City of Hemet Water Department

2010 Urban Water Management Plan

Prepared by the City of Hemet Water Department
as required by
the Urban Water Management Planning Act
& the Water Conservation Bill of 2009

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Section 1 – Plan Preparation

Coordination

☑ *UWMP Checklist #4—Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable (10620(d)(2)).*

The City of Hemet contacted the agencies listed in Table 1 in preparation, discussion, and/or coordination of the City of Hemet UWMP.

Table 1
Coordination with appropriate agencies

Coordinating Agencies[1,2]	Participated in developing the plan	Commented on the draft	Attended public meetings	Was contacted for assistance	Was sent a copy of the draft plan	Was sent a notice of intention to adopt	Not involved / No information
City of San Jacinto						☑	
Eastern Municipal Water District						☑	
Lake Hemet Municipal Water District						☑	
County of Riverside						☑	
General public						☑	
Other: Water System Customers						☑	

1 *Indicate the specific name of the agency with which coordination or outreach occurred.*
2 *Check at least one box in each row.*

☑ *UWMP Checklist #6—Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days prior to the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision (10621(b)).*

The City of Hemet Water Department provides water supplies within the City of Hemet and Riverside County. In compliance with Section 10621(b), the County of Riverside Executive Office was notified on April 19, 2011 that the City would be reviewing the UWMP and considering amendments and/or changes to the plan at a public hearing. In addition, notices were sent to the City of San Jacinto, Eastern Municipal Water District, and Lake Hemet Municipal Water District. Documentation of this notification is provided in **Appendix A**.

☑ *UWMP Checklist #54—The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan (10635(b)).*

Copies of the adopted 2010 City of Hemet UWMP were mailed to the City of San Jacinto, Riverside County Executive Office, Eastern Municipal Water District, and Lake Hemet Municipal Water District on September 20, 2011.

☑ *UWMP Checklist #55—Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan (10642).*

The City of Hemet reached out to water system customers during the development and adoption of the UWMP through information provided in utility bill mailings and on the City's website: www.cityofhemet.org.

☑ *UWMP Checklist #56—Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its serve area (10642).*

The City of Hemet Water Department made copies of the draft 2010 UWMP available for public inspection at City of Hemet Public Works Department, 3777 Industrial Avenue, Hemet, CA 92545 prior the public hearing on the plan, which was held on September 13, 2011 at 7:00 PM at the City of Hemet Council Chambers, 450 E. Latham Avenue, Hemet, CA 92543. Notice of the time and place of this hearing was published in the Press Enterprise newspaper on August 25, 2011 and September 1, 2011. See proof of publication in **Appendix B**. The City of Hemet Water Department also provided a copy of the draft UWMP along with a notice of the time and place of the hearing to the City of San Jacinto, Riverside County Executive Office, Eastern Municipal Water District, and Lake Hemet Municipal Water District.

Plan Adoption, Submittal, and Implementation

☑ *UWMP Checklist #57—After the hearing, the plan shall be adopted as prepared or as modified after the hearing (10642).*

The Hemet City Council adopted the City of Hemet UWMP on September 13, 2011. A copy of the adoption resolution is included in **Appendix C**.

☑ *UWMP Checklist #7—The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640) (10621(c)).*

Any amendments or changes to the City of Hemet UWMP shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640 (10621(c)).

☑ *UWMP Checklist #58—An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan (10643).*

The City of Hemet shall implement this UWMP by continuing and/or enhancing existing Demand Management Measures and implementing new Demand Management Measures to achieve water demand reduction goals.

☑ *UWMP Checklist #59—An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption (10644(a)).*

The City of Hemet submitted copies of this adopted UWMP to the following agencies on September 20, 2011:

Department of Water Resources
Statewide Integrated Water Management
Water Use and Efficiency Branch
Attention: Coordinator, Urban Water Management Plans
P.O. Box 942836
Sacramento, CA 94236-0001

California State Library
Government Publications Section
Attention: Coordinator, Urban Water Management Plans
P.O. Box 942837
Sacramento, CA 94237-0001

County of Riverside
Bill Luna, Executive Officer
4080 Lemon Street
Riverside, CA 92501

City of San Jacinto
Tim Hults, City Manager
595 S. San Jacinto Avenue
San Jacinto, CA 92583

☑ *UWMP Checklist #60—Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours. (10645).*

The adopted City of Hemet 2010 UWMP is available for public review at the following locations: Hemet City Hall (City Clerk's Office and Planning Department) 445 E. Florida Avenue, Hemet, CA 92543; City of Hemet Water Department, 3777 Industrial Avenue, Hemet, CA 92545.

UWMP Preparer

Linda Nixon
City of Hemet Environmental Services Manager
3777 Industrial Avenue
Hemet, CA 92545
951-765-3880
Lnixon@cityofhemet.org

Section 2 – System Description

Service Area Physical Description

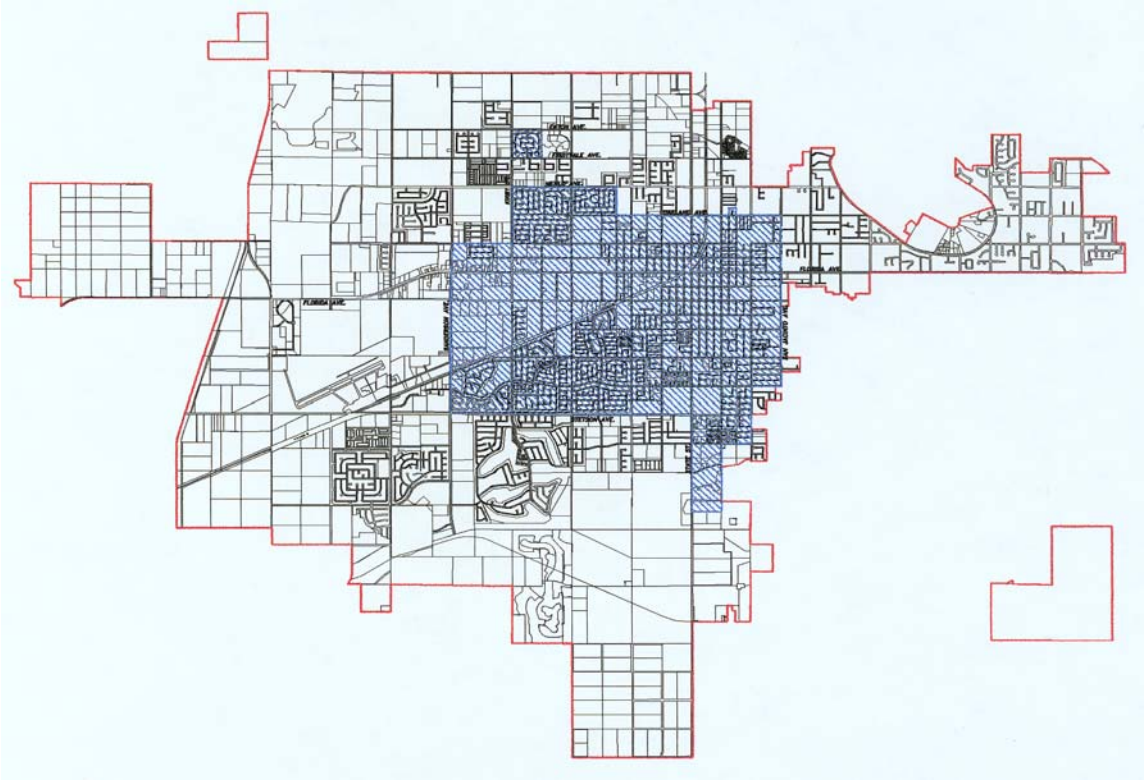
☑ *UWMP Checklist #8—Describe the service area of the supplier. (10631(a)).*

Service Area Physical and Political Attributes

In 1954, the City of Hemet purchased the Lake Hemet Water Company water system, which consisted of two deep wells, one 1.5 million gallon (MG) reservoir and miscellaneous distribution systems in need of a maintenance and replacement program. At that time, the boundaries of the City of Hemet and the area serviced by the City's Water Department were approximately the same, 3,360 acres (5.25 square miles). Since that time, the city limits have expanded, mostly to the south and west and now encompass 17,728 acres (27.7 square miles), while the City's water service area has remained approximately the same.

Today, the City of Hemet continues to provide water service to residential and commercial customers in the 5.25 square mile service area, which extends generally from Menlo Avenue on the north to Stetson Avenue on the south and from Sanderson Avenue on the west to San Jacinto Street on the east.

City of Hemet Water Distribution System Boundary (Figure 1)



Two other water districts, Eastern Municipal Water District (EMWD) and Lake Hemet Municipal Water District (EMWD), serve the remaining 22.45 square miles of incorporated City area. The present City of Hemet system consists of eleven (11) wells, four (4) storage reservoirs with a maximum capacity of 5.1 MG, and 120 miles of water mains varying in size from four inches to 14 inches in diameter.

Land use zoning within the 5.25 square mile city water service area is comprised of residential uses (80-percent) with the remaining 20-percent of the area designed for commercial and institutional uses. The city service area is currently 85-percent built out. The City estimates the area in which the water system is located will be nearing 100-percent built out by 2020.

Most of the city water system customers are residential consumers (90-percent), with the remaining 10-percent of customers consisting of commercial and institutional/governmental users. (Based on 2010 customer accounts)

Because the vast majority of residential areas within the 5.25-square mile water service area are built out, the number of residential water customers is expected to increase by less than 5-percent over the next twenty years (2010-2030). Commercial water customers in the service area are expected to increase by just 2-percent by 2030.

☑ *UWMP Checklist #9—Describe the service area climate. (10631(a)).*

Service Area Climate

Hemet has a semi-arid climate, typical of Southern California inland valleys, with hot, dry summers and cooler winters. Rainfall, which averages 12.57 inches annually, occurs mostly in what is called the "rainy season," which generally occurs between November and April. The table below summarizes average evapotranspiration, precipitation and temperatures in Hemet.

Hemet, California – Monthly Climate Summary – 1/17/1917 to 12/31/2010													
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
Standard Monthly Average ETo	2.81	2.76	3.78	5.31	6.10	6.97	7.08	6.83	5.67	4.15	3.31	2.56	57.33
Average Total Precipitation (inches)	2.34	2.21	1.79	0.90	0.31	0.05	0.15	0.24	0.40	0.50	1.01	1.47	11.37
Average Max. Temperature (Fahrenheit)	69.2	67.8	73.0	76.3	85.0	92.1	98.9	98.7	94.5	84.2	74.5	68.0	81.8
Average Min. Temperature (Fahrenheit)	38.1	39.3	41.9	44.5	50.4	55.6	60.9	60.7	57.3	50.0	42.1	37.4	48.2

Precipitation and temperature data obtained from Western Regional Climate Center (http://www.wrcc.dri.edu/CLIMATEDATA.html)
Evapotranspiration data obtained from (http://wwwcimis.water.ca.gov/cimis/welcome.jsp)

Service Area Population

☑ *UWMP Checklist #10—Describe the service area current and project population . . . The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier . . . (10631(a)).*

The City of Hemet was incorporated in 1910 with a total population of 992. U.S. Census Bureau count in 2010 was 78,657 [U.S. Census Bureau]. Over the next ten years (2010-2020), the population in Riverside County is projected to increase by 29.7% with another 20.7% increase expected by 2030. [California Department of Finance Demographic Research Unit]

☑ *UWMP Checklist #12— Describe . . . other demographic factors affecting the supplier's water management planning (10631(a)).*

While the population of the City of Hemet is expected to increase in proportion to the population of Riverside County during the next two decades, the population of the City's water system service area will not increase by the same ratio due to the fact that the service area is nearly built out. In addition, the City's 5.25-square mile service area is bordered on all sides by two other water districts, Lake Hemet Municipal Water District and Eastern Municipal Water District, so no expansion of the system is anticipated.

The population estimate for the City of Hemet Water Department service area was developed using the Alternative Methodology for Service Area Population (Appendix A of Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use). Because the city did not have detailed population data for its service area, population estimates were developed by anchoring year 2000 residential connections to the year 2000 census population estimate and then scaling this estimate forward using data for active residential connections.

☑ *UWMP Checklist #11— . . . (population projections) shall be in five-year increments to 20 years or as far as data is available (10631(a)).*

Table 2
Population — current and projected

	2010	2015	2020	2025	2030	2035 - optional
Service area population[1]	23,537	23,832	24,132	24,132	24,132	24,132

[1] *Service area population calculated using Appendix A: Alternative Methodology for Service Area Population (2010 UWMP Guidebook, Section M).*
Data Source: U.S. Census Bureau 2000 Census Data

Section 3 – System Demands

Baselines and Targets

☑ *UWMP Checklist #1— An urban retail water supplier shall include in its urban water management plan . . . due in 2010 the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data (10608.20(e)).*

Step 1: Determine Base Daily per Capita Water Use

Step 1A: Determine Supplier 10- to 15-year and 5-year Base Periods
Using Methodology 3 (Base Daily Per Capita Water Use), determine the percentage of recycled water to total water deliveries for the year 2008.

No recycled water was delivered in 2008.

Step 1B: Decision — 2008 Recycled Water Percentage
Using Methodology 3 (Base Daily Per Capita Water Use) and the results from Step 1A, determine if the percentage of recycled water to total water deliveries for the year 2008 is 10 percent or greater.

The percentage of recycled water to total water deliveries for the year 2008 is 0 percent.

Steps 1C1: Determine 10- Year Base Period Range
Using Methodology 3 (Base Daily Per Capita Water Use), determine base period ranges for calculating the base daily per capita water use. For both steps 1C1 and 1C2, this is a continuous period of years with the end of the range ending between December 31, 2004, and December 31, 2010. For Step 1C1, the range must be 10 years.

Base Period Range for calculating base daily per capita water use: 2001 – 2010

Step 1D: Estimate Distribution System Area
The service area identifies the physical extent for which both the population and gross water use will be determined and, ultimately, the base daily per capita water use. For the purposes of implementing this legislation, the service area is equivalent to a water supplier's distribution system. Using Step 2 of Methodology 1 (Gross Water Use), delineate the distribution system boundary for each of the base period years. A map is to be included in the UWMP that shows the Distribution System Boundary and any changes that occurred in the boundary during the base period. This map may be a single page using shading or various line types to show system area changes over the identified base period.

The City of Hemet water distribution system service area did not change during the 10-Year Base Period (2001-2010). See water system distribution service area map on page 7.

Step 1E: Estimate Service Area Population
Using Methodology 2 (Service Area Population), determine the service area population for each year of the baseline periods by using the estimates for the Distribution System Boundary during each of the years in the base period.

The City of Hemet used the Alternative Methodology for Service Area Population (Appendix A, Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use as summarized below:

1: *Finalize Census Blocks in the 2000 Distribution Area*
All Census Blocks in the City of Hemet water system service area were identified.

2: *Scale Population Information from Census Blocks to Distribution Area*
Total and group-quarter population in 2000 for each Census Block in the water system service area was obtained from the U.S. Census Bureau website, www.census.gov.

3: *Obtain Population by Structure Type*
Single-family connection multifamily populations at the Block Group level were obtained from the U.S. Census Bureau website.

4: *Obtain Active Connections Data*
The City of Hemet Water Department maintains data in its billing system that designates residential connections as either single-family or multifamily.

5: *Develop Population Estimates for Non-Census Years*
For census year 2000, total single-family population was divided by total single-family connections to obtain a ratio and total multifamily population was divided by total multifamily connections to obtain ratios, which were then applied to connections data from non-census years (2001-2010) to estimate non-census-year single-family and multifamily population.

Step 1F: Calculate Gross Water Use

City of Hemet Water Department	12-month period: 1 Jan to 31-Dec					Volume Units: Million Gallons per Year				
Calculation	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Volume from Own Sources	1,882.1	1,868.5	1,528.0	1,663.9	1,435.5	1,406.7	1,754.0	1,559.0	1,256.1	1,126.4
Volume from Imported Sources	0	0	0	0	0	0	0	0	0	0
TOTAL Volume into Distribution System	1,882.1	1,868.5	1,528.0	1,663.9	1,435.5	1,406.7	1,754.0	1,559.0	1,256.1	1,126.4
Volume Exported to Other Utilities	0	0	0	0	0	0	0	0	0	0
Change in Dist. System Storage	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1,882.1	1,868.5	1,528.0	1,663.9	1,435.5	1,406.7	1,754.0	1,559.0	1,256.1	1,126.4
Indirect Recycled Water Use Deduction	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1,882.1	1,868.5	1,528.0	1,663.9	1,435.5	1,406.7	1,754.0	1,559.0	1,256.1	1,126.4
Water Delivered for Ag. Use	0	0	0	0	0	0	0	0	0	0
Process Water Use	0	0	0	0	0	0	0	0	0	0
GROSS WATER USE	1,882.1	1,868.5	1,528.0	1,663.9	1,435.5	1,406.7	1,754.0	1,559.0	1,256.1	1,126.4

Step 1G: Determine Annual Daily Per Capita Water Use

BASE DAILY PER CAPITA WATER USE CALCULATON FOR SECTION 10608.20
City of Hemet Water Department
12-month Period: 1 Jan – 31-Dec

(1)	(2)	(3)	(4)
BASE YEARS	SERVICE AREA POPULATION	GROSS WATER USE (GAL PER DAY)	DAILY PER CAPITA WATER USE (3) / (2)
2001	25,087	5,156,606	206
2002	25,085	5,119,240	204
2003	24,793	4,186,381	169
2004	24,023	4,558,744	190
2005	24,023	3,932,944	164
2,006	24,010	3,854,001	161
2,007	23,590	4,805,510	204
2,008	23,201	4,271,271	184
2,009	23,181	3,441,643	148
2,010	23,537	3,086,151	131
		Total of Column 4:	1,760
		Divide Total by 10:	176

Step 1H: Determine Base Daily Per Capita Water Use

The base daily per capita water use for the entire base period (2001-2010) was calculated by averaging the annual daily per capita water use values identified above. The Base Daily Per Capita Water Use is 176 GPCD (gallons per capita per day).

Step 2: Determine Urban Water Use Target

Step 2A: Decision — Method Determination
Step 2A is the decision point a water supplier uses to identify which of these four methods it will use to determine the urban water use target.

The City of Hemet used Method 1: 80% of Base Daily Per Capita Water Use to determine the urban water use target.

Step 2B: Urban Water Use Target Methods

Base Daily Per Capita Water Use				Urban Water Use Target
176	x	80%	=	141

Step 3: Confirm Urban Water Use Target

Step 3 confirms the water supplier's urban water use target determined in Step 2. It compares the urban water use target determined in Step 2 to a 5-year base daily per capita water use value to confirm that the urban water use target has met a minimum reduction established by statute. Adjustments are made, if necessary, so that the threshold is met.

Step 3A: Identify the 5-Year Base Period
CWC Section 10608.22 indicates that calculation of a base daily per capita water use determined by using a 5-year base period will be used to confirm that the urban water use target meets a minimum threshold. The 5-year continuous base period is to end no earlier than December 31, 2007, and no later than December 31, 2010.

The 5-year base period used to confirm the urban water use target meets a minimum reduction established by statute is 2006-2010.

BASE DAILY PER CAPITA WATER USE CALCULATON FOR SECTION 10608.20
City of Hemet Water Department
12-month Period: 1 Jan – 31-Dec

(1)	(2)	(3)	(4)
BASE YEARS	SERVICE AREA POPULATION	GROSS WATER USE (GAL PER DAY)	DAILY PER CAPITA WATER USE (3) / (2)
2,006	24,010	3,854,001	161
2,007	23,590	4,805,510	204
2,008	23,201	4,271,271	184
2,009	23,181	3,441,643	148
2,010	23,537	3,086,151	131
		Total of Column 4:	828
		Divide Total by 5:	166

Step 3F: Determine 5-Year Base Daily Per Capita Water Use

The base daily per capita water use for the 5-year base period (2006-2010) was calculated by averaging the annual daily per capita water use values identified above. The Base Daily Per Capita Water Use is 166 GPCD (gallons per capita per day).

Step 3H: Decision — 5-Year Base Daily Per Capita Water Use
Is the 5-year base daily per capita water use value from Step 3G less than or equal to 100 GPCD? If so, proceed to Step 3Ka. If not, proceed to Step 3I.

The 5-year base daily per capita water use value from Step 3G [166 GPCD] is NOT less than or equal to 100 GPCD.

Step 3I: Calculate 95% of 5-Year Base Daily Per Capita Water Use

Base Daily Per Capita Water Use				95% of 5-Year Base Daily Per Capita Water Use
166	x	95%	=	158

Step 3J: Decision — Compare 5-Year Base Daily Per Capita Water Use and Urban Water Use Target

The Urban Water Use Target is 141, which is NOT greater than 95 percent of the 5-year base daily per capita water use value of 158. [Ninety-five percent of 158 is 150.]

Step 3Ka: No Adjustments
No adjustments to the urban water use target are needed.

No adjustments to the City of Hemet urban water use target are needed.

Step 3L: Urban Water Use Target

The City of Hemet Water Department urban water use target is 141 GPCD.

Step 4: Determine Interim Urban Water Use Target

Step 4A: Determine Interim Urban Water Use Target

Urban Water Use Target		Base Daily Per Capita Water Use					Interim Urban Water Use Target
141	+	176	=	317	÷ 2	=	159

The City of Hemet Water Department's interim urban water use target is 159 GPCD.

Water Demands

☑ *UWMP Checklist #25— Quantify, to the extent records are available, past and current water use, and projected water use (over the same five-year increments described in subdivision (a), identifying the uses among water use sectors, including but not necessarily limited to, all the following uses: (A) Single-family residential; (B) Multifamily; (C) Commercial; (D) Industrial; (E) Institutional and governmental; (F) Landscape; (G) Sales to other agencies; (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use or any combination thereof; (I) Agricultural (10631(e)(1) and (2)).*

Table 3 provides information concerning actual water deliveries in 2005.

Table 3
Water deliveries — actual, 2005

	2005				
	Metered		Not metered		Total
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	7,778	1,942			1,942
Multi-family	630	1,060			1,060
Commercial	753	1,153			1,153
Industrial	0				0
Institutional/governmental	0				0
Landscape	99	250			250
Agriculture	0				0
Other	15	5			5
Total	9,275	4,410	0	0	4,410

Units : Acre-feet per year

Table 4 provides information concerning actual water deliveries in 2010.

Table 4 Water deliveries — actual, 2010					
	2010				
	Metered		Not metered		Total
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	7,577	1,512			1,512
Multi-family	626	985			985
Commercial	725	784			784
Industrial	0				0
Institutional/governmental	0				0
Landscape	151	176			176
Agriculture	0				0
Other					0
Total	9,079	3,457	0	0	3,457

Units: Acre-feet per year

Table 5 provides projected water deliveries for 2015.

Table 5 Water deliveries — projected, 2015					
	2015				
	Metered		Not metered		Total
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	7,852	1,962			1,962
Multi-family	632	995			995
Commercial	732	791			791
Industrial	0				0
Institutional/governmental	0				0
Landscape	100	178			178
Agriculture					0
Other					0
Total	9,316	3,926	0	0	3,926

Units: Acre-feet per year

Table 6 provides projected water deliveries for 2020.

Table 6 Water deliveries — projected, 2020					
	2020				
	Metered		Not metered		Total
Water use sectors	# of accounts	Volume	# of accounts	Volume	Volume
Single family	7,930	1,981			1,981
Multi-family	638	1,005			1,005
Commercial	739	799			799
Industrial	0				0
Institutional/governmental	0				0
Landscape	100	178			178
Agriculture	0				0
Other					0
Total	9,407	3,963	0	0	3,963

Units: Acre-feet per year

Table 7 provides projected water deliveries for 2025 and 2030.

Table 7 Water deliveries — projected 2025 and 2030				
	2025		2030	
	metered		metered	
Water use sectors	# of accounts	Volume	# of accounts	Volume
Single family	7,852	1,981	7,852	1,981
Multi-family	632	1,005	632	1,005
Commercial	732	799	732	799
Industrial	0		0	
Institutional/governmental	0		0	
Landscape	100	178	100	178
Agriculture	0		0	
Other				
Total	9,316	3,963	9,316	3,963
Units: Acre-feet per year				

☑ *UWMP Checklist #34—The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier. (10631.1(a))*

The Southern California Association of Governments (SCAG) through the Regional Housing Needs Plan adopted in July 2007 determines the City of Hemet's share of the region's housing need. The plan contains the Regional Housing Needs Allocation (RHNA), which specifies the share of regional housing need allocated to each city and county by income level. According to the RHNA, the City must accommodate 11,242 housing units between 2006 and 2014.

Category	Description	Housing Units	Percentage
Very Low Income	< 30-50 percent of Area Median Income (AMI)	2,484	22.1%
Low Income	51-80 percent of AMI	1,781	15.8%
Moderate Income	81-120 percent of AMI	2,080	18.5%
Above Moderate Income	> 120 percent of AMI	4,898	43.6%

Based on the RHNA, lower income single family and multifamily housing units in the water service area should ultimately account for 37.9% of all housing units (Very Low Income 22.1% + Low Income 15.8%), and therefore, 37.9% of the water demand. Since single family housing units account for 70.8% of all housing units, it is assumed that lower income single family households would account for 28.6% of the water demand, while lower income multifamily households would account for 11.1% of the water demand in the City of Hemet service area. Until updated projections are made these percentages will be used to determine total low-income project water demands through 2030.

Table 8 Low-income projected water demands				
Low Income Water Demands (percent of total demand)	2015	2020	2025	2030
Single-family residential	28.6%	28.6%	28.6%	28.6%
Multi-family residential	11.1%	11.1%	11.1%	11.1%
Total	39.7%	39.7%	39.7%	39.7%

While the City of Hemet will have the option to sell allotted water to adjacent water districts (Eastern Municipal Water District and Lake Hemet Municipal Water District) when the San Jacinto Groundwater Management Plan is formally adopted, no water sales are planned at this time.

Table 9
Sales to other water agencies

Water distributed	2005	2010	2015	2020	2025	2030
Lake Hemet Municipal Water District	0	0	0	0	0	0
Eastern Municipal Water District	0	0	0	0	0	0
Total	0	0	0	0	0	0

Units: Acre-feet per year

Since the City of Hemet does not operate a wastewater treatment plant, there are no plans to offer recycled water to customers.

Table 10
Additional water uses and losses

Water use[1]	2005	2010	2015	2020	2025	2030
Saline barriers						
Groundwater recharge						
Conjunctive use						
Raw water						
Recycled water	-	-	-	-	-	-
System losses						
Other (define)						
Total	0	0	0	0	0	0

Units: Acre-feet per year
[1] Any water accounted for in Tables 3 through 7 are not included in this table.

Table 11 summarizes total water use in the City of Hemet Water Department service area

Table 11
Total water use

Water Use	2005	2010	2015	2020	2025	2030
Total water deliveries (from Tables 3 to 7)	4,405	3,457	3,926	3,963	3,963	3,963
Sales to other water agencies (from Table 9)	-	-	-	-	-	-
Additional water uses and losses (from Table 10)	-	-	-	-	-	-
Total	4,405	3,457	3,926	3,963	3,963	3,963

Units: Acre-feet per year

Water Demand Projections

☑ *UWMP Checklist #33— Urban water suppliers that rely upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c). (10631(k))*

The City of Hemet Water Department does not rely upon a wholesale agency for water. The City has a supplemental connection to the Eastern Municipal Water District system, which is utilized only for water exchanges in emergency situations.

Water Use Reduction Plan

☑ *UWMP Checklist #2— Wholesalers: Include an assessment of present and proposed future measures, programs, and policies to help achieve the water use reductions. Retailers: Conduct at least one public hearing that includes general discussion of the urban retail water supplier's implementation plan for complying with the Water Conservation Bill of 2009. (CWC §10608.36)*

A public hearing, conducted on September 13, 2011 included a general discussion of the City of Hemet Water Department's plans for complying with the Water Conservation Bill of 2009. During the hearing information was provided related to the calculation methods and supporting data used to determine the baseline daily per capital water use, urban water use target, interim water use target, and compliance daily per capita water use. The City of Hemet Water Department will report progress toward meeting the urban water use targets to reduce average per capita daily water consumption in the 2015 and 2020 Urban Water Management Plans.

Plan for Per Capita Use Reduction

Section 3 provides the calculations and supporting data references used to determine the base daily per capita water use (176 GPCD), the urban water use target (141 GPCD), and the interim water use target (159 GPCD). In 2010, the actual daily per capita water use was 131 GPCD, which exceeds the 2020 compliance daily water use target of 141 GPCD. The daily per capita water use by City of Hemet Water Department customers has been declining since 2001. The two main reasons for this decline in water use are 1) the recent economic downturn and resulting home foreclosures, and 2) promotion of water conservation over the past decade. It is anticipated that water use will mostly likely increase over the next 5 years as the economy improves. To continue to meet or exceed our urban water use target, the City of Hemet Water Department will continue ongoing promotion of water conservation and expand conversation programs as described in Section 6 Demand Management Measures.

Potential Economic Impacts

The City of Hemet Water has seen a decline in revenues over the past decade as the result of reduced water use. While this has also resulted in decreased water production costs, there are some costs not related to production that have continued or increased including department administration, billing, facility maintenance, water quality testing, and regulatory compliance requirements. The City of Hemet Water Department has a tiered rate structure with a minimum monthly fixed charge according to meter size. This monthly fixed charge is designed to generate sufficient income, based on water system connections to fund all fixed costs related to system operation. As a result, fluctuating water sales do not impact basic operations.

Section 4 – System Supplies

Water Sources

☑ *UWMP Checklist #13— Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). (10631(b))*

The City of Hemet Water Department relies on local groundwater as the only water supply source for customers in its 5.25 square mile service area. Groundwater is currently pumped from the Hemet Groundwater basin by nine (9) City-owned wells.

Table 16
Water supplies — current and projected

Water Supply Sources		2010	2015	2020	2025	2030
Water purchased from[1]:	**Wholesaler supplied volume (yes/no)**					
Wholesaler (Not Allicable)	NO	0	0	0	0	0
Supplier-produced groundwater[2]		4,240	4,367	4,498	4,500	4,500
Supplier-produced surface water		0	0	0	0	0
Transfers in		0	0	0	0	0
Exchanges In		0	0	0	0	0
Recycled		0	0	0	0	0
Desalinated Water		0	0	0	0	0
Other						
Other						
Total		**4,240**	**4,367**	**4,498**	**4,500**	**4,500**

Units: Acre-feet per year
[1] *Volumes shown here should be what was purchased in 2010 and what is anticipated to be purchased in the future. If these numbers differ from what*
[2] *Volumes shown here should be consistent with Tables 17 and 18.*

The City plans to continue the use local groundwater as a supply source through 2030 and does not anticipate the need to purchase wholesale or imported water to supplement the groundwater supply. The City does have a supplemental connection to the Eastern Municipal Water District system, which is utilized only for water exchanges in emergency situations.

Table 17
Wholesale supplies — existing and planned sources of water

Wholesale sources[1,2]	Contracted Volume[3]	2015	2020	2025	2030
Not Applicable					

Units: acre-feet per year
[1] *Water volumes presented here should be accounted for in Table 16.*
[2] *If the water supplier is a wholesaler, indicate all customers (excluding individual retail customers) to which water is sold. If the water supplier is a retailer, indicate each wholesale supplier, if more than one.*
[3] *Indicate the full amount of water*

Groundwater

☑ *UWMP Checklist #14— (Is) groundwater . . . identified as an existing or planned source of water available to the supplier . . .? (10631(b))*

There are eight (8) groundwater management zones or sub basins delineated within the San Jacinto Basin based on major impermeable boundaries, constrictions in impermeable bedrock, groundwater divides, and internal flow systems. The City of Hemet pumps groundwater from two (2) of these sub basins, the Hemet South Sub basin and the San Jacinto Upper Pressure Sub basin.

The City of Hemet has plans to abandon two (2) wells (Well 1 & Well 3) and drill a new replacement well in 2012. This project will not increase production of groundwater. In addition, the City anticipates that up to 4,500 acre feet of groundwater will be available when the Hemet-San Jacinto Groundwater Management Plan is adopted. (See description below)

☑ *UWMP Checklist #15—(Provide a) copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management. 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))*

The City of Hemet anticipates the Hemet-San Jacinto Groundwater Management Plan will be approved by all agencies in 2011. The draft Hemet-San Jacinto Groundwater Management Plan is provided on a separate CD-ROM, included with this report.

☑ *UWMP Checklist #16—(Provide a) description of any groundwater basin or basins from which the urban water supplier pumps groundwater. (10631(b)(2))*

The City of Hemet currently pumps groundwater from the Hemet South Sub Basin and the San Jacinto Upper Pressure Sub Basin.

Hemet South Sub basin – The general boundaries include the Casa Loma and Bautista Creek fault zones to the east; the groundwater divide near Esplanade Avenue to the north; the ground water divide in Winchester area to the west; and various crystalline bedrock outcrops to the south. The Casa Loma and Bautista Creek fault zones are known barriers to groundwater. However, groundwater leaks across the fault zones as underflow from the San Jacinto Upper Pressure Management Zone. The total area of the basin is approximately 85 square miles. Recharging of the Hemet Basin occurs primarily from percolation of yearly rainfall and run off from the surrounding mountains.

San Jacinto Upper Pressure Sub basin – This zone is bounded by the San Jacinto fault to the northeast, the Casa Loma and Bautista Creek fault zones to the southeast, and the flow system boundary with the San Jacinto Lower Pressure Sub basin to the northwest. A branch of the San Jacinto fault zone extends southeast along the channel of Bautista Creek until it intersects the Park Hill fault. In the early 1900s, the barrier effect of the fault resulted in rising groundwater

within the San Jacinto River upstream of the fault. This area is known as the Cienega and is an area of significant municipal groundwater production. The Casa Loma and Bautista Creek fault

zones are known barriers to groundwater flow. However, groundwater leaks across the fault zones as underflow to the Hemet South and Lakeview/Hemet North Sub basins. The total area of the basin is approximately 60 square miles. This basin is replenished by the percolation of annual rainfall and from the San Jacinto River and other ephemeral streams.

☑ *UWMP Checklist #17—For those basins for which a court or the board has adjudicated the rights to pump groundwater, (provide) a copy of the order or decree adopted by the court or the board (10631(b)(2)).*

The City of Hemet anticipates the Hemet-San Jacinto Groundwater Management Plan will be approved by all agencies in 2011. The draft Hemet-San Jacinto Groundwater Management Plan is provided on a separate CD-ROM, included with this report in **Appendix E**.

☑ *UWMP Checklist #18—(Provide) a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. (10631(b)(2)).*

Per the Hemet-San Jacinto Groundwater Management Plan, the City of Hemet will have the legal right to pump 4,500 acre feet per year from the San Jacinto Upper Pressure Sub-Basin. This allocation will exceed recent annual demand and the City anticipates this allocation will meet or exceed future demand, especially when ongoing and planned water conservation efforts are taken into consideration.

☑ *UWMP Checklist #19—For basins that have not been adjudicated, (provide) information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition. (10631(b)(2)).*

As discussed above, the final Hemet-San Jacinto Groundwater Management Plan will limit the amount of water being extracted from the San Jacinto Upper Pressure Sub-Basin to a sustainable yield and implement continued recharge of the basin using imported water.

☑ *UWMP Checklist #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. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records. (10631(b)(3)).*

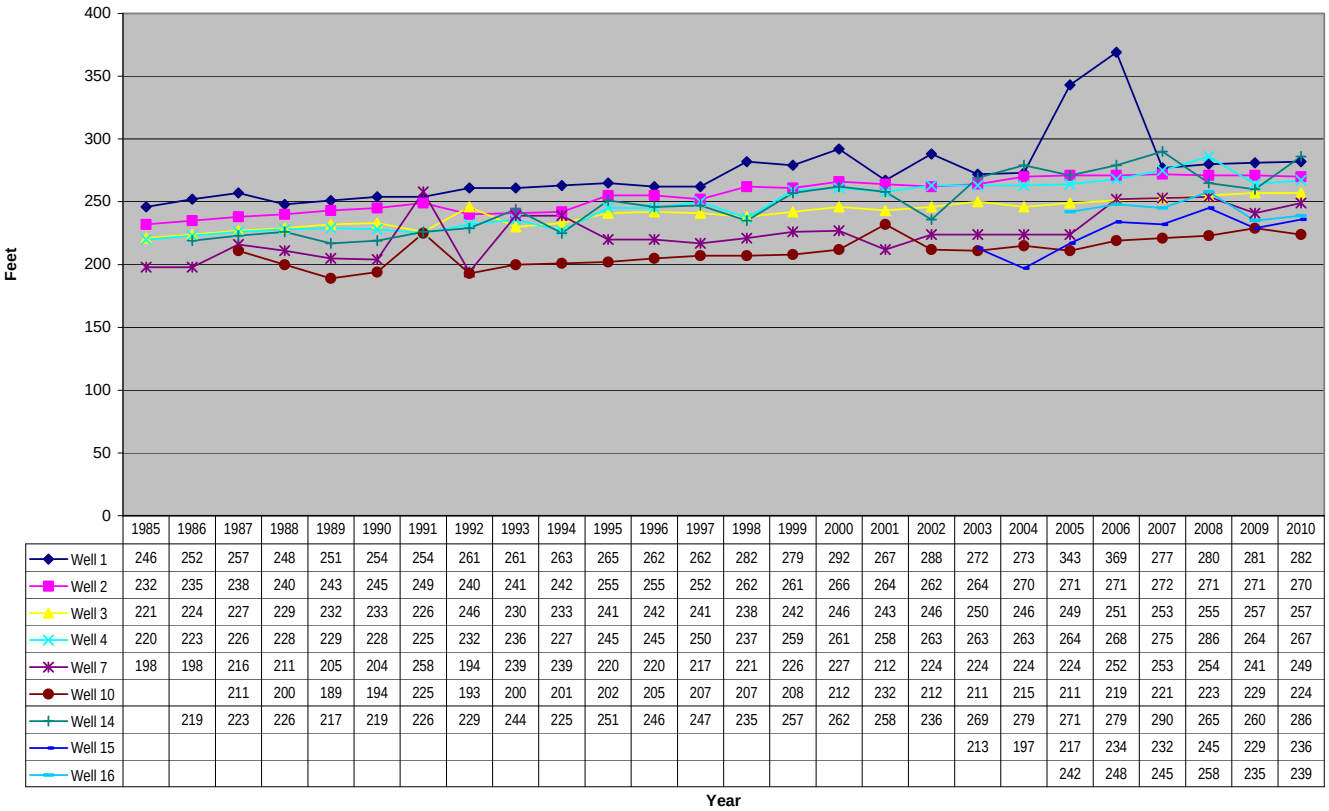
Table 18
Groundwater — volume pumped

Basin name(s)	Metered or Unmetered[1]	2006	2007	2008	2009	2010
Hemet South Sub-Basin	Metered	4,102	3,502	3,657	3,857	3,130
San Jacinto Upper Pressure Sub-Basin	Metered	1,392	1,220	910	574	1,109
Total groundwater pumped		5,494	4,722	4,567	4,431	4,239
Groundwater as a percent of total water supply		100.00%	100.00%	100.00%	100.00%	100.00%

Units: Acre-feet per year
[1] Indicate whether volume is based on volumeteric meter data or another method

There were no limitations or challenges in obtaining groundwater as summarized in Table 18. Sufficient water existed to meet the needs of the City during this time period. The Hemet-San Jacinto Groundwater Management Plan will limit the amount of water being extracted from the San Jacinto Upper Pressure Sub-Basin to a sustainable yield and also implement recharge projects to replenish the basin, which will eliminate the long-term overdraft condition in this basin. The Hemet South Sub-Basin, from which the City of Hemet extracts most of its water, has remained relatively constant over the past 25 years (1985-2010) as shown in the chart below.

Static Well Levels - Hemet South Sub-Basin 1985-2010



	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Well 1	246	252	257	248	251	254	254	261	261	263	265	262	262	282	279	292	267	288	272	273	343	369	277	280	281	282
Well 2	232	235	238	240	243	245	249	240	241	242	255	255	252	262	261	266	264	262	264	270	271	271	272	271	271	270
Well 3	221	224	227	229	232	233	226	246	230	233	241	242	241	238	242	246	243	246	250	246	249	251	253	255	257	257
Well 4	220	223	226	228	229	228	225	232	236	227	245	245	250	237	259	261	258	263	263	263	264	268	275	286	264	267
Well 7	198	198	216	211	205	204	258	194	239	239	220	220	217	221	226	227	212	224	224	224	224	252	253	254	241	249
Well 10			211	200	189	194	225	193	200	201	202	205	207	207	208	212	232	212	211	215	211	219	221	223	229	224
Well 14		219	223	226	217	219	226	229	244	225	251	246	247	235	257	262	258	236	269	279	271	279	290	265	260	286
Well 15																			213	197	217	234	232	245	229	236
Well 16																					242	248	245	258	235	239

☑ *UWMP Checklist #21—(Provide a) detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records. (10631(B)(4)).*

Table 19 Groundwater — volume projected to be pumped				
Basin name(s)	**2015**	**2020**	**2025**	**2030**
Hemet South Sub-Basin	3,057	3,149	3,150	3,150
San Jacinto Upper Pressure Sub-Basin	1,310	1,349	1,350	1,350
Total groundwater pumped	4,367	4,498	4,500	4,500
Percent of total water supply	100.00%	100.00%	100.00%	100.00%
Units: Acre-feet per year *Include future planned expansion*				

The Hemet-San Jacinto Groundwater Management Plan will limit the amount of water being extracted from the San Jacinto Upper Pressure Sub-Basin to a sustainable yield and also implement recharge projects to replenish the basin, which will eliminate the long-term overdraft condition in this basin. The static water levels in the Hemet South Sub-Basin, from which the City of Hemet extracts most of its water, has remained relatively constant over the past 25 years as shown in the charts above. The City of Hemet has no plans to change or expand use of the groundwater supply during the planning horizon (20 years) of the UWMP.

Transfer Opportunities

☑ *UWMP Checklist #24—Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis. (10631(d))*

The City currently has water exchange service connections with EMWD and LHMWD, which provides an opportunity for water exchanges during emergency situations. Although there are currently no formal transfer/exchange agreements in place between the City and EMWD or LHMWD, all agencies have expressed willingness to help one another in any emergency situation.

Desalinated Water Opportunities

☑ *UWMP Checklist #31—Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply. (10631(i))*

Although brackish groundwater exists in the southwest portion of Hemet, the City does not have plans to develop desalinated water over the next 20 years due to lack of need and cost of development.

Recycled Water Opportunities

☑ *UWMP Checklist #44—Provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area. (10633)*

☑ *UWMP Checklist #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))*

The City of Hemet owns and operates a wastewater collection system. However, the City does not own or operate any wastewater treatment facilities. The City has an agreement with Eastern Municipal Water District for treatment of all wastewater generated within the City of Hemet. The wastewater from the City system flows directly into the EMWD system through a series of inter-connections between the two systems. These inter-connections are not metered,

so there is no accurate method for determining the volume of wastewater collected or treated exclusively for the City of Hemet customers. An estimated volume is 4705 AF per year, based on the population in the City's service area.

The City's wastewater is treated at the EMWD San Jacinto Regional Water Reclamation Facility (RWRF). The San Jacinto RWRF produces tertiary effluent, suitable for all Department of Public Health permitted uses, including irrigation of food crops and full-body contact. The treatment capacity of the San Jacinto RWRF in 2010 was 12,300 AF per year. EMWD plans to expand the treatment capacity at this facility to 14,000 AF per year by 2014. EMWD disposes of its recycled water in one of three ways: 1) customer sales, 2) discharge to Temescal Creek, or, 3) through percolation and evaporation while stored in ponds located throughout the EMWD service area. (2010 EMWD UWMP)

☑ *UWMP Checklist #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))*

Information concerning the quantity of treated wastewater that meets recycled water standards, the quality of treated wastewater being discharged, and is otherwise available for use in a recycled water projects is available in the 2010 EMWD UWMP.

☑ *UWMP Checklist #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))*

Recycled water from EMWD is not currently available in the City of Hemet Water Department service area. It is anticipated that limited recycled water from EMWD will be available within the City by 2014 to irrigate several golf courses.

☑ *UWMP Checklist #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))*

☑ *UWMP Checklist #49—(Describe) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision. (10633(e))*

Potential uses of recycled water within the City of Hemet Water Department service area, when it becomes available from EMWD, include: landscape irrigation, commercial irrigation, golf course irrigation and groundwater recharge. Table 23 below provides information concerning the projected use of recycled water in the City of Hemet Water Department service area at the end of 5, 10, 15, and 20 years as well as a determination with regard to the technical and economic feasibility of using recycling water to serve these needs.

Table 23 Recycled water — potential future use						
User type	Description	Feasibility[1]	2015	2020	2025	2030
Agricultural irrigation						
Landscape irrigation[2]		Feasible		10	15	20
Commercial irrigation[3]		Feasible		15	20	25
Golf course irrigation		Very Feasible	50	75	100	100
Wildlife habitat						
Wetlands						
Industrial reuse						
Groundwater recharge						
Seawater barrier						
Getothermal/Energy						
Indirect potable reuse						
Other (user type)						
Other (user type)						
	Total	0	50	100	135	145

Units: Acre-feet per year
[1] *Technical and economic feasibility.*
[2] *Includes parks, schools, cemeteries, churches, residential, or other public facilities)*
[3] *Includes commercial building use such as landscaping, toilets, HVAC, etc) and commercial uses (car washes, laundries, nurseries, etc)*

☑ *UWMP Checklist #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))*

The City of Hemet plans to purchase recycled water when available from EMWD. Financial incentives to encourage use of recycled water will be developed by EMWD.

☑ *UWMP Checklist #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)).*

The City of Hemet Water Department plans to purchase recycled water from EMWD when this resource is available in the city's service area—estimated date of availability for golf course irrigation is 2014.

Future Water Projects

☑ *UWMP Checklist #30—(Describe) all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs, other than the demand management programs identified pursuant to paragraph (1) of subdivision (f), that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program. (10631(h)).*

The City of Hemet Water Department does not anticipate any future water supply projects or programs will be undertaken to meet the total projected water use as present groundwater production capability exceeds current and anticipated future demand.

Section 5 – Water Supply Reliability and Water Shortage Contingency Planning

Water Supply Reliability

☑ *UWMP Checklist #5—An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions. (10620(f))*

☑ *UWMP Checklist 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))*

The City of Hemet has the water supply needed to meet the demand of its customers through 2030. This statement is based on the past reliability of the supplier-produced groundwater supplies, the efforts to maintain this reliability through implementation of the Hemet/San Jacinto Groundwater Management Plan, and the continuation and/or implementation of water demand management measures and promotion of continued water conservation efforts.

Water Shortage Contingency Planning

☑ *UWMP Checklist 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))*

The City of Hemet Water Department Emergency Response Plan lists the following department priorities in an emergency:

1. Act to protect life.
   - In the event a disaster has created a severe water supply emergency that results in a threat to public health, the City of Hemet Water Department will follow the criteria established by the Department of Public Health for authorization to use alternative supplies.

2. Preserve water in storage to the extent possible.
   - Lower water levels in reservoirs to reduce the possibility of structural failure if damage is apparent.
   - Shut down system valves as necessary to preserve system water
   - Assess damage to sewer system to determine if it may contaminate water supplies

3. Isolate areas that will take the longest to restore to service and work to provide alternate water supplies.

4. Set priorities on repair work to restore service.
   - Develop plan to restore service area by area
   - Determine essential uses and agencies or facilities with critical needs, such as hospitals, convalescent homes, and hospices.
   - Consider need for firefighting water
   - Request mutual aid/assistance if the needed repairs exceed the Water Department's ability to complete repairs in a timely manner
   - Restore service according to established procedures to assure public safety and avoid system damage

☑ *UWMP Checklist 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))*

The City of Hemet shall implement the following mandatory prohibitions against specific water use practices during water shortages:

Table 36 Water shortage contingency — mandatory prohibitions	
Examples of Prohibitions	**Stage When Prohibition Becomes Mandatory**
Restaurants shall serve water only upon request	Phase I
Additional water for new landscaping or facility expansion prohibited unless low water use landscape designs and efficient irrigation systems are used	Phase I
Commercial carwash businesses must recycle their water	Phase II
Car washing prohibited except with bucket or container. Hoses for rinsing must have positive shutoff nozzle	Phase II
Use of water prohibited for fire drills	Phase II
Landscape watering prohibited between 6:00 AM and 6:00 PM, except for regular maintenance checks and repairs, watering golf course green and tees, watering with drip irrigation system	Phase II
Use of water prohibited for filling new pools	Phase III
Operation of decorative fountains prohibited unless water is recycled.	Phase III
Use of water prohibited to clean, fill or maintain levels in decorative fountains, ponds or artificial lakes	Phase III
Installation of new turf prohibited	Phase IV

☑ *UWMP Checklist 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))*

The City of Hemet will use the following consumption reduction methods to reduce water use in the most restrictive stages with up to a 50% reduction.

Table 37
Water shortage contingency — consumption reduction methods

Consumption Reduction Method	Stage When Method Takes Effect	Projected Reduction (%)
Allocation of historic consumption less 10 percent to residential customers (but not less than 2,000 cubic feet bimonthly) / 2,000 cubic feet bimonthly for accounts with historic consumption records.	Phase I	10%
Allocation of historic consumption less 35 percent to residential customers (but not less than 2,000 cubic feet bimonthly) / 2,000 cubic feet bimonthly for accounts with historic consumption records.	Phase II	25%
Allocation of historic consumption less 25 percent to residential customers (but not less than 2,000 cubic feet bimonthly) / 2,000 cubic feet bimonthly for accounts with historic consumption records.	Phase III	35%
Allocation of historic consumption less 50 percent to residential customers (but not less than 2,000 cubic feet bimonthly) / 2,000 cubic feet bimonthly for accounts with historic consumption records.	Phase IV	50%

☑ *UWMP Checklist 40—(Indicated) penalties or charges for excessive use, where applicable. (10632(f))*

The City of Hemet will create an incentive rate structure to achieve a required reduction in consumption. The incentive rates depend on the mandatory rationing phase in effect. The incentive rate will call for a minimum 10 percent rate increase for every five percent of desired decrease in water consumption. Any customer who exceeds his water allotment during the various phases of mandatory water rationing will be billed at the new incentive water rate structure.

Table 38
Water shortage contingency — penalties and charges

Penalties or Charges	Stage When Penalty Takes Effect
20 percent rate increase	Phase I – Target water savings 10 percent
50 percent rate increase	Phase II – Target water savings 25 percent
70 percent rate increase	Phase III – Target water savings 35 percent
100 percent rate increase	Phase IV – Target water savings 50 percent

☑ *UWMP Checklist 41—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))*

The City of Hemet has a tiered rate structure with a minimum monthly fixed charge according to meter size. This monthly fixed charge is designed to generate sufficient income, based on water system connections to fund all fixed costs related to system operation. As a result, reduced sales during shortages should not impact basic operations.

☑ *UWMP Checklist 42—(Provide) a draft water shortage contingency resolution or ordinance. (10632(h))*

The current City of Hemet Water Conservation Plan (Hemet Municipal Code Sections 82-121 – 82-134) is included as **Appendix D**.

Water Quality

☑ *UWMP Checklist 52—The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability. (10634)*

In 2010, the City of Hemet monitored water drawn from eleven well sites, nine (9) located in the Hemet South Sub Basin and two (2) located in the San Jacinto Upper Pressure Sub Basin according to requirements of the U.S. Environmental Protection Agency and the California Department of Health Services. All drinking water health standards were met.

Results of monitoring and testing of City of Hemet wells in 2010 indicate that all contaminants detected were within the parameters established by the U.S. Environmental Protection Agency (USEPA), the California Environmental Protection Agency, and the California Department of Health Services. All City of Hemet wells are chlorinated to insure that drinking water is safe for customers. All wells are monitored daily to maintain an average chlorine residual of .3 mg/L.

Water Quality Projections

At the present time, the City of Hemet does not foresee any major changes in the next 20 years that would adversely affect the existing quality of the groundwater in either the Hemet South sub-basin or the San Jacinto Upper Pressure sub-basin. Water quality plays an important role in the City's water management strategies. The City has and will continue to take all measures necessary to ensure that the water provided to customers is safe to drink and meets all the regulations of the USEPA and the California Department of Health Services.

Table 30
Water quality — current and projected water supply impacts

Water source	Description of condition	2010	2015	2020	2025	2030
Hemet South Sub Basin	No known or potential water quality issues	0	0	0	0	0
San Jacinto Uper Pressure Sub Basin	No known or potential water quality issues	0	0	0	0	0

Units: Acre-feet per year

Drought Planning

☑ *UWMP Checklist 22—Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following: (A) An average water year, (B) A single dry water year, (C) Multiple dry water years. (10631(c)(1))*

Although water levels in the San Jacinto Upper Pressure sub-basin have been gradually declining over the years, water levels in the Hemet South sub-basin now appear to be holding steady. During 56 years of operation, there has never been a shortage of water due to any seasonal or climatic factors. The City's water system has never experienced a supply deficiency. The City of Hemet has always been able to provide all necessary water supplies to its customers.

Despite this fact, the City of Hemet recognizes that the reliability of continued groundwater supplies is dependent upon a combination of basin recharge through both natural and artificial means and implementation of Hemet/San Jacinto Groundwater Management Plan to maintain the safe-yield of each sub-basin (production ≤ recharge). Implementation of this plan will assure that groundwater will be available to City of Hemet customers at a consistent level over the next 20 years and beyond.

Table 27
Basis of water year data

Water Year Type	Base Year(s)
Average Water Year	1997
Single-Dry Water Year	2007
Multiple-Dry Water Years	1999-2002

Data for above chart based on Annual Streamflow Statistics 1978-2010 – USGS Gauging Station No. 11069500-San Jacinto River at Cranston Ranger Station

Table 28
Supply reliability — historic conditions

Average / Normal Water Year	Single Dry Water Year	Multiple Dry Water Years			
		Year 1	Year 2	Year 3	Year 4
5,891	5,382	4,805	5,048	4,737	5,598
Percent of Average/Normal Year:	91.4%	81.6%	85.7%	80.4%	95.0%
Units: Acre-feet per year					

☑ *UWMP Checklist 35—Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage. (10632(a))*

The City of Hemet Municipal Code (Sec. 82-128) establishes four water-rationing phases to be implemented in the case of an emergency water shortage or water supply shortage. Each phase is initially implemented with voluntary use restrictions. The level of water use reduction is monitored and any time conservation goals are not achieved, the appropriate phase is implemented as a mandatory use reduction.

Table 35
Water shortage contingency — rationing stages to address water supply shortages

Stage No.	Water Supply Conditions	% Shortage
I	Minor Shortage - When normal operating production drops by ten percent or aquifer water level drops an average of 25 feet.	10%
II	Moderate Shortage - When normal operating production drops by 25 percent during highest production time (May 15-October 15) or aquifer water level drops an average of 50 feet.	25%
III	Serious Shortage - When normal operating production drops by 35 percent during highest production time (May 15-October 15) or aquifer water level drops an average of 60 feet.	35%
IV	Critical Shortage - When normal operating production drops by 50 percent during highest production time (May 15-October 15) or aquifer water level drops an average of 70 feet.	50%

[1] *One of the stages of action must be designed to address a 50 percent reduction in water supply.*

The City of Hemet will implement all of the following water use restrictions if water supplies are reduced by 50 percent for a single year:

- Restaurants shall serve water only upon request
- Additional water for new landscaping or facility expansion prohibited unless low water use landscape designs and efficient irrigation systems are used
- Commercial carwash businesses must recycle their water
- Car washing shall be prohibited except with bucket or container. Hoses for rinsing must have positive shutoff nozzle
- Use of water prohibited for fire drills
- Landscape watering prohibited between 6:00 AM and 6:00 PM, except for regular maintenance checks and repairs, watering golf course green and tees, watering with drip irrigation system
- Use of water prohibited for filling new pools
- Operation of decorative fountains prohibited unless water is recycled.
- Use of water prohibited to clean, fill or maintain levels in decorative fountains, ponds or artificial lakes
- Installation of new turf prohibited

☑ *UWMP Checklist 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))*

The City of Hemet relies exclusively on groundwater for its service area supply. There does not appear to be a direct correlation between hydrology and available groundwater supply on a short-term basis. Past operating records show previous drought conditions have historically had minimal effect on the groundwater supply. As a result, dry years are not expected to impact the amount of water available during the next three years. Available supply is anticipated to be equal to the amount of water required to meet demand. Estimated minimum water supply over the next three years is shown in the table below.

Table 31
Supply reliability — current water sources

Water supply sources[1]	Average / Normal Water Year Supply[2]	Multiple Dry Water Year Supply[2]		
		Year 2011	Year 2012	Year 2013
Groundwater	5,891	4,265	4,291	4,316
Percent of normal year:	100.0%	72.4%	72.8%	73.3%

Units: acre-feet per year
[1] From Table 16.
[2] See Table 27 for basis of water type years.

☑ *UWMP Checklist 43—(Indicate) a mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis. (10632(i))*

The City of Hemet Water Department will measure and determine actual water savings as a result of implementing the 2010 UWMP by tracking annual water demand and comparing to previous years.

☑ *UWMP Checklist 53—Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier. (10635(a))*

Table 32
Supply and demand comparison — normal year

	2015	2020	2025	2030
Supply totals (from Table 16)	4367	4498	4500	4500
Demand totals (From Table 11)	3926	3963	3963	3963
Difference	441	535	537	537
Difference as % of Supply	10.1%	11.9%	11.9%	11.9%
Difference as % of Demand	11.2%	13.5%	13.6%	13.6%

Units are in acre-feet per year.

Table 33 Supply and demand comparison — single dry year				
	2015	2020	2025	2030
Supply totals[1,2]	4,367	4,498	4,500	4,500
Demand totals[2,3,4]	3,923	3,963	3,963	3,963
Difference	444	535	537	537
Difference as % of Supply	10.2%	11.9%	11.9%	11.9%
Difference as % of Demand	11.3%	13.5%	13.6%	13.6%

Units are in acre-feet per year.

There does not appear to be a direct correlation between hydrology and available groundwater supply on a short-term basis. Drought conditions have historically had minimal effect on the groundwater supply. As a result, single dry years are not expected to impact the amount of water available over the next 20 years.

Table 34 Supply and demand comparison — multiple dry-year events					
		2015	2020	2025	2030
Multiple-dry year first year supply	**Supply totals[1,2]**	4,367	4,498	4,500	4,500
	Demand totals[2,3,4]	3,923	3,963	3,963	3,963
	Difference	444	535	537	537
	Difference as % of Supply	10.2%	11.9%	11.9%	11.9%
	Difference as % of Demand	11.3%	13.5%	13.6%	13.6%
Multiple-dry year second year supply	**Supply totals[1,2]**	4,393	4,500	4,500	4,500
	Demand totals[2,3,4]	3,931	3,963	3,963	3,963
	Difference	462	537	537	537
	Difference as % of Supply	10.5%	11.9%	11.9%	11.9%
	Difference as % of Demand	11.8%	13.6%	13.6%	13.6%
Multiple-dry year third year supply	**Supply totals[1,2]**	4,419	4,500	4,500	4,500
	Demand totals[2,3,4]	3,938	3,963	3,963	3,963
	Difference	481	537	537	537
	Difference as % of Supply	10.9%	11.9%	11.9%	11.9%
	Difference as % of Demand	12.2%	13.6%	13.6%	13.6%

Units are in acre-feet per year.

There does not appear to be a direct correlation between hydrology and available groundwater supply on a short-term basis. Drought conditions have historically had minimal effect on the groundwater supply. As a result, mutliple dry years are not expect

Section 6 – Demand Management Measures

☑ *UWMP Checklist 26— (Describe and provide a schedule of implementation for) each water demand management measure that is currently being implemented, or scheduled for implementation, including the steps necessary to implement any proposed measures, including, but not limited to, all of the following: (A) Water survey programs for single-family residential and multifamily residential customers; (B) Residential plumbing retrofit; (C) System water audits, leak detection, and repair; (D) Metering with commodity rates for all new connections and retrofit of existing connections; (E) Large landscape conservation programs and incentives; (F) High-efficiency washing machine rebate programs; (G) Public information programs; (H) School education programs; (I) Conservation programs for commercial, industrial, and institutional accounts; (J) Wholesale agency programs; (K) Conservation pricing; (L) Water conservation coordinator; (M) Water waste prohibition;(N) Residential ultra-low-flush toilet replacement programs. (10631(f)(3))*

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

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

☑ *UWMP Checklist 29—An evaluation of each water demand management measure listed in paragraph (1) of subdivision (f) that is not currently being implemented or scheduled for implementation. In the course of the evaluation, first consideration shall be given to water demand management measures, or combination of measures, that offer lower incremental costs than expanded or additional water supplies. This evaluation shall do all of the following: (1) Take into account economic and noneconomic factors, including environmental, social, health, customer impact, and technological factors; (2) Include a cost-benefit analysis, identifying total benefits and total costs; (3) Include a description of funding available to implement any planned water supply project that would provide water at a higher unit cost; (4) Include a description of the water supplier's legal authority to implement the measure and efforts to work with other relevant agencies to ensure the implementation of the measure and to share the cost of implementation. (10631(g))*

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

YEAR IMPLEMENTED: 1994

DESCRIPTION:
The City of Hemet offers free water audits to all residential customers upon request. Water use audits take from 30-minutes up to two-hours and are conducted by the Water Quality / Conservation Specialist (who has received certification as a Conservation Practitioner from the American Water Works Association (AWWA). In 2010, a total of 184 audits were conducted.

Interior audits include measurement of flow rates of existing plumbing fixtures, testing for toilet leakage with dye tablets, installation of showerheads and faucet aerators (if necessary), and providing general information about water conservation in the home.

External audits include showing the customer the location of the water meter and how to read it (if necessary), measurement of landscaped areas, testing of the sprinkler system for irrigation efficiency and distribution uniformity, instructions on how to set the irrigation controller (if necessary); and recommendations concerning sprinkler system repairs or improvements and brochures on water efficient landscaping, design, and use of drought tolerant and native plants.

Customers are provided with written evaluation results and water savings recommendations. The Water Department staff maintains records on residential water audits completed in their daily work logs.

Multi-family surveys are similar to the audit program described above, but require coordination with owners/managers, tenants, and landscaping services.

METHODS USED TO EVALUATE EFFECTIVENESS:
The Water Quality / Conservation Specialist completes a Water Conservation Form for each dwelling unit audited, which includes information concerning problems and corrective measures taken. To check for implementation of this measure, meter readings are taken and compared with meter readings taken on the day of the initial audit.

CONSERVATION SAVINGS ESTIMATE:
A comparison of current customer water use with historic data (billing records) can be used to quantify conservation savings.

(B) Residential plumbing retrofit

YEAR IMPLEMENTED: 1998

DESCRIPTION:
The City distributes low-flow showerheads and faucets, aerators, toilet tank bags and leak detection tablets, and low-flow hose nozzles per customer request, during residential water audits, and at local community events. Low flow devices are also available at the City Corporation Yard for City water customers to pick up. Residential water audits are conducted based on customer request.

METHODS USED TO EVALUATE EFFECTIVENESS:
The Water Quality / Conservation Specialist completes a Water Conservation Form for each dwelling unit audited, which includes information concerning problems and corrective measures taken, such as distribution and installation of showerheads, aerators, and toilet tank leak detection tablets. To check for implementation of this measure, meter readings are taken and compared with meter readings taken on the day of the initial audit. Information concerning distribution of low-flow devices is recorded on the Water Conservation Form.

CONSERVATION SAVINGS ESTIMATE:

A comparison of current customer water use with historic data (billing records) can be used to quantify conservation savings.

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

YEAR IMPLEMENTED: 1955 – routine monitoring of known system leak problem areas
2009 – installation of new electronic read water meters

IMPLEMENTATION DESCRIPTION:
Water Department personnel routinely identify areas of the system with known leak problems and monitor these areas on a regular basis. In addition, reports of leaks in the municipal water distribution system by customers and field crews trigger inspection and system repairs.

In 2009, a Water Distribution System Rehabilitation Feasibility Study was completed for the city water system using Prop. 13 grant funds. As a part of this study, past water production and consumption were compared to determine the amount of unaccounted for water loss. The results are shown in the table below:

Water Production and Consumption – AF/Year (Table C1)

Year	Total Well Production	Purchased Water	Total Water Production	Total Water Consumed	Unaccounted for Water	Percent
2000	5,048	398	5,446	4,740	706	13.0%
2001	4,736	745	5,481	4,665	816	14.9%
2002	4,957	641	5,598	4,659	939	16.8%
2003	4,999	460	5,459	4,690	769	14.1%
2004	5,684	26	5,710	5,106	604	11.8%
2005	5,330	35	5,365	4,405	960	21.8%
2006	5,399	94	5,493	4,317	1,176	27.2%
2007	4,722	0	5,314	4,768	546	10.3%
2008	4,567	0	5,120	4,784	336	6.6%

Consumption records include water used by customers, for fire fighting, fire hydrant flushing and annual system flushing. Water use for well start up is approximately 10-12 AF each year, and is not included in chart above.

As a part of this study, two leak detection surveys were completed. The leak detection survey completed in October-November 2006 analyzed 20.42 miles (18 percent) of the City's 112 miles of pipeline. No noticeable leaks were detected. In November-December 2008, a second leak detection survey examined approximately 177.72 miles of main and service

lines. Points surveyed included 860 hydrants, 378 valves, and 9,892 services. A total of 37 leaks were identified, with an estimated water loss of 9,986,400 gallons / 30.6 acre-feet per year. City crews repaired all 37 leaks identified in the 2008 survey.

The results of both leak detection surveys effectively ruled out system leakage as a substantial contributor to the annual average 762-acre-foot unaccounted for water loss recorded over the past 10 years. As a result, the water department considered other potential sources or causes of water loss, including the possibility that the recorded losses were due to inaccurate metering and/or un-metered usage.

Due to the age and condition of the water meters in the City system (15-years + in most cases), a decision was made to install new electronic read water meters in 2009 and 2010. Records are not yet available to determine if these new meters will contribute toward reducing the water system unaccounted for water loss.

The new meters provide Customer Service Representatives reading the meter with a "Leak Alert" if a leak is detected. The Customer Service Representative then leaves the resident a notice explaining a leak was found on the property and they must contact a plumber to make repairs.

METHODS TO EVALUATE EFFECTIVENESS:
The water department staff compares annual production records and billing records to determine the amount of unaccounted for water losses.

CONSERVATION SAVINGS ESTIMATE:
Conservation savings resulting from installation of new radio read meters will be determined by a comparison of current customer water use with historic data (billing records). Conservation savings will also be expedited by the new technology and the "leak alert" system.

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

YEAR IMPLEMENTED: 1955

IMPLEMENTATION DESCRIPTION:
The City of Hemet meters all water sales to its customers. The City's water rates include a fixed base water rate plus an additional charge for water use. The use charge is based on a two-tiered system that rewards conservation with lower rates. A Low Use Rate is applicable for residential customers who use > 1,000 cubic feet of water in a bimonthly billing period. All other customers are billed a base rate determined by the size of the water meter and a consumption charged based on the cubic feet of water used. The City also conducts a meter calibration and replacement program.

Total Number of Accounts (2010):	**9,079**
Number of Accounts without Commodity Rates:	**0**

METHODS TO EVALUATE EFFECTIVENESS:
The City periodically reviews customer water use, comparing current water use per capita with historic data to document trends in water use and conservation.

CONSERVATION SAVINGS ESTIMATES:
The City believes that metering in conjunction with the tiered rate system provides an incentive for customers to monitor and reduce water use and cost.

(E) Large landscape conservation programs and incentives

YEAR IMPLEMENTED: 1955

IMPLEMENTATION DESCRIPTION:
All developers requesting building permits for commercial, industrial, institutional / governmental, and multi-family projects are required to submit a landscape plan as part of their overall land use application. City water department personnel review all landscape plans. Use of drought tolerant plants, shrubs and trees and the efficiency of any proposed irrigation system is noted, and recommendations are made concerning water conservation improvements, if necessary.

In 2010, there were 151 dedicated irrigation meter accounts in the city system.

Landscape irrigation audits have been conducted for most of the city's large landscape customers. The amount of water necessary for each site is calculated based on the size of the landscape and the climate. Recommendations are made concerning appropriate irrigation system repairs or improvements needed. Water Department staff tracks landscape irrigation audits completed in daily work logs.

Landscape Irrigation– AF/Year (Table C1)

Year	No. of Accounts	Water Delivered
2005	99	250
2006	100	268
2007	145	410
2008	151	387
2009	151	365
2010	151	177

METHODS TO EVALUATE EFFECTIVENESS:
The city plans to continue auditing large landscape customers, as requested or as necessary. Comparison of water use by large landscape customers will be done from year to year to document trends.

CONSERVATION SAVINGS ESTIMATES:
Landscape planning that incorporates water conservation recommendations will result in reduced water used for landscape irrigation in new developments. In addition, landscapes that are upgraded based on audit recommendations usually experience some degree of reduction in water demand. The amount of water utilized by large landscape customers dropped significantly from 2009 (365 AF) to 2010 (177 AF). While efforts to saving money and conserve water resources may have played a role in this use reduction, the drop is mainly attributed to a combination of weather conditions in 2010 that included above-average rainfall and a cooler than normal summer.

(F) High-efficiency washing machine rebate programs

YEAR IMPLEMENTED: To be implemented in FY 2011/2012

EVALUATION

Economic and Non-Economic Benefits:

- Lower Cost to Own: High-efficiency washing machines use less water, less electricity, and less detergent than conventional washers, resulting in a lower cost to own.
- Customer Convenience: The larger capacity of high-efficiency washers allows the same amount of laundry to be washed in fewer loads; Larger items fit inside a front-loading washer, so you can wash them yourself instead of taking them to a shop; Clothes come out with less water content (due to the high speed of the spin cycle), so they can be dried much more quickly.
- Environmental Advantages: Because high-efficiency washers use less water, less detergent and less power, they are inherently kinder to the environment than conventional washers. In addition, high-efficiency washers typically make much less noise than conventional washers. This makes them ideal for homes where the laundry room is located on the first or second floor, near common living areas.
- Fabric Care: High-efficiency washers are easier on clothes. A flat-sided drum, rolling on a horizontal axis, gently tumbles clothes clean instead of pulling them violently around a vertical shaft as the agitator in a traditional top-loading machine does; For the same reasons, high-efficiency washers also allow washing of items normally taken to the cleaners or washed by hand; High-efficiency washers rinse multiple times with clean water so no soap or residue is left in clothes, and dirt really comes out.

Cost/Benefit Analysis

Benefit: Water Savings
[INFORMATION PROVIDED BY H2ouse.org]

A recent study conducted in Seattle measured water use in single-family homes before and after installation of high efficiency clothes washers (DeOreo, et. al. 2001). Three different makes and models of clothes washer were tested and all three saved water and all three received high satisfaction ratings from the study participants. Most major manufacturers now offer at least one high-efficiency model. The results are shown below in Table 1.

Table 1: Water use in homes with standard and high efficiency clothes washers

	Avg. Volume per Load (gal.)	Avg. Hot Water volume per load (gal.)	Avg. Loads per Capita per Day	Avg. Gallons per Person Per Day
Non-conserving Home	40.9	11.4	0.36	14.8
Conserving home	24.3	4.2	0.38	9.2

Annual Water Savings Per Household (4 persons)		**Water Use – Gallons Per Year**
Non-Conserving home	*4 x 14.8 gallons x 365 days*	21,608
Conserving home	*4 x 9.2 gallons x 365 days*	13,432
Annual Water Savings – Gallons Per Year		**8,176**

Using the above annual water savings per family of 8,716 gallons and multiplying this figure by 50 rebates equals a potential annual water savings of 408,900 gallons or 1.26 AF.

Agency Program Costs

Administration Costs	1,020.00
Rebate Costs	5,000.00
Advertising	600.00
TOTAL COSTS	**6,620.00**

Funding Available to Implement Program

The City of Hemet has allocated $5,000 in 2011/2012 to provide 50 water customers with rebates of $100 each for the purchase of high efficiency washers.

Legal Authority to Implement Program

As a municipal government the City of Hemet has the legal authority to implement a high-efficiency washing machine rebate program.

(G) Public information programs

YEAR IMPLEMENTED: 1992

IMPLEMENTATION DESCRIPTION:
The City promotes water conservation by providing informational pamphlets with water saving tips to citizens at City Hall and the City Corporation Yard, by responding to citizen questions and requests, and by having information on water conservation available to residents on the City website. The City of Hemet also provides residents with information regarding drought tolerant landscaping workshops and the annual Valley Beautiful Garden Tour, which offers a chance to tour drought tolerant landscaping and to get tips on implementing a drought tolerant landscape at home.

In addition, the City of Hemet participates in a water conservation work group comprised of representatives from local water agencies including Eastern Municipal Water District, Lake Hemet Municipal Water District, and the City of San Jacinto. All agencies benefit from the joint efforts of this group to promote water savings in the local community including: paid advertising, public service announcements, media advisories, utility bill inserts, notification and promotion of special events, and availability of speakers on water conservation topics.

The City is also very fortunate to be able to take advantage of the fact that EMWD has an active public water conservation education program in the local community. (Many City residents are EMWD customers.) The City benefits from the efforts of EMWD, which include distribution of public information through brochures, community speakers, paid advertising, and their website which provides information on water conservation, recycling, and other resource issues. In 2009 EMWD completed a demonstration garden at their headquarters designed to be an education tool in the community. The public can take tours of the garden and learn about drought tolerant landscaping.

METHODS TO EVALUATE EFFECTIVENESS:
Periodic reviews of customer water use, comparing current water use per capita with historic data can be used to evaluate the effectiveness of public education efforts.

CONSERVATION SAVINGS ESTIMATES:
The City believes that public education plays an important role in encouraging water conservation practices in all sectors of the community. Methods for estimating water savings from public education programs will be investigated as the City continues to expand and develop water conservation efforts and programs.

(H) School education programs

IMPLEMENTATION DESCRIPTION:
Water conservation information is currently provided to students in the local schools by EMWD, which provides water to many City of Hemet residents. EMWD has programs for students in kindergarten through the twelfth grade. Programs include water conservation assembly presentations, administration of a "water-wise" poster contest, and classroom presentations. EMWD also provides materials free of charge to teachers in the 11 school districts in their service area. These materials include complete units and workbooks, lesson plans, booklets, and teacher training.

METHODS TO EVALUATE EFFECTIVENESS:
EMWD staff reported that over 100,000 students in their service area, of which Hemet is a part, were reached in 2010, according to Malea Ortloff, Education Specialist in the Community Involvement Department.

CONSERVATION SAVINGS ESTIMATES:
Providing information concerning the importance of conserving water to students is one way to influence behavior changes and encourage residents to curtail water-wasting activities. Methods for estimating water savings from school education programs will be considered as the City continues to expand and develop water conservation efforts and programs. The savings attained by school education programs will have the ability to further reduce water demand because students will gain knowledge about conservation, why it is important, and how to implement it in their homes and will be able to share this information with their parents.

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

YEAR IMPLEMENTED: 1992

IMPLEMENTATION DESCRIPTION:
The City provides free water use audits to commercial and institutional customers. The City has no industrial customers. In 2010, there were 725 commercial/institutional accounts in the City of Hemet Water Department. Water audits are conducted at commercial and institutional facilities in the Water Department service upon request or if random inspections reveal potential water waste.

METHODS TO EVALUATE EFFECTIVENESS:
Meter readings taken on the day of the initial audit can be compared with later meter readings to check for implementation of this measure.

CONSERVATION SAVINGS:
Providing information to commercial and institutional customers on ways to conserve water is an important part of curbing water-wasting activities. Methods for estimating water

savings from the DMM will be explored as the City continues to expand and develop water conservation efforts and programs.

(J) Wholesale agency programs

The City of Hemet Water Department is not a wholesale agency.

(K) Conservation pricing

IMPLEMENTATION DESCRIPTION:
The City of Hemet water rates are based on a three-tiered system that rewards conservation with lower rates. The rates include a fixed base water rate plus an additional charge for water use. In addition, a low use rate is offered to customers who use less than 500 cubic feet (CF) of water per month (or 1,000 CF over the bimonthly billing cycle).

METHODS TO EVALUATE EFFECTIVENESS:
Conducting periodic reviews of customer water use, comparing current water use per capita with historic data can be done to evaluate effectiveness of conservation pricing.

CONSERVATION SAVINGS:
This DMM is designed to decrease both customer water costs and water use by encouraging customers to conserve water in order to qualify for price incentives, which will result in lower water bills.

Table K1

RESIDENTIAL LOW WATER USAGE RATES – Effective January 7, 2009		
Residential water accounts with a 5/8-inch or ¾'inch meter which registers less than 1,000 cubic feet in a bimonthly billing period are eligible for the following flat water charges:		
QUALIFYING CONSUMPTION	MONTHLY RATE	BIMONTHLY RATE
0—1,000 CF bimonthly Billed at a lower of flat rate or actual usage	$28.00	$56.00

Table K2

RESIDENTIAL NORMAL WATER USAGE RATES – Effective January 7, 2009				
All other Residential accounts are billed a Base Rate determined by the size of the water meter and a Consumption Charge based on the cubic feet of water used.				
BASE METER RATES			CONSUMPTION RATES	
METER SIZE	MONTHLY RATE	BIMONTHLY RATE	BIMONTHLY CONSUMPTION	RATE PER 100 CF
5/8-inch	21.14	42.28	0-600 CF	2.30
¾-inch	22.79	45.58	601-1200 CF	2.50
1-inch	27.29	54.58	1201-Over CF	2.88
2-inch	70.75	141.50		

Table K3

COMMERICAL & INSTITUTIONAL NORMAL WATER USAGE RATES – Effective January 7, 2009				
All commercial and industrial accounts are billed a Base Rate determined by the size of the water meter and a Consumption Charge based on the cubic feet of water used.				
BASE METER RATES			CONSUMPTION RATES	
METER SIZE	MONTHLY RATE	BIMONTHLY RATE	BIMONTHLY CONSUMPTION	RATE PER 100 CF
5/8-inch	21.14	42.28	0-600 CF	2.30
¾-inch	22.79	45.58	601-1200 CF	2.50
1-inch	27.29	54.58	1201-Over CF	2.88

Table K4

RESIDENTIAL SEWER RATES – Effective January 7, 2009		
SERVICE DESCRIPTION	MONTHLY RATE	BIMONTHLY RATE
EMWD Sewer Treatment * (per dwelling unit)	19.28	38.56
City Sewer & Storm Drain Maintenance (per dwelling unit)	7.52	15.04

* The City of Hemet owns and operates a wastewater collection system, but does not operate wastewater treatment facilities. The City contracts with EMWD for treatment of wastewater.

Table K5

COMMERCIAL SEWER RATES – Effective January 7, 2009		
SERVICE DESCRIPTION	MONTHLY RATE	BIMONTHLY RATE
EMWD Sewer Treatment * (per sewer unit**)	19.28	38.56
City Sewer & Storm Drain Maintenance (per sewer unit)	7.52	15.04

* The City of Hemet owns and operates a wastewater collection system, but does not operate wastewater treatment facilities. The City contracts with EMWD for treatment of wastewater.
** Sewer units are calculated based on the total water consumption of the commercial facility.

(L) Water conservation coordinator

YEAR IMPLEMENTED: 1992

IMPLEMENTATION DESCRIPTION:
The City established the position of Water Quality / Conservation Specialist in 1992. This multi-function position is responsible for the City's water conservation program as well as customer service, water quality testing and the backflow prevention program. The individual currently holding this position has received certification as a Conservation Practitioner from the AWWA. Water conservation activities include conducting water audits for residential, commercial, and institutional/governmental customers and making appropriate recommendations concerning improvements that will result in water savings. In addition, the Water Quality / Conservation Specialist represents the City as a member of the Water Conservation Workgroup (comprised of four local water agencies) and attends

water conservation seminars and conferences as time allows. He is also an active member of a local non-profit group dedicated to promoting use of native plants in residential and commercial landscaping.

METHODS TO EVALUATE EFFECTIVENESS:
Periodic reviews of customer water use to compare current water use per capita with historic data as one method that can be utilized to evaluate the effectiveness of the Water Quality / Conservation Specialist position.

CONSERVATION SAVINGS:
The position of Water Quality/Conservation Specialist provides City water customers with the ability to obtain assistance in reducing water waste and high water bills. Methods for calculating expected annual water savings due to these efforts is being explored as the City continues to expand and develop water conservation efforts and programs.

(M) Water waste prohibition

YEAR IMPLEMENTED: 1992

IMPLEMENTATION DESCRIPTION:
The City of Hemet Water Conservation Ordinance No. 1442, adopted in 1992 [City of Hemet Municipal Code Section 82-127], has a provision for water waste prevention. A copy of the water waste prevention ordinance and information on regulations, restrictions and enforcement is included in this plan as **Appendix D.**

METHODS TO EVALUATE EFFECTIVENESS:
Violations are recorded annually. Periodic comparisons of current customer water use per capita with historic data can be used to evaluate effectiveness of the water waste prevention ordinance.

CONSERVATION SAVINGS:
Methods for calculating expected annual water savings due to water waste prohibitions in the water conservation ordinance will be explored as the City continues to expand and develop water conservation efforts and programs.

(N) Residential ultra-low-flush toilet replacement program

YEAR IMPLEMENTED: 1998 – Participated in replacement program with EMWD
2001-2006 – City replacement program implemented
2012 – Program to be re-established

IMPLEMENTATION DESCRIPTION:

The City of Hemet had a successful ultra-low-flush toilet replacement program from 2001-2006. The program was discontinued due to budget cuts from 2007-2010. In the fiscal year 2011/2012 the City of Hemet plans to re-establish the ultra-low flush toilet (ULFT) replacement program. The City will purchase 400 Niagara 0.8 GPF Stealth™ ultra high-efficiency toilets at a total estimated cost of $40,000, which will be distributed free of charge to City of Hemet Water Department customers at a one-day event in April-May 2012.

METHODS TO EVALUATE EFFECTIVENESS:

A comparison of current customer water use per capita with historic data is one method that can be used to evaluate the effectiveness of the ULFT program.

CONSERVATION SAVINGS:

The distribution of 400 Niagara Stealth toilets has the potential to save a total of 7,884,000 gallons (24.2 acre feet) of water per year when replacing 3.5 Gallons Per Flush (GPF) toilets.

Toilet	Gallons Per Flush	Daily GPF (4 people/5 flushes per day)	Gallons Per Day	Gallons Per Year
3.5 GPF Toilet	3.5	20	70	25,550
0.8 GPF Toilet	0.8	20	16	5,840
GALLONS SAVED PER YEAR PER TOILET				**19,710**
ANNUAL WATER SAVINGS FOR 400 TOILETS				**7,884,000**

Section 7 – Climate Change

The City of Hemet Water Department has not formally begun evaluating potential climate change impacts in its service area. However, the City recognizes that climate change impacts to the California environment may affect our local water supply and water system operations.

The City of Hemet General Plan addresses climate change in the Open Space and Conservation Element. The "Sustainability" section outlines the City's approach to reducing GHG emissions in response to the Global Warming Solutions Act of 2006, the Greenhouse Gas Emissions Act of 2007, the Sustainable Communities and Climate Protection Act of 2008, and other federal and state legislation. The City has threaded its sustainability goals and policies throughout the General Plan with a focus on energy and water conservation and reducing GHG emissions. These goals and policies generally fall into the following categories:

- Smart Growth: Land Use and Community Design,
- Transportation and Connectivity,
- Water Conservation,
- Air Quality,
- Energy and Resource Conservation,
- Waste Reduction, and
- Economic Sustainability.

The City of Hemet Water Department anticipates future consideration will be given to how the following impacts of climate change will effect our water system operations:

Water Demand – Hotter days and nights, as well as longer irrigation season, will increase landscaping water needs, and power plants and industrial processes will have increased cooling water needs.

Water Supply and Quality – Reduced snowpack, shifting spring runoff to earlier in the year, increased potential for algal bloom, and increased potential for seawater intrusion—each has the potential to impact water supply and water quality.

Sea Level Rise – It is expected that sea level will continue to rise, resulting in near shore ocean changes such as stronger storm surges, more forceful wave energy, and more extreme tides. This will also affect levee stability in low-lying areas and increase flooding.

Disaster – Disasters are expected to become more frequent as climate change brings increased climate variability, resulting in more extreme droughts and floods. This will challenge water supplier operations in several ways as wildfires are expected to become larger and hotter, droughts will become deeper and longer, and floods can become larger and more frequent.

Section 8 – Completed UWMP Checklist

The following UWMP checklist has been completed to confirm that the required elements have been included in the City of Hemet UWMP.

City of Hemet 2010 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement [a]	Calif. Water Code reference	UWMP Section	UWMP Page No.
PLAN PREPARATION				
4	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	10620(d)(2)	Section 1 – Plan Preparation	**4**
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 1 – Plan Preparation	**4**
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 1 – Plan Preparation	**5**
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 1 – Plan Preparation	**4**
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 1 – Plan Preparation	**4**
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 1 – Plan Preparation	**5**
57	Provide supporting documentation that the plan has been adopted as prepared or modified.	10642	Section 1 – Plan Preparation	**5**
58	Provide supporting documentation as to how the water supplier plans to implement its plan.	10643	Section 1 – Plan Preparation	**5**

City of Hemet 2010 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement [a]	Calif. Water Code reference	UWMP Section	UWMP Page No.
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 1 – Plan Preparation	**5**
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 1 – Plan Preparation	**6**
SYSTEM DESCRIPTION				
8	Describe the water supplier service area.	10631(a)	Section 2 – System Description	**7**
9	Describe the climate and other demographic factors of the service area of the supplier	10631(a)	Section 2 – System Description	**8**
10	Indicate the current population of the service area	10631(a)	Section 2 – System Description	**9**
11	Provide population projections for 2015, 2020, 2025, and 2030, based on data from State, regional, or local service area population projections.	10631(a)	Section 2 – System Description	**9**
12	Describe other demographic factors affecting the supplier's water management planning.	10631(a)	Section 2 – System Description	**9**
SYSTEM DEMANDS				
1	Provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	10608.20(e)	Section 3 – System Demands	**10**
2	*Wholesalers:* Include an assessment of present and proposed future measures, programs, and policies to help achieve the water use reductions. *Retailers:* Conduct at least one public hearing that includes general discussion of the urban retail water supplier's implementation plan for complying with the Water Conservation Bill of 2009.	10608.36 10608.26(a)	Section 3 – System Demands	**18**
3	Report progress in meeting urban water use targets using the standardized form.	10608.40	Will report progress beginning in 2015 UWMP	**N/A**

City of Hemet 2010 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement [a]	Calif. Water Code reference	UWMP Section	UWMP Page No.
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)	Section 3 – System Demands	**14**
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)	Section 3 – System Demands	**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 3 – System Demands	**16**
SYSTEM SUPPLIES				
13	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, and 2030.	10631(b)	Section 4 – System Supplies	**20**
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)	Section 4 – System Supplies	**21**
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)	Section 4 – System Supplies	**21**
16	Describe the groundwater basin.	10631(b)(2)	Section 4 – System Supplies	**21**
17	Indicate whether the groundwater basin is adjudicated? Include a copy of the court order or decree.	10631(b)(2)	Section 4 – System Supplies	**22**
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)	Section 4 – System Supplies	**22**

City of Hemet 2010 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement [a]	Calif. Water Code reference	UWMP Section	UWMP Page No.
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)	Section 4 – System Supplies	**22**
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)	Section 4 – System Supplies	**22**
21	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	10631(b)(4)	Section 4 – System Supplies	**23**
24	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	10631(d)	Section 4 – System Supplies	**24**
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 4 – System Supplies	**26**
31	Describe desalinated water project opportunities for long-term supply, including, but not limited to, ocean water, brackish water, and groundwater.	10631(i)	Section 4 – System Supplies	**24**
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 4 – System Supplies	**24**
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 4 – System Supplies	**24**
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 4 – System Supplies	**25**
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)	Section 4 – System Supplies	**25**

City of Hemet 2010 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement [a]	Calif. Water Code reference	UWMP Section	UWMP Page No.
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)	Section 4 – System Supplies	**25**
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)	Section 4 – System Supplies	**25**
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)	Section 4 – System Supplies	**26**
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)	Section 4 – System Supplies	**26**
WATER SHORTAGE RELIABILITY AND WATER SHORTAGE CONTINGENCY PLANNING [b]				
5	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	10620(f)	Section 5 – Water Supply Reliability & Water Shortage Contingency Planning	**27**
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**31**
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**27**
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**32**
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**33**

City of Hemet 2010 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement [a]	Calif. Water Code reference	UWMP Section	UWMP Page No.
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**27**
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**28**
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**29**
40	Indicated penalties or charges for excessive use, where applicable.	10632(f)	Section 5 – Water Supply Reliability & Water Shortage Contingency Planning	**29**
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**30**
42	Provide a draft water shortage contingency resolution or ordinance.	10632(h)	Section 5 – Water Supply Reliability & Water Shortage Contingency Planning	**30**
43	Indicate a mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.	10632(i)	Section 5 – Water Supply Reliability & Water Shortage Contingency Planning	**33**
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	Section 5 – Water Supply Reliability & Water Shortage Contingency Planning	**30**

City of Hemet 2010 Urban Water Management Plan checklist, organized by subject

No.	UWMP requirement [a]	Calif. Water Code reference	UWMP Section	UWMP Page No.
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 5 – Water Supply Reliability & Water Shortage Contingency Planning	**33**
DEMAND MANAGEMENT MEASURES				
26	Describe how each water demand management measures is being implemented or scheduled for implementation. Use the list provided.	10631(f)(1)	Section 6 – Demand Management Measures	**35**
27	Describe the methods the supplier uses to evaluate the effectiveness of DMMs implemented or described in the UWMP.	10631(f)(3)	Section 6 – Demand Management Measures	**35**
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)	Section 6 – Demand Management Measures	**35**
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)	Section 6 – Demand Management Measures	**35**
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)	N/A	**N/A**

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. It is aligned with the organization presented in Part I of this guidebook. A water supplier is free to address the UWMP Requirement anywhere with its UWMP, but is urged to provide clarification to DWR to facilitate review.