end, the provisions of these rules and regulations are declared to be severable.

APPENDIX A

Change Rule Number	Eff. Date	Number	Reference
1	03-12-68	1-H-2a	Ag Rate
2	11-04-68		
3	02-28-69		
4	07-01-69		
5	08-11-70		
6	07-28-70		
7	08-11-70		
8	10-27-70		Part 8 Sewage O&M
9	03-01-71		
10	04-01-71	1-H-31	Cross Connection
11	05-01-71	1-A-6a	Definition
11	05-01-71	1-E-1	Surplus Water
11	05-01-71	1-H-13	Construction Charges
11	05-01-71	1-H-13	Construction Charges
11	05-01-71	1-H-18	Substitution of Meter
11	05-01-71	1-H-25c	Estimated Bill
11	05-01-71	1-H-26e	Fees
11	05-01-71	1-I-1	Capital Imp. Charges
11	05-01-71	1-I-2	Ag Capital Imp. Charges
11	05-01-71	1-I-3	Surplus Water
12	05-17-71		
13	05-02-72	7-B-1	Definition
13	05-02-72	7-B-1	Definition
13	05-02-72	7-C-5.1	Sewer Connection Fees
13	05-02-72	7-C-5.3	Sewer Connection Fees
13	05-02-72	7-C-13	Sewer Requirements
13	05-02-72	7-C-15	Construction Requirements
13	05-02-72	7-C-16	Separate Sewers
13	05-02-72	7-C-16.1	Condominium Sewers
13	05-02-72	7-C-17	Sewer Permit
13	05-02-72	7-C-19	Incomplete Construction
13	05-02-72	7-C-26	Permit Classes
13	05-02-72	7-E-3	Original Connections
13	05-02-72	7-E-4	Sewer Responsibility
14	08-29-72	1-I-8	Off-Site Const.
15	01-01-73	1-C-1	Water Supply
16	02-02-73		
17	03-27-73	7-C-6	Sewer Service Charge
18	06-14-73	7-C-6	Sewer Service Charge

19	07-01-73	Part 9	Standard Criteria
20	09-11-73	7-C-8.1	Plan Check Fees
20	09-11-73	7-C-8.2.1	Plan Check Fees
21	11-13-73		
22	07-01-74	2-B-4	Construction Water
22	07-01-74	2-B-6	Fire Sprinkler Service
22	07-01-74	3-A-1	Interconnection Charges
23a	01-01-75	1-A-11	Definition
23a	01-01-75	1-A-12	Definition
23a	01-01-75	7-B-1	Definition
23b	02-18-75	Part 10	Piru Sewage System
23c	02-20-75		
24	04-29-75		
25	06-06-76	9-B-14.3	Approval & Acceptance of Plans
25	06-06-76	9-B-16.3	Approval & Acceptance of Plans
25	06-06-76	10-E-9	Sewer Construction Security
26	09-01-76	3-A-9	Capital Improvement Charge
27	12-01-76	2-A-2	Service Charges
28	04-01-77	8-C-3	Sewer Service Charge
29	06-14-77	7-C-6	Sewer Service Charge
30	06-21-77	2-A-4, 5, 6	Service Charge & Rates
31	06-28-77	8-C-2	Sewer Connection Fees
32	10-25-77	9-B-5	Water Improvement Plans
33	08-01-78	2-A-2	Water Rates
33	08-01-78	8-C-3.1	Sewer Service Charge
34	08-08-78	1-A-32a	District Divisions
34	08-08-78	2-A-1b	Charges
34	08-08-78	2-B-5	Construction Service Charge
34	08-08-78	2-B-5	Installation Fees
34	08-08-78	2-B-6	Service Charges
34	08-08-78	3-A-4	Service Charges
34	08-08-78	3-A-5	Construction Charges
34	08-08-78	3-A-6	Service Charges
34	08-08-78	3-A-9	Service Charges
35	03-20-79	3-A-9	Capital Improvement Charges
36	07-01-80	8-C-3.1	Sewer Service Charge
37	09-09-80	3-A-1	Service Charges
37	09-09-80	3-A-2	Installation Charges
38	09-09-80		
39	01-22-81		
40	05-26-81	3-A-10	Fire Flow
41	07-22-81		
42	08-01-81	2-A-8	Water Rates
43	07-07-81	10-C-7	Service Charges
44	06-08-82	9-B-14.1	Approval & Acceptance of Plans

45	06-29-82	2-A-9	Water Rates
46	08-31-82	7-C-6.1	Sewer Rates
47	09-28-82	2-A-8	Service Charge
48	01-11-83	2-A-1c	Deposit
49	06-29-82	10-C-7.1	Sewer Service Charge
50	12-06-83	2-B-4	Construction Water
50	12-06-83	7-C-6.1	Sewer Service Charge
51	07-31-84	2-A-9	Ag Rate
52	08-28-84	2-B-8	Misc. Charges
53	08-28-84	2-A-2	Service Charges
54	11-20-84	2-A-8	Service Charges
55	11-27-84	2-A-8	Service Charges
55	11-27-84	2-B-3	Surplus Water
56	05-06-86	7-C-5	Sewer Connection Fees
56	05-06-86	7-C-5.4	Sewer Connection Fees
57	09-30-86	1-H-2a	Ag Water
57	09-30-86	1-H-2a	Ag Water Exemption
58	04-14-87	3-A-9	Capital Improvement Charges
59	05-05-87	3-A-9	Capital Improvement Charges
60	08-29-89	2-A-2	Service Charges
60	08-29-89	2-A-8	Service Charges
60	08-29-89	2-A-9	Service Charges
61	06-05-90	Part 12	Rules and Regulations for Sewage Disposal (1 & 16)
62	6-05-90	Section L	Water Conservation
63	11-13-90	1-H-26g	Service Charges
63	11-13-90	2-B-8	Miscellaneous Charges
63	11-13-90	2-B-8a	Personalized Charges
63	11-13-90	2-B-8b	Personalized Charges
63	11-13-90	2-B-8d	Personalized Charges
63	11-13-90	2-B-8e	Personalized Charges
63	11-13-90	2-B-8f	Personalized Charges
63	11-13-90	2-B-8g	Personalized Charges
63	11-13-90	7-C-5.2	Sewer Connection Fees
63	11-13-90	7-C-5.3	Sewer Connection Fees
63	11-13-90	7-C-6	Sewer Service Charges
64	03-12-91	1-L-4a	Water Conservation
64	03-12-91	1-L-4a	Water Conservation
64	03-12-91	1-L-4a	Water Conservation
64	03-12-91	2-A-2	Ag Rates
64	03-12-91	2-A-2	Ag Customers
64	03-12-91	2-A-8	Ag Customers
64	03-12-91	2-A-9	Ag Customers
65	04-09-91	1-L-4a	Water Conservation
65	04-09-91	2-A-2	Rates
65	04-09-91	2-A-2	Ag Rates

65	04-09-91	2-A-8	Rates
65	04-09-91	2-A-9	Service Charges
65	04-09-91	2-A-9	Rates
65	04-09-91	2-A-9	Ag Rates
66	04-30-91	2-A-2	IIP (1) Tiers
66	04-30-91	2-A-2	IIP (2) Tiers
66	04-30-91	2-A-2	IIP (3) Tiers
66	04-30-91	2-A-8	IIP (1) Tiers
66	04-30-91	2-A-8	IIP (2) Tiers
66	04-30-91	2-A-8	IIP (3) Tiers
66	04-30-91	2-A-9	IIP (1) Tiers
66	04-30-91	2-A-9	IIP (2) Tiers
66	04-30-91	2-A-9	IIP (3) Tiers
67	07-30-91	2-A-1c	Deposit from Applicants, WWD 1
67	07-30-91	2-A-1c	Deposit from Applicants, WWD 17
67	07-30-91	2-A-1c	Deposit from Applicants, WWD 19
67	07-30-91	2-A-2	Water Rates, WWD 1
67	07-30-91	2-A-8	Water Rates, WWD 17
67	07-30-91	2-A-9	Water Rates, WWD 19
67	07-30-91	2-B-8	Miscellaneous Charges, WWD 1
67	07-30-91	2-B-8c	Miscellaneous Charges, WWD 1
67	07-30-91	2-B-8c	Miscellaneous Charges, WWD 17
67	07-30-91	2-B-8c	Miscellaneous Charges, WWD 19
67	07-30-91	7-C-6	Sewer Service Charges, WWD 1
68 19	11-26-91	Part 5	Oversizing & Reimbursement Agreements, WWD 1, 16, 17,
69	06-30-92	10-C-7	Sewer Service Charges
70	08-11-92	2-A-2b	Commodity Rates, WWD 1
70	08-11-92	2-A-2c	IIP, WWD 1
70	08-04-92	2-A-8b	Commodity Rates, WWD 17
70	08-04-92	2-A-8e	IIP, WWD 17
70	08-04-92	2-A-9b	Commodity Rates, WWD 19
70	08-04-92	2-A-9c	IIP, WWD 19
70	08-11-92	7-C-6	Sewer Service Charge, WWD 1
71	07-06-93	10-C-7	Sewer Service Charges, WWD 16
71	07-06-93	2-A-8d	Commodity Rates, WWD 17
71	07-13-93	2-A-9b	Commodity Rates, WWD 19
71	07-13-93	2-A-2a	Bi-monthly Service Charge, WWD 1
71	07-13-93	2-A-2b	Commodity Rates, WWD 1
71	07-13-93	7-C-6	Bi-monthly Sewer Service Charges
72	04-19-94	1-A-12	Definition of Terms
72	04-19-94	1-H-2a	Service Rules
72	04-19-94	1-H-25e	Service Rules
72	04-19-94	1-H-26a	Service Rules
72	04-19-94	1-H-26b	Service Rules

72	04-19-94	1-H-26g	Service Rules
72	04-19-94	1-H-29a	Service Rules
72	04-19-94	1-H-29b	Service Rules
72	04-19-94	2-A-1a	Rate Schedules & Service Charges
72	04-19-94	2-A-1c	Rate Schedules & Service Charges
72	04-19-94	2-A-1d	Rate Schedules & Service Charges
72	04-19-94	2-A-10	Rate Schedules & Service Charges
72	04-19-94	2-B-5	Water Rates for Misc. Services
72	04-19-94	2-B-8	Water Rates for Misc. Services
72	04-19-94	2-B-8a	Water Rates for Misc. Services
72	04-19-94	7-B-1	Definition of Terms
72	04-19-94	7-C-6.2	Sewer Service Charge
72	04-19-94	7-D-9	Tampering with District Property
72	04-19-94	9-F-1	Annexation Procedures
72	04-19-94	9-F-2	Annexation Procedures
72	04-19-94	10-B-1	Definition of Terms
72	04-19-94	10-F-8	Tampering with District Property
73	07-26-94	2-A-2a	Service Charges, WWD #1
73	07-26-94	2-A-2b	Agricultural Base Rate & Disincentive Rate, WWD #1
73a	10-25-94	2-A-3	WWD #16
73a	10-25-94	3-A-9	WWD #16
74	05-02-95	1-I-6	Improvement Zone, WWD #1
74	05-02-95	3-A-9	Capital Improvement Charge, WWD #1
75	07-25-95	2-A-2a	Bi-Monthly Agricultural Service Charge, (WWD #1)
75	07-25-95	2-A-2b	Commodity Rates, WWD #1
75	07-25-95	2-A-8d	Commodity Rates, WWD #17
75	07-25-95	2-B-8	Miscellaneous Charges
75	07-25-95	2-A-11	Water Allocation Appeals
75	07-25-95	1-H-17	Removal of Meters from Inactive Service Connections
76	01-09-96	2-A-2b (ii)	Commodity Rates (GSP), WWD #1
76	01-09-96	2-A-9b (ii)	Commodity Rates (GSP), WWD #19
77	09-10-96	Part 4	Water Construction Standards
77	09-10-96	Part 11	Sewer Construction Standards
	78	11-4-97	Part 6 Operation and Maintenance of Recycled Water Distribution System
79	01-27-98	1-H-2a	Service Rules
79	01-27-98	1-H-26i	Service Rules
79	01-27-98	2-A-1d	Water Use-Domestic, Industrial & Agricultural
79	01-27-98	2-A-2c	Water Use-Domestic, Industrial & Agricultural
79	01-27-98	2-A-2d	Water Use-Domestic, Industrial & Agricultural
79	01-27-98	2-A-3c	Water Use-Domestic, Industrial & Agricultural
79	01-27-98	2-A-8e	Water Use-Domestic, Industrial & Agricultural
79	01-27-98	2-A-8g	Water Use-Domestic, Industrial & Agricultural
79	01-27-98	2-A-9c	Water Use-Domestic, Industrial & Agricultural
79	01-27-98	2-A-9e	Water Use-Domestic, Industrial & Agricultural

79	01-27-98	2-A-3b	Water Use-Domestic, Industrial & Agricultural
79	01-27-98	2-B-3	Water Rates for Misc. Services
79	01-27-98	2-B-5	Water Rates for Misc. Services
79	01-27-98	2-B-8a	Water Rates for Misc. Services
79	01-27-98	3-A	Rates and Charges for Construction Service
79	01-27-98	7-C-6.1	General (WWD #1)
79	01-27-98	7-C-6.2	General (WWD #1)
79	01-27-98	10-C-7.2	General (WWD #16)
80	04-7-98	3-A-9a	Capital Improvement Charge (WWD #1)
81	02-23-99	3-A-9a	Capital Improvement Charge (WWD #1)
82	03-16-99	2-A-8e	Incremental Interruption Level Plan No. 1: Tiered Allocations
83	09-28-99	3-A-2	Installation Charges
83	09-28-99	9-D	Plan Check Fees
83	09-28-99	9-E	Construction Inspection Fees
83	09-28-99	7-C-7	Deleted
83	09-28-99	7-C-8	Deleted
83	09-28-99	7-C-27.1	Deleted
83	09-28-99	10-C-8	Deleted
83	09-28-99	10-C-9	Deleted
83	09-28-99	10-C-10	Deleted
84	11-16-99	2-A-3a, 3b	Water Rates (WWD #16)
85	02-27-01	3-A-9	Capital Improvement Charge (WWD #1)
86	07-10-01	2-A-3a, 3b	Water Rates (WWD #16)
86	07-10-01	2-A-8d	Commodity Rates (WWD #17)
86	07-10-01	2-A-9b	Commodity Rate Lift Charge (WWD #19)
86	07-10-01	10-C-7	Sewer Service Charges (WWD #16)
87	07-17-01	7-C-6	Sewer Service Charges (WWD #1)
88	02-12-02	3-A-9	Capital Improvement Charge (WWD #1)
89	07-2-02	10-C-7	Sewer Service Charge (WWD #16)
90	07-23-02	2-A-3a, 3b	Water Rates (WWD #16)
90	07-23-02	7-C-6	Sewer Service Charges (WWD #1)
91	11-26-02	10-C-6.5	Sewer Connection Fees (WWD #16)
92	01-14-03	2-A-9b	Commodity Rates (WWD #19)
93	06-24-03	10-C-7	Sewer Service Charges (WWD #16)
94	07-15-03	7-C-6	Sewer Service Charges (WWD #1)
95	01-27-04	7-C-5.4	Sewer Connection Fees (SCF)
96	03-1-04	3-A-9	Capital Improvement Charge (WWD #1)
97	06-15-04	2-A-8d	Commodity Rates (WWD #17)
98	06-15-04	1-A-5	Billing Date
98	06-15-04	1-A-5a	Mailing Date (added)
98	06-15-04	1-H-26a	Payment of Water Bills
98	06-15-04	2-A-2a, 2b	Water Rates (WWD #1)
99	06-15-04	7-C-6	Sewer Service Charges (WWD #1)
100	03-1-05	3-A-9	Capital Improvement Charge (WWD #1)
101	04-5-05	2-A-2b	Commodity Rates (WWD #1)

102	07-12-05	2-A-8d	Commodity Rates (WWD #17)
103	07-12-05	2-A-9b	Commodity Rates (WWD #19)
104	07-26-05	10-C-7	Sewer Service Changes (WWD #16)
105	02-28-06	7-C-5	Sewer Connection Fees (SCF)
105	02-28-06	7-C-5.4	Sewer Connection Fees (SCF)
106	02-28-06	3-A-9a	Capital Improvement Charge (WWD #1)
107	06-27-06	2-A-3a	Monthly Service Charge (WWD #16)
107	06-27-06	2-A-3b	Water Rates & Water Service Charge (WWD #16)
108	06-27-06	10-C-7	Sewer Service Charges (WWD #16)
109	07-11-06	2-A-2b	Water Rates (WWD #1)
110	07-18-06	2-A-9b	Water Rate Changes (WWD #19)
112	07-25-06	2-A-8d	Commodity Rates (WWD#17)
113	03-13-06	3-A-9	Capital Improvement Fees (WWD#1)
114	03-13-06	7-C-5	Sewer Connection Fees (SCF)
115	03-13-06	7-C-5.4	Sewer Connection Fees (SCF)
116	07-10-07	10-C-7	Sewer Service Charges (WWD#16)
117	09-11-07	2-A-2b (ii) A	Commodity Rates (WWD#1) AG
118	09-11-07	7-C-6	Sewer Service Charge (WWD#1)
119	09-11-07	2-A-9b	Commodity Rates, Lift Charge (WWD#19)
120	11-20-07	Part 12	Commodity Rates (WWD #17)
122	02-26-08	2-A-1d	Account Reconciliation for AG Customers (WWD#1)
122	02-26-08	2-A-2b, 2d, 2e	Commodity, AG Rates (WWD#1)
123	03-11-08	2-A-9b	Commodity Rates, Lift Charge (WWD #19)
123	03-11-08	2-A-9c, 9d, 9e	Agricultural Rates (WWD# 19)
124	04-22-08	2-A-3a, 3b	Commodity Rates, Monthly Service. Charge (WWD #16)
125	12-16-08	1-H-26f, g, i	Bill Form and Payments (WWD#17)
126	12-16-08	2-A-1c	Deposits (WWD#17)
127	12-16-08	2-A-8d	Commodity Rates (WWD#17)
128	12-16-08	2-A-8e (ii), f, g	Tiered Rates (WWD#17)
129	12-16-08	2-A-8e(iii),8e(iv)f,g	AG Allocations and AG Rates (WWD#17)
130	12-16-08	2-A-8e (v) f, g	Disincentive Rate (WWD#17)
131	12-16-08	2-B-8a, b, c, d	Charges for Personalized Service (WWD#17)
132	12-16-08	2-B-8e, 8f	Payment Arrangements (WWD#17)
133	01-06-09	2-H-25a,b	Reading of Meter and Billing (WWD#1)
134	01-06-09	2-H-26a	Payment of Water Bills (WWD#1)
135	01-06-09	2-H-26f,26g,26i	Delinquent Water Bills (WWD#1)
136	01-06-09	2-A-1a	Minimum Charge for Service (WWD#1)
137	01-06-09	2-A-1c	Deposits (WWD#1)
138	01-06-09	2-A-1d	AG Customers Accounting, Reconciliation (WWD#1)
139	01-06-09	2-A-2b	Commodity Rates (WWD#1)
140	01-06-09	2-A-2c(ii),d(ii),e(ii)	Tier Rates (WWD#1)
141	01-06-09	2-A-2c(iv),d(iv),e(iv)	Industrial, Commercial Other Rates (WWD#1)
142	01-06-09	2-A-2c(vi),2d(vi),2e(vi)	Agricultural Rates (WWD#1)
143	01-06-09	2-B-8a,8b,8c,8d	Personalized Service (WWD#1)
144	01-06-09	2-B-8e,8f	Payment Arrangements (WWD#1)

145	01-13-09	1-H-25a,25b	Meter and Billing (WWD#19)
146	01-13-09	1-H-26a	Payment of Water Bills (WWD#19)
147	01-13-09	1-H26f,g,i	Delinquent Water Bills (WWD#19)
148	01-13-09	2-A-1a	Minimum Service Charge (WWD#19)
149	01-13-09	2-A-1c	Deposits (WWD#19)
150	01-13-09	2-A-1d	AG Accounting, Reconciliation (WWD#19)
151	01-13-09	2-A-9b	Commodity Rates (WWD#19)
152	01-13-09	2-A-2c(ii),d(ii),e(ii)	Tier Rates (WWD#19)
153	01-13-09	2-A-9c(iv),9d(iv)	Industrial, Commercial, Other Rates (WWD #19)
154	01-13-09	2-A-9c(vi)d(vi)3(vi)	Agricultural Rates (WWD#19)
155	01-13-09	2-B-8a,8b,8c,8d	Personalized Service (WWD#19)
156	01-13-09	2-B-8e, 8f	Payment Arrangements (WWD#19)
157	03-24-09	3-A-9	Capital Improvement Charges (WWD#1)
158	03-24-09	7-C-5, 5.4	Sewer Connection Fees (WWD#1)
159	06-16-09	1-H-25a,25b	Meter & Billing (WWD#16)
160	06-16-09	1-H-26a,f,g,i	Water Bills, Delinquent Bills (WWD#16)
161	06-16-09	2-A-3a	Monthly Service Charge (WWD#16)
162	06-16-09	2-A-3b(i)	Commodity Rates
163	06-16-09	2-A-3b(ii)	Agricultural Rates
164	06-16-09	2-A-3c(v),C(II)	Industrial, Commercial, Other, AG Rates (WWD#16)
165			NO CHANGE
166	06-16-09	2-B-8a,b,c,d	Personalized Service (WWD# 1,16,17,19)
167	07-14-09	7-C-6	Sewer Service Charge (WWD#1)
168	07-21-09	10-C-6.5	Sewer Connections Fees (WWD#16)
169	11-10-09	2-A-9b(i),(ii)	Commodity Rates (WWD#19)
170	11-24-09	2-A-8d, (i),(ii),(iii),(iv)	Commodity Rates (WWD#17)
171	12-08-09	1-A-5,1-A-11,11a	Definitions of Terms (WWD # 1,16,17,19)
171	12-08-09	1-A-11b, 11-A-12,12a	Definitions of Terms (WWD # 1,16,17,19)
172	12-08-09	1-B-1	Service Area Maps (WWD# 1,16,17,19)
173	12-08-09	1-E-1	Service to Users Outside the District (WWD# 1,16,17,19)
174	12-08-09	1-H-2a,1-H-4,1-H-6a	Service Rules/ Temporary Water Supply (WWD# 1,16,17,19)
174	12-08-09	1-H-16a,1-H-25a,e	Setting/Reading Meters (WWD# 1,16,17,19)
174	12-08-09	1-H-26a,i,1-H-27e	Payment Water Bills (WWD# 1,16,17,19)
174	12-08-09	1-H-30a	Right of Inspection (WWD# 1,16,17,19)
175	12-08-09	1-I-3	Service to Users Outside the District (WWD#1,16,17,19
175	12-08-09	1-I-6	Improvement Zone (WWD# 1,16,17,19)
175	12-08-09	1-J-1	Local System Construction & Charge (WWD#1,16,17,19)
176	12-08-09	SECTION K	Water Shortages (WWD# 1,16,17,19)
177	12-08-09	SECTION L	Permanent Water Conservation Measures (WWD#1,16,17,19)
178	12-08-09	2-A-1b,c,d,e	Rate Schedules/Service Charges/IIP(WWD#1,16,17,19)
179	12-08-09	2-A-2b,c	Commodity Rates, IIP 1 (WWD# 1)
179	12-08-09	2-A-2c(i)(iv)(v)(vi)	IIP 1, Allocations, AG, Industrial, Commercial, Other (WWD#1)

180	12-08-09	2-A-2d(i)(iii)(iv)(v)(vi)	IIP 2, Allocations, AG, Industrial, Commercial, Other (WWD#1)
181	12-08-09	2-A-2e(i)(iii)(iv)(v)(vi)	IIP 3, Allocations, AG, Industrial, Commercial, Other (WWD#1)
182	12-08-09	2-A-3b(ii)	Commodity Rates, AG (WWD#16)
182	12-08-09	2-A-3c(i)(iii)(iv)(v)	IIP 1, Allocation, AG, Industrial, (WWD#16)
183	12-08-09	2-A-8a	Meter Service Charge (WWD#17)
183	12-08-09	2-A-8e(i)a,b(v)	IIP1, Allocations, Municipal, Industrial, Commercial (WWWD#17)
184	12-08-09	2-A-8f(i)a,b(v)	IIP2, Allocations, Municipal, Industrial, Commercial(WWWD#17)
185	12-08-09	2-A-8g(i)a,b(v)	IIP3, Allocations, Municipal, Industrial, Commercial (WWWD#17)
186	12-08-09	2-A-9a	Meter Service Charge (WWD#19)
186	12-08-09	2-A-9b(ii)a	Commodity Rates, AG (WWD#19)
186	12-08-09	2-A-9c(i)a,b(iv)(v)(vi)b	IIP1, Allocations- AG, Industrial, Municipal (WWD#19)
187	12-08-09	2-A-9d(i)a,b(iv)(v)(vi)b	IIP2, Allocations- AG, Industrial, Municipal (WWD#19)
188	12-08-09	2-A-9e(i)a,b(iv)(v)(vi)b	IIP3, Allocations- AG, Industrial, Municipal (WWD#19)
189	12-08-09	2-A-11	Water Allocation Appeals (WWD#1,16,17,19)
190	12-08-09	2-B-3,4,5,6	Water Rates for Miscellaneous Services (WWD#1,16,17,19)
191	12-08-09	3-A-2	Installation Charges Permanent Meters (WWD#1,16,17,19)
192	12-08-09	5-A-1	Oversizing Agreement (WWD#1,16,17,19)
192	12-08-09	5-B-1	Reimbursement Agreement (WWD#1,16,17,19)
193	12-08-09	6-D-4	Mandatory Service Conditions (WWD#1,16,17,19)
194	12-08-09	7-B-1	Definition of Terms (WWD#1)
194	12-08-09	7-C-6.1	Sewer Service Charges (WWD#1)
194	12-08-09	7-C-6.2	Sewer Service Charges (WWD#1)
194	12-08-09	7-C-10	Treatment of Waste (WWD#1))
194	12-08-09	7-C-20	Easements or Rights of Way (WWD#1)
194	12-08-09	7-C-23	Application for Permit (WWD#1)
194	12-08-09	7-C-27.2	Industrial Waste Testing Fee (WWD#1)
195	12-08-09	7-D-2	Enforcement – Violation (WWD#1)
195	12-08-09	7-D-4	Enforcement – Disconnection (WWD#1)
196	12-08-09	7-E-2,6	Miscellaneous Provisions (WWD#1)
197	12-08-09	9-B-1,4,5,9	Water System Developments (WWD#1,16,17,19)
197	12-08-09	9-B-10,13.2,3	Water System Developments (WWD#1,16,17,19)
197	12-08-09	9-B-14, 14.1	Approval & Acceptance of Plans/Agreements (WWD#1,16,17,19)
198	12-08-09	10-B-1	Definition of Terms (WWD#16)
199	12-08-09	10-C-1,4.5,4.6,7.2.4,11	Sewage Collection, General (WWD#16)
200	12-08-09	10-D-5.11,6,7,7.1,8,9	Public Sewer Use (WWD#16)
201	12-08-09	10-E-1.2,1.3,7	Public Sewer Construction, Application for Permit (WWD#16)
202	12-08-09	10-F-2,4	Enforcement (WWD#16)

203	12-08-09	10-G-2,6,8	Miscellaneous provisions(WWD#16)
204	12-08-09	10-H-2,4,17.1	Enforcement, Sewer Capacities & Sizes (WWD#16)
205	12-08-09	2-A-2b(i)(ii)	Commodity Rates (WWD#1)
206	11-23-10	2-A-8d (i)a,b,c (iii)(iv)	Commodity Rates (WWD#17)
207	12-07-10	2-A-3a, b(i)(ii)	Meter Service Charge, Commodity Rates (WWD#16)
208 (WWD#19)	02-01-11	2-A-9a,b(i)a,b,c(ii)(iii)	Meter Service Charge, Commodity Rates, Lift Charges
209	03-22-11	3-A-9(a), 7-C-5	CIC, Water and Sewer Connection Fees (WWD#1)
210	03-22-11	10-C-6.5	Sewer Connection Fees (WWD#16)
211	04-05-11	2-A-2b, 2-A-2c,d,e	Commodity Rates, Allocation adjustments (WWD#1)
212	12-06-11	2-A-9b(i)b,c(ii)a,b	Commodity Rates, IIP, Tier (WWD#19)
213	12-06-11	2-A-9c(ii)(iv)b(vi)b,2-A-9d,e	IIP2,3 (WWD#19)
214	12-13-11	2-A-8d(i)b,c,(iii)(iv)	Commodity Rates (WWD#17)
215	12-13-11	2-A-8d,e,(v)c,f,g	Tier Allocations, IIP2,3 (WWD#17)
216	01-24-12	2-A-1d,e	Accounting, Reconciliation (WWD#1)
217	01-24-12	2-A-2b,(i)b,c (ii)a,b	Commodity Rates/AG (WWD#1)
218	01-24-12	2-A-9c,(i)a(ii)(iv)9d	Allocations/Tier Rates (WWD#1)
219 (WWD#16)	02-28-12	2-A-1d	Accounting and Reconciliation for AG customers
220	02-28-12	2-A-3a	Meter Service Charge (WWD#16)
221	02-28-12	2-A-3b	Commodity Rates (WWD#16)
222 (WWD#16)	02-28-12	2-A-3c, (ii)(iii)(iv)(v)	Tier Allocations/Tier Rates AG Allocations/AG Rates
222 (WWD#1)	03-6-12	3-A-9/7-C-5	Capital Improvement Charges/Sewer Connection Fees
223	6-26-12	10-C-7	Sewer Service Charges (WWD#16)
224	03-6-12	10-C-6.3/6.5	Annual Adjustment Sewer Connection Fees (WWD#16)
225	12-4-12	2-A-1d	Accounting and Reconciliation (WWD#1)
226	12-4-12	2-A-2b(i)a,(ii)a	Commodity Rates M&I/AG (WWD#1)
227	12-4-12	2-A-2c(i),(iii)(iv)(v)(vi)	Allocations, Tier Rates M&I/AG (WWD#1)
228	12-4-12	6-D-5	Recycled Water Rate (WWD#1)
229 (WWD#1,16,17,19)	12-11-12	1-C-3,1-D-1(g)	Types of Accts. Services/App. for Service
230	12-11-12	1-H-25 a,b,c	Reading of Meters and Billing (WWD#1,16,17,19)
231	12-11-12	1-H-26 a,f,g,k	Payment of Water Bills (WWD#1,16,17,19)
232	12-11-12	2-A-1c	Deposit from Applicants (WWD#1,16,17,19)
233	01-15-13	2-A-8d	Commodity Rates (WWD#17)
234	12-11-12	2-A-1d	Accounting and Reconciliation,
234	12-11-12	2-A-9b,c	Commodity Rates, Allocation(WWD#19)
235	01-15-13	2-A-8e(I,iii,v,vi)	Monthly Consumption, Allocation, Rates (M&I) (WWD#17)
236	02-26-13	3-A-9	Capital Improvement Charges (WWD#1)
237	02-26-13	7-C-5/5.4	Sewer Connection Fees (R&R)
238	02-26-13	10-C-6.3	Multiple Sewer Connections (WWD#16)
239	02-26-13	10-C-6.5	Sewer Connection Fees (WWD#16)
240	12-10-13	2-A-2b	Commodity Rates (WWD#1)
241	12-10-13	2-A-2c	Allocations Monthly Consumption (WWD#1)

242	10-01-14	7-C-6.1/6.2	Types of Sewer Connection (WWD#1)
243	12-09-14	2-A-2b	Commodity Rates (WWD#1)
244	12-16-14	2-A-8d	Commodity Rates (WWD#17)
245	12-16-14	2-A-9b	Commodity Rates (WWD#19)

APPENDIX H

VCWWD No. 1 2011 and 2012 CUWCC Best Management Practice Annual Reports

CUWCC BMP Retail Coverage Report 2011

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

233 Ventura County Waterworks Dist. #1

1. Conservation Coordinator provided with necessary resources to implement BMPs?	Name:	Sandy Lomeli
	Title:	Environmental Resource Analyst II
	Email:	Sandy.Lomeli@ventura.org

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.	Districts 1,16,17,19 Rules and Regulations.mht	http://portal.countyofventura.org/portal/page/portal/PUBLIC_WORKS/WaterSanitation/Ventura%20County%20Waterworks%20Districts%20Rules%20and%20Regulations	Water waste prohibited as specified in Ventura County Waterworks Districts 1, 16, 17, 19; Section 6 of the Rules and Regulations.
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.	Copy_of_Districts_1,16,17,19_Rules_and_Regulations.mht		
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.	Copy_of_VCRULE_Prop.84_Agreement.pdf		Ventura County Regional Urban Landscape Effciency Program (VC-RULE)
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

At Least As effective As No

CUWCC BMP Retail Coverage Report 2011

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices **ON TRACK**

Exemption	No	0

Comments:

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control — ON TRACK

233 Ventura County Waterworks Dist. #1

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
Zero_AWWA_2011_Ventura1.xls	
AWWA Water Audit Validity Score?	68
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)

At Least As effective As No

We compare water sales to water production. As long as we maintain a less than 2% loss, we do not perform a water leak detection survey.

Exemption No — Cost Effectivness

Comments:

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

On Track

233 Ventura County Waterworks Dist. #1

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	0
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No
Feasibility Study provided to CUWCC?	No

Date: 12:00:00 AM

Uploaded file name:

Completed a written plan, policy or program to test, repair and replace meters	Yes

At Least As effective As	Yes	
Exemption	No	0

Comments:

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Consrvation Pricing

On Track

233 Ventura County Waterworks Dist. #1

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Commercial	Allocation Based	Yes	863812.87	5350.5
Industrial	Allocation Based	Yes	245741.62	2233
Institutional	Allocation Based	Yes	111591.19	3117.5
Agricultural	Allocation Based	Yes	1968069.25	149370
Single-Family	Allocation Based	Yes	7564685.14	66598.5
			10753900.07	**226669.5**

Calculate: V / (V + M) **98 %**

Implementation Option: Use Annual Revenue As Reported

☐ Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: Yes

Customer Class	Rate Type	Conserving Rate?
Commercial	Uniform	Yes
Institutional	Uniform	Yes
Industrial	Uniform	Yes
Single-Family	Uniform	Yes

At Least As effective As No

Exemption No 0

Comments:

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach — ON TRACK

233 **Ventura County Waterworks Dist. #1** **Retail Only**

Does your agency perform Public Outreach programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

Calleguas Municipal Water District,Metropolitan Water District of SC

The name of agency, contact name and email address if not CUWCC Group 1 members

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

Public Outreach Program List	Number
Landscape water conservation media campaigns	12
General water conservation information	6
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	50552
Website	8000
Total	**58570**

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

Number Media Contacts	Number
Radio contacts	12
Television contacts	12
Total	**24**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Personnel	41000
Conservation Materials	10200
Total Amount:	**51200**

Public Outreah Additional Programs
General Conservartion though bills, mail, messages printed on bills
Public Banner, notifications on watering times, updates on supply, conservation ideas
Landscape water calculator; MWD/www.venturawatersavingplants.com

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

Description of all other Public Outreach programs

Waterwise Gardening Website

Comments:

At Least As effective As	No	
Exemption	No	0

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs — ON TRACK

233 Ventura County Waterworks Dist. #1 — **Retail Only**

Does your agency implement School Education programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP.

Metropolitan Water District of SC

Materials meet state education framework requirements? Yes

Materials include teacher study guides and student workshops.

Materials distributed to K-6? Yes

Conduct a water conservation poster contest for grades K - 8. Hand out water conservation information and "goodie bags". Participate in Country Days and distribute conservation educational material.

Materials distributed to 7-12 students? Yes (Info Only)

Conduct a water conservation poster contest for grades K - 8. Hand out water conservation information and "goodie bags". Participate in Country Days and distribute conservation educational material.

Annual budget for school education program: 5000.00

Description of all other water supplier education programs

Materials include teacher study guides and student workshops. Conduct a water conservation poster contest for grades K - 8. Hand out water conservation information and "goodie bags". Participate in Country Days and distribute conservation educational material. Distribution of edcuation conservation materials through local fair, traveling student poster Art Exhibit, Annual Poster Competition. Annual Water Awareness Student Poster Competition Country Days

Comments:

At Least As effective As No

Exemption No 0

CUWCC BMP Coverage Report 2011

BMP3 - Residential

ON TRACK

Agency **Ventura County Waterworks Dist. #1**

Date Agency Signed MOU: 8/27/1991

Coverage Option: Flextrack

Total Measured Water Savings (AF/Year)

TRADITIONAL	FLEXTRACK	ACTUAL	TARGET	Prior Activities Credit
201.46	0	201.46	14.65	-7.130

Residential Assistance

	Single Family Accounts	Single Family Target	Multi Family Accounts	Multi Family Target
Total Number Of Customers	9607		0	
Total Participants during Reporting	9607		0	
Number of Leak Detection Surveys or Assistance on Customer Property	1531	72.05	0	0.00
Number of Faucet Aerators Distributed	0		0	
Number of WSS Showerheads Distributed	250			
Landscape Water Surveys	7205	72.05		

Has agency reached a 75% market saturation for showerheads? No

High Efficiency Clothes Washers

	Single Family Accounts	Single Family Target
Number of installations for HECW	156	96.07
Are financial incentives provided for HECWs?	Yes	
Has agency completed a HECW Market Penetration Study?	No	

Water Sense Specification Toilets

Retrofit 'On Resale' Ordinance exists: No

75% Market Penetration Achieved: No

	Single Family Units	Multi Family Units
Five year average Resale Rate	0.02	0.00
Number Toilets per Household	2	0
Number WSS Toilets Installed	48	0
Target Number of WSS Toilets	151.79	0.00

WSS for New Residential Development

	Single Family Units	Multi Family Units
Does an Ordinance Exists Requiring WSS Fixtures and Appliances in new SF and MF residences?	Yes	Yes
Number of new SF & MF units built	15	0
Incentives		

CUWCC BMP Coverage Report 2011

BMP3 - Residential **ON TRACK**

Unique Conservation Measures

Residential Assistance / Landscape Water Survey unique water savinigs

Measured water savings (AF/YR) 0

Uploaded file name:

High Efficiency Clothes Washers unique water savinigs

Measured water savings (AF/YR) 0

Uploaded file name:

WaterSense Specification toilets unique water savinigs

SF Measured water savings (AF/YR) MF Measured water savings (AF/YR)

Uploaded file name:

WaterSense Specification toilets for New Residential development unique water savinigs

Measured water savings (AF/YR) 0

Uploaded file name:

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

Measured water savings (AF/YR)

Uploaded file name:

Educate residential customers about the behavioral aspects of water conservation

Measured water savings (AF/YR) 0

Uploaded file name:

Notify residential customers of leaks on the customer's side of the meters

Measured water savings (AF/YR) 0

Uploaded file name: Copy_of_Notice_to_the_Cusotmer_yellow_tag.pdf

Provide bill or surcharge refunds for customers to repair leaks on the customer's side of the meters

Measured water savings (AF/YR) 0

Uploaded file name:

Provide unique water savings fixtures that are not included in the BMP list above

Measured water savings (AF/YR) 0

Uploaded file name:

Install residence water use monitors

Measured water savings (AF/YR) 0

Uploaded file name:

Participate in programs that provide residences with school water conservation kits

Measured water savings (AF/YR) 0

Uploaded file name:

Implement in automatic meter reading program for residential customers

CUWCC BMP Coverage Report 2011

BMP3 - Residential **ON TRACK**

Measured water savings (AF/YR) 0

Uploaded file name:

OTHER Types of Measures

Measured water savings (AF/YR) 0

Uploaded file name:

Traditional Water Savings Calculation result:

Measures	Target Water Savings (AF):	Actual Water Savings (AF):
SF Leak Detection Surveys	1.61	34.30
MF Leak Detection Surveys	0.00	0.00
Landscape Water Surveys	1.61	161.41
SF WSS Toilets Installed	8.74	1.38
MF WSS Toilets Installed	0.00	0.00
HECW	2.69	4.37

Comments:

At Least As Effective As No

Exemption No

CUWCC BMP Coverage Report 2011

BMP4 - Commercial Industrial Institutional

ON TRACK

Agency **Ventura County Waterworks Dist. #1**

Date Agency Signed MOU: 8/27/1991

Coverage Option: Flextrack

CII Baseline Water Use (AF): 862.17

CII Water Use Reduction(AF): 86.217

Total Measured Water Savings (AF/Year)

TRADITIONAL	FLEXTRACK	ACTUAL	TARGET	Prior Activities Credit
0	0	0		0.000

Water Efficiency Measures:	Quantity Installed:	Water Savings:	Accept Council's default value
1 High Efficiency Toilets (1.2 GPF or less)	0	0.00	Yes
2 High Efficiency Urinals (0.5 GPF or less)	0	0.00	Yes
3 Ultra Low Flow Urinals	0.00	0.00	Yes
4 Zero Consumption Urinals	0.00	0.00	Yes
5 Commercial High Efficiency Single Load Clothes Washers	0.00	0.00	Yes
6 Cooling Tower Conductivity Controllers	0.00	0.00	Yes
7 Cooling Tower pH Controllers	0.00	0.00	Yes
8 Connectionless Food Steamers	0.00	0.00	Yes
9 Medical Equipment Steam Sterilizers	0.00	0.00	Yes
10 Water Efficient Ice Machines	0.00	0.00	Yes
11 Pressurized Water Brooms	0.00	0.00	Yes
12 Dry Vacuum Pumps	0.00	0.00	Yes
Total Water Savings:		**0.00**	

Unique Conservation Measures

Industrial Process Water Use Reduction

Measured water savings (AF/YR)

Uploaded file name:

Commercial Laundry Retrofits

Measured water savings (AF/YR)

Uploaded file name:

Industrial Laundry Retrofits

Measured water savings (AF/YR)

Uploaded file name:

Filter Upgrades (for pools, spas and fountants)

CUWCC BMP Coverage Report 2011

BMP4 - Commercial Industrial Institutional

ON TRACK

Measured water savings (AF/YR)

Uploaded file name:

Car Wash Reclamation Systems

Measured water savings (AF/YR)

Uploaded file name:

Wet Cleaning

Measured water savings (AF/YR)

Uploaded file name:

Water Audits (to avoid double counting, do not include device/replacement water savings

Measured water savings (AF/YR)

Uploaded file name:

Clean In Place (CIP)Technology (such as bottle sterilization in a beverage processing plant)

Measured water savings (AF/YR)

Uploaded file name:

Waterless Wok

Measured water savings (AF/YR)

Uploaded file name:

Alternative On-site Water Sources

Measured water savings (AF/YR)

Uploaded file name:

Sub-metering

Measured water savings (AF/YR)

Uploaded file name:

High Efficiency Showerheads

Measured water savings (AF/YR)

Uploaded file name:

Faucet Flow Restrictors

Measured water savings (AF/YR)

Uploaded file name:

Water Efficiency Dishwashers

Measured water savings (AF/YR)

Uploaded file name:

Hor Water on Demand

Measured water savings (AF/YR)

Uploaded file name:

Pre-rinse spray Valves of 1.3 gpm (gallons per minute) or less

CUWCC BMP Coverage Report 2011

BMP4 - Commercial Industrial Institutional

ON TRACK

Measured water savings (AF/YR)

Uploaded file name:

Central Flush Systems

Measured water savings (AF/YR)

Uploaded file name:

IOther Measures chosen by the Agency

Measured water savings (AF/YR)

Uploaded file name:

Comments:

At Least As Effective As	No
Exemption	No

CUWCC BMP Coverage Report 2011

BMP5 - Landscape

Agency **Ventura County Waterworks Dist. #1** Date Agency Signed MOU: 8/27/1991

Coverage Option: Flextrack

Total Measured Water Savings (AF/Year)

TRADITIONAL	FLEXTRACK	ACTUAL	TARGET	PRIOR ACTIVITIES CREDIT
0	0	0	0	-230.66

1) Accounts with Dedicated Irrigation Meters

a) Number of dedicated irrigation meter accounts	596
b) Number of dedicated irrigation meter accounts with water budgets	596
c) Aggregate water use for all dedicated non-recreational landscape accounts with water budgets	0
d)Aggregate acreage assigned water budgets for dedicated non-recreational landscape accounts with budgets	
Aggregate acreage of recreational areas assigned water budgets for dedicated recreational landscape accounts with budgets	0
Preserved water use records and budgets for customers with dedicated landscape irrigation accounts for at least four years	Yes
Unique measured water Savings (AF/YR) in this measure	
Uploaded the backup data if there are unique measured water savings?	No

Technical Assistance

Number of Accounts 20% over-budget	0
Number of Accounts 20% over-budget offered technical assistance	0
Number of Accounts 20% over-budget accepting technical assistance	0
Unique measured water Savings (AF/YR) in technical assistance	
Uploaded the backup data if there are unique measured water savings?	No

2) Commercial / Industrial / Institutional Accounts without Meters or with Mixed-Use Meters

Number of mixed use and un-metered accounts.	0		
Number of irrigation water use surveys offered	0		
Number of irrigation water use surveys accepted	0		
Type: Incentives numbers received by customers:	0	$ Value:	0
Type: Rebates numbers received by customers:	0	$ Value:	0
Type No- or low-Interest loan offered numbers received by customers:	0	$ Value:	0
Annual water savings by customers receiving irrigation water savings surveys and implementing recomendations			
Estimated annual water savings by customers receiving surveys and implementing recommendations			

CUWCC BMP Coverage Report 2011

BMP5 - Landscape

Unique measured water Savings (AF/YR) in this measure

Uploaded the backup data if there are unique measured water savings? No

Financial Incentives

Unique measured water Savings (AF/YR) inFinancial incentives

Uploaded the backup data if there are unique measured water savings? No

Unique Conservation Measures

1. Monitor and report on landscape water use

1a. Measure landscapes and develop water budgets for customers with dedicated landscape meters. Provide timely water use reports with comparisons of water use to budget that provide customers the information they need to adjust irrigation schedules.

Uploaded file name:

1b. Measure landscapes and develop water budgets for customers with Mixed Use meters. Provide timely water use reports with comparisons of water use to budget that provide customers the information they need to adjust irrigation schedules.

Uploaded file name:

1c. Establish agency-wide water budget. (Include in Help notes: ETo based water budget in the MWELO changed in 2010 from .8ETo to .7ETo.)

Uploaded file name:

1d. Establish agency-wide, sector-based irrigation goal to reduce water use, based on season.

Uploaded file name:

2. Provide technical landscape resources and training

2a. Upon customer requests, provide landscape irrigation management and landscape design information and resources: provide assistance, answer customer questions, respond to run-off and high-bill calls.

Uploaded file name:

2b. Perform landscape & irrigation audits: including irrigation scheduling, plant information, and landscape area measurement.

Uploaded file name:

2c. Sponsor, co-sponsor, promote, or support landscape workshops, training, presentations and other technical educational events for homeowners and professionals: design, installation, maintenance, water management.

Uploaded file name:

2d. Establish time-of-day irrigation restrictions.

Uploaded file name:

2e . Establish day-of-week irrigation restrictions.

Uploaded file name:

3. Provide incentives

CUWCC BMP Coverage Report 2011

BMP5 - Landscape

3a. Establish landscape budget-based rates.

Uploaded file name:

3b. Provide incentives for conversions from mixed-use meters to dedicated landscape meters.

Uploaded file name:

3c. Provide incentives for irrigation equipment upgrades that improve distribution uniformity, irrigation efficiency, or scheduling capabilities.

Uploaded file name:

3d. Provide incentives for the reduction of water use over an irrigated area, or reduction in the size of the irrigated area due to replacement of turf or other high water-using plants with low water-using plants, artificial turf, or permeable surfaces.

Uploaded file name:

3e. Provide incentives for conversions from potable to recycled water.

Uploaded file name:

3f. Provide incentives for the use of alternative sources of water in the landscape (i.e. gray water, rainwater, cisterns, etc.)

Uploaded file name:

4. Participate in local and regional planning and regulatory activities

4a. Collaborate with planning agencies at the local and regional level, other water suppliers in the area and stakeholders in response to state or federal requirements such as the State Model Water Efficient Landscape Ordinance and AB 1881. Participate in the development, review, implementation, and enforcement of requirements for new developments. Provide water use data to planning agencies.

4b. Establish or participate in a water conservation advisory committee or other community outreach effort to drive market transformation and exchange information about landscape water conservation with developers, community-based organizations, homeowners associations, residential customers, landscape professionals, educators, other water suppliers in region.

4c. Participate in regional efforts: integrated water resource management, watershed management, NPDES permit agencies, etc.

5. Develop a holistic approach to landscape water use efficiency

5a. Develop and implement a comprehensive landscape water conservation program for all customers. Target marketing efforts to those most likely to result in benefits to both customer and Agency.

Uploaded file name:

6. Other Measures

Other Landscape Measures.

Uploaded file name:

Comments:

CUWCC BMP Coverage Report 2011

BMP5 - Landscape

At Least As Effective As	No
Exemption	No

CUWCC BMP Retail Coverage Report 2012

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

233 Ventura County Waterworks Dist. #1

1. Conservation Coordinator provided with necessary resources to implement BMPs?	Name:	Sandy Lomeli
	Title:	Environmental Resource Analyst II
	Email:	Sandy.Lomeli@ventura.org

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.	Copy1_of_Districts_1,16,17,19_Rules_and_Regulations.mht	http://portal.countyofventura.org/portal/page/portal/PUBLIC_WORKS/WaterSanitation/Ventura%20County%20Waterworks%20Districts%20Rules%20and%20Regulations	Water waste prohibited as specified in Ventura County Waterworks District 1, 16, 17, 19; Section 6 of the Rules and Regulations.
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.	Copy2_of_Districts_1,16,17,19_Rules_and_Regulations.mht		
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.	VCRULE Prop.84 Agreement.pdf		Ventura County Regional Urban Landscape Effciency Program (VC-RULE)
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

At Least As effective As No

CUWCC BMP Retail Coverage Report 2012

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices **ON TRACK**

Exemption	No	0

Comments:

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control

ON TRACK

233 Ventura County Waterworks Dist. #1

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
Zero_AWWA_2012_Ventura1.xls	
AWWA Water Audit Validity Score?	68
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)

At Least As effective As No

We compare water sales to water production. Maintain a less than 2% loss.

Exemption No Cost Effectivness

Comments:

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

On Track

233 Ventura County Waterworks Dist. #1

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	0
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No
Feasibility Study provided to CUWCC?	No

Date: 12:00:00 AM

Uploaded file name:

Completed a written plan, policy or program to test, repair and replace meters	Yes

At Least As effective As	Yes	
Exemption	No	0

Comments:

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Consrvation Pricing

On Track

233 Ventura County Waterworks Dist. #1

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Allocation Based	Yes	9174688.39	6986.1
Commercial	Allocation Based	Yes	1027933.3	5452
Institutional	Allocation Based	Yes	1287179.89	3110.25
Industrial	Allocation Based	Yes	278022.99	2131.5
Agricultural	Allocation Based	Yes	2282353.75	149370
			14050178.32	**167049.85**

Calculate: V / (V + M) **99 %**

Implementation Option: Use Annual Revenue As Reported

☐ Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: Yes

Customer Class	Rate Type	Conserving Rate?
Commercial	Uniform	Yes
Institutional	Uniform	Yes
Industrial	Uniform	Yes
Single-Family	Uniform	Yes

At Least As effective As No

Exemption No 0

Comments:

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach — ON TRACK

233 **Ventura County Waterworks Dist. #1** **Retail Only**

Does your agency perform Public Outreach programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

Calleguas Municipal Water District,Metropolitan Water District of SC

The name of agency, contact name and email address if not CUWCC Group 1 members

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

Public Outreach Program List	Number
Landscape water conservation media campaigns	12
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	50552
General water conservation information	6
Website	12260
Total	**62830**

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

Number Media Contacts	Number
Radio contacts	12
Television contacts	12
Total	**24**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Convservation	41000
Conservationon Materials	10200
Total Amount:	**51200**

Public Outreah Additional Programs
General conservation outreach through bills, mail, messages printed on bills
Public banner, notifications on watering times, updates on supply, conservation ideas, public awareness through website
Landscape water calculator, MWD/www.venturawatersavingsplants.com

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach — ON TRACK

Description of all other Public Outreach programs

Waterwise Gardening Workshops

Comments:

At Least As effective As	No	
Exemption	No	0

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs

ON TRACK

233 Ventura County Waterworks Dist. #1

Retail Only

Does your agency implement School Education programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

Metropolitan Water District of SC

Materials meet state education framework requirements? Yes

Curriculum materials include teacher study guide and student workbooks.

Materials distributed to K-6? Yes

Waterwise - curriculum for grades 4-8. Poster contest for grades K - 8.

Materials distributed to 7-12 students? No (Info Only)

Annual budget for school education program: 5000.00

Description of all other water supplier education programs

Curriculum materials include teacher study guide and student workbooks. Waterwise - curriculum for grades 4-8. Poster contest for grades K - 8. Conservation information distribution through local fair, traveling student poster Art Exhibit, Annual Poster Contest. Annual Water Awareness Student Poster Contest

Comments:

At Least As effective As No

Exemption No 0

Flex Track Summary Report

Foundational Best Management Practices For Urban Water Efficiency

233 Ventura County Waterworks Dist. #1

BMP	ACTUAL	TARGET	PRIOR CREDIT	Coverage option	STATUS
BMP 3	200.89	14.71	179.680	Flextrack	ON TRACK
BMP 4	0	20.69	0.000	Flextrack	ON TRACK
BMP 5	0	0	-230.66	Flextrack	NOT ON TRACK
TOTAL	**200.89**	**35.4**	**-50.98**		**On Track**

CUWCC BMP Coverage Report 2012

BMP3 - Residential

ON TRACK

Agency **Ventura County Waterworks Dist. #1**

Date Agency Signed MOU: 8/27/1991

Coverage Option: Flextrack

Total Measured Water Savings (AF/Year)

TRADITIONAL	FLEXTRACK	ACTUAL	TARGET	Prior Activities Credit
200.89	0	200.89	14.71	179.680

Residential Assistance

	Single Family Accounts	Single Family Target	Multi Family Accounts	Multi Family Target
Total Number Of Customers	9636		0	
Total Participants during Reporting	9636		0	
Number of Leak Detection Surveys or Assistance on Customer Property	1516	72.27	0	0.00
Number of Faucet Aerators Distributed	0		0	
Number of WSS Showerheads Distributed	0			
Landscape Water Surveys	5	72.27		

Has agency reached a 75% market saturation for showerheads? No

High Efficiency Clothes Washers

	Single Family Accounts	Single Family Target
Number of installations for HECW	136	96.36
Are financial incentives provided for HECWs?	Yes	
Has agency completed a HECW Market Penetration Study?	No	

Water Sense Specification Toilets

Retrofit 'On Resale' Ordinance exists: No

75% Market Penetration Achieved: No

	Single Family Units	Multi Family Units
Five year average Resale Rate	0.02	0.00
Number Toilets per Household	2	0
Number WSS Toilets Installed	24	0
Target Number of WSS Toilets	152.25	0.00

WSS for New Residential Development

Does an Ordinance Exists Requiring WSS Fixtures and Appliances in new SF and MF residences?	Single Family Units	Multi Family Units
	Yes	Yes
Number of new SF & MF units built	11	0
Incentives		

CUWCC BMP Coverage Report 2012

BMP3 - Residential **ON TRACK**

Unique Conservation Measures

Residential Assistance / Landscape Water Survey unique water savinigs

Measured water savings (AF/YR) 0

Uploaded file name:

High Efficiency Clothes Washers unique water savinigs

Measured water savings (AF/YR) 0

Uploaded file name:

WaterSense Specification toilets unique water savinigs

SF Measured water savings (AF/YR) MF Measured water savings (AF/YR)

Uploaded file name:

WaterSense Specification toilets for New Residential development unique water savinigs

Measured water savings (AF/YR) 0

Uploaded file name:

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

Measured water savings (AF/YR)

Uploaded file name:

Educate residential customers about the behavioral aspects of water conservation

Measured water savings (AF/YR) 0

Uploaded file name:

Notify residential customers of leaks on the customer's side of the meters

Measured water savings (AF/YR) 0

Uploaded file name: Copy2_of_Notice_to_the_Cusotmer_yellow_tag.pdf

Provide bill or surcharge refunds for customers to repair leaks on the customer's side of the meters

Measured water savings (AF/YR) 0

Uploaded file name:

Provide unique water savings fixtures that are not included in the BMP list above

Measured water savings (AF/YR) 0

Uploaded file name:

Install residence water use monitors

Measured water savings (AF/YR) 0

Uploaded file name:

Participate in programs that provide residences with school water conservation kits

Measured water savings (AF/YR) 0

Uploaded file name:

Implement in automatic meter reading program for residential customers

CUWCC BMP Coverage Report 2012

BMP3 - Residential

ON TRACK

Measured water savings (AF/YR) 0

Uploaded file name:

OTHER Types of Measures

Measured water savings (AF/YR) 0

Uploaded file name:

Traditional Water Savings Calculation result:

Measures	Target Water Savings (AF):	Actual Water Savings (AF):
SF Leak Detection Surveys	1.62	61.40
MF Leak Detection Surveys	0.00	0.00
Landscape Water Surveys	1.62	129.24
SF WSS Toilets Installed	8.77	2.07
MF WSS Toilets Installed	0.00	0.00
HECW	2.70	8.18

Comments:

At Least As Effective As No

Exemption No

CUWCC BMP Coverage Report 2012

BMP4 - Commercial Industrial Institutional

ON TRACK

Agency **Ventura County Waterworks Dist. #1**

Date Agency Signed MOU: 8/27/1991

Coverage Option: Flextrack

CII Baseline Water Use (AF): 862.17

CII Water Use Reduction(AF): 86.217

Total Measured Water Savings (AF/Year)

TRADITIONAL	FLEXTRACK	ACTUAL	TARGET	Prior Activities Credit
0	0	0	20.69	0.000

Water Efficiency Measures:	Quantity Installed:	Water Savings:	Accept Council's default value
1 High Efficiency Toilets (1.2 GPF or less)	0	0.00	Yes
2 High Efficiency Urinals (0.5 GPF or less)	0	0.00	Yes
3 Ultra Low Flow Urinals	0.00	0.00	Yes
4 Zero Consumption Urinals	0.00	0.00	Yes
5 Commercial High Efficiency Single Load Clothes Washers	0.00	0.00	Yes
6 Cooling Tower Conductivity Controllers	0.00	0.00	Yes
7 Cooling Tower pH Controllers	0.00	0.00	Yes
8 Connectionless Food Steamers	0.00	0.00	Yes
9 Medical Equipment Steam Sterilizers	0.00	0.00	Yes
10 Water Efficient Ice Machines	0.00	0.00	Yes
11 Pressurized Water Brooms	0.00	0.00	Yes
12 Dry Vacuum Pumps	0.00	0.00	Yes
Total Water Savings:		**0.00**	

Unique Conservation Measures

Industrial Process Water Use Reduction

Measured water savings (AF/YR)

Uploaded file name:

Commercial Laundry Retrofits

Measured water savings (AF/YR)

Uploaded file name:

Industrial Laundry Retrofits

Measured water savings (AF/YR)

Uploaded file name:

Filter Upgrades (for pools, spas and fountants)

CUWCC BMP Coverage Report 2012

BMP4 - Commercial Industrial Institutional

ON TRACK

Measured water savings (AF/YR)

Uploaded file name:

Car Wash Reclamation Systems

Measured water savings (AF/YR)

Uploaded file name:

Wet Cleaning

Measured water savings (AF/YR)

Uploaded file name:

Water Audits (to avoid double counting, do not include device/replacement water savings

Measured water savings (AF/YR)

Uploaded file name:

Clean In Place (CIP)Technology (such as bottle sterilization in a beverage processing plant)

Measured water savings (AF/YR)

Uploaded file name:

Waterless Wok

Measured water savings (AF/YR)

Uploaded file name:

Alternative On-site Water Sources

Measured water savings (AF/YR)

Uploaded file name:

Sub-metering

Measured water savings (AF/YR)

Uploaded file name:

High Efficiency Showerheads

Measured water savings (AF/YR)

Uploaded file name:

Faucet Flow Restrictors

Measured water savings (AF/YR)

Uploaded file name:

Water Efficiency Dishwashers

Measured water savings (AF/YR)

Uploaded file name:

Hor Water on Demand

Measured water savings (AF/YR)

Uploaded file name:

Pre-rinse spray Valves of 1.3 gpm (gallons per minute) or less

CUWCC BMP Coverage Report 2012

BMP4 - Commercial Industrial Institutional

ON TRACK

Measured water savings (AF/YR)

Uploaded file name:

Central Flush Systems

Measured water savings (AF/YR)

Uploaded file name:

IOther Measures chosen by the Agency

Measured water savings (AF/YR)

Uploaded file name:

Comments:

At Least As Effective As	Yes	Considering creating a survey for CII customers to inquire about which type of measure(s) if any, were implemented in their business.
Exemption	No	

CUWCC BMP Coverage Report 2012

BMP5 - Landscape

Agency **Ventura County Waterworks Dist. #1** Date Agency Signed MOU: 8/27/1991

Coverage Option: Flextrack

Total Measured Water Savings (AF/Year)

TRADITIONAL	FLEXTRACK	ACTUAL	TARGET	PRIOR ACTIVITIES CREDIT
0	0	0	0	-230.66

1) Accounts with Dedicated Irrigation Meters

a) Number of dedicated irrigation meter accounts	593
b) Number of dedicated irrigation meter accounts with water budgets	593
c) Aggregate water use for all dedicated non-recreational landscape accounts with water budgets	0
d)Aggregate acreage assigned water budgets for dedicated non-recreational landscape accounts with budgets	
Aggregate acreage of recreational areas assigned water budgets for dedicated recreational landscape accounts with budgets	0
Preserved water use records and budgets for customers with dedicated landscape irrigation accounts for at least four years	Yes
Unique measured water Savings (AF/YR) in this measure	
Uploaded the backup data if there are unique measured water savings?	No

Technical Assistance

Number of Accounts 20% over-budget	0
Number of Accounts 20% over-budget offered technical assistance	0
Number of Accounts 20% over-budget accepting technical assistance	0
Unique measured water Savings (AF/YR) in technical assistance	
Uploaded the backup data if there are unique measured water savings?	No

2) Commercial / Industrial / Institutional Accounts without Meters or with Mixed-Use Meters

Number of mixed use and un-metered accounts.	0
Number of irrigation water use surveys offered	0
Number of irrigation water use surveys accepted	0

Type: Incentives numbers received by customers:	0	$ Value:	0
Type: Rebates numbers received by customers:	0	$ Value:	0
Type No- or low-Interest loan offered numbers received by customers:	0	$ Value:	0

Annual water savings by customers receiving irrigation water savings surveys and implementing recomendations

Estimated annual water savings by customers receiving surveys and implementing recommendations

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Unique measured water Savings (AF/YR) in this measure

Uploaded the backup data if there are unique measured water savings? No

Financial Incentives

Unique measured water Savings (AF/YR) inFinancial incentives

Uploaded the backup data if there are unique measured water savings? No

Unique Conservation Measures

1. Monitor and report on landscape water use

1a. Measure landscapes and develop water budgets for customers with dedicated landscape meters. Provide timely water use reports with comparisons of water use to budget that provide customers the information they need to adjust irrigation schedules.

Uploaded file name:

1b. Measure landscapes and develop water budgets for customers with Mixed Use meters. Provide timely water use reports with comparisons of water use to budget that provide customers the information they need to adjust irrigation schedules.

Uploaded file name:

1c. Establish agency-wide water budget. (Include in Help notes: ETo based water budget in the MWELO changed in 2010 from .8ETo to .7ETo.)

Uploaded file name:

1d. Establish agency-wide, sector-based irrigation goal to reduce water use, based on season.

Uploaded file name:

2. Provide technical landscape resources and training

2a. Upon customer requests, provide landscape irrigation management and landscape design information and resources: provide assistance, answer customer questions, respond to run-off and high-bill calls.

Uploaded file name:

2b. Perform landscape & irrigation audits: including irrigation scheduling, plant information, and landscape area measurement.

Uploaded file name:

2c. Sponsor, co-sponsor, promote, or support landscape workshops, training, presentations and other technical educational events for homeowners and professionals: design, installation, maintenance, water management.

Uploaded file name:

2d. Establish time-of-day irrigation restrictions.

Uploaded file name:

2e . Establish day-of-week irrigation restrictions.

Uploaded file name:

3. Provide incentives

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3a. Establish landscape budget-based rates.

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3b. Provide incentives for conversions from mixed-use meters to dedicated landscape meters.

Uploaded file name:

3c. Provide incentives for irrigation equipment upgrades that improve distribution uniformity, irrigation efficiency, or scheduling capabilities.

Uploaded file name:

3d. Provide incentives for the reduction of water use over an irrigated area, or reduction in the size of the irrigated area due to replacement of turf or other high water-using plants with low water-using plants, artificial turf, or permeable surfaces.

Uploaded file name:

3e. Provide incentives for conversions from potable to recycled water.

Uploaded file name:

3f. Provide incentives for the use of alternative sources of water in the landscape (i.e. gray water, rainwater, cisterns, etc.)

Uploaded file name:

4. Participate in local and regional planning and regulatory activities

4a. Collaborate with planning agencies at the local and regional level, other water suppliers in the area and stakeholders in response to state or federal requirements such as the State Model Water Efficient Landscape Ordinance and AB 1881. Participate in the development, review, implementation, and enforcement of requirements for new developments. Provide water use data to planning agencies.

4b. Establish or participate in a water conservation advisory committee or other community outreach effort to drive market transformation and exchange information about landscape water conservation with developers, community-based organizations, homeowners associations, residential customers, landscape professionals, educators, other water suppliers in region.

4c. Participate in regional efforts: integrated water resource management, watershed management, NPDES permit agencies, etc.

5. Develop a holistic approach to landscape water use efficiency

5a. Develop and implement a comprehensive landscape water conservation program for all customers. Target marketing efforts to those most likely to result in benefits to both customer and Agency.

Uploaded file name:

6. Other Measures

Other Landscape Measures.

Uploaded file name:

Comments:

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At Least As Effective As	No
Exemption	No