June 2011

2010 Urban Water Management Plan

CITY OF THOUSAND OAKS
2100 Thousand Oaks Boulevard
Thousand Oaks, California 91362

PREPARED BY:

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CITY OF THOUSAND OAKS

2010 URBAN WATER MANAGEMENT PLAN

City of Thousand Oaks
2100 Thousand Oaks Boulevard
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June 2011

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CITY OF THOUSAND OAKS
2010
URBAN WATER MANAGEMENT PLAN

SECTION I: INTRODUCTION

A. Background and Objective

The 2010 Urban Water Management Plan (UWMP) has been prepared in compliance with Assembly Bill No. 797 ("The Urban Water Planning Management Act") of the 1983-1984 Regular Session of the California Legislature (Water Code Section 10610 et. seq.). That legislation requires that an Urban Water Management Plan be prepared by all water purveyors having more than 3,000 accounts or supplying more than 3,000 acre-feet of water annually. Since its passage in 1983, several amendments have been added to the Act. Plans are required to be submitted every five years. The City adopted previous Plans in 1991, 1997, 2000, and 2005.

As with the 2005 UWMP, the 2010 UWMP incorporates the Senate Bills 610 and 221 legislation and serves as the primary source documentation for future Water Supply Assessments and Written Verifications.

The purpose of this 2010 UWMP is to update the 2005 UWMP and include the requirements of the Delta Legislation of 2009. Senate Bill 7 (SBx7-7), also known as the Water Conservation Act, is recent legislation that is required to be included with the 2010 UWMP, which specifically mandates that a water agency outline water use reduction targets and procedures for achieving those targets. It's a demand-side solution aimed at reducing overall water demands within California, which could directly result in improvements to the reliability of the State Water Project. **Appendix A** includes a copy of the Water Conservation Act.

The 2010 UWMP was prepared in accordance with state requirements mentioned herein, and consistent with the analysis and recommendations made in the City of Thousand Oaks 2005 Water Master Plan. The State Department of Water Resources (DWR) published the *Guidebook to assist Urban Water Suppliers to Prepare a 2010 Urban Water Management Plan* (March 2011) which includes a checklist to assist DWR staff in reviewing UWMPs. **Appendix B** includes a completed checklist for the 2010 UWMP.

The 2010 UWMP will serve as:

- Source documentation for Water Supply Assessments and Written Verifications
- Guidance document for water conservation
- Documentation of policy decisions and selection of water use reduction methodologies
- A long-range planning document for water supply
- A database for development of regional water plans and General Plans
- A component to Integrated Regional Water Management Plans

B. Public Participation and Hearing

The City of Thousand Oaks has actively encouraged community participation in its Urban Water Management Planning efforts. Prior to adopting the UWMP and pursuant to recently-adopted legislation, the City notified the County of Ventura prior to its public hearing to adopt the UWMP. The final draft was made available for public review two weeks prior to the public hearing. Prior notice of the public hearing was published within the jurisdiction of the City pursuant to Section 6066 of the Government Code. The County will be provided the City's 2010 UWMP within 60 days following its submittal to DWR. The City will again make the final UWMP available for public review within 30 days following its submittal to DWR.

C. City of Thousand Oaks Water Service Area

Incorporated in 1964, the City of Thousand Oaks, located in eastern Ventura County, had a population of about 20,000 and encompassed an area of 14.28 square miles. **Exhibit I-1** shows the regional vicinity of Thousand Oaks. Currently, the population is approximately 130,200 and the City encompasses an area of approximately 56 square miles[1]. The City is the water purveyor to approximately 36 percent of the water users within the City. Other water purveyors include the California-American Water Company (Cal-Am: 48 percent), California Water Service Company (Cal-Water: 16 percent), the Newbury Park Academy Mutual Water Company (less than one percent) and the Camrosa County Water District (less than one percent). The City also serves unincorporated areas within the County, as shown in **Exhibit I-2**.

The potable water distributed by the City is imported water purchased from the Calleguas Municipal Water District (CMWD), which receives its supply from the Metropolitan Water District of Southern California (MWDSC). The source of MWDSC's supply is either the State Water Project or the Colorado River. Hence, water conservation efforts in the City's service area will reduce the demand for imported water. The City also owns and operates two groundwater wells that have historically provided irrigation water to public properties.

The City water system consists of approximately 317 miles of transmission and distribution pipelines, 11 pump stations and 16 reservoirs with a total capacity of 35.5 million gallons. Water is delivered to the system through 10 turnouts from the CMWD system. The City serves approximately 16,900 accounts and purchased approximately 12,900 acre-feet (AF) of water in 2009. Approximately 60 percent of the City's customers are within service zones that require additional pumping. The majority of the City's water service area is residential. The City does not serve any agricultural users.

All City water customers receive City wastewater service through the Hill Canyon Wastewater Treatment Plant, which has a current capacity of 14 MGD. Plant capacity is used by customers of private water purveyors in the City as well. The plant's tertiary-treated wastewater is discharged into the North Fork of the Arroyo Conejo.

[1] Source: January 2010, California Department of Finance Website.

D. Climate

The Thousand Oaks climate is typified by warm dry summers followed by moist, cool winters. Maximum summer temperatures can exceed 100F degrees, and winter temperatures occasionally drop below 32F degrees. Average annual rainfall for 2001-2010 ranged from five to 26 inches. Because water is imported from MWDSC and the State Water Project via CMWD, the City's supplies are not subject to local seasonal or climatic shortages. Table I-1 shows the monthly climate characteristics, including evapotranspiration, temperature and rainfall, for the last 10 years.

Table I-1
Thousand Oaks Average Weather

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Standard Monthly Average ETo [1]	2.8	2.9	4.1	5.6	6	6.8	7.6	7.8	5.8	5.2	3.7	3.2	**61.5**
Average temp, °F [2]	55	56	57	58	62	66	70	74	73	70	64	57	**63.5**
Precipitation, in. [2]	3.3	4.5	4.3	2.1	0.5	0.2	0	0	0.2	0.4	0.9	1.8	**18.2**

[1] Source: http://www.cimis.water.ca.gov/cimis/data.jsp, Data shown is for Santa Clarita 204 Station.

[2] Source: http://www.city-data.com/city/thousand-oaks-california.html.

E. Population

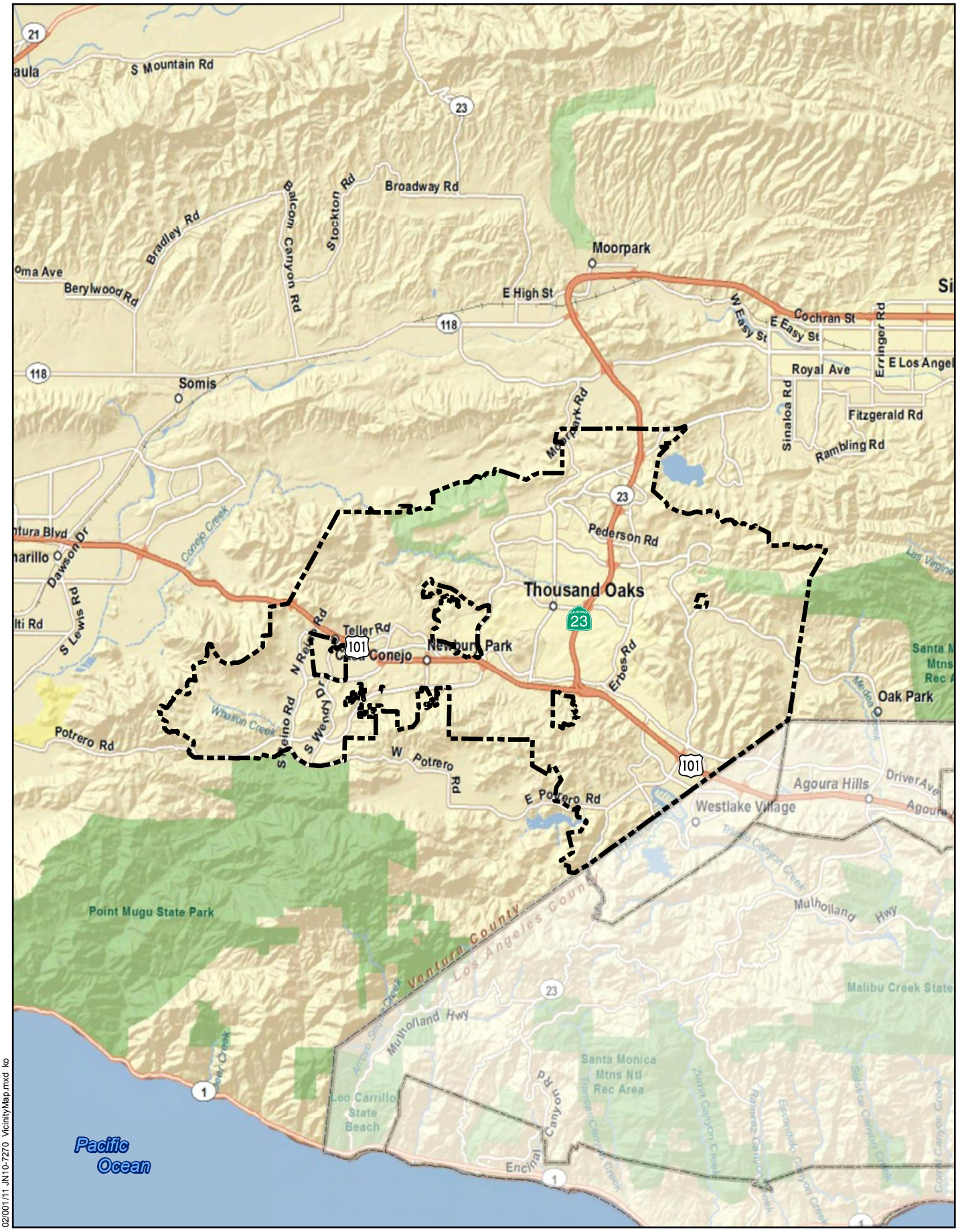
Table I-2 outlines the current and projected service area population in five-year increments to Year 2035. This assumes straight-line projection and ultimate buildout of the City's service area by 2035[2]. The ultimate projection is based on data provided by the City's Community Development Department. As calculated later in Section III, the City anticipates ultimately adding approximately 1570 more residential and non-residential service connections to the City's water system.

Table I-2
Population Projections for City Water Service
(Persons)

	2005	2010	2015	2020	2025	2030	2035
Service Area Population	50,282	51,609	52,027	52,298	52,452	52,607	52,761

Note: Based on population figures determined by available methods as dictated in the 2010 UWMP Guidebook for historical years, and Thousand Oaks Community Development Department for future years. Year 2035 population assumed to be 'ultimate'. Population for years 2025 and 2030 assumes straight-line interpolation.

[2] Source: Community Development Department, City of Thousand Oaks



02/001/11 JN10-7270 VicinityMap.mxd ko

RBF CONSULTING GIS

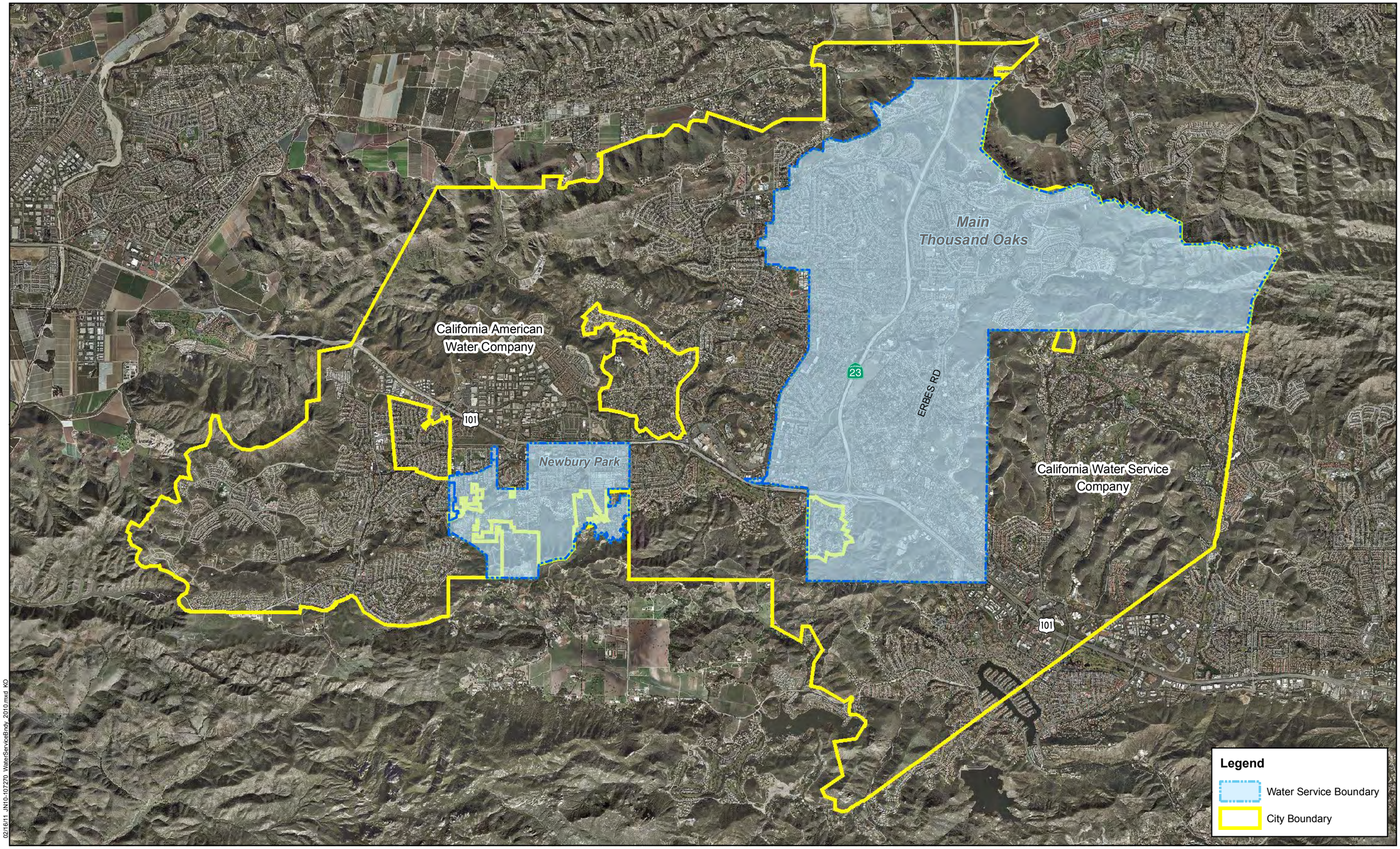
0 1 2 4 Miles

Source: ESRI

2010 URBAN WATER MANAGEMENT PLAN - THOUSAND OAKS

Vicinity Map

Exhibit I-1



02/16/11 JN10-107270 WaterServiceBndy 2010.mxd KO

RBF CONSULTING GIS

0 2,600 5,200 10,400 Feet

Source: Eagle Aerial, 2009

2010 URBAN WATER MANAGEMENT PLAN - THOUSAND OAKS

Water Service Boundaries 2010

Exhibit I-2

SECTION II: WATER SUPPLY AND QUALITY

A. Background

The City of Thousand Oaks has access to two sources of water: imported water and groundwater. The Calleguas Municipal Water District (CMWD) delivers imported water to the City. Groundwater is available via the Thousand Oaks Area Groundwater Basin. However, the groundwater is used for irrigation purposes only, due to its poor water quality. The City uses the treated imported water from CMWD to meet all of its domestic demands. This section identifies the City's existing water supply sources and discusses water quality associated with each source.

B. Existing Water Supply and Quality

1. Imported Water

The City has been relying on imported water since it became available in 1963. The City receives imported water from CMWD, the wholesale provider of imported water to the region, which owns and operates a transmission system to convey water to local water retail agencies across an area of approximately 350 square miles. CMWD provides water to the City of Thousand Oaks, in addition to the neighboring water agencies within and around the Conejo Valley (California-American Water Company, California Water Service Company, Academy Water Company, and Camrosa Water District). The imported water is supplied to CMWD's distribution system through a system connection with Metropolitan Water District of Southern California (MWDSC), a State Water Project contractor. CMWD's potable water is supplied entirely from the California State Water Project, which is generally of high quality from the Northern California Sierra Mountain Range. Generally, the water is low in total dissolved solids, sulfate, hardness, iron and manganese[3], and consistently meets all federal and state water quality standards as reported in the annual Water Quality Report (July 2010). Prior to delivery to CMWD, the imported water is treated at MWDSC's Jensen Treatment Facility in Granada Hills to ensure that all the water quality standards are met or surpassed. MWDSC has recently upgraded their disinfection process at the Jensen Facility to include a combination of ozone and hydrogen peroxide - peroxone - as the primary disinfectant.

The City water system has ten (10) turnout connections to the CMWD system, for a total combined maximum rated capacity of 32,250 gpm. All of the turnouts are used regularly and are critical elements to supplying water to City customers. Of the 10 turnouts, seven of them gravity feed directly into City service area zones, while the other three provide suction to a pump station. The ten turnouts are listed in Table II-1 and shown in **Exhibit II-1**[4].

[3] Kennedy/Jenks/Chilton. June 1992. *Feasibility Study of Groundwater Utilization for Nonpotable Water Demands.* p.3.1.
[4] Source: City of Thousand Oaks: 2005 Water Master Plan

Table II-1
CMWD Turnout Summary

Turnout Name	Location	Rated Capacity (GPM)
NEWBURY PARK		
Ventu Park	1304 Newbury Road	2,000
West Kelley	2770 Borchard Road	2,000
MAIN THOUSAND OAKS		
Del Sol	3235 Erbes Road	5,000
Encino Vista	819 Encino Vista	2,500
Gainsborough	1240 N. Moorpark Road	2,500
Hillcrest Drive	19 E. Hillcrest Drive	2,500
Las Flores	2194 N. Moorpark Road	3,000
Lindero	2106 Erbes Road	6,000
Lone Oak	560 Lone Oak	3,750
Los Arboles	555 E. Avenida de Los Arboles	3,000
	Total	32,250

As described in the next section, the City has significantly reduced its groundwater production from its two remaining active wells. This was in response to reduced water quality. Groundwater produced by the City is not used within the City's service area. Rather, it supplements California-American Water Company's supply to City-owned property. Therefore, water supply from imported sources and CMWD has been the exclusive water source for the City's service area. Historical water purchases from CMWD are as shown in Table II-2.

Table II-2
Purchased Water Summary, (Acre Feet per Year)

Purchased from Calleguas Municipal Water District	1980	1985	1990	1995	2000	2005	2008	2009
	8,053	9,310	10,917	9,798	12,734	13,347	14,310	12,902

2. Groundwater Supply

The Thousand Oaks Area Groundwater Basin covers approximately 3,110 acres and has an estimated total storage capacity of 130,000 acre-feet[5]. In 1999, the groundwater in storage was estimated at 87 percent, or 113,000 acre-feet. Public and private agencies managing the basin are listed in Table II-3.

Table II-3
Agencies Managing and Using Thousand Oaks Area Groundwater Basin

Private Agencies	Public Agencies
California Water Service Company-Westlake District	City of Thousand Oaks Public Works Department
California American Water Company	Ventura County Public Works Agency

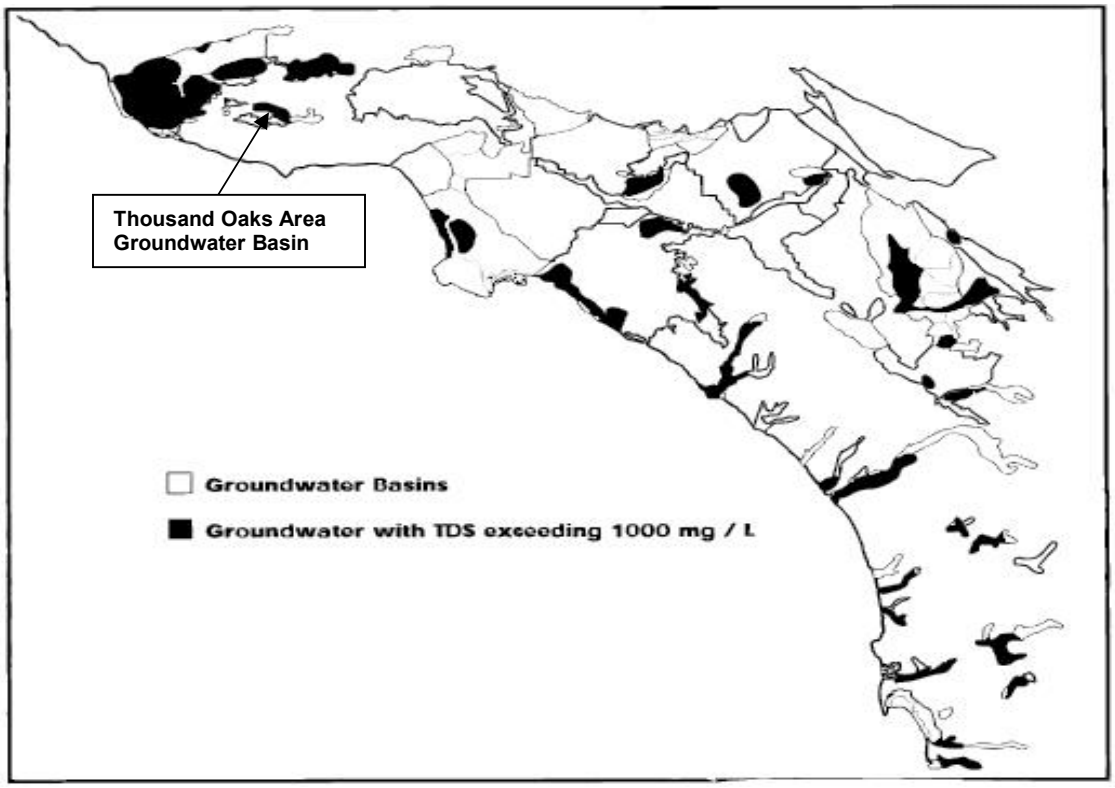
[5] California Department of Water Resources (DWR) Bulletin 118, 2/27/04.

The groundwater basin has high iron content and high total dissolved solids levels ranging from 1,200 to 2,300 mg/L. TDS levels average 1,410 mg/L according to the California State Water Resources Control Board[6]. Figure II-1 shows the basins containing high TDS levels within the MWDSC service boundary.

The results of high TDS levels are high alkalinity and hardness, which influence taste and quality characteristics. The groundwater does not meet secondary water quality standards and cannot be used as potable water without treatment. The Kennedy/Jenks/Chilton report, *Feasibility Study of Groundwater Utilization for Non-potable Water Demands* (1992), stated that the potential recoverable groundwater in the upper 300 to 500 feet of the aquifer is estimated to be between 400,000 and 600,000 acre-feet.

Treatment of groundwater will produce a brine discharge. CMWD's Salinity Management Pipeline is currently under construction, which will provide brine discharge capacity for brackish groundwater recovery projects and treatment plant effluent. This will facilitate treatment of the under-utilized groundwater of the Calleguas Creek Watershed, as a whole, and potentially make groundwater mining projects within the Thousand Oaks Area Groundwater Basin (Figure II-1) economically viable.

Figure II-1[7]
Distribution of Salinity Levels in MWDSC's Service Area



[6] California Department of Water Resources (DWR), 2004. *California's Groundwater-Hydrologic Region South Coast-Thousand Oaks Area Groundwater Basin.* Bulletin 118.

[7] Source: MWDSC Regional Urban Water Management Plan.

The Ventura County Public Works Agency (VCPWA) operates two wells that are used to monitor groundwater levels. Neither of the neighboring water agencies, California-American Water Company nor the California Water Service Company, uses groundwater as a drinking water supply. The City of Thousand Oaks owns two groundwater production wells within California-American's service area. These are the Hillcrest Drive and Los Robles Golf Course wells. Table II-4 summarizes depth and flow characteristics of these two wells. Two other wells previously operated by the City have recently been abandoned – Library Well and Old Goebel Well. The wells are categorized as irrigation wells, i.e. wells solely used for supplying irrigation demands. Their respective locations are shown in **Exhibit II-1**.

Table II-4
Well Summary

Well Name	Location	Current Status	Depth (feet)	Discharge Capacity (gpm)
Hillcrest Drive Well	Hillcrest Drive Median, West of Lynn Rd.	Active	475'	100
Los Robles Golf Course Well	Los Robles Golf Course	Active	500'	600

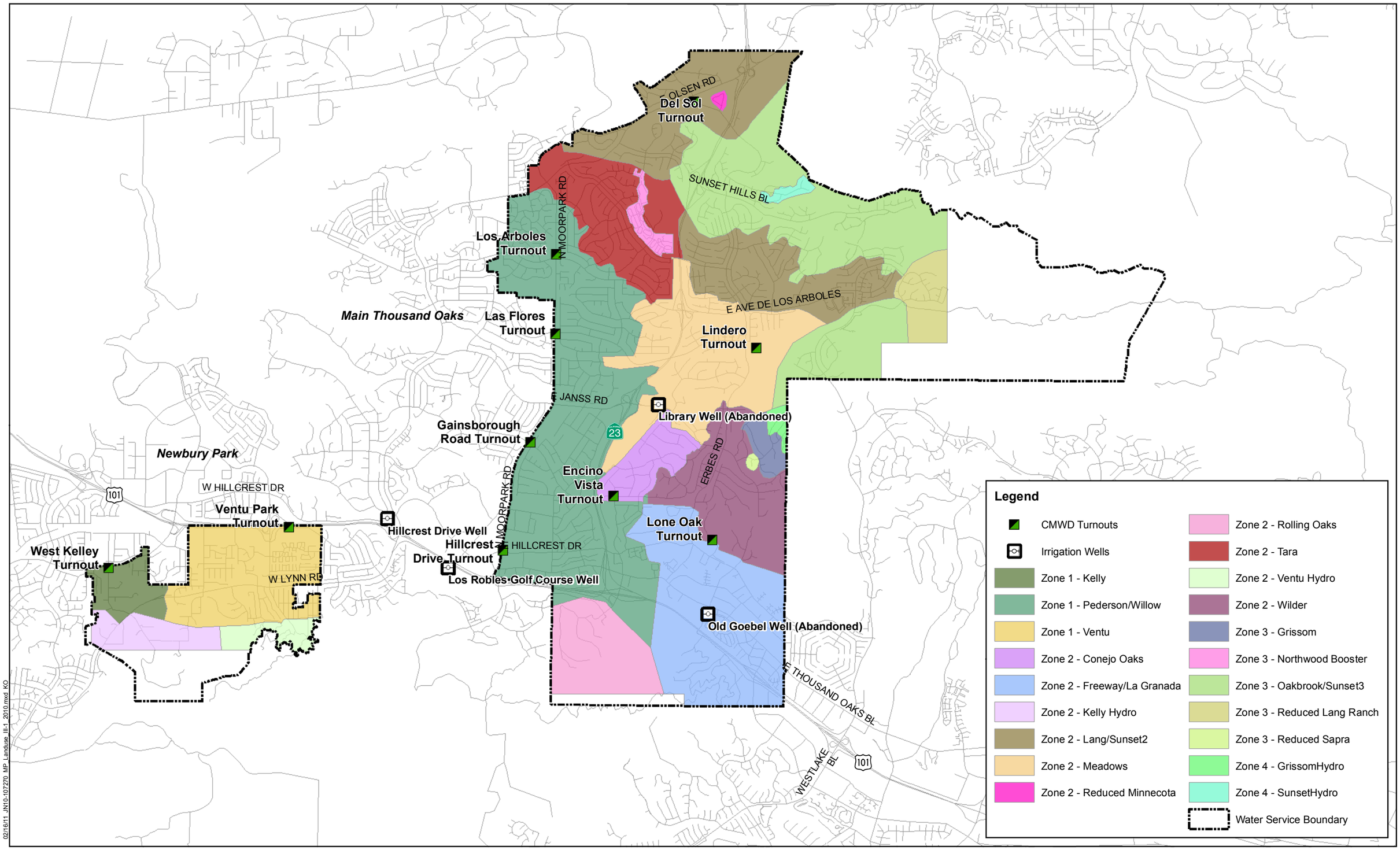
3. Recycled Water Sources

The City of Thousand Oaks operates a recycled water program in conjunction with CMWD and Camrosa Water District. This program provides tertiary treated wastewater via discharge from the Hill Canyon Wastewater Treatment Plant (WWTP) to the Conejo Creek for beneficial uses downstream. Known as the Conejo Creek Diversion Project, the regional benefit extends beyond the City's service area; therefore, the City receives water conservation credits which are used to offset imported water supplies in the event of a water supply shortage. The project provides various downstream users within the Santa Rosa Valley and Oxnard Plain direct benefit as a local water source, as further discussed in Section VII. Table II-5 estimates the wastewater flows from the City's Hill Canyon WWTP.

Table II-5
Current and Projected Wastewater Flows (AFY)

	2005	2010	2015	2020	2025	2030	2035
Hill Canyon Wastewater Treatment Plant Flow	10,667	10,667	10,667	10,667	10,667	10,667	10,667

As shown in the table, flows through the WWTP are not expected to increase with the nominal increase anticipated in Thousand Oaks water demands. This is due to new water service efficiencies and water conservation.



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RBF CONSULTING GIS

0 2,000 4,000 8,000 Feet

Source:

2010 URBAN WATER MANAGEMENT PLAN - THOUSAND OAKS

Turnouts & Well Locations 2010

Exhibit II-1

Based on current and future projections of groundwater use as indicated by the City in the 2005 Water Master Plan, and presented in this subsection, it is expected that no additional wells will be built for groundwater extraction before Year 2035. Table II-6 summarizes the historical production from the City's wells.

Table II-6[8]

City of Thousand Oaks Groundwater Usage (2000-2009)

Year	Los Robles Golf Course (Acre-Feet)	Hillcrest Drive (Acre-Feet)	Old Goebel (Acre-Feet)	Annual Total (Acre-Feet)
2000	172	4	2	177
2001	247	4	1	252
2002	264	8	1	272
2003	104	3	0	108
2004	38	7	0	45
2005	95	3	0	98
2006	70	5	0	75
2007	67	4	0	71
2008	71	3	0	74
2009	1	2	0	3
2010	46	0	0	46

In 2009, the Los Robles Golf Course well was taken out of service for an extended period. It has recently been re-activated, and currently is back in operation providing irrigation for the golf course.

3. Emergency Interconnections

Interconnections with neighboring water purveyors can also be considered a source of supply. Interconnections allow for agencies to share supply and storage in the event of an emergency. The City currently does not have any interconnections with neighboring water agencies that can provide water for the City's system.

Table II-7 is a summary of the current and projected water supplies for the City's service area at five year intervals through year 2035.

Table II-7
Current and Projected Water Supplies
(Acre Feet per Year, AFY)

Water Supply Source	2009	2010	2015	2020	2025	2030	2035
Calleguas Municipal Water District	12,902	10,977	13,965	15,360	15,360	15,360	15,360
Local Groundwater [1]	3	46	0	0	0	0	0
Total City Water Supplies	12,902	10,977	13,965	15,360	15,360	15,360	15,360

[1] Groundwater produced by the City supplements California-American Water Company's water supply outside the City's service area; therefore, not included in total City water supplies.

[8] Based on City Records

SECTION III: PAST, CURRENT AND PROJECTED LAND USE AND WATER DEMAND

A. Land Use

The City water service area consists primarily of residential, with commercial land uses located along the main City streets. Table III-1 summarizes the existing land uses within the City's water service area, and is illustrated in **Exhibit III-1**.

Table III-1
Existing Land Use within City Water Service Area

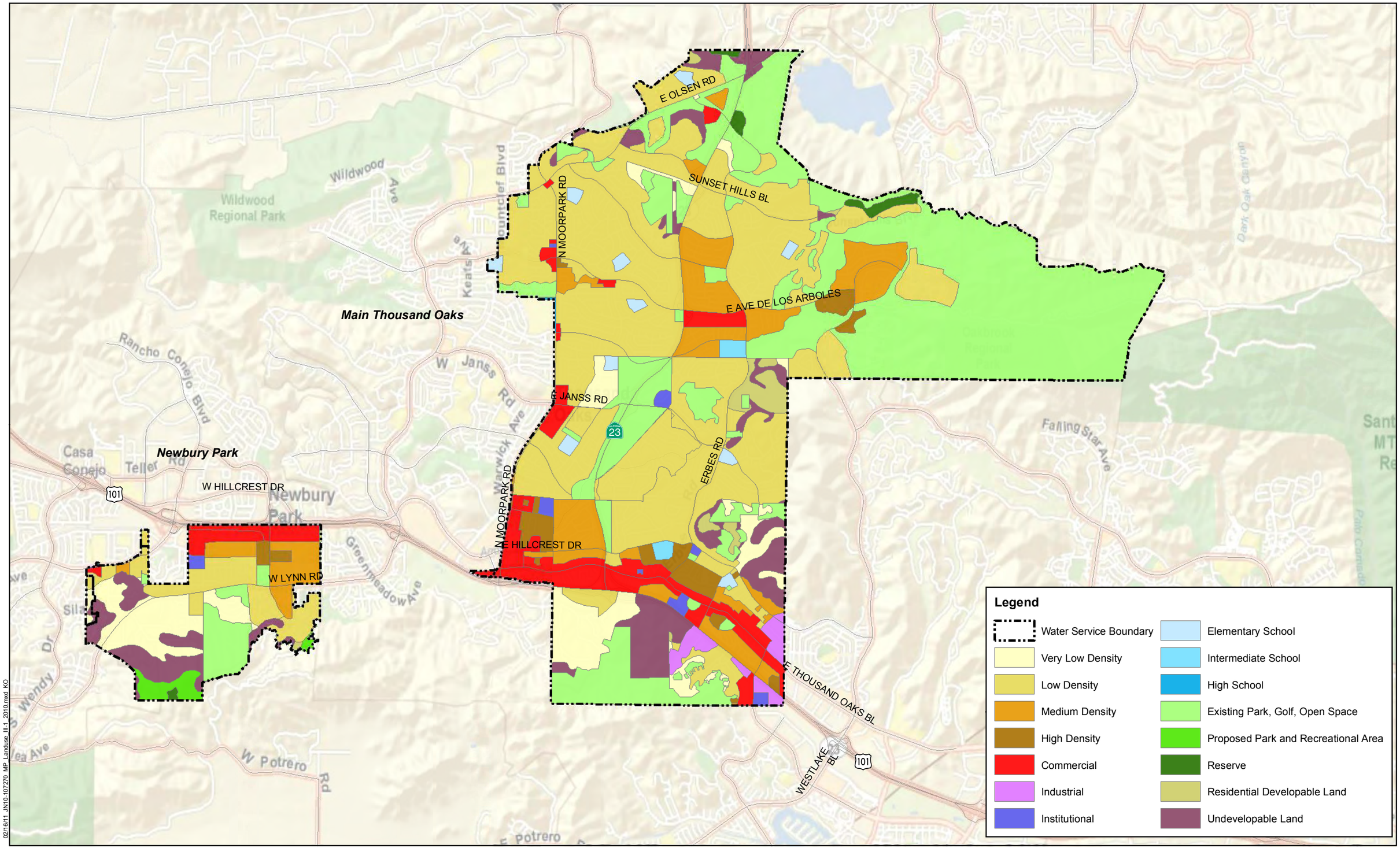
Land Use Type	Density Factor (du/ac)	Area (acre)
High Density Residential	15-30	330.2 [1]
Medium Density Residential	4.5-15	1048.2 [1]
Low Density Residential	2-4.5	5086.4 [1]
Very Low Density Residential	0-2	807.0 [1]
Reserve Residential	0-2 (ultimate need)[9]	81.6
Commercial	N/A	893.7 [2]
Industrial	N/A	197.2 [2]
Institutional	N/A	182.8 [2]
Elementary School	N/A	121.0
Intermediate School	N/A	58.4
High School	N/A	8.2
Existing Parks, Golf Courses, Open Space	N/A	2642.7 [3]
Proposed Parks and Recreational Area	N/A	57.1 [3]
Residential Developable Land	0.2-1.0 (ultimate need)	177.5
Undevelopable Land	N/A	658.2
Undefined	N/A	9.5
TOTAL		**12,360**

[1] Based on City Public Works Department (February 2011) remaining development to be completed in the future, it is estimated total existing residential area grew by 232 acres since the 2005 UWMP and distributed proportionately among the residential densities. Low density residential includes recent annexation of the Conejo Oaks community.

[2] Based on City Public Works Department (February 2011) remaining development to be completed in the future, it is estimated total existing CII area grew by 5 acres since the 2005 UWMP, which was assumed to be distributed proportionately among Commercial, Industrial and Institutional.

[3] Based on City Public Works Department (February 2011) remaining development to be completed in the future, Parks and Recreational area has not increased from the estimate in the 2005 UWMP; therefore, it is assumed there is no change in future Parks and Recreational area.

[9] Ultimate need is defined as the density factor for a land use type in an ultimate future condition.



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2010 URBAN WATER MANAGEMENT PLAN - THOUSAND OAKS

Land Use 2010

Exhibit III-1

Although essentially all of the land within the City water service boundary is developed, changes in the existing land use are expected either by developing the few remaining small vacant parcels within the City's service area, or by redevelopment of existing land uses. Future service area development will add approximately 173 acres residential and 168 acres of non-residential land uses by Year 2035. For the purposes of the 2010 UWMP, this will result in a nominal increase in service area demands. However, it should be noted that the water conservation requirements for 2015 and 2020 pursuant to SBx7-7, will likely decrease the City's service area water usage from current consumption levels. Section III discusses the demand management measures and the City's 20x2020 plan to comply with the State's requirements.

The City recently annexed the Conejo Oaks area, which was previously served by the California-American Water Company. The agreement between the City and Cal-Am, approved by the California Public Utilities Commission, completed this annexation into the City water system in January, 2008.

B. Water Demand

The historical trend of water usage has declined in response to the recent drought and economic recession. Table III-2 shows the historical connections, accounted-for water usage and total water production for the last ten years.

Table III-2
Historical Water Loss and Per-Connection Water Usage

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of Connections	15,946	16,124	16,300	16,396	16,436	16,507	16,535	16,835	16,868	16,885
Accounted-for Water Usage (AF/Yr)	12,095	13,189	12,688	13,538	12,839	12,976	14,179	13,971	12,330	10,874
Purchased from CMWD (AF/Yr)	12,339	13,606	13,430	14,211	13,347	13,579	14,587	14,310	12,902	10,977
Thousand Oaks Wells (AF/Yr)	- [1]	- [1]	- [1]	- [1]	- [1]	- [1]	- [1]	- [1]	- [1]	- [1]
Total Production	12,339	13,606	13,430	14,211	13,347	13,579	14,587	14,310	12,902	10,977
Water Loss	1.98%	3.06%	5.52%	4.74%	3.81%	4.44%	2.80%	2.37%	4.43%	0.94%
Production per Connection (AFY/conn)	0.77	0.84	0.82	0.87	0.81	0.82	0.88	0.85	0.76	0.65

[1] Groundwater produced by the City supplements California-American Water Company's water supply outside the City's service area.

As shown in the table, the water usage per service connection over this time period ranged from 0.65 to 0.88 AF/Yr, and currently trending downward as can be expected during drought years.

Water usage and connection accounts provided by the City for 2005 to 2010 are shown in Table III-3, which also shows the percent breakdown for each of the City's land use categories.

Table III-3
Past Water Usage by Land Use Category

Land Use Type		2005	2006	2007	2008	2009	2010	Average (Current) (AF)
Single-Family	Connections	15,237	15,264	15,280	15,582	15,625	15,639	8,893
	Usage (AF)	8,848	9,027	9,737	9,665	8,603	7,480	
	% of total usage	69%	70%	69%	69%	70%	69%	
Multi-Family	Connections	252	252	251	252	252	251	849
	Usage (AF)	901	834	885	869	815	788	
	% of total usage	7%	6%	6%	6%	7%	7%	
Commercial, Industrial, Institutional	Connections	549	556	559	563	564	563	1,435
	Usage (AF)	1,438	1,451	1,584	1,554	1,336	1,248	
	% of total usage	11%	11%	11%	11%	11%	11%	
Irrigation	Connections	396	395	401	405	407	410	1,675
	Usage (AF)	1,652	1,650	1,956	1,875	1,567	1,351	
	% of total usage	13%	13%	14%	13%	13%	12%	
Construction	Connections	2	40	44	33	20	22	9
	Usage (AF)	0	14	17	8	9	7	
	% of total usage	0%	0%	0%	0%	0%	0%	
Total	Connections	16,436	16,507	16,535	16,835	16,868	16,885	12,862
	Usage (AF)	12,839	12,976	14,179	13,971	12,330	10,874	
	% of total usage	100%	100%	100%	100%	100%	100%	

The City's water usage has shown a steady decline since 2007 due to the persistent drought of 2008-2010 and ensuing water conservation efforts. Due to the extreme nature of the drought and water reduction, an average of these years is used as 'current' for the purposes of the 2010 UWMP. Although the mandatory water conservation measures required by the 2010 UWMP are expected to maintain this recorded water use reduction, it is not expected that this reduced level of water use will be maintained during the early years of SBx7-7 compliance.

The City estimates a total of 173 acres of additional residential and 168 acres of non-residential development at build-out[10] (Year 2035). The anticipated water demands of these future land uses on currently undeveloped or under-developed lots within the City's service area are estimated in Table III-4.

[10] Source: Community Development Department, City of Thousand Oaks

Table III-4
Projected Future Additional Water Demands by Land Use

Land Use Type		Area	Usage Factor[4]	Water Demand (gpd)	Water Demand (AFY)
Residential	High Density	30.6 Ac	3.93 gpm/Ac		
	Medium Density	13.3 Ac	3.23 gpm/Ac		
	Low Density	28.8 Ac	1.27 gpm/Ac		
	Very Low Density	100.2 Ac	0.61 gpm/Ac	375,718	421
Commercial, Industrial & Institutional	Commercial [1],[2]	49 Ac	3.93 gpm/Ac		
	Industrial [1]	4 Ac	1.82 gpm/Ac		
	Institutional [2]	-10 Ac	1.36 gpm/Ac	268,200	300
Landscape Irrigation	Proposed Parks and Recreational Area [3]	125 Ac	2.36 gpm/Ac	424,800	476
Total		**341 Acres**	-	**1,068,718 gpd**	**1,197 AFY**

Source: City of Thousand Oaks Community Development Department
[1] Includes vacant land plus redevelopment of 10 acres of underused commercial land, and 2 acres of underused industrial land.

[2] Includes conversion of 10 acres from institutional to commercial (CVUSD Kelley Road Property).

[3] Assumes all undeveloped park sites will be developed with landscaped area, except portions of Lang Ranch Community Park to remain natural.

[4] Per City of Thousand Oaks 2005 Water Master Plan.

Thus, future anticipated buildout is expected to increase City water usage by 1197 acre-feet per year (AFY), for a total production requirement of 14,059 AFY. If a constant development rate of future development occurs, and buildout is expected to occur in year 2035, then Table III-5 represents the projected number of connections and water usage out to Year 2035 in five-year increments.

Table III-5
Estimated Number of Service Connections

	2010	2015	2020	2025	2030	2035
Number of Connections	16,885	17,199	17,514	17,828	18,142	18,456
Water Production (AFY)	12,862 [1]	13,101	13,341	13,580	13,820	14,059
Production/Connection	0.762	0.762	0.762	0.762	0.762	0.762

[1] Represents average production for Years 2005 through 2010.

As shown in Table III-2, water loss has fluctuated from approximately one to five percent of the total purchased water from CMWD. The City is currently implementing best management practices (BMP) within its 20x2020 compliance goals to further reduce water loss and overall per-capita water use. The status of all BMP activity is described in Section IV.

Demands for years 2000-2010 are based on City billing records. Future water demands assume development of remaining projects will occur at a constant rate until 2035, and is calculated using the City's standard usage factors. It should be noted that these estimates do not consider the reduced water usage mandated by SBx7-7. Using straight-line interpolation between current and ultimate (Year 2035) for each land use category, estimates for each five-year interval can be projected. Table III-6 quantifies past, current and projected water use among the water use types identified in Table III-4, plus miscellaneous city uses, in five-year increments to 2035.

Table III-6
Past, Current and Projected Water Demand
(Acre Feet per Year)

Water Use Sectors	2000	2005	2009	Current [1]	2015	2020	2025	2030	2035
Residential (Single and Multi-Family)	9,005	9,700	9,377	9,742	9,826	9,910	9,995	10,079	10,163
Commercial, Industrial and Institutional	1,665	1,488	1,376	1,435	1,495	1,555	1,615	1,675	1,735
Landscape Irrigation	1,777	1,652	1,567	1,675	1,770	1,866	1,961	2,056	2,151
Construction/Sweepers (misc. "used but not sold")	39	0	9	9	10	10	10	10	10
Subtotal	**12,486**	**12,840**	**12,329**	**12,862**	**13,102**	**13,341**	**13,581**	**13,820**	**14,059**
Additional Demands to Build-out (2010 – 2035)					**1,197**				
Unaccounted-for water (water loss) [2]	428	489	546	514	524	534	543	553	562
Sales to Other Agencies	0	0	0	0	0	0	0	0	0
Saline Barriers	0	0	0	0	0	0	0	0	0
Groundwater Recharge	0	0	0	0	0	0	0	0	0
Conjunctive Use	0	0	0	0	0	0	0	0	0
Agriculture	0	0	0	0	0	0	0	0	0
Total	**12,914**	**13,329**	**12,875**	**13,376**	**13,626**	**13,875**	**14,124**	**14,373**	**14,622**

[1] Represents average usage for Years 2005 through 2010.

[2] Represents actual water loss measured for past years, and 4% average for "current" and future years.

Table III-7 shows the number of connections (accounts) by land use category under current conditions. An estimate of the number of accounts for each land use category is based on the calculated average usage per connection for current conditions. For the purpose of the UWMP, these are assumed to build out of a straight-line projection to the estimated ultimate number of accounts.

Table III-7
Number of Connections by Land Use Type

Water Use Sectors	2000	2005	2010	2015	2020	2025	2030	2035
Residential (Single and Multi-Family)	14,770	15,489	15,890	16,185	16,482	16,777	17,073	17,368
Commercial, Industrial and Institutional	529	551	585	596	607	618	629	640
Landscape Irrigation	350	396	410	418	425	433	440	448
Total	15,649	16,436	16,885	17,199	17,514	17,828	18,142	18,456

Note: Assumes similar percent breakdown between the water use sectors for Year 2005.

According to the City's 2006-2014 Housing Element of the General Plan, 137 multi-family residences are set aside for families qualifying for low-income benefits or already within approved projects with affordable housing partners. The City potentially could make an additional 110 multi-family housing units available for low-income benefits in the future. Unit water usage for low-income housing units is estimated to be similar to the City's overall residential water usage.

C. 20x2020 (SBx7-7) Requirements

The Delta Legislation passed in late 2009 resulted in a sweeping change for water management within the state. Although the majority of the legislation addresses new governance structures aimed at improving the health and management of the Delta, some elements also address demand management by water agencies throughout the state. In particular, SBx7- 7 Water Conservation, requires the state to achieve a 20 percent reduction in urban per capita water use by December 31, 2020.

SBx7-7 provides the details for each urban agency to develop urban water use targets for 2015 and 2020. An urban agency is to establish a baseline demand, select one of four alternative demand reduction goals, and then develop a strategy and plan to meet its goals for 2015 and 2020. There is some flexibility in selecting the baseline demand. In general, the baseline demand is the 10-year average starting as early as 1995, but an agency may be allowed to modify the baseline due to special circumstances. The four alternatives listed to identify the demand reduction goal are:

(1) 80 percent of the baseline demand.

(2) Meet demands equal to a prescribed water budget of 55 gallons per capita day (gpcd) indoor plus demands resulting from DWR Landscape Ordinance, 10 percent reduction on CII accounts.

(3) Achieve 95 percent of the target identified in the 20x2020 Task Force Report (149 gpcd (South Coast Region) for Thousand Oaks).

(4) Includes calculated total savings from the baseline value, reported as gpcd. Total savings are a summary of assumed savings from indoor and outdoor BMPs, plumbing code changes, metering, and CII reductions.

Each agency's demand reduction analysis and goals are to be included in the 2010 Urban Water Management Plan. The legislation also identifies penalties for non-compliance. An agency that does not meet its interim goals will not be eligible for state grants and loans.

Baseline Analysis[11]

The annual gallon per capita per day (gpcd) is calculated over a 17-year period and is used to develop the 2020 water reduction targets as outlined in the DWR 2010 UWMP Guidebook. The process involves two main components, water supplied and population served, as described below.

[11] Source: Technical Memorandum, J. Crowley Group, Inc., May 2, 2011

Water Supplied. The water supplied volume is the sum of groundwater and surface water put into the potable water distribution system. Over the 17-year period, the City did not use any groundwater for its potable water system. Surface water is purchased from the Calleguas Municipal Water District (CMWD) and is metered at each connection point.

Population. The City's water service area only serves a portion of the City's population. The UWMP Guidelines require population be determined through use of Census, California Department of Finance (DOF), or some other survey-based means. A map of the City's 2000 water service area was combined with the 2000 Census tract and block group maps to create a list of the block groups within the service area. For block groups that are only partially in the water service area, a percent of inclusion was estimated. Block group information from the 2000 Census was obtained to quantify population, housing units, capita per housing unit, and other information.

The estimated population served, water supplied, and resulting gpcd are summarized in Table III-8. The 10-year running average for gpcd is indicated in the right column. The UWMP Guidelines list the methodology for 20x2020 requirements, including the baseline demand analysis. The baseline demand is the 10-year or 15-year average for gpcd ending no earlier than 2004. The largest 10-year average is 242 gpcd for the 1999-2008 period. 242 gpcd is selected as the baseline demand for the analysis.

Table III-8
Base Daily per Capita Use

Year	Population Served	Water Supplied (million gal)	Annual gpcd	10-Year Running gpcd
1995	42,884	3,193	204	---
1996	44,276	3,572	221	---
1997	45,590	3,807	229	---
1998	46,200	3,444	204	---
1999	47,131	4,038	235	---
2000	47,916	4,149	237	---
2001	48,863	4,021	225	---
2002	49,427	4,434	246	---
2003	49,936	4,376	240	---
2004	50,223	4,631	253	229
2005	50,282	4,349	237	233
2006	50,371	4,425	241	235
2007	50,424	4,753	258	238
2008	51,421	4,663	248	242
2009	51,563	4,204	223	241
2010	51,609	3,577	190	236

Per the UWMP Guidelines, the 2020 goal must be no more than 95 percent of a five-year gpcd average ending no earlier than 2007. The 5-year gpcd average is calculated in Table III-9. The 2008 five-year average of 247 gpcd is selected. Therefore, the 2020 goal must be less than 235 gpcd.

Table III-9
5-Year Range Base GPCD

Year	Population Served	Water Supplied (million gal)	Annual gpcd	10-Year Running gpcd
2003	49,936	4,376	240	---
2004	50,223	4,631	253	---
2005	50,282	4,349	237	---
2006	50,371	4,425	241	---
2007	50,424	4,753	258	246
2008	51,421	4,663	248	247
2009	51,563	4,204	223	242
2010	51,609	3,577	190	232

2020 Target - Option 1

The 2020 Target Option 1 is a 20 percent reduction from the baseline demand. The baseline demand is 242 gpcd, and the City of Thousand Oaks' 2020 target is then 194 gpcd. The City water system's 2010 water usage was 190 gpcd. As such, the City system has achieved the 20x2020 goal, as shown in Table III-10.

Table III-10
Comparison of Baseline Demand, Reduction Targets and 2010 Demand

Baseline Demand Value (gpcd)	2015 Reduction Target (gpcd)	2020 Reduction Target (gpcd)	2010 Demand (gpcd)
242	218	194	190

The City's future water demands, based on 20x2020 compliance, are estimated in Table III-11.

Table III-11
Projected 20x2020 Water Usage

		2010	2015	2020	2025	2030	2035
Per Capita Water Usage (gpcd)		232	218	194	194	194	194
Population		51,609	52,027	52,298	52,452	52,607	52,761
Total Water Usage	***AFY***	***13,410***	***12,704***	***11,364***	***11,397***	***11,431***	***11,465***
	MGD	11.97	11.34	10.15	10.18	10.21	10.24

Measures for Future Compliance with the 20x2020 Requirements

The City of Thousand Oaks water system is presently in compliance with the urban water use targets established in SBx7-7. To help ensure that water usage does not rebound to pre-drought levels, the City will continue to implement the demand management measures described in the City's 2010 Urban Water Management Plan. Additional measures for sustaining compliance are described below.

- Water usage monitoring and tracking: The City routinely monitors wholesale water purchases and water consumption by customer class. As part of this effort, on an annual basis the City will also calculate per capita water use and compare the per capita usage with the 20x2020 targets.

- Data analysis: The City will conduct detailed customer demand and GIS analysis to identify individual customers or classes that offer the most demand reduction potential.

- Conservation BMPs will focus on those customers or classes with the most demand reduction potential.

- Landscape water use efficiency: The City will investigate an expanded rebate program for "smart" irrigation controls (residential customer class).

- The cost of water: The City's purchased water costs have increased dramatically over the past five years as a result of MWDSC and CMWD rate increases. These rate increases will continue. City water rates have also increased as a result of increasing purchased water costs. The increasing price of water will result in continued customer demand reduction.

- Program coordination: The City will investigate conservation program coordination with other local water agencies and its wholesaler, CMWD.

SECTION IV: WATER DEMAND MANAGEMENT AND CONSERVATION

A. Best Management Practices

The City of Thousand Oaks is committed to implementing water conservation programs. The City is a signatory to the Memorandum of Understanding regarding Urban Water Conservation in California dated September 1991 (and amended thereafter), and is therefore a member of the California Urban Water Conservation Council (CUWCC). Signatories must submit biennial reports to the CUWCC outlining progress towards implementing Best Management Practices (BMPs). The City's 2008/09 annual BMP report is included as **Appendix C**.

The City's water conservation program was extensively revised in 2009 and 2010. As a result of an increased emphasis on conservation, City water customers significantly reduced demands over a two year period, as shown below:

Table IV-1
Recent Water Demand Reduction

Calendar Year	Purchased Water Volume (acre feet per year)	Percent Reduction from Prior Year
2008	14,310	NA
2009	12,902	-10%
2010	10,978	-18%
Cumulative		**-30%** (from 2008 through 2010)

In April 2009, City Council amended the Thousand Oaks Municipal Code (Title 10, Chapter 2, Article 11) to replace the City's 17-year old water conservation provisions with a new Ordinance based on the Metropolitan Water District's "Model Water Conservation Ordinance." The new water conservation provisions became effective in June 2009.

The new water conservation ordinance is a Best Management Practice based policy that requires the same actions by all customers. It is a four tiered system of increasingly stringent water conservation standards. The first tier includes permanent water conservation requirements and is followed by Level 1 through Level 3 requirements which would be imposed based upon City Council action.

The permanent water conservation requirements recognize that Southern California always needs to responsibly conserve water and include limited watering hours and duration, prohibiting excessive run-off and hosing down of hard surfaces, and requiring eating and drinking establishments serve water only upon request, and lodging establishments provide guests the option to decline daily linen service.

Level 1 water conservation measures limit irrigation to three days per week (two days per week from November through March) and obligate users to repair leaks or breaks within 72 hours. Level 2 measures limit irrigation to two days per week (one day per week from November through March), obligate users to repair breaks or leaks within 48 hours, and restrict filling or refilling of pools and spas. Level 3 measures are restrictions that would be put in place during a significant emergency condition. The likely event for such an emergency condition is not anticipated to be drought but rather a major

pipeline break or other disruption to the water supply system due to earthquake or other significant event. During Level 3 essentially no irrigation is permitted, all leaks and breaks in plumbing systems must be repaired within 24 hours, and no new potable water services will be approved.

Descriptions of the City's water conservation programs are as follows:

BMP 1: Water Survey Programs for Single-Family and Multi-Family Residential Customers

In September 2009, the City implemented a new water survey program for single-family and multi-family residential customers. The water conservation surveys are conducted by a City Field Inspector. Fifty percent of the Field Inspector's time is dedicated to the water conservation program.

Essential parts of the survey program include:

- A review of the customer's consumption history and consumption patterns
- Evaluation of water fixtures and appliances
- Provide low flow showerheads and faucet aerators
- Guidance for leak detection and adjustment of sprinkler controllers
- Helpful information and tips on using water more wisely

The survey program is promoted through the use of billing inserts, newspaper advertisements and the City's website. In addition, usage data from customers equipped with "smart meters" (AMR) is utilized for leak detection purposed. If a "smart meter" customer has usage detected every hour throughout a 24 hour period, it is quite possible that the customer has a water leak. When this situation occurs, customers are sent letters notifying them of a potential leak and informing them about the availability of the water conservation survey program.

189 residential surveys were conducted in 2009 and 2010. Leaks were found on 72 properties. It is not possible to quantify water savings from this program at the present time.

BMP 2: Residential Plumbing Retrofit

The Thousand Oaks City Council adopted Ordinance 1069-NS on May 8, 1990, adding Section 902.1 and modifying the Uniform Plumbing Code requiring that Ultra Low Flow toilets (ULFT) and other water saving devices be installed in all new construction.

The Low Flow Showerhead Kit distribution program was implemented in June 1991. The City has distributed more than 5,500 low flow showerheads during the past 15 years. Showerheads, toilet displacement bags and faucet aerators are distributed to customers upon request.

In July 2008, MWDSC began to offer rebates for residential weather-based irrigation controllers and rotating sprinkler nozzles through its regional rebate program. As of December 2010, rebates for 353 rotating sprinkler nozzles and 3 weather-based irrigation controllers were issued through the regional program resulting is a savings of 1.7 acre feet of water per year.

BMP 3: Distribution System Water Audits, Leak Detection and Repair

Annual water purchases are compared to water sales to audit the distribution system for unaccounted for water losses. The City's unaccounted for water losses are minimal (2.2 percent in fiscal Year 2009/2010).

In 2010, the City engaged the services of a consultant to prepare a Water Loss Audit Report for the western portion of the City's water service area. AWWA Manual M36, *Water Loss Audits and Loss Control Programs* software was utilized to prepare the system audit.

The City routinely conducts leak detection on all streets scheduled for repair prior to the commencement of street overlay or slurry seal projects. In addition, areas of the City that have poly service lines are annually checked for leaks, and lines found to be leaking are replaced with copper service lines. Water meters that are 10 years old and older are identified and replaced to prevent loss to leaks and to improve the accuracy of water billing. In addition, City water division staff routinely test 25 to 50 large (2" and larger) meters per year to determine accuracy. Water meters are read bimonthly and any leaks found by the meter reader in the field are reported and corrected. Customers are notified when leaks are found on the customer's side of the meter.

Leak detection is a continuing activity whether part of a formal program such as the AWWA Manual 36 water audit project, or whether detected and repaired on a routine basis.

BMP 4: Metering With Commodity Rates for all New Connections and Retrofit of Existing Connections

Metered account statistics for the City water system are as follows:

Number of metered accounts:	16,886 (100%)
Number of accounts read:	16,886 (100%)
Number of metered accounts billed by volume of use:	16,886 (100%)
Frequency of billing:	Bimonthly (98%), monthly (2%)
Number of unmetered accounts:	Zero

All new and existing water services within the City of Thousand Oaks water system are metered. The City's water meter change-out program involves removing 10-year-old standard 3/4 inch water meters and replacing them with new meters. New meters generally increase water bills to their proper level and customers with recorded water usage will tend to conserve water. Water main pressures, capacities and sizes are designed for maximum potential population or land use of the area. Water mains are designed to provide for service pressures between 45 and 150 pounds per square inch (psi). Pressures between 45 and 80 psi are desired and, for pressures over 80 psi, pressure regulators are required. Reservoirs or storage tanks are designed to work in conjunction with the pipelines and pumping stations to supply water for both domestic and fire fighting purposes. During peak demands, such as fire fighting, reservoirs supply the highest anticipated fire flow within a particular zone.

Many studies have shown that customers use less water when they have their own meter and must pay their own bill. The City's requirement of separate meters for all single family detached residences, condominiums and businesses where separate ownership is involved, accomplishes a most significant water conservation objective.

The City has a long-term plan for installing automated meter reading for all accounts. To date, approximately 4000 accounts have been switched to AMR.

Pursuant to State Assembly Bill No. 1881 (AB 1881), as of January 1, 2008, all new non-single family residential project that contain more than 5,000 square feet of irrigated landscape require a fully separate water meter for irrigation and landscaping. The City has made this requirement a condition of the development permit for applicable projects.

The City has identified disincentives or barriers to retrofitting mixed-use commercial accounts with dedicated landscape meters. These disincentives are primarily financial: Customers would need to pay an additional "Plant Investment Fee" (connection fee) for an additional meter, onsite plumbing would need to be rerouted (at the customer's expense) and the City would be required to routinely read additional meters and bill additional accounts. In addition, many of the smaller mixed use projects would see little to no conservation benefit from the installation of a dedicated landscape meter since the projects have minimal landscaping and the landscaping has been designed to use water efficiently.

BMP 5: Large Landscape Conservation Programs and Incentives

As a result of an increased emphasis on conservation, City irrigation customers significantly reduced demands over a two year period, as shown below:

Table IV-2
Recent Irrigation Demand Reduction

Calendar Year	Water Use (acre feet per year)	Percent Reduction from Prior Year
2008	1875	NA
2009	1514	-24%
2010	1351	-12%
Cumulative (irrigation)		**-39%** (from 2008 through 2010)

The City has identified and periodically reviews all accounts with dedicated landscape meters. The largest irrigation users in the City's water service area are the Conejo Recreation and Park District (parks playgrounds, sports fields), the Conejo Valley Unified School District (playgrounds and sports fields) and the City itself (public landscape irrigation). Water usage for these accounts is closely monitored by City water conservation program staff. For the last three years, City staff has worked with the large irrigation users to implement water savings programs. As a result, the Conejo Recreation and Park District has reduced water usage by 24 percent, the Conejo Valley Unified School District has reduced usage by 20 percent and the City has reduced irrigation usage by 25 percent. Both the City and the Conejo Recreation and Park District have active programs to install weather based irrigation controllers. In addition, all Home Owners Associations with irrigation meters have been contacted by mail and advised to review their usage and conserve water.

The Thousand Oaks City Council adopted the most recent revisions to the City's "Guidelines and Standards for Landscape Planting and Irrigation Plans" in 2007. The standards require that drought tolerant plant materials and low water use principles be provided in all projects. Use of water

conservation principles must be provided through the use of low flow sprinkler heads, drip irrigation systems, soil moisture sensing devices, rain sensing override devices, etc. Reclaimed water irrigation systems (dual distribution systems) are required where reclaimed water is available or will be available in the foreseeable future.

The City's Community Development Department reviewed the DWR's Model Water Efficient Landscape Ordinance in 2009 and determined that the City's existing landscape standards were "at least as effective" as the model ordinance requirements. As such, the City continues to utilize the 2007 "Guidelines and Standards for Landscape Planting and Irrigation Plans".

In 2009, all landscaping and landscape maintenance companies doing business in Thousand Oaks were sent letters advising them of the City's water conservation regulations. A bilingual flyer was enclosed with the correspondence.

City irrigation customers may participate in the rebate program offered by MWDSC. Rebates are available for Weather-Based Irrigation Controllers and Central Computer Irrigation Controllers, rotating nozzles for pop-up spray head retrofits and large rotary nozzles. In addition, MWDSC offers "California Friendly Landscape Training for Professionals" classes that cover:

- Irrigation Principles & Adjustments and Repair
- Irrigation System Troubleshooting
- Controller Programming
- Irrigation Scheduling

MWDSC also offers "California Friendly Landscape Training Plant Class", which is designed to give landscape professionals information in plant identification, characteristics, and water use requirement guidelines for over 40 common landscape plant species.

BMP 6: High-Efficiency Washing Machine (HECW) Rebate Program

The City began offering a high efficiency washing machine rebate program in 2002. The Calleguas Municipal Water District and the Metropolitan Water District of Southern California reimbursed the City in the amount of $200 per rebate while the City absorbed the administrative cost of running the program. Between 2002 and July 2008, the City issued 308 HECW rebates to water customers. In July 2008, MWDSC began to offer HECW rebates through its regional rebate program. As of December 2010, 442 residential customers have received HECW rebates through the regional program resulting is a savings of 13.8 acre feet of water per year.

BMP 7: Public Information Programs

The City promotes water conservation and other resource efficiencies in coordination with Calleguas MWD and MWDSC. MWDSC maintains a robust public information program consisting of a website, print adds internet ads, and radio and TV media campaigns.

The City expanded its water conservation public information program in 2008. The program consists of the following elements:

Outreach

- Billing inserts on a variety of conservation topics
- Water bills carry conservation tips, hotline information and free survey information
- Direct mailings to AMR customers when possible leak is detected
- Hotline for residents to report observations of inefficient usage
- Door tags left at homes/businesses with inefficient usage
- Brochures distributed at City Hall, libraries, Senior Center and at public events
- Quarterly City newsletter contains water conservation message
- Annual water quality report to customers contains water conservation message
- Large message display at the regional shopping center
- Articles in the local papers (resulting from City press releases)
- "Slow the Flow" magnetic signs on all City vehicles
- Civic Arts Plaza marquee carries the message "Save Water, Thank You"
- Transit buses display water conservation placards

Information

- City website – conservation regulations, survey program, helpful tips, links
- 12 month graph of water usage on each bill
- Water conservation demonstration garden at City Hall
- Water conservation survey program
- Local government channel (TOTV) airs programs on water conservation
- City public service announcements are aired on TOTV and available for viewing on the City's website
- Mann Theater screens aired 15-second PSAs before show time
- Presentations to business groups and homeowners associations

Coordination with Other Agencies

- City staff coordinates outreach activities with the area's two major private water purveyors
- City staff worked with Calleguas MWD and MWDSC to obtain educational materials and rebate information

BMP 8: School Education Program

CMWD, in conjunction with the MWDSC, offers a variety of school education programs within the City's service area. The primary focus of the program is to educate children on water resource issues including available water sources, water use and conservation.

The programs include elementary, secondary and post secondary education curricula, supplemental materials, assemblies and in-class presentations for K-12 teachers and students. Programs and materials are free to teachers in the City's service area. Each of the programs has been field-tested and correlates to the current California state content standards, particularly in the areas of science and history/social science.

City sponsored education projects include four one-hour conservation presentations given at the two city libraries as part of their summer program, *Making a Splash with Reading.* Two presentations were for teens and two for young children. In addition, the City sponsored a high school PSA video contest with the theme "*Water – It's Not for Wasting*". The winner's school received a $1,000 prize.

BMP 9: Conservation Programs for Commercial, Industrial and Institutional Accounts

There are no industrial accounts within the City's water service area. As a result of an increased emphasis on conservation, City commercial and Institutional customers significantly reduced water demand over a two year period, as shown below:

Table IV-3
Recent Commercial, Industrial & Institutional Water Demand Reduction

Calendar Year	Water Use (acre feet per year)	Percent Reduction from Prior Year
2008	1554	NA
2009	1405	-11%
2010	1247	-12%
Cumulative (commercial)		**-25%** (from 2008 through 2010)

The City has identified and ranked large commercial, industrial and institutional (CII) customers. The "top-25" commercial and institutional water users were contacted and shown an analysis of their water consumption. Methods of reducing consumption were discussed with each customer. Letters were sent to every full-service restaurant owner or manager requesting that they serve water only upon request. Correspondence was sent to each lodging establishment customer requesting that they offer reduced linen and towel service to their guests.

Through the MWDSC's "Save A Buck" program, City CII customers are eligible for rebates for high efficiency toilets, ultra low water urinals and zero water urinals, high efficiency clothes washing machines, cooling tower conductivity and pH controllers, pressurized water brooms, connectionless food steamers, air-cooled ice making machines, dry vacuum pumps, weather-based and central computer irrigation controllers, rotating irrigation nozzles for pop-up spray head retrofits and large rotary nozzles.

All car washes in the City service area utilize recycling systems for wastewater. Per the City's water conservation regulations, new car wash facilities will be required to use recycling systems as a condition of approval.

BMP 10: Wholesale Agency Assistance Programs

This BMP is not applicable to retail water agencies, such as the City of Thousand Oaks.

BMP 11: Conservation Pricing

Conservation pricing provides an economic incentive (price signal) to customers to use water efficiently. In 2009, the City changed the single-family residential (SFR) water rate structure from a uniform volume

rate to a tiered rate in which the volumetric rate increases as the quantity used increases. The City's water rates are outlined in Ordinance No. 1549, a copy of which is included in **Appendix D**. Tiers established for the single-family residential rate structure are shown below.

Table IV-4
City Water Rates

Tier		Cost per hcf
Tier 1	0 – 15 hcf/month	$2.74
Tier 2	16 – 35 hcf/month	3.42
Tier 3	over 35 hcf/month	4.33

Commercial, multi-family residential and irrigation customers are charged a uniform volume rate at a cost per hcf that is slightly higher than the SFR Tier 2 rate. All customers are charged a monthly "base rate" that varies with meter size. This charge recovers a portion of the system's fixed operating costs. In addition, customers that reside in the higher pressure zones are charged a "lift charge" ($0.17/hcf/lift) when water must be pumped (lifted) to their residence or business. The lift charge recovers the cost of operating and maintaining the system's pump stations.

The CUWCC deems a retail agency's rates to be consistent with the definition of "conservation pricing" when 70 percent or more of operating revenue (as defined by CUWCC) is derived from volumetric rates. In Fiscal Year 2009/2010, the City Water Operating Fund derived 80 percent of operating revenue (as defined) through volumetric rates. As such, the City's water rate structure is consistent with CUWCC's definition of "conservation pricing".

The City requires meters for construction water used for development and capital projects. This requirement encourages conservation by requiring contractors to pay for the water they use.

The City provides wastewater service to approximately 90 percent of Thousand Oaks. The majority of properties in the City's wastewater service area are served by private water purveyors. The City cannot develop a volumetric rate for residential wastewater service since it does not have water usage information for over half of its customers. Wastewater services are not metered, except for certain industries that discharge large volumes of wastewater. Residential wastewater customers are charged a flat rate. Commercial customers are charged based on the number and types of fixtures that they have in their buildings (volumetric rate). Industrial customers are charged based on the flow and strength of their wastewater discharge (volumetric rate).

BMP 12: Conservation Coordinator

The Public Works Department's Resource Division Manager manages the City's Water Conservation Program. The Division Manager provides overall program coordination of staff members assigned to public information, program planning, implementation and reporting.

BMP 13: Water Waste Prohibition

In April 2009, the Thousand Oaks City Council adopted a new water conservation ordinance. The ordinance is essentially a four tiered system of increasingly stringent water conservation standards. The

first tier includes permanent water conservation requirements and is followed by Level 1 through Level 3 requirements which would be imposed based upon City Council action.

The permanent water conservation requirements recognize that Southern California always needs to responsibly conserve water and include limits on watering hours and duration, prohibits excessive run-off and hosing down of hard surfaces, and provides that eating and drinking establishments serve water only upon request and lodging establishments provide guests the option to decline daily linen service, as well as other requirements.

Level 1 water conservation measures limit irrigation to three days per week, and only two days per week from November through March. Level 1 also obligates users to repair leaks or breaks within 72 hours.

Level 2 water conservation measures further restrict usage by limiting irrigation to two days per week and only one day per week from November through March. Level 2 obligates users to repair breaks or leaks within 48 hours. Level 2 further restricts the filling or refilling or more than one foot of pools or spas.

Level 3 water conservation measures are restrictions that would be put in place during an emergency condition. The likely event for such an emergency condition is not anticipated to be drought but a major pipeline break or other disruption to the water supply system.

During a Level 3 event no irrigation is permitted, all leaks and breaks in plumbing systems must be repaired within 24 hours, and no new potable water service connections will be provided.

BMP 14: Residential Ultra Low Flow Toilet (ULFT) Replacement Program

The City's first ULFT rebate program was implemented in January 1992, making $100 rebates available to individually metered residential households. Because of the staff time invested in this program for accounting and auditing, the rebate program was temporarily discontinued.

In January 1998, the City began offering a $60 ULFT rebate to all single-family and multi-family residential customers. The rebates were funded by Calleguas MWD and the City funded program administration. Under this program, City staff issued more than 1,900 rebate vouchers. When the program ended in July 2008, over 1,200 customers had returned the completed voucher forms and received rebates totaling over $72,000; 140 of the rebates were issued to multi-family residential apartment complexes.

In July 2008, MWDSC launched its regional "SoCal WaterSmart" residential rebate program. The program offers rebates to customers that purchase High Efficiency Toilets (HETs). As of December 2010, 87 customers received rebates for 132 HETs, resulting in a savings of 5.6 acre feet of water per year.

B. Water Shortage Contingency Plan

The City of Thousand Oaks updated its Water Shortage Contingency Plan within its Water Conservation Ordinance adopted June 5, 2009 (Appendix D). This was vital to ensure City water users are constrained by commensurate restrictions in water use to the contingency plans of both the Calleguas Municipal Water District and Metropolitan Water District of Southern California.

Metropolitan maintains two main documents that address water shortage and allocation strategies. The Water Surplus and Drought Management Plan (WSDM Plan, 1999) provides guidelines for supply strategy implementation depending on current demands and available supplies. As demand exceeds normal supplies, Metropolitan will utilize surface and groundwater storage supplies, cease other deliveries, call for demand reductions, and purchase additional water. If supplies are still not sufficient, Metropolitan will implement the Water Supply Allocation Plan (WSAP). The WSAP was adopted by the Metropolitan Board in 2008 and provides methodologies for allocating supply to each of Metropolitan's retail and wholesale customers.

Calleguas maintains a water shortage contingency plan consistent with Metropolitan's WSDM and WSAP. As supplies from Metropolitan to Calleguas are reduced, Calleguas will implement measures to obtain additional supplies balanced with its retailer demand reductions. Calleguas' Board of Directors adopted Ordinance No. 12, which gives it authority to implement actions, and strategies to allocate supply depending on the supply reductions from Metropolitan. Supply shortage conditions are unique in that each is a result of specific local, regional, and state-wide issues at the particular time of shortage. As such, the Calleguas shortage contingency plan does not identify unique supply or demand reduction requirements for each of its shortage stages. Instead, Calleguas' stages identify the strategy to manage supply shortages, and provide the flexibility to identify any supply or demand reduction percentages dependent on the unique issues of the particular shortage condition.

The intent of the City's water shortage plan is to follow Metropolitan's and Calleguas' shortage plans. The City's Water Conservation Program establishes permanent water conservation requirements, as well as enacting a water supply shortage based on three levels of implementation, depending on the shortage severity. Each level provides for mandated water use restrictions and demand reduction actions. Similar to Calleguas' shortage plan, specific supply and demand reduction percentages are not identified for the three levels. Instead, a level can be implemented that best meets the shortage while also considering other factors, such as severity, length of projected shortage, time of year, weather, or other issues. The third water supply shortage level (emergency condition) includes actions that may be necessary if supplies are reduced up to 50 percent of normal.

The City's water conservation plan maintains a permanent level of conservation requirements and water waste prohibitions in addition to the measures for each shortage level. Tables IV-5 through IV-8 summarize the requirements for each level. **Appendix D** provides the City's complete Water Conservation Program Ordinance.

Table IV-5 Normal Supply Conditions, Prohibition Against Water Waste
Requirements and Restrictions
Limits on watering hours
Limit on watering duration
No excessive water flow or runoff
No washing down hard or paved surfaces
Obligation to fix leaks, breaks, or malfunctions within 7 days
Recirculating water required for water fountains and decorative features
Limits on washing vehicles
Drinking water served upon request only
Commercial lodging provide option to decline daily linen service
No installation of single pass cooling systems
No installation of non-recirculating water systems in commercial car wash and laundry systems
Restaurants required to use water conserving dish wash spray valves
Commercial car washers must incorporate re-circulating water systems

Table IV-6
Level 1 Water Supply Shortage Condition, Conservation and Water Waste Prohibitions

Requirements and Restrictions
All requirements and restrictions from Normal Supply Conditions
Limit on watering days – reduced allowable days compared to Normal Water Supply Conditions
Obligation to fix leaks, breaks, or malfunctions within 4 days

Table IV-7
Level 2 Water Supply Shortage Condition, Conservation and Water Waste Prohibitions

Requirements and Restrictions
All requirements and restrictions from Level 1 Supply Shortage Conditions
Further limits on watering days compared to Level 1 Supply Shortage Conditions
Obligation to fix leaks, breaks, or malfunctions within 48 hours
Limits on filling ornamental lakes or ponds
Limits on filling residential swimming pools and spas

Table IV-8
Level 3 Water Supply Shortage Condition (Emergency Condition) – Conservation and Water Waste Prohibitions

Requirements and Restrictions
All requirements and restrictions from Level 2 Supply Shortage Conditions
No watering or irrigating (with some exceptions)
Obligation to fix leaks, breaks, or malfunctions within 24 hours
No new potable water services (with some exceptions)
Limits on building permits
Discontinued service to violators of restrictions

The Water Conservation Program provides for enforcing required actions during normal and water shortage levels. Specific penalties and fines are identified for up to four or more violations. The City has the option to install flow restrictors or even cut off service, with subsequent fees. In addition, any violation of the water use restrictions may be prosecuted as a misdemeanor through civil enforcement.

The City utilizes a water rate structure that ensures all overhead, operating and man-hour costs are covered by the base charge. The cost of water is paid through the commodity charges. Pumping costs are assessed based upon each customer's pressure zone. Because of this rate structure, City revenues are not affected by changes in water consumption.

SECTION V: WATER SUPPLY RELIABILITY

A. Introduction

The California Department of Water Resources (DWR) delivers water to the Metropolitan Water District of Southern California using State Water Project (SWP) facilities. MWDSC is a State Water Project contract agency that provides imported SWP water to CMWD and its member agencies including the City of Thousand Oaks. Therefore, water supply reliability for the City depends on CMWD, MWDSC, and DWR. The City's strategy for meeting these water demands in its service area, both in normal and dry years, includes the implementation of regional and local supply augmentation and demand management programs. This section outlines the supply reliability of CMWD, as described in their Purveyor Draft 2010 UWMP (January, 2011), and discusses the programs of DWR and MWDSC, as well as the current and proposed programs of the City of Thousand Oaks.

The State of California has adopted legislation since the 2005 Plans, which has made sweeping changes to urban water management planning. As a result of continued population growth, the recent state-wide drought, and the status of Sacramento-San Joaquin Delta, water conservation has become mandatory for all water agencies throughout California. In addition to the 2001 legislation, which ties land development planning to water supply capacity during the CEQA entitlement phase, the Water Conservation Act of 2009 mandates that water agencies reduce their unit water usage to achieve a state-wide reduction in per-capita water use by 20 percent. This water reduction plan, known as the "20x2020 Compliance Plan" is discussed in Section V, and will be a significant component to increased water supply reliability.

B. Imported Water Reliability [12]

1. State Water Project Reliability

Due to the increased environmental and water management challenges of the SWP facilities in past years, a cooperative effort among state and federal agencies and environmental, urban and agricultural communities was initiated in 1995, known as the CALFED Bay-Delta Program (CALFED). The CALFED program goals, which include restoring ecological health, improving water quality, and water supply reliability for beneficial uses, as well as developing new groundwater and surface water storage projects, will maximize the supply from SWP to the receiving agencies and reduce the possibilities of any cutbacks occurring in water delivery.

Imported water provided by MWDSC via CMWD accounts for 100 percent of the City's water supply. Both MWDSC and CMWD have completed, or are currently developing, storage projects which will insulate agency members from water shortages due to drought or catastrophic interruption. These projects include MWDSC's Diamond Valley Lake which provides an additional 800,000 acre-feet of storage capacity and CMWD's Las Posas ASR which will provide 300,000 acre-feet of storage capacity. Together these storage facilities will provide a reliable water supply during periods of multi-year drought. Based on studies conducted by MWDSC and CMWD, these storage facilities will provide a reliable water

[12] Sources: City of Thousand Oaks 2005 Water Master Plan, and CMWD Purveyor Draft 2010 Urban Water Management Plan

source during periods of drought, or in the event of other catastrophic interruption of water supply, through the Year 2035.

More recently, environmental concerns due to supposed over-pumping combined with the recent state-wide three-year drought reduced the storage reserves in southern California SWP reservoirs to unprecedented levels. This resulted in supply cutbacks to as low as 15 percent of original entitlements. As the State emerges from this three-year drought, DWR has increased this delivery allocation to 70 percent as of March 2011.

2. Metropolitan Water District of Southern California

In their 2004 Integrated Resources Plan (IRP), MWDSC identified a resource mix of local water resources, imported supply and conservation measures. MWDSC also utilizes storage strategies to increase both SWP and Colorado River reliability. Such strategies include utilizing Diamond Valley Lake and shared portions of Lake Perris and Castaic Lake, and developing off-stream storage facilities along the SWP California Aqueduct and the Colorado River Aqueduct. The IRP was last updated in MWDSC's 2010 Integrated Water Resources Plan, which identified changing conditions affecting water resource development. Among other things, the 2010 IWRP outlined emerging trends related to climate change, energy use and greenhouse gas emissions, endangered species protection and conveyance needs in the Sacramento-San Joaquin River Delta system.

In 2007, MWDSC began to update their plans for addressing the water shortage conditions. The impetus for this was on-going dry conditions that began the recent three-year drought and a series of reduced deliveries from the SWP. In 2008, MWDSC's Water Supply Allocation Plan was adopted as an extension of their Water Surplus and Drought Management Plan. Shortage Stage 7, the most severe shortage stage in their plan, authorizes the strict implementation of their Water Supply Allocation Plan. As a result of this, Calleguas Municipal Water District adopted a similar plan, which is outlined in the next section.

As a result of the Water Supply Allocation Plan, and investments made in conservation and the mandatory water use reductions imposed by the Water Conservation Act of 2009, as well as water recycling and aquifer storage and recovery, MWDSC has greatly enhanced its reliability to its member agencies and their retail customers in the last five years.

3. Calleguas Municipal Water District (CMWD)

CMWD has focused its planning efforts on more efficient use of existing supplies and maximization of local resources. Pursuant to the City's water master plan and CMWD draft 2010 Urban Water Management Plan, CMWD is implementing their capital improvement program, which is aimed at reducing the region's water demands and need for imported water. The District's capital improvement program will expand recycled water systems and conjunctive-use facilities. Some of the major CMWD water projects completed or currently proposed to improve water supply reliability to the region include the following:

- Las Posas Basin Aquifer Storage and Recovery Project – The Las Posas Basin ASR Project allows for the delivery and storage of large volumes of State water to the CMWD service area during periods of availability. The stored water is extracted to meet seasonal, drought and emergency demands. The project developed up to 300,000 acre-feet of storage in the Las Posas Basin which is injected and recovered by 30 wells. The project greatly enhances water supply reliability in the region by providing a backup resource when SWP supplies are greatly reduced as was the case during our recent drought, which forced a SWP supply cutback by 85 percent. The project has an ultimate proposed replenishment rate of 54 cubic feet per second (cfs) and rated extraction capacity of approximately 70 cfs.

- Simi Valley Regional Recycled Water System – This project is proposed to develop approximately 2000 acre-feet per year of recycled wastewater for service to candidate non-potable water users within the City's service area.

- Lake Bard Water Treatment Plant – The Plant was expanded from 75 cfs to 100 cfs. The lake includes a storage capacity of approximately 8,000 acre-feet, which may be used during emergencies and peak demand.

- Salinity Management Project – The SMP includes the construction of a major pipeline to serve a series of proposed brackish groundwater recovery projects as well as wastewater treatment plant effluent. The pipeline (currently under construction) will collect these wastewater sources for possible conveyance to agricultural users, wetland applications or disposed of by ocean discharge. The project is vital for recovery of the underutilized groundwater supply in the region and could ultimately remove up to 42,000 tons of salts from the watershed. The SMP will facilitate treatment of local groundwater that is currently too saline for potable use. Among the desalters currently in the planning stages are the Round Mountain desalter, Camarillo Desalter and Moorpark Desalter. These desalters result in a water supply that could significantly improve regional water supply reliability.

The reliability benefits of these projects are shared with CMWD's member agencies, including the City of Thousand Oaks.

C. Local Sources

1. Groundwater

Although the City operates two irrigation wells, the water produced is used on public property within the California-American Water Company's service area. The City currently has no plans to develop additional groundwater sources.

Although groundwater is available in the area, the water quality is considered poor and the cost to treat the water to drinking water standards is currently considered cost-prohibitive for the City. It is recommended that the City continue to monitor the water quality of the groundwater and keep informed on treatment technology to determine if the groundwater will be an economical supply source in the

future. With the impending completion of CMWD's Salinity Management Pipeline, economic feasibility to develop additional groundwater sources within the Conejo Creek sub-basin could improve.

2. Recycled Water

The Conejo Creek Diversion Project, aimed to utilize recycled wastewater in the region and reduce overdraft of the groundwater, was completed in 2001. The project, which was developed by the City, in conjunction with other governmental entities, diverts recycled water discharged from the City's Hill Canyon Wastewater Treatment Plant for agricultural reuse on farmlands in the Santa Rosa Valley and the Oxnard Plain. The project has substantial regional benefits by allowing downstream water users to reduce groundwater pumping and use of imported water. This will help reduce groundwater overdraft problems and prevent seawater intrusion in the Oxnard Plain, thus reducing TDS levels in the groundwater basin.

D. Supply and Demand Assessment

1. Normal Water Year

Table V-1 compares normal water year supply and demand in five-year intervals. It should be noted that the estimated City demands used throughout the tables of this section are based on the City's standard usage factors from the Water Master Plan. The reduced demand expected pursuant to the mandated water use reduction should reduce these demands to the levels shown in Table III-11, which will further demonstrate the reliability of the City's water supply to meet future needs.

Table V-1
Normal Water Years Supply and Demand Assessment
(Acre Feet per Year, AFY)

		2005-2010 [2]	2015	2020	2025	2030	2035
Total Demand (includes 4% water loss)		13,376	13,626	13,875	14,124	14,373	14,622
Supply from CMWD	Normal [1]	13,600 [2]	13,965	15,360	15,360	15,360	15,360
	Reserves	0	0	0	0	0	0
Local Groundwater		0	0	0	0	0	0
Total Supply		13,600	13,965	15,360	15,360	15,360	15,360
Surplus/(Deficit)		224	339	1,485	1,236	987	738

[1] CMWD Draft 2010 UWMP – Normal Year "Imported Water Demand", except as noted otherwise.

[2] Total demand represents average demand of 2005 through 2010. CMWD supply allocation for Thousand Oaks between 2005 and 2010 ranged from 13,600 AFY to 15,000 AFY.

It is unlikely that minor deficits would force the City to implement any of the water shortage actions listed in the attached Water Shortage Contingency Plan (See **Appendix E**). The Plan requires a voluntary Phase 1 reduction program if shortages reach five percent. As this shows, it is expected that the surplus

CMWD typically has for normal years, coupled with the ability to draw from CMWD or MWDSC reserves, will be sufficient to counter any foreseeable supply deficiencies. (MWDSC average surplus for normal year equals 9 percent).

2. Water Shortage Scenarios

CMWD has implemented many projects designed to drought-proof its member agencies. Key projects include the Las Posas Aquifer Storage and Recovery Project and the expansion of the Lake Bard Treatment Plant. It is expected that the City of Thousand Oaks, as a member agency of CMWD, would receive some additional supplies in a drought lasting up to three years.

Through the Conejo Creek Diversion Project, the City receives conservation credits through a bank set up by CMWD, as described in Section VIII.

If extreme multi-year shortages occurred beyond what MWDSC and CMWD could provide, the City would invoke various water conservation ordinances and activities as described elsewhere in this report, and provided in the appendices attached to this report. The following tables provide supply and demand comparisons for single dry year and multiple dry year water shortage scenarios.

Table V-2a
Dry Water Years Supply and Demand Assessment – 2010-2013 (AFY)

		Average Water Year	Single Dry Water Year	Multiple Dry Water Years		
		2005-2010 [2]	2011	2011	2012	2013
Total Demand [1]		13,376	14,714	14,714	13,376	12,038
Supply from CMWD	Normal [3]	13,600 [2]	14,080	14,080	14,080	14,080
	Reserves [4]	0	634	634	0	0
Local Groundwater		0	0	0	0	0
Total Supply		13,600	14,714	14,714	14,080	14,080
Surplus/(Deficit)		224	0	0	704	2,042

[1] Assumes 10% increase in demand for first year of dry conditions, and 10% decrease for 3rd year of dry conditions.

[2] Total demand represents average demand of 2005 through 2010. CMWD supply allocation for Thousand Oaks between 2005 and 2010 ranged from 13,600 AFY to 15,000 AFY.

[3] CMWD Draft 2010 UWMP – allocations pursuant to 'normal', 'single-dry', and 'multi-dry' years, respectively.

[4] According to CMWD draft 2010 UWMP, CMWD could supplement member agency supply allocations with Las Posas ground water reserves or Lake Bard reserves.

Table V-2b
Dry Water Years Supply and Demand Assessment – 2015-2018 (AFY)

		Average Water Year	Single Dry Water Year	Multiple Dry Water Years		
		2015	2016	2016	2017	2018
Total Demand [1]		13,626	14,989	14,989	13,626	12,263
Supply from CMWD	Normal [2]	13,965	15,264	15,264	15,263	15,262
	Reserves [3]	0	0	0	0	0
Local Groundwater		0	0	0	0	0
Total Supply		13,965	15,264	15,264	15,263	15,262
Surplus/(Deficit)		339	275	275	1,637	2,999

[1] Assumes 10% increase in demand for first year of dry conditions, and 10% decrease for 3rd year of dry conditions.

[2] CMWD Draft 2010 UWMP – allocations pursuant to 'normal', 'single-dry', and 'multi-dry' years, respectively.

[3] According to CMWD draft 2010 UWMP, CMWD could supplement member agency supply allocations with Las Posas ground water reserves or Lake Bard reserves.

Table V-2c
Dry Water Years Supply and Demand Assessment – 2020-2023 (AFY)

		Average Water Year	Single Dry Water Year	Multiple Dry Water Years		
		2020	2021	2021	2022	2023
Total Demand [1]		13,875	15,263	15,263	13,875	12,488
Supply from CMWD	Normal [2]	15,360	15,260	15,260	15,260	15,260
	Reserves [3]	0	3	3	0	0
Local Groundwater		0	0	0	0	0
Total Supply		15,360	15,263	15,263	15,260	15,260
Surplus/(Deficit)		1,485	0	0	1,385	2,773

[1] Assumes 10% increase in demand for first year of dry conditions, and 10% decrease for 3rd year of dry conditions.

[2] CMWD Draft 2010 UWMP – allocations pursuant to 'normal', 'single-dry', and 'multi-dry' years, respectively.

[3] According to CMWD draft 2010 UWMP, CMWD could supplement member agency supply allocations with Las Posas ground water reserves or Lake Bard reserves.

Table V-2d
Dry Water Years Supply and Demand Assessment – 2025-2028 (AFY)

		Average Water Year	Single Dry Water Year	Multiple Dry Water Years		
		2025	2026	2026	2027	2028
Total Demand [1]		14,124	15,536	15,536	14,124	12,712
Supply from CMWD	Normal [2]	15,360	15,260	15,260	15,260	15,260
	Reserves [3]	0	276	276	0	0
Local Groundwater		0	0	0	0	0
Total Supply		15,360	15,536	15,536	15,260	15,260
Surplus/(Deficit)		1,236	(0)	(0)	1,136	2,548

[1] Assumes 10% increase in demand for first year of dry conditions, and 10% decrease for 3rd year of dry conditions.

[2] CMWD Draft 2010 UWMP – allocations pursuant to 'normal', 'single-dry', and 'multi-dry' years, respectively.

[3] According to CMWD draft 2010 UWMP, CMWD could supplement member agency supply allocations with Las Posas ground water reserves or Lake Bard reserves.

Table V-2e
Dry Water Years Supply and Demand Assessment – 2030-2033 (AFY)

		Average Water Year	Single Dry Water Year	Multiple Dry Water Years		
		2030	2031	2031	2032	2033
Total Demand [1]		14,373	15,810	15,810	14,373	12,936
Supply from CMWD	Normal [2]	15,360	15,260	15,260	15,260	15,260
	Reserves [3]	0	550	550	0	0
Local Groundwater		0	0	0	0	0
Total Supply		15,360	15,810	15,810	15,260	15,260
Surplus/(Deficit)		987	(0)	(0)	887	2,324

[1] Assumes 10% increase in demand for first year of dry conditions, and 10% decrease for 3rd year of dry conditions.

[2] CMWD Draft 2010 UWMP – allocations pursuant to 'normal', 'single-dry', and 'multi-dry' years, respectively.

[3] According to CMWD draft 2010 UWMP, CMWD could supplement member agency supply allocations with Las Posas ground water reserves or Lake Bard reserves.

Table V-2f
Dry Water Years Supply and Demand Assessment – 2035-2038 (AFY)

		Average Water Year	Single Dry Water Year	Multiple Dry Water Years		
		2035	2036	2036	2037	2038
Total Demand [1]		14,622	16,084	16,084	14,622	13,160
Supply from CMWD	Normal [2]	15,360	15,260	15,260	15,260	15,260
	Reserves [3]	0	824	824	0	0
Local Groundwater		0	0	0	0	0
Total Supply		15,360	16,084	16,084	15,260	15,260
Surplus/(Deficit)		738	(0)	(0)	638	2,100

[1] Assumes 10% increase in demand for first year of dry conditions, and 10% decrease for 3rd year of dry conditions.

[2] CMWD Draft 2010 UWMP – allocations pursuant to 'normal', 'single-dry', and 'multi-dry' years, respectively.

[3] According to CMWD draft 2010 UWMP, CMWD could supplement member agency supply allocations with Las Posas ground water reserves or Lake Bard reserves.

Dry water year demands were assumed to require an increase by 10 percent over the average water year. This assumption was based on the percent increase assigned by CMWD to the Thousand Oaks service area in its Purveyor Draft 2010 Urban Water Management Plan. Demands between years 2010 and anticipated buildout also experience a gradual increase due to an estimated straight-line growth and development of the additional future land uses to 2035 (Table III-4).

Tables VI-2A through VI-2E include miscellaneous water demands and expected water losses between CMWD turnouts and metered consumption. If deficits occur, they are expected to be lower than the minimum water supply triggering level, and thus are unlikely to force the City to implement any of its water shortage actions described in the Water Shortage Contingency Plan, as shown in **Appendix D**. The City is expected to receive additional water from CMWD to meet any foreseeable deficit. If a dry year equivalent to the recent drought (2008-2010) is experienced, CMWD would supply water either from its available reserves or by using the water stored in the Las Posas Aquifer Storage and Recovery (ASR) facilities. The credits the City receives from the Conejo Creek Diversion Project will also be used in case of a water supply shortage, as discussed in Section VII.

SECTION VI: WATER QUALITY IMPACTS ON RELIABILITY

A. Introduction

The City is on a constant mission to provide high quality water that meets or exceeds the stringent water quality standards established by the U.S. Environmental Protection Agency (EPA) and the State of California Department of Public Health (CDPH), which were set to protect against both naturally occurring and man-made contaminants that may be found in drinking water. The Public Works Department is dedicated to providing its residents dependable supply of high quality water, and therefore operates its water system in compliance with both EPA and CDPH standards. According to the City's 2009 Annual Water Quality Report, the City conducted over 4,000 tests on their drinking water for over 80 drinking water constituents and contaminants, and concluded that the quality of water delivered by the City consistently meets all CDPH and EPA Standards.

B. Impact of Changes in Drinking Water Regulations

It is well known that both the EPA and CDPH are establishing new drinking water regulations and updating their standards on a constant basis. Despite the fact that recently established or future changes to drinking water regulations could impose major changes in treatment and distribution operations, the City's Master Plan concludes that the City's water constituents are and will continue to be within acceptable or non-detectable levels. Table VI-1 summarizes the upcoming, new and/or updated regulations and their relative impact on the City's drinking water quality.

C. Measures to Reduce Future Impact of Water Quality on Reliability

MWDSC, CMWD and the City have adopted policies and taken various measures in an effort to reduce any potential water quality impact that could lead to a decreased water supply. MWDSC has instituted a 10 percent planning buffer, which requires water supplies 10 percent above the needed 2035 water demands. The use of this supply will only be permitted when existing supplies are unavailable.

As for CMWD, it has been estimated that approximately five (5) percent of its total annual demands would be affected if the unlikely contamination of Lake Bard were to occur. The lost supply from such an event would then be compensated with additional imported water from MWDSC or by extracting water from the Las Posas groundwater basin. It is believed, however, that a significant impact on demands would occur, should any water quality issues arise from the water extracted from the Las Posas Basin. According to currently available CMWD UWMP planning information, should the highly unlikely contamination of the confined water within the Las Posas Basin occur, treating the water upon extraction would be the optimum solution. Treatment facilities may require future upgrading to treat the groundwater upon extraction. Therefore, importing additional water from MWDSC is considered the preferred option to meet demands, either on a permanent basis or interim during treatment facility upgrades.

The City, in its part to ensure high water quality for its residents, has evaluated its facilities and developed several measures to prevent water quality issues. The City's Water Master Plan describes these measures, which are summarized as follows:

- Continue monitoring contaminants and unregulated contaminants on the top of the Drinking Water Contaminant Candidate List

- Implement the following recommendations to improve water quality:

    1) Install an active mixing system at the following:
        - Freeway Reservoir
        - Lang Ranch Reservoir
        - Willow Lane Reservoir
        - Oak Brook Reservoir
        - Rolling Hills Reservoir

    2) Install a chlorine analyzer connected to the City SCADA system at the following:

        - Freeway Reservoir
        - La Granada Reservoir
        - Rolling Oaks Reservoir
        - Tara Reservoir
        - Meadows Reservoir
        - Ventu Park Reservoir

These capital improvements have established budgets and are scheduled for completion within the next three to four years.

Table VI-1
Impact of Recent and Future Regulation Changes on the City's Water Quality

Rule	Agency	Date of Establishment	Old Standards/ Requirements	New Standards/ Requirements	Levels in Thousand Oaks's Drinking Water (2009 Averages)	Conclusion
Arsenic	EPA	January-01	50 ppb	10 ppb	3.1 ppb	New Standards will not have an effect since arsenic levels are non-detectable
Ground Water	EPA	July-03	…	New appropriate methods of groundwater disinfection	…	Does not apply since the City does not use groundwater for potable use
Lead and Copper	EPA	April-00	1.3 mg/l for copper 15 ppb for lead	New monitoring requirements and treatment techniques if levels exceed standards	0.162 mg/l for copper 2.46 ppb for lead	City is in compliance
Microbial and Disinfection Byproducts	EPA	N/A	4 mg/l for Chlorine 0.08 mg/l TTHM [1] 0.06mg/l for HAA5 [2] 1.0 mg/l for Chlorite 0.01 mg/l for Bromate	Same as old requirements, but must comply at specific monitoring locations instead of system-wide average levels	24 ppb for TTHMs 4 ppb for HAA5	Results show compliance
MTBE	EPA	N/A	N/A	To be Determined	Non-detectable	Any new Standard will not have an effect since MTBE levels are non-detectable
Perchlorate	EPA & CDPH	N/A	N/A	To be Determined	Non-detectable	Any new Standard will not have an effect since Perchlorate levels are non-detectable
Chromium 6	CDPH	N/A	50 ppb for Total Chromium	To be Determined	Non-detectable	Any new Standard will not have an effect since Chromium 6 levels are non-detectable
Radionuclides	EPA	2008	N/A	Combined Radium: 5pCi/L Beta Emitters: 4 mremes Gross Alpha STD: 15pCi/L	3.4 pCi/L (gross alpha particle activity) 1.8 pCi/L for uranium	2009 monitoring results show the City is in compliance
Radon	EPA	N/A	N/A	New Rule will apply for groundwater use only	Non-detectable	Does not apply since the City does not use groundwater for potable use
Unregulated Contaminant Monitoring	EPA	January-05	N/A	To be Determined	N/A	CMWD and/or City required to monitor for various unregulated contaminants
Sulfate	EPA	2010	N/A	250-500 ppm (Secondary MCL)	65 ppm	City is unlikely to be impacted by this contaminant now or in the near future

[1] TTHM: Total Trihalomethane
[2] HAA5: Five Haloacetic Acids

SECTION VII: RECYCLED WATER/ TRANSFER OPPORTUNITIES

A. Conejo Creek Diversion Project

The City, in conjunction with CMWD and Camrosa Water District, completed a cooperative project, which began operation in 2001 by recycling available wastewater from the Hill Canyon Treatment Plant. The State Water Resources Control Board approved the City's water rights application in 1997, which allowed the City to appropriate water discharged to Conejo Creek for downstream beneficial uses. Use of the project water reduces groundwater pumping and seawater intrusion and reduces the regional need for imported water.

The Project is located along Conejo Creek, a tributary to Calleguas Creek, located in southwestern Ventura County. The diversion is located about 300 feet south of Highway 101, two miles upstream of the confluence of Conejo Creek and Calleguas Creek, and about 10 miles from the Pacific Ocean. The water diverted from Conejo Creek by the project is discharged into the creek from the City of Thousand Oaks's Hill Canyon Wastewater Treatment Plant, located about seven miles upstream of the diversion location. The facilities built for the project include a diversion structure, pipelines to Camrosa's existing storage ponds, a pump station at the storage ponds, and transmission pipelines to distribute the water into the Camrosa Water District and Pleasant Valley Water District.

Through cooperative agreements with the Calleguas Municipal Water District, the Camrosa Water District, and the Pleasant Valley Water District, almost all of the treated effluent from the Hill Canyon plant is currently put to beneficial uses, and a portion of the recycled water is placed in storage through an in-lieu process and transferred to CMWD to be recovered as a potable supply.

Through these agreements, the City receives conservation credits to be used to offset the effects of future water shortages. The project delivers approximately 8,000 to 10,000 acre-feet of water annually for various beneficial uses along Conejo and Calleguas Creek, in the Santa Rosa Valley and the Oxnard Plain, as listed in Table VII-1. For each acre-foot not extracted from the Oxnard Plain because of the availability of project-recycled water, the City receives one half of one acre-foot to be placed in a potable water conservation bank to be used in case of a water supply shortage. Since the project minimum yield is 3,000 acre-feet per year, this guarantees at least 1,500 acre-feet in conservation credits, which is shared with the three principal water retailers - the City, Cal-Am and California Water Service.

Table VII-1
Conejo Creek Diversion Project Benefits

1	Reduce the reliance on additional imported water supplies by recycling water originally imported from northern California.
2	Reduce groundwater overdraft in the Oxnard Plain and Pleasant Valley Groundwater basins by replacing groundwater pumping as a supply for agricultural irrigation.
3	Help sustain agricultural viability in the Santa Rosa Valley and the Oxnard plain by supplying a reliable agricultural irrigation supply.
4	Provide a relatively inexpensive and reliable water source for agriculture.
5	Provide a supplemental water supply that can be used conjunctively with potable sources to increase municipal water supply reliability.

SECTION VIII: PLAN COORDINATION AND ADOPTION

The preparation of this 2010 UWMP was announced in local newspapers, and a draft was sent to Calleguas Municipal Water District (City's water wholesaler), California American Water Company and California Water Service Company. The final draft was made available at local public facilities, including City Hall and the City's two libraries. Previous versions of the Plan were adopted in Years 1991, 1997, 2000 and 2005. Table VIII-1 identifies the following agencies that will be provided a copy of the final 2010 UWMP.

Table VIII-1
Agency Coordination

Agency	Received Draft Report	Sent Notice of Intention to Adopt
CMWD	x	
California American Water Company	x	
California Water Service Company	x	
County of Ventura		x

The City of Thousand Oaks 2010 Urban Water Management Plan was adopted by the Thousand Oaks City Council at a noticed Public Hearing held on _____, 20__.

APPENDIX A

WATER CONSERVATION ACT
(SENATE BILL 7)

RBF CONSULTING
14725 Alton Parkway
Irvine, California 92618-2027

Senate Bill No. 7

CHAPTER 4

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

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

LEGISLATIVE COUNSEL'S DIGEST

SB 7, Steinberg. Water conservation.

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

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

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

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

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

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

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

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

PART 2.55. SUSTAINABLE WATER USE AND DEMAND REDUCTION

Chapter 1. General Declarations and Policy

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(k) Advance regional water resources management.

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

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

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

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

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

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

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

Chapter 2. Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(A) Metered.

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

(C) Treated to a minimum tertiary level.

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

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

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

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

(2) The use of recycled water.

(3) The desalination of brackish groundwater.

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

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

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

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

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

Chapter 3. Urban Retail Water Suppliers

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

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

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

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

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

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

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

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

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

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

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

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

(A) Consider climatic differences within the state.

(B) Consider population density differences within the state.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) Through an urban wholesale water supplier.

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

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

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

(5) By hydrologic region.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chapter 4. Agricultural Water Suppliers

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

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

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

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

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

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

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

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

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

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

(B) Conjunctive use of groundwater.

(C) Appropriate increase of groundwater recharge.

(D) Reduction in problem drainage.

(E) Improved management of environmental resources.

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

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

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

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

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

(9) Automate canal control structures.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chapter 5. Sustainable Water Management

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

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

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

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

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

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

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

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

Chapter 6. Standardized Data Collection

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

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

Chapter 7. Funding Provisions

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

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

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

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

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

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

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

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

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

Chapter 8. Quantifying Agricultural Water Use Efficiency

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

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

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

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

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

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

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

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

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

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

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

(i) Compliance on an individual basis.

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

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

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

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

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

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

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

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

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

PART 2.8. AGRICULTURAL WATER MANAGEMENT PLANNING

Chapter 1. General Declarations and Policy

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Chapter 2. Definitions

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

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

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

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

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

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

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

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

Chapter 3. Agricultural Water Management Plans

Article 1. General Provisions

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

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

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

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

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

Article 2. Contents of Plans

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

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

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

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

(1) Size of the service area.

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

(3) Terrain and soils.

(4) Climate.

(5) Operating rules and regulations.
(6) Water delivery measurements or calculations.
(7) Water rate schedules and billing.
(8) Water shortage allocation policies.

(b) Describe the quantity and quality of water resources of the agricultural water supplier, including all of the following:
(1) Surface water supply.
(2) Groundwater supply.
(3) Other water supplies.
(4) Source water quality monitoring practices.
(5) Water uses within the agricultural water supplier's service area, including all of the following:
(A) Agricultural.
(B) Environmental.
(C) Recreational.
(D) Municipal and industrial.
(E) Groundwater recharge.
(F) Transfers and exchanges.
(G) Other water uses.
(6) Drainage from the water supplier's service area.
(7) Water accounting, including all of the following:
(A) Quantifying the water supplier's water supplies.
(B) Tabulating water uses.
(C) Overall water budget.
(8) Water supply reliability.

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

(d) Describe previous water management activities.

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

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

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

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

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

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

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

Article 3. Adoption and Implementation of Plans

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

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

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

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

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

(1) The department.

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

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

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

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

(6) The California State Library.

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

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

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

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

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

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

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

Chapter 4. Miscellaneous Provisions

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

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

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

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

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

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

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

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

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

O

APPENDIX B

Department of Water Resources
2010 UWMP Checklist

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Irvine, California 92618-2027

Table I-2 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement [a]	Calif. Water Code reference	Additional clarification	UWMP location
CONTINGENCY [b]				
35	Provide an urban water shortage contingency analysis that specifies stages of action, including up to a 50-percent water supply reduction, and an outline of specific water supply conditions at each stage	10632(a)		*Section IV.C. pg. 31*
36	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.	10632(b)		*Section V.D. Table V-2a*
37	Identify actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.	10632(c)		*Section IV.B., pg 31-34*
38	Identify additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.	10632(d)		*Section IV.A. "BMP 13" pg 30*
39	Specify consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.	10632(e)		*Section IV.B. Table IV-8, pg 33*
40	Indicated penalties or charges for excessive use, where applicable.	10632(f)		*Section IV.B. pg 34*
41	Provide an analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.	10632(g)		*Section IV.B. pg 34*
42	Provide a draft water shortage contingency resolution or ordinance.	10632(h)		*Section IV.B. pg 31*
43	Indicate a mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.	10632(i)		*Section IV.B. pg 32*
DMMs				
26	Describe how each water demand management measure is being implemented or scheduled for implementation. Use the list provided.	10631(f)(1)	Discuss each DMM, even if it is not currently or planned for implementation. Provide any appropriate schedules.	*Section IV.A pgs 24-31*

No.	UWMP requirement [a]	Calif. Water Code reference	Additional clarification	UWMP location
27	Describe the methods the supplier uses to evaluate the effectiveness of DMMs implemented or described in the UWMP.	10631(f)(3)		*Section IV.A pgs 24-31*
28	Provide an estimate, if available, of existing conservation savings on water use within the supplier's service area, and the effect of the savings on the ability to further reduce demand.	10631(f)(4)		*N/A*
29	Evaluate each water demand management measure that is not currently being implemented or scheduled for implementation. The evaluation should include economic and non-economic factors, cost-benefit analysis, available funding, and the water suppliers' legal authority to implement the work.	10631(g)	See 10631(g) for additional wording.	*Section IV.A pgs 24 – 31*
32	Include the annual reports submitted to meet the Section 6.2 requirements, if a member of the CUWCC and signer of the December 10, 2008 MOU.	10631(j)	Signers of the MOU that submit the biannual reports are deemed compliant with Items 28 and 29.	*N/A*
EXTERNAL COORDINATION AND OUTREACH				
4	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	10620(d)(2)		*Section VIII pg 47*
6	Notify, at least 60 days prior to the public hearing on the plan required by Section 10642, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. Any city or county receiving the notice may be consulted and provide comments.	10621(b)		*Section I.B pg 2*
7	Provide supporting documentation that the UWMP or any amendments to, or changes in, have been adopted as described in Section 10640 et seq.	10621(c)		*Section VIII pg 47*
54	Provide supporting documentation that the urban water management plan has been or will be provided to any city or county within which it provides water, no later than 60 days after the submission of this urban water management plan.	10635(b)		*Section I.B pg 2*
55	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	10642		*Section I.B pg 2*
56	Provide supporting documentation that the urban water supplier made the plan available for public inspection and held a public hearing about the plan. For public agencies, the hearing notice is to be provided pursuant to Section 6066 of the Government Code. The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water. Privately-owned water suppliers shall provide an equivalent notice within its service area.	10642		*Section I.B pg 2*
57	Provide supporting documentation that the plan has been adopted as prepared or modified.	10642		*Section VIII pg 47*

No.	UWMP requirement [a]	Calif. Water Code reference	Additional clarification	UWMP location
59	Provide supporting documentation that, in addition to submittal to DWR, the urban water supplier has submitted this UWMP to the California State Library and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. This also includes amendments or changes.	10644(a)		*Section I.B pg 2*
60	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the urban water supplier has or will make the plan available for public review during normal business hours	10645		*Section I.B pg 2*
RECYCLED WATER				
44	Provide information on recycled water and its potential for use as a water source in the service area of the urban water supplier. Coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	10633		*Section VII pg 46*
45	Describe the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	10633(a)		*Section II.B pg 9*
46	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	10633(b)		*Section VII pg 46*
47	Describe the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.	10633(c)		*N/A; All beneficial uses of the City's recycled water is used by others outside the City's service area*
48	Describe and quantify the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.	10633(d)		*N/A; All beneficial uses of the City's recycled water is used by others outside the City's service area*
49	The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	10633(e)		*N/A; All future uses of the City's recycled water is planned only for use by others outside the City's service area*
50	Describe the actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.	10633(f)		*N/A*
51	Provide a plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.	10633(g)		*N/A; It is estimated that virtually all recycled water produced by the City is used by others outside the City's service area*

No.	UWMP requirement [a]	Calif. Water Code reference	Additional clarification	UWMP location
RELIABILITY				
22	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage and provide data for (A) an average water year, (B) a single dry water year, and (C) multiple dry water years.	10631(c)(1)		*Section V.B pgs 35-38*
23	For any water source that may not be available at a consistent level of use - given specific legal, environmental, water quality, or climatic factors - describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.	10631(c)(2)		*Section V.B pgs 35-38*
53	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. Base the assessment on the information compiled under Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.	10635(a)		*Section V.D Tables V-2a - V-2f*
SERVICE AREA				
8	Describe the water supplier service area.	10631(a)		*Section I.C pg 2*
9	Describe the climate and other demographic factors of the service area of the supplier	10631(a)		*Section I.D pg 3*
10	Indicate the current population of the service area	10631(a)	Provide the most recent population data possible. Use the method described in "Baseline Daily Per Capita Water Use". See Section M.	*Section I.D pg 3*
11	Provide population projections for 2015, 2020, 2025, and 2030, based on data from State, regional, or local service area population projections.	10631(a)	2035 and 2040 can also be provided to support consistency with Water Supply Assessments and Written Verification of Water Supply documents.	*Section I.D pg 3*
12	Describe other demographic factors affecting the supplier's water management planning.	10631(a)		*Section I.D pg 3*
WATER CONSERVATION				
1	Provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	10608.20(e)		*Section III.C pgs 19-21*
2	Include an assessment of present and proposed future measures, programs, and policies to help achieve the water use reductions.	10608.36		*Section IV.A Pgs 23-31*

No.	UWMP requirement [a]	Calif. Water Code reference	Additional clarification	UWMP location
3	Report progress in meeting urban water use targets using the standardized form.	10608.40		*Section III.C pg 22*
WATER DEMANDS				
25	Quantify past, current, and projected water use, identifying the uses among water use sectors, for the following: (A) single-family residential, (B) multifamily, (C) commercial, (D) industrial, (E) institutional and governmental, (F) landscape, (G) sales to other agencies, (H) saline water intrusion barriers, groundwater recharge, conjunctive use, and (I) agriculture.	10631(e)(1)	Consider 'past' to be 2005, present to be 2010, and projected to be 2015, 2020, 2025, and 2030. Provide numbers for each category for each of these years.	*Section III.B pgs 15, 18*
34	Include projected water use for single-family and multifamily residential housing needed for lower income households, as identified in the housing element of any city, county, or city and county in the service area of the supplier.	10631.1(a)		*Section III.B pg 19*
WATER SUPPLY				
5	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	10620(f)		*Section V.B pgs 36-38*
13	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, and 2030.	10631(b)	The 'existing' water sources should be for the same year as the "current population" in line 10. 2035 and 2040 can also be provided.	*Section V.D, Table V-1 Pg 38*
14	Indicate whether groundwater is an existing or planned source of water available to the supplier. If yes, then complete 15 through 21 of the UWMP Checklist. If no, then indicate "not applicable" in lines 15 through 21 under the UWMP location column.	10631(b)	Source classifications are: surface water, groundwater, recycled water, storm water, desalinated sea water, desalinated brackish groundwater, and other.	*N/A*
15	Indicate whether a groundwater management plan been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	10631(b)(1)		*N/A*
16	Describe the groundwater basin.	10631(b)(2)		*N/A*
17	Indicate whether the groundwater basin is adjudicated? Include a copy of the court order or decree.	10631(b)(2)		*N/A*
18	Describe the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. If the basin is not adjudicated, indicate "not applicable" in the UWMP location column.	10631(b)(2)		*N/A*

No.	UWMP requirement [a]	Calif. Water Code reference	Additional clarification	UWMP location
19	For groundwater basins that are not adjudicated, provide information as to whether DWR has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition. If the basin is adjudicated, indicate "not applicable" in the UWMP location column.	10631(b)(2)		*N/A*
20	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	10631(b)(3)		*N/A*
21	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	10631(b)(4)	Provide projections for 2015, 2020, 2025, and 2030.	*N/A*
24	Describe the opportunities for exchanges or transfers of water on a short term or long-term basis.	10631(d)		*Section VII pg 46*
30	Include a detailed description of all water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years, excluding demand management programs addressed in (f)(1). Include specific projects, describe water supply impacts, and provide a timeline for each project.	10631(h)		*Section V.B pgs 35-38*
31	Describe desalinated water project opportunities for long-term supply, including, but not limited to, ocean water, brackish water, and groundwater.	10631(i)		*Section V.B pg 37*
33	Provide documentation that either the retail agency provided the wholesale agency with water use projections for at least 20 years, if the UWMP agency is a retail agency, OR, if a wholesale agency, it provided its urban retail customers with future planned and existing water source available to it from the wholesale agency during the required water-year types	10631(k)	Average year, single dry year, multiple dry years for 2015, 2020, 2025, and 2030.	*Appendix E*
52	Provide information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments, and the manner in which water quality affects water management strategies and supply reliability	10634	For years 2010, 2015, 2020, 2025, and 2030	*SECTION VI pg 43*

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

b The Subject classification is provided for clarification only. A water supplier is free to address the UWMP Requirement anywhere with its UWMP, but is urged to provide clarification to DWR to facilitate review for completeness.

APPENDIX C

Calleguas Municipal Water District
Purchase Order for Imported Water Supply

RBF CONSULTING
14725 Alton Parkway
Irvine, California 92618-2027

PURCHASE ORDER FOR IMPORTED WATER SUPPLY TO BE PROVIDED BY CALLEGUAS MUNICIPAL WATER DISTRICT

PURCHASER: City of Thousand Oaks	**TERM** 10 years
INITIAL BASE DEMAND: 13,485.9 acre-feet	**EFFECTIVE DATE:** January 1, 2003
INITIAL TIER 1 ANNUAL MAXIMUM: 12,137.3 acre-feet	
PURCHASE ORDER COMMITMENT: 80,915.4 acre-feet	

Definitions of capitalized terms used in this Purchase Order are provided in Attachment 1. Terms used in this Purchase Order and not defined in Attachment 1 are defined in Metropolitan's Administrative Code.

COMMITMENT TO PURCHASE

In consideration of Purchaser's commitment to purchase System Water pursuant to this Purchase Order, Calleguas agrees to sell such System Water to Purchaser at the Tier 1 Supply Rate each year in an amount up to the Tier 1 Annual Maximum. System Water sold to Purchaser (excluding deliveries of System Water made under the Interim Agricultural Water Program and Long-term Seasonal Storage Service) in an amount greater than the Tier 1 Annual Maximum shall be sold to the Purchaser at the Tier 2 Supply Rate. In connection with the receipt of System Water, the Purchaser also agrees to pay all other applicable rates and charges, as established by Calleguas from time to time. The rates and charges applicable to System Water as of the Effective Date are shown in Attachment 2.

Purchaser agrees to purchase System Water from Calleguas during the Term in an amount (excluding deliveries of System Water, made under the Interim Agricultural Water Program and Long-term Seasonal Storage Service) not less than the Purchase Order Commitment.

Purchaser recognizes and agrees that Calleguas has relied and will, during the term of this Purchase Order, rely on this commitment by Purchaser in setting its rates and charges, planning and providing its capital facilities and developing its water supply, management and reliability programs. If Purchaser's applicable System Water purchases during the Term are less than the Purchase Order Commitment, Purchaser agrees to pay Calleguas an amount equal to the difference between the Purchase Order Commitment and Purchaser's applicable System Water purchases during the Term times the average of the Tier 1 Supply Rate in effect during the Term. The Purchaser agrees to pay such amount to Calleguas within the next regular billing cycle following the reconciliation of all certifications for special programs that the Purchaser may participate in (e.g. Interim Agricultural Water Program, Long-term Seasonal Storage Service). The Purchaser may elect to pay such amount in twelve equal monthly payments over the course of the next twelve months beginning with the first regular billing cycle following the reconciliation of all outstanding certifications for special programs. If the

Purchaser elects to pay such amount over the course of the next twelve months following the regular billing cycle any outstanding balance shall bear interest at Calleguas' then current investment portfolio average yield. All other amounts payable under this Purchase Order shall be billed and paid in accordance with Ordinance 12.

RENEWAL

Prior to but not later than December 31, 2010, the Purchaser may provide a non-binding written notice to Calleguas of the Purchaser's determination to extend this Purchase Order. Upon the receipt of such notice, the Board of Directors of Calleguas (the "Board") shall determine whether Calleguas will continue to provide System Water to retail purveyors by Purchase Order. If the Board so determines, the Purchaser and Calleguas shall amend this Purchase Order to include an extended term and/or to include such other terms and conditions as may be mutually agreed by the parties. If the Purchaser elects not to renew this Purchase Order it will terminate upon the expiration of the Term.

WATER SERVICE

Conditions of water service by Calleguas to the Purchaser, including but not limited to (i) delivery points, (ii) water delivery schedules, and (iii) water quality, will be determined in accordance with Ordinance 12.

In accordance with its Ordinance 12, Calleguas shall use its reasonable best efforts to supply System Water in the quantities requested by the Purchaser, but is not obligated to dedicate any portion of System capacity for the conveyance, distribution, storage or treatment of System Water for the benefit of the Purchaser or any other retail purveyor. Calleguas shall use its reasonable best efforts to deliver the Base Demand when needed by the Purchaser during the Term; provided however, there shall be no default under this Purchase Order if Calleguas fails to deliver water to the Purchaser in accordance with any such schedule of deliveries during the Term.

By execution of this Purchase Order, the Purchaser recognizes and agrees that it acquires no interest in or to any portion of the System or any other Calleguas facilities, or any right to receive water delivered through the System, excepting the right to purchase up to Purchaser's Tier 1 Annual Maximum at the Tier 1 Supply Rate provided that System Water is available. This Purchase Order governs pricing of the System Water delivered to the Purchaser pursuant to this Purchase Order and does not confer any entitlement to receive System Water.

System Water provided to the Purchaser under the terms of this Purchase Order shall be subject to reduction in accordance with the shortage allocation provisions as adopted by the Board.

In the event that Calleguas' Board determines to reduce, interrupt or suspend deliveries of System Water (excluding deliveries of System Water made under the Interim Agricultural Water Program and Long-term Seasonal Storage Service) any outstanding balance of the Purchase Order Commitment at the end of the Term shall be reduced by the reduction in System Water made available to the Purchaser under this Purchase Order.

MISCELLANEOUS

This Purchase Order will be interpreted, governed and enforced in accordance with the laws of the State of California.

This Purchase Order will apply to and bind the successors and assigns of the Purchaser and Calleguas.

No assignment or transfer of the rights of the Purchaser under this Purchase Order will be valid and effective against Calleguas or the Purchaser without the prior written consent of Calleguas and the Purchaser. In the event that a Calleguas purveyor is acquired by another Calleguas purveyor, the Purchase Order commitment of the acquiree will transfer to the acquirer.

If at any time during the Term, by reason of error in computation or other causes, there is an overpayment or underpayment to Calleguas by the Purchaser of the charges provided for under this Purchase Order, which overpayment or underpayment is not accounted for and corrected in the annual re-determination or reconciliation of said charges, the amount of such overpayment or underpayment shall be credited or debited, as the case may be, to the Purchaser. Calleguas will notify the Purchaser in writing regarding the amount of such credit or debit, as the case may be. In no case will credits or debits for charges provided for under this Purchase Order be administered beyond the limit for billing adjustments as specified in Metropolitan's Administrative Code.

IN WITNESS WHEREOF, this Purchase Order is executed by the duly authorized officers of the Calleguas Municipal Water District and the City of Thousand Oaks, Purchaser, to be effective January 1, 2003.

CALLEGUAS MUNICIPAL WATER DISTRICT

By: Donald R. Kendall
Title: General Manager

APPROVED AS TO FORM ~~AND CONTENT~~:

General Counsel

CITY OF THOUSAND OAKS

Andrew P. Fox, Mayor

ATTEST:

Nancy A. Dillon, City Clerk

APPROVED AS TO FORM:

Mark G. Sellers, City Attorney

APPROVED AS TO ADMINISTRATION:

MaryJane V. Lazz, City Manager

Attachment 1
Purchase Order for Imported Water Supplies
DEFINITIONS

"Base Demand" means the greater of (i) the Initial Base Demand or (ii) the ten-year rolling average of the Purchaser's Firm Demand, measured on a fiscal year basis.

"Calleguas" means Calleguas Municipal Water District.

"Effective Date" means the effective date of this Purchase Order as specified above.

"Firm Demand" means the Purchaser's purchases of non-surplus System Water supplies, including full-service and seasonal shift deliveries.

"Initial Base Demand" means the Purchaser's highest annual Firm Demand on Calleguas in any fiscal year during the period from fiscal year 1989/90 through fiscal year 2001/02.

"Metropolitan" means The Metropolitan Water District of Southern California.

"Purchase Order Commitment" means 60% of the initial Base Demand times 10. Deliveries of System Water made under the Agricultural Water Program and Long-term Seasonal Storage Service, will not count toward the Purchase Order Commitment.

"Purchase Order" means this Purchase Order.

"Purchaser" means the retail purveyor specified above, a duly organized [city/water district/county water authority] of the State of California.

"System" means the properties, works and facilities of Calleguas necessary for the supply, development, storage, conveyance, distribution, treatment or sale of water.

"System Water" means water supplies developed by Calleguas and delivered to the Purchaser through the System or other means (e.g. conjunctive use storage).

"Term" means the term of this Purchase Order as specified above.

"Tier 1 Annual Maximum" means an amount equal to 90% of the Base Demand.

"Tier 1 Supply Rate" means Metropolitan's per-acre-foot Tier 1 Supply Rate, as determined from time to time by Metropolitan's Board of Directors. The initial Tier 1 Rate is $73/AF.

"Tier 2 Supply Rate" means Metropolitan's per-acre-foot Tier 2 Supply Rate, as determined from time to time by Metropolitan's Board of Directors. The initial Tier 2 Rate is $154/AF.

APPENDIX D

Water Conservation and Water Rates

1. Article 11. Water Conservation, June 5, 2009 (Ordinance No. 1516-NS)

2. Ordinance No. 1549 (2010 Water Fees and Rates)

RBF CONSULTING
14725 Alton Parkway
Irvine, California 92618-2027

Article 11. Water Conservation

Sec. 10-2.1101. Conservation Measures Established.

Mandatory water conservation measures are hereby established as set forth in this article.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1102. Application.

(a) To the extent authorized by law, this article shall apply to all customers and property within the City and the City's water service area, with no distinction as to whether service is provided by the City or a private water purveyor of potable water that operates water service systems within the City.

(b) The provisions of this article do not apply to uses of water necessary to protect public health and safety or for essential health care or government services such as police, fire and other similar emergency services.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1103. General Prohibition: Enforcement, Penalties.

(a) No customer of the City water system or of a water purveyor serving customers within the City shall make, cause, use, or permit the use of potable water in a manner contrary to any provision of this article. Any violation of the use restrictions set forth in this article shall be reported to the City by the water purveyor. Each customer shall be guilty of a separate offense for each day during which such unauthorized use occurred, continued or was permitted.

(b) Any violation of the water use restrictions set forth in this article shall be subject to prosecution and fines and penalties as set forth in Title 1, Chapter 2, Articles 1 and 2 of this code. Furthermore, any violation of the water use restrictions set forth in this article is a public nuisance under TOMC Section 1-6.01 et seq.

(c) Water Flow Restrictors: In addition to any fines or penalties, the City may install a water flow restrictor device for willful violations of mandatory water use restrictions set forth in this article.

(d) Disconnecting Service: In addition to any fines and the installation of a water flow restrictor, the City may disconnect a customer's water service for continued willful violations of mandatory water use restrictions set forth in this article.

(e) Cost of Flow Restrictor and Disconnecting Service: A person or entity that violates this ordinance is responsible for payment of charges for installing and/or removing any flow restricting device and for disconnecting and/or reconnecting service per the City's schedule of charges then in effect. Such charges must be paid to the City before the flow restricting device is removed or the water service is reconnected. Nonpayment will be subject to the same remedies as nonpayment of basic water rates.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1104. Permanent Water Conservation Requirements: Prohibition Against Waste.

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

(a) Limits on Watering Hours: Watering or irrigating of lawn, landscape or other vegetated area with potable water is prohibited between the hours of 9:00 a.m. and 5:00 p.m. on any day, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for short periods of time for the express purpose of adjusting or repairing an irrigation system.

(b) Limit on Watering Duration: 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 is limited to no more than fifteen (15) minutes watering per day per station. This subsection does not apply to landscape irrigation systems that use highly efficient components such as low volume drip type irrigation, stream rotator sprinklers and/or soil moisture-based or weather-based controllers.

(c) No Excessive Water Flow or Runoff: Watering or irrigating of any lawn, landscape or other vegetated area in a manner that causes or allows excessive water flow or runoff onto an adjoining sidewalk, driveway, street, alley, gutter or ditch is prohibited.

(d) No Washing Down Hard or Paved Surfaces: Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary for safety or sanitary purposes, 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 device, a low-volume, high-pressure cleaning machine equipped to recycle any water used, or a low-volume high-pressure water broom. The discharge of pollutants to the storm drain system is prohibited pursuant to Section 7-8.201 of this code.

(e) Obligation to Fix Leaks, Breaks or Malfunctions: Excessive use, loss or release of water through breaks, leaks or other malfunctions in the water user's plumbing or distribution system for any period of time after such release of water should have reasonably been discovered and corrected and, in no event more than seven (7) days of receiving notice from the City, is prohibited.

(f) Re-circulating Water Required for Decorative Water Fountains and Features: Operating a water fountain or other decorative water feature that does not use recirculated water is prohibited.

(g) Limits on Washing Vehicles: Using water to wash or clean a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not is prohibited, except by use of a hand-held bucket or similar container or a hand-held hose equipped with a positive self-closing water shut-off nozzle or device. This subsection does not apply to any commercial car washing facility.

(h) Drinking Water Served Upon Request Only: Eating or drinking establishments, including but not limited to a restaurant, hotel, café, cafeteria, bar, or other public place where food or drinks are sold, served, or offered for sale, shall only provide drinking water to any person upon request.

(i) Commercial Lodging Establishments Must Provide Guests Option to Decline Daily Linen

Services: Hotels, motels and other commercial lodging establishments must provide customers the option of not having towels and linen laundered daily. Commercial lodging establishments must prominently display notice of this option in each bathroom using clear and easily understood language.

(j) No Installation of Single Pass Cooling Systems: Installation of single pass cooling systems is prohibited in buildings requesting new water service.

(k) No Installation of Non-recirculating Commercial Car Wash and Laundry Systems: Installation of non-recirculating water systems is prohibited in new commercial car wash and new industrial laundry systems.

(l) Restaurants Required to Use Water Conserving Dish Wash Spray Valves: Effective on January 1, 2010, food preparation establishments such as restaurants must use water conserving dish wash spray valves.

(m) Commercial Car Wash Systems: Effective on January 1, 2010, all commercial conveyor car wash systems must have installed operational re-circulating water systems, or must have secured a waiver of this requirement from the City.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1105. Level 1 Water Conservation Measures.

(a) A Level 1 Water Supply Shortage exists when the City Council determines, that due to drought or other water supply conditions, a moderate 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 City Council of a Level 1 Water Supply Shortage condition, the City will implement mandatory Level 1 conservation measures identified in this section.

(b) Additional Water Conservation Measures: In addition to the prohibited uses of water identified in Section 10-2.1104, the following water conservation requirements apply during a declared Level 1 Water Supply Shortage:

(1) Limits on Watering Days: Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to three days per week. During November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than two days per week. This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two (2) gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for short periods of time for the express purpose of adjusting or repairing an irrigation system.

(2) Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within seventy-two (72) hours of notification by the City unless other arrangements are made with the City.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1106. Level 2 Water Conservation Measures.

(a) A Level 2 Water Supply Shortage exists when the City Council determines, that due to drought or other water supply conditions, a severe 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 City Council of a Level 2 Water-Supply Shortage condition, the City will implement mandatory Level 2 conservation measures identified in this section.

(b) Additional Conservation Measures: In addition to the prohibited uses of water identified in Sections 10-2.1104 and 10-2.1105, the following additional water conservation requirements apply during a declared Level 2 Water Supply Shortage:

(1) Limits on Watering Days: Watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to two days per week. During November through March, watering or irrigating of lawn, landscape or other vegetated area with potable water is limited to no more than one day per week. This provision does not apply to landscape irrigation zones that exclusively use very low flow drip type irrigation systems when no emitter produces more than two (2) gallons of water per hour. This provision also does not apply to watering or irrigating by use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off nozzle or device, or for short periods of time for the express purpose of adjusting or repairing an irrigation system.

(2) Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within forty-eight (48) hours of notification by the City unless other arrangements are made with the City.

(3) Limits on Filling Ornamental Lakes or Ponds: Filling or re-filling ornamental lakes or ponds with potable water 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 declaration of a supply shortage level under this article.

(4) 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.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1107. Level 3 Water Conservation Measures.

(a) A Level 3 Water Supply Shortage condition is also referred to as an "Emergency" condition. A Level 3 condition exists when the City Council declares a critical water shortage emergency and notifies its residents and businesses that a significant reduction in consumer demand is necessary to maintain sufficient water supplies for public health and safety. Upon the declaration of a Level 3 Water Supply Shortage condition, the City will implement mandatory Level 3 conservation measures identified in this section.

(b) Additional Conservation Measures: In addition to the prohibited uses of water identified in Sections 10-2.1104, 10-2.1105, and 10-2.1106, the following water conservation requirements apply during a declared Level 3 Water Supply Shortage Emergency:

(1) 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:

(i) Maintenance of trees and shrubs, that are watered using a hand-held bucket or similar container, hand-held hose equipped with a positive self-closing water shut-off nozzle or device;

(ii) Maintenance of existing landscape necessary for fire protection;

(iii) Maintenance of existing landscape for soil erosion control;

(iv) Maintenance of plant materials identified to be rare or essential to the well-being of protected species;

(v) 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 days per week in accordance with the time restrictions in Section 10.2-1104;

(vi) Actively irrigated environmental mitigation projects.

(vii) Maintenance of landscaping installed for the purpose of mitigating the effects of stormwater pollution.

(2) Obligation 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 by the City unless other arrangements are made with the City.

(3) No New Potable Water Service: Except for 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, 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:

(i) A valid, unexpired building permit has been issued for the project; or

(ii) The project is necessary to protect the public health, safety, and welfare; or

(iii) 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 City.

(4) Limits on Building Permits: The City will limit or withhold the issuance of building permits which require new or expanded water service, except to protect the public health, safety and welfare, or in cases which meet the City's adopted conservation offset requirements.

(5) Discontinue Service: The City may discontinue service to consumers who willfully violate provisions of this section.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1108. Procedures for Determination: Notification of Water Supply Shortage.

Declaration and Notification of Water Supply Shortage: The existence of Level 1, Level 2 or Level 3

Water Supply Shortage conditions shall be declared by resolution of the City Council adopted at a regular or special public meeting held in accordance with State law.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1109 Hardship Waiver.

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

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

(1) Application: Application for a waiver must be on a form prescribed by the City and accompanied by a non-refundable processing fee in an amount set by City Council resolution.

(2) Supporting Documentation: The application should include photographs, maps, drawings, and other information, including a written statement of the applicant.

(3) Required Findings for Waiver: An application for a waiver will be denied unless the City finds, based on the information provided in the application, supporting documents, or such additional information as may be requested, and on water use information for the property as shown by water use records, all of the following:

(i) That the waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses;

(ii) That because of special circumstances applicable to the property or its use, the strict application of this chapter would have a disproportionate impact on the property or use that exceeds the impacts to residents and businesses generally;

(iii) That the authorizing of such waiver will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the City to effectuate the purpose of this chapter and will not be detrimental to the public interest; and

(4) Approval Authority: The Public Works Director must act upon any completed application no later than fourteen (14) days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver must 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 period of the mandatory water supply shortage condition.

(Ord. 1516-NS, eff. June 5, 2009)

Sec. 10-2.1110. Additional Water Conservation Measures.

The City Council upon adoption of a resolution may implement additional water conservation measures in addition to the prohibited uses of water identified in Sections 10-2.1104, 10-2.1105, 10-2.1106 and 10-2.1107.

(Ord. 1516-NS, eff. June 5, 2009)

ORDINANCE NO. 1549-NS

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF THOUSAND OAKS ADJUSTING AND SETTING FEES AND RESTATING RATES OF THE CITY WATER DIVISION (UNCODIFIED)

WHEREAS, Section 5471 of the Health and Safety Code requires that rates and fees of the City Water Division be adopted by Council action; and

WHEREAS, the City Council of the City of Thousand Oaks has adopted Ordinance No. 1526-NS which establishes the authority for imposing and charging fees for the Water Division; and

WHEREAS, Thousand Oaks Municipal Code Section 10-2.701 (d) and Sections I B, II B, and III B of said Ordinance No.1526-NS provided for the automatic annual escalation of such connection fees and charges, those sections stating that water plant investment, special facilities and fire flow surcharge charges shall automatically be adjusted in December each year based on the percentage change in the Engineering News Record (ENR) Construction Cost Index for Los Angeles as of July of that year; and

WHEREAS, the July 2010 ENR Construction Cost Index for Los Angeles was 9968.69; and

WHEREAS, the July ENR Construction Cost Index for Los Angeles increased by 2.1percent from the July 2009 Index used to establish the charges in Ordinance No. 1526-NS; and

WHEREAS, the annual (December 2010) automatic escalation adjustment to the City's water plant investment, special facilities and fire flow surcharge charges (pursuant to Ordinance No.1526-NS, Sections I B, II B, and III B) is hereby approved; and

WHEREAS, in the adoption of this Ordinance, the City of Thousand Oaks desires to adjust the existing water plant investment fee, special facilities fee, and fire flow surcharge fee; and

WHEREAS, in the adoption of this Ordinance, the City of Thousand Oaks has followed the provisions of Government Code Section 66000 et seq. relating to the conducting of a noticed Public Hearing on November 9, 2010 to hear both oral and written testimony and to the setting of fees and charges that do not exceed the estimated reasonable cost of providing the services for which the fees or charges are made, as well as complied with Proposition 218; and

WHEREAS, the effective date of the water plant investment fee, special facilities fee, and fire flow surcharge fee set forth in this Ordinance shall be the 31st day following its final passage and adoption; and

NOW, THEREFORE, the City Council of the City of Thousand Oaks DOES ORDAIN as follows:

Part 1

(Uncodified)

Ordinance No. 1526-NS is hereby repealed to the extent inconsistent with this Ordinance, concurrent with the effective date of this Ordinance. For ease of administration, one of the purposes of this Ordinance is to have all of the City's water fees, rates, charges, formulas, and related cost recovery matters in one document (or one Ordinance). Some of the water fees, rates, charges, formulas, and related cost recovery matters are restated in this Ordinance and have not been modified or altered from the earlier Ordinance No. 1526-NS therefore, the respective portions of the facility or capital improvement financial plans, operating expense reports and budgets, future facility needs and cost studies, City Council findings and nexus reports associated with the earlier Ordinance are incorporated herein and re-approved by the City Council.

Part 2

(Uncodified)

That the following rates, charges and fees shall be set for the City Water Division in accordance with Chapter 2 of Title 10 of the Thousand Oaks Municipal Code:

I. In accordance with Section 10-2.701, plant investment fees shall be as follows:

A. Plant Investment Fees. The assessment of the plant investment fee shall be computed as follows:

By Customer Type*	Ratio**	
Single family detached home	1.00	$ 4,379
Single family detached condominium	1.00	$ 4,379
Residential condominium, townhouse, mobile home	0.75	$ 3,286
Apartment, duplex, granny flat, secondary unit, per dwelling unit	0.75	$ 3,286
Motel, hotel, congregate care units, with kitchens per dwelling unit	0.50	$ 2,189
Commercial if 10 or less fixture units & low water use ***	0.50	$ 2,189
All Others by meter size		

By Meter Size*		
5/8"x3/4" or 3/4"	1.00	$ 4,379
1"	2.00	$ 8,757
1-1/2"	4.00	$ 17,514
2"	6.40	$ 28,023
3"	13.00	$ 56,924
4"	22.00	$ 96,331
6"	45.00	$ 197,043

* Generally, a customer is charged based upon the "customer type" amounts unless that category does not fit. Exceptions include a single family dwelling or condominium project having larger than a 3/4" meter, kitchen and dining facilities at a motel, hotel or congregate-care facility and any irrigation meter. The charge for these customers is to be based on equivalent meter size of the estimated water demand.

** Approximate ratio to single family detached home or to 5/8" x 3/4" or 3/4" meter as appropriate.

*** Fixture units as defined in the City of Thousand Oaks Plumbing Code using the water demand weight of fixtures; low water usage corresponds to 10 hundred cubic feet per month or less.

B. Escalation. In December of each year, all Plant Investment Fee charges in this Ordinance shall automatically be increased by a factor based upon the change from the preceding July-to-July period in the ENR Construction Cost Index for Los Angeles. The July 2010 ENR Construction Cost Index for Los Angeles was 9968.69 and will be the basis for future adjustments to the Plant Investment Fee charges.

II. In accordance with Section 10-2.702, special facilities surcharge fees shall be as follows:

A. Special Facilities Surcharge Fees

Single Family Detached: per Unit	
- Rolling Oaks Zone	$ 12,236
- Kelley/Ventu Zone	$ 3,362
- Wilder/Grissom Zone	$ 4,583
Condominiums, Townhouses, Mobile Homes: per Unit	0.75 x above SFD fees
- Rolling Oaks Zone	
- Kelley/Ventu Zone	
- Wilder/Grissom Zone	

Apartments, Duplex: per Unit: - Rolling Oaks Zone - Kelley/Ventu Zone - Wilder/Grissom Zone	0.75 x above SFD fees
Motel, Hotel, Congregate Care: per Room or Suite	0.50 x above SFD fees
Commercial Projects with 10 or less fixture Units	0.50 x above SFD fees
Irrigation Meters	-0-
All others, on a building by building basis	*Per formula below with a minimum charge equal to "SFD" charge per site/project

* SFS=SFD amount x (FF x0.5+F.U.x0.25+Sq.Ft.x0.25)
1000 20 3000

Where:	SFS	=	Special facilities surcharge per site/project
	SFD	=	Single family dwelling
	FF	=	Required fire flow for site/project
	F.U.	=	Fixture units in site/project
	Sq. Ft.	=	Total site/project square footage

B. Escalation. In December of each year, all Special Facilities Surcharge Fee charges in this Ordinance shall automatically be increased or decreased by a factor based upon the percent increase or decrease in the ENR Construction Cost Index for Los Angeles as of July of that year. The July 2010 ENR Construction Cost Index for Los Angeles was 9968.69 and will be the basis for future adjustments to the Special Facilities Surcharge Fee charges.

III. In accordance with Section 10-2.703, the fire flow surcharge fees shall be as follows:

A. Fire Flow Surcharge Fees

	Residential	All Others
Required fire flow 0 - 1,250 gpm*	-0-	$ -0-
Required fire flow 1,251 - 1,750 gpm*	10% of PIF	$ 5,309 or 10% of PIF**
Required fire flow 1,751 - ,250 gpm*	20% of PIF	$ 10,599 or 20% of PIF**
Required fire flow over 2,250 gpm*	30% of PIF	$ 15,908 or 30% of PIF**

* Fire flow as set by Ventura County Fire Department.
** Whichever is greater, per site/project.

Fire flow surcharge fees shall not be applied to the PIF for any irrigation meter.

B. Escalation. In December of each year, all Fire Flow Surcharge Fee charges in this Ordinance shall automatically be increased or decreased by a factor based upon the percent increase or decrease in the ENR Construction Cost Index for Los Angeles as of July of that year. The July 2010 ENR Construction Cost Index for Los Angeles was 9968.69 and will be the basis for future adjustments to the Fire Flow Surcharge Fee charges.

C. Refunds of Previous Payments. Where payments of fire flow surcharge fees have been made at higher rates, refunds shall not be made. Where an agreement has been executed for the deferred payment of this fee, the amount due shall be the amount shown on the deferred agreement.

IV. In accordance with Section 10-2.705, the base or minimum domestic use rate shall be as follows:

A. Single Units Rate prior to July 1, 2010

Meter Size	Base Rate (Monthly)*
3/4"	$ 14.46
1"	$ 26.31
1-1/2"	$ 49.90
2"	$ 81.54
3"	$ 158.97
4"	$ 265.46
6"	$ 534.16

*Most customers are billed bimonthly.

B. Single Units Rate after June 30, 2010

Meter Size	Base Rate (Monthly)*
3/4"	$ 15.53
1"	$ 28.26
1-1/2"	$ 53.58
2"	$ 87.57
3"	$ 170.72
4"	$ 258.08
6"	$ 573.63

*Most customers are billed bimonthly.

C. Multiple Units Rate (including multiple family dwellings, apartments, commercial buildings and trailer courts) prior to July 1, 2010.

Meter Size	Minimum Rate (Monthly)
3/4"	$ 30.19
1"	$ 39.48
Above 1"	Same as single units

D. Multiple Units Rate (including multiple family dwellings, apartments, commercial buildings and trailer courts) after June 30, 2010.

Meter Size	Minimum Rate (Monthly)
3/4"	$ 32.42
1"	$ 42.39
Above 1"	Same as single units

E. Conejo Oaks Provision. Effective January 1, 2008, the City of Thousand Oaks Public Works Department will be the official water purveyor and owner of the water facilities within the Conejo Oaks area. Commencing December 31, 2008 and terminating December 31, 2018, properties within the Conejo Oaks service area, shall pay $4.64 per month. This charge shall represent additional infrastructure provided by the City to serve these customers including pressure reduction vaults construction, pipeline installation, pump station abandonment, demolition and site clean-up, and telemetry improvements.

F. Groundwater accounts are not charged a base meter charge as total program costs are collected through the quantity rate.

G. Charges for portions of billing period. A property connected to the water system for a portion of a billing period shall be billed for the portion of the period service is received.

V. In accordance with Section 10-2.705, the quantity rate shall be as follows per one hundred (100) cubic feet. The quantity rate is comprised of three components: Operations and Maintenance, Capital Replacements, and Calleguas Municipal Water District (CMWD) pass-through:

Non-Single Family Residential Quantity Rate Prior to July 1, 2010

Operations and Maintenance	$2.75
Capital Replacements	.30
Total Quantity Rate	$3.05

A. Non-Single Family Residential Quantity Rate After June 30, 2010

Operations and Maintenance	$3.25
Capital Replacements	.30
Total Quantity Rate	$3.55

B. Single Family Residential Quantity Rate Prior to July 1, 2010

Tier 1 (0-15 HCF)	Operations and Maintenance	$2.40
	Capital Replacements	.30
	Total Quantity Rate	$2.70
Tier 2 (16-35 HCF)	Operations and Maintenance	$3.00
	Capital Replacements	. 30
	Total Quantity Rate	$3.30
Tier 3 (36+ HCF)	Operations and Maintenance	$3.80
	Capital Replacements	.30
	Total Quantity Rate	$4.10

C. Single Family Residential Quantity Rate After June 30, 2010

Tier 1 (0-15 HCF)	Operations and Maintenance	$2.74
	Capital Replacements	.30
	Total Quantity Rate	$3.04
Tier 2 (16-35 HCF)	Operations and Maintenance	$3.42
	Capital Replacements	.30
	Total Quantity Rate	$3.72
Tier 3 (36+ HCF)	Operations and Maintenance	$4.33
	Capital Replacements	.30
	Total Quantity Rate	$4.63

VI. In accordance with Section 10-2.705, prior to July 1, 2010, the pumping lift charge is fifteen cents ($0.15) and after June 30, 2010, the pumping lift charge is seventeen cents ($0.17) per one hundred (100) cubic feet per pumping lift. It shall be charged to all water services which rely on one or more pumping lifts in the City system.

VII. In accordance with Section 10-2.706, the groundwater rate shall be one dollar and twenty-two cents ($1.22) per one hundred (100) cubic feet effective November 16, 2009 and one dollar and forty-two cents ($1.42) per one hundred (100) cubic feet effective July 1, 2010. This rate is based on charging forty (40%) percent of the current non-single family residential water quantity rate.

VIII. In accordance with Sections 10-2.707 and 10-2.708, the following shall apply for construction water and unmetered water furnished by the City:

A. Construction Water Prior to July 1,2010

The construction water rate shall be four dollars and twelve cents ($4.12) per one hundred cubic feet

with a base rate of $476.91 per month. These rates are based on charging 135 percent of the current non-single family resident quantity potable water rate and three (3) times the current base rate for a 3-inch meter.

Deposit: $620.00 for a 3-inch meter or as determined by the Public Works Director for larger meter sizes.

Installation Charge: $90.00 with a signed application by an authorized person, for initial installation.

$45.00 each time the meter is relocated to another hydrant at the customer's request.

B. Construction Water After June 30,2010

The construction water rate shall be four dollars and seventy-nine cents ($4.79) per one hundred cubic feet with a base rate of $512.16 per month. These rates are based on charging 135 percent of the current non-single family resident quantity potable water rate and three (3) times the current base rate for a 3-inch meter.

Deposit: $620.00 for a 3-inch meter or as determined by the Public Works Director for larger meter sizes.

Installation Charge: $90.00 with a signed application by an authorized person, for initial installation.

$45.00 each time the meter is relocated to another hydrant at the customer's request.

C. Unmetered Water

For projects where a water system has been declared usable but has not been accepted by the City Council and the subdivider, builder, or developer requests the use of or uses unmetered water for incidental onsite construction purposes, a

monthly fee equal to that of the base rate of a 3/4" water meter shall be charged per lot. The subdivider, builder or developer shall be responsible for the payment of the charge until such time as the new owner or occupant signs an application for metered service at which time the regular service charges shall apply.

If water use during the period the availability rate is in effect is estimated to exceed 3 hcf per service per month, the Public Works Director, at his option, may increase such monthly service charge to reflect the estimated usage.

D. Payment Due Date:

Payment is due on all invoices for construction water and unmetered water within 40 days of the date of the invoice; the invoice becomes delinquent then after.

IX. In accordance with Section 10.2.902, delinquent invoices shall be assessed a basic penalty equal to ten (10%) percent of the unpaid water service charge. An additional penalty, equal to one-half of one percent (0.5%) of the unpaid water service charge and the basic penalty, shall be charged each month, or fraction thereof, that the water service charge and the basic penalty of the previous billing period remain unpaid.

X. In accordance with Section 10-2.712, the overhead rate is included in the approved fully burdened hourly rate.

XI. In accordance with Section 10-2.713 and 10-2.305, the minimum rate for each automatic fire sprinkler service and each private fire hydrant shall be as follows:

Size of Service Connection	Monthly Charge
2-inch & smaller	$ 7.60
3-inch	$11.40
4-inch	$15.20
6-inch	$22.70
8-inch	$30.30
10-inch	$37.90
12-inch	$45.50

XII. In accordance with Section 10-2.715, the overhead rate is included in the approved fully burdened hourly rate.

XIII. Repeal of any provision of this ordinance will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before, this Ordinance's effective date. Any

such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

XIV. Any water-related fees not set forth in this ordinance may be set forth in the User Fee Manual or other ordinance or resolution.

Part 3
Continuation
(Uncodified)

Repeal of any provision of Chapter 1, Wastewater, of Title 10 of the Municipal Code herein will not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before, this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

Part 4
Severability

If any section, sentence, clauses, or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions. The City Council hereby declares that it would have passed this ordinance, and each section, sentence, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clause, or phrases be declared invalid or unconstitutional.

Part 5
Effective Date

This Ordinance shall take effect on the 31st day following final passage and adoption.

PASSED AND ADOPTED this 14th day of December, 2010.

Andrew P. Fox, Mayor

ATTEST:

Linda D. Lawrence, City Clerk

APPROVED AS TO FORM:
Office of the City Attorney

Christopher G. Norman, Assistant City Attorney

APPROVED AS TO ADMINISTRATION:

Scott Mitnick, City Manager

CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF VENTURA) SS.
CITY OF THOUSAND OAKS)

I, LINDA D. LAWRENCE, City Clerk of the City of Thousand Oaks, DO HEREBY CERTIFY that the foregoing is a full, true, and correct copy of Ordinance No. 1549-NS, that was introduced by said City Council at a regular meeting held November 9, 2010, and adopted by said City Council at a regular meeting held on December 14, 2010 by the following vote:

AYES: Councilmembers Gillette, Glancy, Bill-de la Peña, Irwin and Mayor Fox

NOES: None

ABSENT: None

I further certify that said Ordinance No. 1549-NS was published as required by law in the THOUSAND OAKS STAR, a newspaper of general circulation printed and published in said City.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Thousand Oaks, California.

Linda Lawrence

Linda D. Lawrence, City Clerk
City of Thousand Oaks, California

APPENDIX E

CMWD 2010 UWMP Long Term Forecast

RBF CONSULTING
14725 Alton Parkway
Irvine, California 92618-2027

Calleguas Municipal Water District
Local Production Model Data Request
Data for **Calendar Year 2010** City of Thousand Oaks

4. Long Term Forecast

	Demand		Groundwater Production		Hill Canyon Effluent Discharge
Year	M & I	AG	M & I	AG	
2011		0	0	0	11000
2012		0	0	0	11000
2013		0	0	0	11000
2014		0	0	0	11000
2015	14,000	0	35	0	11000
2016		0	0	0	11000
2017		0	0	0	11000
2018		0	0	0	11000
2019		0	0	0	11000
2020	15,400	0	40	0	11000
2021		0	0	0	11000
2022		0	0	0	11000
2023		0	0	0	11000
2024		0	0	0	11000
2025	15,400	0	40	0	11000
2026		0	0	0	11000
2027		0	0	0	11000
2028		0	0	0	11000
2029		0	0	0	11000
2030	15,400	0	40	0	11000
2031		0	0	0	11000
2032		0	0	0	11000
2033		0	0	0	11000
2034		0	0	0	11000
2035	15,400	0	40	0	11000

5. Purveyor Expalantions and Comments

All groundwater is used for landscape irrigation.

RBF CONSULTING

14725 Alton Parkway
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