2015 Urban Water Management Plan

Public Draft

Appendices

Prepared By:

May 2016

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Appendix A - UWMP Checklist

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Table F1
Checklist Arranged by Water Code Section

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10608.20(b)	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	Section 4.4
10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5 and App E	Sections 4.3, 4.4, and 4.5
10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply is the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.7.2	Section 4.4
10608.24(a)	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	Section 4.5
1608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	Section 5.8.2	N/A
10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	Section 1.4
10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	Section 5.1	N/A
10608.40	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	Sections 4.4, 4.5, and 4.6 and Appendix D
10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	Section 2.1	Section 1.1
10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	Section 2.5.2	Section 1.3
10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.4	Section 6.4
10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.1	Section 1.4 and Appendix B
10621(d)	Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.	Plan Adoption, Submittal, and Implementation	Sections10.3.1 and 10.4	Section 1.4
10631(a)	Describe the water supplier service area.	System Description	Section 3.1	Section 2.1
10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3	Section 2.1.3
10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Sections 3.4 and 5.4	Sections 2.1.2 and 4.2
10631(a)	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	Section 2.1.2
10631(a)	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.4	Section 2.1.2
10631(b)	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	Section 5.8
10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2	Section 5.2
10631(b)(1)	Indicate whether a groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.2.2	Section 5.2
10631(b)(2)	Describe the groundwater basin.	System Supplies	Section 6.2.1	Section 5.2
10631(b)(2)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	Section 6.2.2	Section 5.2

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10631(b)(2)	For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.	System Supplies	Section 6.2.3	Section 5.2
10631(b)(3)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.2.4	Section 5.2
10631(b)(4)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Sections 6.2and 6.9	Section 5.2
10631(c)(1)	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.1	Section 6.2
10631(c)(1)	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.2	Section 6.2 and Tables 6-1 and 6-2
10631(c)(2)	For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.	Water Supply Reliability Assessment	Section 7.1	Section 6.1
10631(d)	Describe the opportunities for exchanges or transfers of water on a short-term or long- term basis.	System Supplies	Section 6.7	Section 5.6
10631(e)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2	Sections 3.2 and 3.3
10631(e)(3)(A)	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.3	Section 3.1.5 and Table 3-1
10631(f)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Sections 9.2and 9.3	Section 8.1
10631(f)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	Sections 9.1and 9.3	N/A
10631(g)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years.	System Supplies	Section 6.8	Section 5.7
10631(i)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6	Section 5.5
10631(j)	CUWCC members may submit their 2013- 2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.	Demand Management Measures	Section 9.5	Section 8.3 and Appendix G
10631(j)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) – if any - with water use projections from that source.	System Supplies	Section 2.5.1	Section 1.4 and Table 1-4
10631(j)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	Section 2.5.1	N/A
10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5	Section 3.3.6
10632(a) and 10632(a)(1)	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.1	Section 7.2
10632(a)(2)	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three- year historic sequence for the agency.	Water Shortage Contingency Planning	Section 8.9	Section 7.7
10632(a)(3)	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.8	Section 7.6
10632(a)(4)	Identify mandatory prohibitions against specific water use practices during water shortages.	Water Shortage Contingency Planning	Section 8.2	Section 7.3
10632(a)(5)	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.4	Section 7.3
10632(a)(6)	Indicated penalties or charges for excessive use, where applicable.	Water Shortage Contingency Planning	Section 8.3	Section 7.3

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10632(a)(7)	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.6	Section 7.5
10632(a)(8)	Provide a draft water shortage contingency resolution or ordinance.	Water Shortage Contingency Planning	Section 8.7	Appendix D
10632(a)(9)	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.5	Section 7.4
10633	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.1	Section 5.4
10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.5.2	Section 5.4.1
10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.5.2.2	Section 5.4.1 and Table 5-3
10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.3and 6.5.4	Section 5.4.2 and Table 5-4
10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Section 6.5.4	Section 5.4.2
10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.5.4	Section 5.4.2 and Tables 5-4 and 5-5
10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.5.5	Section 5.4.3 and Table 5-6.
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5	Section 5.4.3 and Table 5-6.
10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.1	Section 6.1
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.3	Section 6.3
10635(b)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	Appendix B and Section 1.4
10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	Plan Preparation	Section 2.5.2	Section 1.4
10642	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Plan Adoption, Submittal, and Implementation	Sections 10.2.2, 10.3,and 10.5	Section 1.4 and Appendix B
10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.2.1	Section 1.4 and Appendix B
10642	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3.1	Section 1.4 and Appendix C
10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.4.3	Section 1.4
10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	Section 1.4 and Appendix B
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Sections10.4.1 and 10.4.2	Section 1.4

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10645	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.5	Section 1.4

Appendix B - Notification

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Agencies Notified of the City of Escondido 2015 UWMP
County of San Diego
Rincon del Diablo Municipal Water District
San Diego County Water Authority
Vallecitos Water District
Valley Center Municipal Water District
Vista Irrigation District

ESCONDIDO
City of Choice

DATE

Agency
Attn: Name
Address

Subject: City of Escondido 2015 Urban Water Management Plan Update

In conformance with California Water Code Division 6, Part 2.6, Section 10621, this letter serves as a notification to neighboring agencies and interested parties that the City of Escondido is currently preparing its 2015 Urban Water Management Plan (UWMP), and intends to adopt the UWMP following a public hearing scheduled for June 15, 2016.

The City of Escondido encourages your input during development of the UWMP. A draft will be available for review, and it is anticipated that it will be available on the City of Escondido's website from May 18 to June 15, 2016. Comments are requested in writing, and will be considered for incorporation into the document until the final version is approved by the City Council and submitted to the California Department of Water Resources.

If you have any input for the 2015 UWMP, require additional information, or would like to set up a meeting to discuss the City of Escondido's 2015 UWMP update process, please contact me at 760-839-4075, or by email at EMarrone@escondido.org.

Sincerely,

Elisa Marrone, AICP
Environmental Programs Specialist
City of Escondido/Utilities

Sam Abed, Mayor Michael Morasco, Deputy Mayor Olga Diaz Ed Gallo John Masson

Appendix C - Adoption Resolution

2015 UWMP Adoption Resolution will be added after adoption

Appendix D - Required DWR and SBX7-7 Tables

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Table 2-1 Retail Only: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2015	Volume of Water Supplied 2015
CA3710006	City of Escondido	26,565	21,879
	TOTAL	26,565	21,879
NOTES:			

Table 2-2: Plan Identification		
Select Only One	**Type of Plan**	
☑	**Individual UWMP**	
	☐	Water Supplier is also a member of a RUWMP
	☐	Water Supplier is also a member of a Regional Alliance
☐	**Regional Urban Water Management Plan (RUWMP)**	
NOTES:		

Table 2-3: Agency Identification	
Type of Agency	
☐	Agency is a wholesaler
☑	Agency is a retailer
Fiscal or Calendar Year	
☐	UWMP Tables Are in Calendar Years
☑	UWMP Tables Are in Fiscal Years
If Using Fiscal Years Provide Month and Date that the Fiscal Year Begins (mm/dd)	
7/1	
Units of Measure Used in UWMP	
Unit	AF
NOTES:	

Table 2-4 Retail: Water Supplier Information Exchange
The retail supplier has informed the following wholesale supplier(s) of projected water use in accordance with CWC 10631.
Wholesale Water Supplier Name
San Diego County Water Authority
NOTES:

Table 3-1 Retail: Population - Current and Projected						
Population Served	2015	2020	2025	2030	2035	2040
	137,941	150,260	152,827	157,001	159,541	160,388
NOTES:						

Table 4-1 Retail: Demands for Potable and Raw Water - Actual			
Use Type	2015 Actual		
	Additional Description	Level of Treatment When Delivered	Volume
Single Family		Drinking Water	9,662
Multi-Family		Drinking Water	3,870
Commercial		Drinking Water	1,783
Industrial		Drinking Water	171
Institutional/Governmental		Drinking Water	517
Landscape		Drinking Water	1,950
Agricultural irrigation		Drinking Water	3,017
Sales/Transfers/Exchanges to other agencies	Sales to Rincon customers	Drinking Water	384
Losses		Drinking Water	525
		TOTAL	21,879
NOTES:			

Table 4-2 Retail: Demands for Potable and Raw Water - Projected						
Use Type	Additional Description	Projected Water Use *Report To the Extent that Records are Available*				
		2020	2025	2030	2035	2040
Single Family		10,220	10,577	10,793	10,927	11,084
Multi-Family		3,994	4,023	4,119	4,166	4,184
Commercial		1,980	1,992	2,004	2,019	2,020
Industrial		221	219	216	217	217
Institutional/Governmental		724	726	728	731	731
Landscape		536	536	536	536	536
Agricultural irrigation		2,485	1,917	1,235	1,276	1,313
Losses		1,245	1,271	1,292	1,305	1,316
Sales/Transfers/Exchanges to other agencies	Deliveries to Rincon customers	498	508	517	522	527
TOTAL		21,903	21,769	21,440	21,699	21,928

Table 4-3 Retail: Total Water Demands						
	2015	2020	2025	2030	2035	2040
Potable and Raw Water *From Tables 4-1 and 4-2*	21,879	21,903	21,769	21,440	21,699	21,928
Recycled Water Demand* *From Table 6-4*	576	3,000	3,650	4,400	4,400	4,400
TOTAL WATER DEMAND	22,455	24,903	25,419	25,840	26,099	26,328
**Recycled water demand fields will be blank until Table 6-4 is complete.*						
NOTES: The recycled water demand listed here is not consistent with information in Table 6-4. Table 6-4 includes recycled water demands associated with potable reuse. Those supply values are not "recycled water demand", and therefore are not included in this table.						

Table 4-4 Retail: 12 Month Water Loss Audit Reporting	
Reporting Period Start Date (mm/yyyy)	Volume of Water Loss*
07/2013	525
** Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet.*	
NOTES: the City's Water Loss Audit reports losses in MG/yr as 171 MG/yr. This is equal to 325 AFY.	

Table 4-5 Retail Only: Inclusion in Water Use Projections	
Are Future Water Savings Included in Projections? (Refer to Appendix K of UWMP Guidebook)	Yes
If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, etc… utilized in demand projections are found.	Section 3.3.1 includes land use-based methodology used to calculate projected demands
Are Lower Income Residential Demands Included In Projections?	Yes
NOTES:	

Table 5-1 Baselines and Targets Summary					
Baseline Period	Start Year	End Year	Average Baseline GPCD*	2015 Interim Target *	Confirmed 2020 Target*
10-15 year	1999	2008	227	204	182
5 Year	2003	2007	228		
*All values are in Gallons per Capita per Day (GPCD)					
NOTES:					

Table 5-2: 2015 Compliance *Retail Agency or Regional Alliance Only*								
Actual 2015 GPCD*	2015 Interim Target GPCD*	**Optional Adjustments to 2015 GPCD** *From Methodology 8*					2015 GPCD* *(Adjusted if applicable)*	Did Supplier Achieve Targeted Reduction for 2015? Y/N
		Extraordinary Events*	Economic Adjustment*	Weather Normalization*	TOTAL Adjustments*	Adjusted 2015 GPCD*		
142	204	0	0	0	0	142	142	Yes
**All values are in Gallons per Capita per Day (GPCD)*								
NOTES:								

Table 6-1 Retail: Groundwater Volume Pumped	
☑	Supplier does not pump groundwater. The supplier will not complete the table below.

Table 6-2 Retail: Wastewater Collected Within Service Area in 2015						
☐	There is no wastewater collection system. The supplier will not complete the table below.					
	Percentage of 2015 service area covered by wastewater collection system *(optional)*					
	Percentage of 2015 service area population covered by wastewater collection system *(optional)*					
Wastewater Collection			**Recipient of Collected Wastewater**			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? *Drop Down List*	Volume of Wastewater Collected from UWMP Service Area 2015	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area? *Drop Down List*	Is WWTP Operation Contracted to a Third Party? *(optional)* *Drop Down List*
City of Escondido	Metered	11,388	City of Escondido	HARRF	Yes	No
Total Wastewater Collected from Service Area in 2015:		11,388				
NOTES:						

Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2015									
☐	No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.								
Wastewater Treatment Plant Name	Discharge Location Name or Identifier	Discharge Location Description	Method of Disposal	Does This Plant Treat Wastewater Generated Outside the Service Area?	Treatment Level	2015 volumes			
						Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area	Recycled Outside of Service Area
HAARF	Escondido Land Outfall	The Escondido Land Outfall connects to the San Elijo Ocean Outfall	Land disposal	Yes	Secondary, Disinfected - 23	11,388	10,858	0	0
HAARF	Recycled Water Customers	Recycled Water Customers	Other	Yes	Tertiary	576	0	576	0
					Total	11,964	10,858	576	0
NOTES:									

Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area

☐	Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below.
Name of Agency Producing (Treating) the Recycled Water:	City of Escondido
Name of Agency Operating the Recycled Water Distribution	City of Escondido
Supplemental Water Added in 2015	
Source of 2015 Supplemental Water	

Beneficial Use Type	General Description of 2015 Uses	Level of Treatment	2015	2020	2025	2030	2035	2040
Agricultural irrigation		Tertiary	144	750	913	1,100	1,100	1,100
Landscape irrigation (excludes golf courses)		Tertiary	288	1,500	1,825	2,200	2,200	2,200
Golf course irrigation								
Commercial use								
Industrial use		Tertiary	144	750	913	1,100	1,100	1,100
Geothermal and other energy production								
Seawater intrusion barrier								
Recreational impoundment								
Wetlands or wildlife habitat								
Groundwater recharge (IPR)*								
Surface water augmentation (IPR)*						4,000	5,000	5,000
Direct potable reuse								
		Total:	576	3,000	3,650	8,400	9,400	9,400

**IPR - Indirect Potable Reuse*

NOTES: Includes potable reuse values, which are not non-potable recycled water. Therefore, these figures do not match the recycled water row shown in Table 4-3.

Table 6-5 Retail: 2010 UWMP Recycled Water Use Projection Compared to 2015 Actual			
☐	Recycled water was not used in 2010 nor projected for use in 2015. The supplier will not complete the table below.		
Use Type		**2010 Projection for 2015**	**2015 Actual Use**
Agricultural irrigation		1,825	144
Landscape irrigation (excludes golf courses)		1,825	288
Industrial use		1,150	144
Total		4,800	576
NOTES:			

Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
☐	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Financial incentives		Ongoing	2,200
Pay on-site retrofit costs for all Phase I customers		Ongoing	550
Provide ongoing technical assistance to recycled water customers at no charge		Ongoing	550
Ensure recycled water supply reliability even during shortages (excluding disaster conditions)		Ongoing	550
Continue proactive public education campaign regarding safety and reliability of recycled water		Ongoing	550
		Total	4,400
NOTES:			

Table 6-7 Retail: Expected Future Water Supply Projects or Programs					
☐	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.				
☐	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.				
	Provide page location of narrative in the UWMP				
Name of Future Projects or Programs	Joint Project with other agencies?		Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Agency
	Drop Down List (y/n)	*If Yes, Agency Name*			
HARRF Expansion for Recycled Water (Phase I)	No		2020	Average Year	2,500
HARRF Expansion for Recycled Water (Phase II)	No		2025	Average Year	650
HARRF Expansion for Recycled Water (Phase III)	No		2030	Average Year	750
Potable Reuse Program (Phase I)	No		2030	Average Year	4,000
Potable Reuse Program (Phase II)	No		2035	Average Year	1,000
NOTES:					

Table 6-8 Retail: Water Supplies — Actual				
Water Supply	Additional Detail on Water Supply	2015		
		Actual Volume	Water Quality	Total Right or Safe Yield *(optional)*
Purchased or Imported Water		21,253	Drinking Water	
Surface water		626	Drinking Water	
Recycled Water		576	Recycled Water	
	Total	22,455		0
NOTES:				

Table 6-9 Retail: Water Supplies — Projected						
Water Supply	Additional Detail on Water Supply	Projected Water Supply *Report To the Extent Practicable*				
		2020	**2025**	**2030**	**2035**	**2040**
		Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume
Purchased or Imported Water		14,643	14,509	10,180	9,439	9,668
Surface water		7,260	7,260	7,260	7,260	7,260
Recycled Water		3,000	3,650	4,400	4,400	4,400
Other	Potable Reuse	0	0	4,000	5,000	5,000
Total		24,903	25,419	25,840	26,099	26,328
NOTES:						

Table 7-1 Retail: Basis of Water Year Data			
Year Type	**Base Year** *If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 1999-2000, use 2000*	**Available Supplies if Year Type Repeats**	
		☐ Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____	
		☑ Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available	**% of Average Supply**
Average Year	2006	31,065	100%
Single-Dry Year	2015	31,065	100%
Multiple-Dry Years 1st Year	2013	31,065	100%
Multiple-Dry Years 2nd Year	2014	31,065	100%
Multiple-Dry Years 3rd Year	2015	28,269	91%
Agency may use multiple versions of Table 7-1 if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If an agency uses multiple versions of Table 7-1, in the "Note" section of each table, state that multiple versions of Table 7-1 are being used and identify the particular water source that is being reported in each table.			
NOTES:			

Table 7-2 Retail: Normal Year Supply and Demand Comparison					
	2020	2025	2030	2035	2040
Supply totals	24,903	25,419	25,840	26,099	26,328
Demand totals	24,903	25,419	25,840	26,099	26,328
Difference	0	0	0	0	0
NOTES:					

Table 7-3 Retail: Single Dry Year Supply and Demand Comparison					
	2020	2025	2030	2035	2040
Supply totals	27,144	27,707	28,165	28,448	28,697
Demand totals	27,144	27,707	28,165	28,448	28,697
Difference	0	0	0	0	0
NOTES:					

Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2020	2025	2030	2035	2040
First year	Supply totals	26,647	27,199	27,649	27,926	28,171
	Demand totals	26,647	27,199	27,649	27,926	28,171
	Difference	0	0	0	0	0
Second year	Supply totals	29,852	31,037	32,245	32,472	32,678
	Demand totals	29,852	31,037	32,245	32,472	32,678
	Difference	0	0	0	0	0
Third year	Supply totals	24,473	25,445	26,435	26,621	26,790
	Demand totals [1]	24,473	25,445	26,435	26,621	26,790
	Difference	0	0	0	0	0
NOTES:[1] Demand Totals include implementation of water conservation measures.						

Table 8-1 Retail Stages of Water Shortage Contingency Plan		
Stage	Complete Both	
	Percent Supply Reduction[1]	Water Supply Condition
1	up to 10	Water Shortage Watch
2	up to 20	Water Shortage Alert
3	up to 40	Water Shortage Critical
4	greater than 40	Water Shortage Emergency
[1] *One stage in the Water Shortage Contingency Plan must address a water shortage of 50%.*		
NOTES: Stage 4 includes water shortages of 50%		

Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses			
Stage	Restrictions and Prohibitions on End Users	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?[1]
1	Landscape - Restrict or prohibit runoff from landscape irrigation		Yes
1	Water Features - Restrict water use for decorative water features, such as		Yes
1	Other - Require automatic shut of hoses	Washing any vehicle with a hose not having a water shut-off nozzle is prohibited.	Yes
1	Other	Allowing water to run continuously from a hose while washing any vehicle is prohibited.	Yes
1	Other - Prohibit use of potable water for washing hard surfaces		Yes
1	Other - Prohibit use of potable water for construction and dust control	Using water unnecessarily for construction operations, receiving water from a construction meter or water truck for any purpose other than those required by regulatory agencies is prohibited.	Yes
1	Landscape - Other landscape restriction or prohibition	Watering or irrigating outdoor landscaping with potable water during a measurable rainfall event or within forty-eight (48) hours of measurable rainfall is prohibited.	Yes
1	Other	The installation of single pass cooling systems in buildings requesting new water connections is prohibited.	Yes
1	CII - Other CII restriction or prohibition	The installation of non-recirculating systems in new or remodeled conveyor or automatic car wash systems is prohibited.	Yes
1	CII - Other CII restriction or prohibition	The installation of non-recirculating systems in new commercial laundry systems is prohibited.	Yes

1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	The loss or escape of water by means of breaks, leaks, or other malfunctions in the water user's plumbing or distribution system must be repaired within five (5) days of notification.	Yes
1	Landscape - Limit landscape irrigation to specific times	Golf courses, parks, school grounds, landscapes, and recreational fields must only be watered between the hours of 6 p.m. and 10 a.m.	Yes
1	Landscape - Other landscape restriction or prohibition	Recycled water must be used, after the department has provided to the customer an analysis showing that recycled water, if available, is a cost-effective alternative to potable water and the customer has had a reasonable amount of time to make the conversion.	Yes
1	CII - Lodging establishment must offer opt out of linen service		Yes
1	CII - Restaurants may only serve water upon request		Yes
1	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	All conveyor or automatic car wash systems shall have installed operational water recycling systems, or shall have secured a waiver of this requirement.	Yes
1	CII - Other CII restriction or prohibition	All laundromats shall have converted one hundred (100) percent of their washers to high efficiency models by November 22, 2015.	Yes
1	Landscape - Other landscape restriction or prohibition	Irrigating landscapes with potable water for new construction must be consistent with the regulations established by the California Building Standards Commission and the department of housing and community development.	Yes
1	Other	Increased education and awareness on the existing restrictions.	No

2	Landscape - Limit landscape irrigation to specific days	Irrigating landscapes with potable water shall be limited in frequency as determined necessary by City Council.	Yes
2	Landscape - Other landscape restriction or prohibition	Irrigating landscapes shall not exceed ten (10) minutes per station. This provision does not apply to irrigating landscapes using water efficient devices including, but not limited to, drip-micro-irrigation systems and stream rotor sprinklers.	Yes
2	Landscape - Restrict or prohibit runoff from landscape irrigation	Operating irrigation systems that result in water not being applied to the landscaped area by virtue of any or all of the following: excessive overspray, misting, over pressurization, misaligned or tilted spray heads, or any other malfunction or out-of-adjustment condition, is prohibited.	Yes
2	Landscape - Limit landscape irrigation to specific times	Water from a construction meter or water truck for irrigation purposes must be applied between the hours of 6 p.m. and 10 a.m.	Yes
3	Water Features - Restrict water use for decorative water features, such as fountains	Maintaining ornamental lakes, ponds, or fountains is prohibited, except to the extent needed to sustain aquatic life, provided that such aquatic life is of significant value and have been actively managed within the water feature prior to declaration of a water shortage.	Yes
3	Pools and Spas - Require covers for pools and spas	A pool or spa must be covered during non-use periods.	Yes
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Any washing of vehicles must be done at commercial car washes or by mobile high pressure/low volume commercial services that recycle water.	Yes
3	Other	Other water uses may be prohibited as determined by the Director, after public notice to customers.	Yes

4	Other	In addition to all prohibited or restrictions uses of water identified in Stages 1-3, the City Council may adopt a resolution to impose additional restrictions or prohibitions on the use of water to achieve reductions.	Yes
NOTES: [1]All prohibitions and restrictions under the Water Shortage Response Level 1 are in effect at all time, including when no drought response is in effect. Violation of these measures carries the possibility of penalties, charges, or other enforcement.			

Table 8-3 Retail Only: Stages of Water Shortage Contingency Plan - Consumption Reduction Methods		
Stage	Consumption Reduction Methods by Water Supplier	Additional Explanation or Reference *(optional)*
All Stages	Expand Public Information Campaign	
All Stages	Offer Water Use Surveys	
All Stages	Provide Rebates on Plumbing Fixtures and Devices	
All Stages	Provide Rebates for Landscape Irrigation Efficiency	
Stages 3 and 4	Other	Annexations to the City's water service area will be suspended
Stages 3 and 4	Moratorium or Net Zero Demand Increase on New Connections	
Stage 4	Implement or Modify Drought Rate Structure or Surcharge	
NOTES:		

Table 8-4 Retail: Minimum Supply Next Three Years			
	2016	2017	2018
Available Water Supply	22,192	22,870	23,547
NOTES:			

Table 10-1 Retail: Notification to Cities and Counties		
City Name	60 Day Notice	Notice of Public Hearing
N/A	☐	☐
County Name	60 Day Notice	Notice of Public Hearing
San Diego County	☑	☑
NOTES		

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SB X7-7 Table 0: Units of Measure Used in UWMP*
Acre Feet
**The unit of measure must be consistent with Table 2-3*
NOTES:

SB X7-7 Table-1: Baseline Period Ranges			
Baseline	**Parameter**	**Value**	**Units**
10- to 15-year baseline period	2008 total water deliveries	32,856	Acre Feet
	2008 total volume of delivered recycled water	3,517	Acre Feet
	2008 recycled water as a percent of total deliveries	10.70%	Percent
	Number of years in baseline period[1, 2]	10	Years
	Year beginning baseline period range	1999	
	Year ending baseline period range[3]	2008	
5-year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2003	
	Year ending baseline period range[4]	2007	

[1] *If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period.*

[2] *The Water Code requires that the baseline period is between 10 and 15 years. However, DWR recognizes that some water suppliers may not have the minimum 10 years of baseline data.*

[3] *The ending year must be between December 31, 2004 and December 31, 2010.*

[4] *The ending year must be between December 31, 2007 and December 31, 2010.*

NOTES:

SB X7-7 Table 2: Method for Population Estimates	
Method Used to Determine Population	
☐	**1. Department of Finance** (DOF) DOF Table E-8 (1990 - 2000) and (2000-2010) and DOF Table E-5 (2011 - 2015) when available
☐	**2. Persons-per-Connection Method**
☑	**3. DWR Population Tool**
☐	**4. Other** DWR recommends pre-review
NOTES:	

SB X7-7 Table 3: Service Area Population		
Year		**Population**
10 to 15 Year Baseline Population		
Year 1	1999	117,087
Year 2	2000	117,654
Year 3	2001	120,432
Year 4	2002	121,433
Year 5	2003	123,025
Year 6	2004	125,135
Year 7	2005	125,647
Year 8	2006	126,451
Year 9	2007	128,203
Year 10	2008	128,768
5 Year Baseline Population		
Year 1	2003	123,025
Year 2	2004	125,135
Year 3	2005	125,647
Year 4	2006	126,451
Year 5	2007	128,203
2015 Compliance Year Population		
2015		137,941
NOTES:		

SB X7-7 Table 4: Annual Gross Water Use *								
Baseline Year		Volume Into Distribution System.	Deductions					Annual Gross Water Use
			Exported Water	Change in Dist. System Storage (+/-)	Indirect Recycled Water	Water Delivered for Agricultural Use	Process Water	
10 to 15 Year Baseline - Gross Water Use								
Year 1	1999	28,752			-		-	28,752
Year 2	2000	31,489			-		-	31,489
Year 3	2001	30,417			-		-	30,417
Year 4	2002	33,304			-		-	33,304
Year 5	2003	31,387			-		-	31,387
Year 6	2004	35,171			-		-	35,171
Year 7	2005	29,503			-		-	29,503
Year 8	2006	31,495			-		-	31,495
Year 9	2007	32,578			-		-	32,578
Year 10	2008	29,339			-		-	29,339
10 - 15 year baseline average gross water use								**31,344**
5 Year Baseline - Gross Water Use								
Year 1	2003	31,387			-		-	31,387
Year 2	2004	35,171			-		-	35,171
Year 3	2005	29,503			-		-	29,503
Year 4	2006	31,495			-		-	31,495
Year 5	2007	32,578			-		-	32,578
5 year baseline average gross water use								**32,027**
2015 Compliance Year - Gross Water Use								
2015		21,879	-		-		-	**21,879**

* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3

NOTES:

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)			
Name of Source	SDCWA		
This water source is:			
☐	The supplier's own water source		
☑	A purchased or imported source		
Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System			
Year 1	1999	23,002	23,002
Year 2	2000	25,191	25,191
Year 3	2001	24,334	24,334
Year 4	2002	26,643	26,643
Year 5	2003	25,110	25,110
Year 6	2004	28,137	28,137
Year 7	2005	23,602	23,602
Year 8	2006	25,196	25,196
Year 9	2007	26,062	26,062
Year 10	2008	23,471	23,471
5 Year Baseline - Water into Distribution System			
Year 1	2003	25,110	25,110
Year 2	2004	28,137	28,137
Year 3	2005	23,602	23,602
Year 4	2006	25,196	25,196
Year 5	2007	26,062	26,062
2015 Compliance Year - Water into Distribution			
2015		21,253	21,253
** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*			
NOTES:			

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)			
Name of Source	Local Surface Water		
This water source is:			
☑	The supplier's own water source		
☐	A purchased or imported source		
Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System			
Year 1	1999	5,750	5,750
Year 2	2000	6,298	6,298
Year 3	2001	6,083	6,083
Year 4	2002	6,661	6,661
Year 5	2003	6,277	6,277
Year 6	2004	7,034	7,034
Year 7	2005	5,901	5,901
Year 8	2006	6,299	6,299
Year 9	2007	6,516	6,516
Year 10	2008	5,868	5,868
5 Year Baseline - Water into Distribution System			
Year 1	2003	6,277	6,277
Year 2	2004	7,034	7,034
Year 3	2005	5,901	5,901
Year 4	2006	6,299	6,299
Year 5	2007	6,516	6,516
2015 Compliance Year - Water into Distribution			
2015		626	626
** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*			
NOTES:			

SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)				
Baseline Year		Service Area Population	Annual Gross Water Use	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	1999	117,087	28,752	219
Year 2	2000	117,654	31,489	239
Year 3	2001	120,432	30,417	225
Year 4	2002	121,433	33,304	245
Year 5	2003	123,025	31,387	228
Year 6	2004	125,135	35,171	251
Year 7	2005	125,647	29,503	210
Year 8	2006	126,451	31,495	222
Year 9	2007	128,203	32,578	227
Year 10	2008	128,768	29,339	203
10-15 Year Average Baseline GPCD				**227**
5 Year Baseline GPCD				
Baseline Year		Service Area Population	Gross Water Use	Daily Per Capita Water Use
Year 1	2003	123,025	31,387	228
Year 2	2004	125,135	35,171	251
Year 3	2005	125,647	29,503	210
Year 4	2006	126,451	31,495	222
Year 5	2007	128,203	32,578	227
5 Year Average Baseline GPCD				**228**
2015 Compliance Year GPCD				
2015		137,941	21,879	**142**
NOTES:				

SB X7-7 Table 6: Gallons per Capita per Day	
10-15 Year Baseline GPCD	227
5 Year Baseline GPCD	228
2015 Compliance Year GPCD	142
NOTES:	

SB X7-7 Table 7: 2020 Target Method		
Target Method		Supporting Documentation
☑	Method 1	SB X7-7 Table 7A
☐	Method 2	SB X7-7 Tables 7B, 7C, and 7D *Contact DWR for these tables*
☐	Method 3	SB X7-7 Table 7-E
☐	Method 4	Method 4 Calculator
NOTES:		

SB X7-7 Table 7-A: Target Method 1 20% Reduction	
10-15 Year Baseline GPCD	**2020 Target** **GPCD**
227	**182**
NOTES:	

SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target			
5 Year Baseline GPCD	Maximum 2020 Target[1]	Calculated 2020 Target[2]	**Confirmed 2020 Target**
228	216	182	**182**

[1] Maximum 2020 Target is 95% of the 5 Year Baseline GPCD

[2] 2020 Target is calculated based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target.

NOTES:

SB X7-7 Table 8: 2015 Interim Target GPCD		
Confirmed 2020 Target	10-15 year Baseline GPCD	**2015 Interim Target GPCD**
182	227	**204**
NOTES:		

SB X7-7 Table 9: 2015 Compliance					
Actual 2015 GPCD	2015 Interim Target GPCD	Optional Adjustments *(in GPCD)*		2015 GPCD *(Adjusted if applicable)*	**Did Supplier Achieve Targeted Reduction for 2015?**
		TOTAL Adjustments	Adjusted 2015 GPCD		
142	204	-	142	142	**YES**
NOTES:					

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Appendix E - Water Conservation Plan

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ORDINANCE NO. 2015-12R

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ESCONDIDO, CALIFORNIA, AMENDING ARTICLE 5 OF CHAPTER 31 OF THE ESCONDIDO MUNICIPAL CODE TO ADD RECENT STATE REQUIREMENTS FOR WATER CONSERVATION

The City Council of the City of Escondido, California, DOES HEREBY ORDAIN as follows:

SECTION 1. Article 5, Section 31-227 of Chapter 31 of the Escondido Municipal Code is hereby amended to read as follow:

Sec. 31-227. Definitions.

The following words and phrases whenever used in this chapter shall have the meaning defined in this section.

(a) "Baseline period" means the period of time during which a customer's water use in prior years shall be used to compare to the same customers water use during a declared water shortage. The baseline period will be determined by the City Council at the time the City Council declares the appropriate water shortage response level, as outlined in section 31-232 of this article.

(b) "City" means the City of Escondido.

(c) "Customer" means any natural person, corporation, public or private entity, public or private association, public or private agency, government agency or institution, school district, college, or any other user of water provided by the City.

(d) "Department" means the utilities department of the City of Escondido.

(e) "Director" means the director of utilities of the City of Escondido,

(f) "IAWP" means the Metropolitan Interim Agricultural Water Program.

(g) "Measurable rainfall" means total rainfall within a 24 hour period that measures at least 0.2 inches.

(h) "Metropolitan" means the Metropolitan Water District of Southern California.

(i) "Water Authority" and "SDCWA" means the San Diego County Water Authority.

(j) "Wholesale supplier" means the San Diego County Water Authority.

SECTION 2. Article 5, Sections 31-229 – 31-232 of Chapter 31 of the Escondido Municipal Code are hereby amended to read as follows:

Sec. 31-229. Authorization for exceptions.

The City Manager or designee is authorized to make minor and limited exceptions to the provisions of this article, on a customer wide basis, to prevent undue hardship or unreasonable restrictions, provided that water shall not be wasted or used unreasonably, and that the purposes of this article can be accomplished. Any such exceptions should be made in writing.

Sec. 31-230. Water use restrictions and measures (at all times).

(a) The following water uses are prohibited:

(1) Watering or irrigating lawns or landscape areas in a manner causing significant runoff.

(2) Operating a fountain or other water feature that does not recirculate water.

(3) Washing any vehicle with a hose not having a water shut-off nozzle.

(4) Allowing water to run continuously from a hose while washing any vehicle.

(5) Washing driveways, sidewalks, parking areas, patios or other hardscape areas with water, except when necessary to alleviate safety or sanitation hazards.

(6) Using water (unnecessarily) for construction operations, receiving water from a construction meter or water truck for any purpose other than those required by regulatory agencies.

(7) Watering or irrigating outdoor landscaping with potable water during a measurable rainfall event or within 48 hours of measurable rainfall.

(8) The installation of single pass cooling systems in buildings requesting new water connections.

(9) The installation of non-recirculating systems in new or remodeled conveyor or automatic car wash systems.

(10) The installation of non-recirculating systems in new commercial laundry systems.

(b) The following water use restrictions are required at all times:

(1) The loss or escape of water by means of breaks, leaks or other malfunctions in the water user's plumbing or distribution system must be repaired within five (5) days of notification by the utilities department, or within such other time as determined by the director of utilities or designee.

(2) Golf courses, parks, school grounds, landscapes, and recreational fields must only be watered between the hours of 6:00 p.m. and 10:00 a.m., except for very short periods of time for the express purpose of adjusting or repairing the irrigation system. Tees and greens may be watered at any time. New plantings including grass may be watered as needed until established.

(3) Recycled water must be used, after the department has provided to the customer an analysis showing that recycled water, if available, is a cost-effective alternative to potable water and the customer has had a reasonable amount of time, as determined by the director or the director's designee to make the conversion to recycled water.

(4) A hotel or motel must provide guests the option of refusing daily laundering of towels and linens. The hotel or motel shall prominently display notice of this option in each bathroom and sleeping room using clear and easily understood language. The department shall make suitable displays available.

(5) Restaurants or other public places where food is served, sold, or offered for sale, will not serve drinking water to any customer unless expressly requested by the customer. The department shall make "table tents" available to restaurants and these types of other public places alerting customers to this restriction.

(6) All conveyor or automatic car wash systems shall have installed operational water recycling systems, or shall have secured a waiver of this requirement from the director

(7) All laundromats shall have converted one hundred (100) percent of their washers to high efficiency models, as determined by the Consortium for Energy Efficiency, by November 22, 2015.

(8) Irrigating landscapes with potable water for new construction must be consistent with regulations by established by the California Building Standards Commission and the Department of Housing and Community Development

Sec. 31-231. Reserved.

Sec. 31-232. Water shortage response levels.

(a) Response Level One – Water Shortage Watch Condition.

(1) It is the intent of the response level one to achieve up to a ten (10) percent reduction in water use when measured against the baseline period.

(2) Declaration. The City Council shall declare a water shortage response level one – water shortage watch condition by resolution when the City Council determines, in its sole discretion that a declaration will help to avoid or lessen the impact of an impending water supply shortage. The types of events which may prompt the City Council to declare a water shortage response level one – water shortage watch condition may include, among other factors, a finding that the City's wholesale supplier

or metropolitan experiences shortages in their imported water supply, or must remove water from storage to meet normal demands.

(3) Public Awareness/Education. During a water shortage response level one – water shortage watch condition, the City will increase its public awareness and education efforts of water use restrictions and measures as outlined in this article.

(b) Response Level Two – Water Shortage Alert Condition.

(1) It is the intent of response level two to achieve up to a twenty (20) percent reduction in water use when measured against the baseline period.

(2) Declaration. The City Council shall declare a water shortage response level two – water shortage alert condition by resolution when response level one actions have been taken, but the City Council determines, in its sole discretion, that there are still insufficient supplies available to meet anticipated demands. The City Council may then determine that the actions outlined in this section are necessary.

(3) In addition to the water use restrictions and measures identified in subsection a, the following restrictions and measures shall be applicable:

(A) Irrigating landscape with potable water shall be limited in frequency as determined necessary by the City Council by resolution.

(B) Irrigating landscapes shall not exceed ten (10) minutes per station. This provision does not apply to irrigating landscapes using water efficient devices including, but not limited to, drip-micro-irrigation systems and stream rotor sprinklers.

(C) Operating irrigation systems that result in water not being applied to the landscaped area by virtue of any or all of the following: excessive over spray, misting, over pressurization, misaligned or tilted spray heads, or any other malfunction or out-of-adjustment condition, is prohibited.

(D) Water from a construction meter or water truck for irrigation purposes must be applied between the hours of 6:00 p.m. and 10:00 a.m. Note: if the City is notified in writing that initial landscape materials will be adversely affected by these restrictions, the City may establish a reasonable schedule for initial irrigation. The City has the right to inspect all construction sites using water from a city construction meter for the efficient use of water.

(c) Response Level Three – Water Shortage Critical Condition.

(1) It is the intent of response level three to achieve up to a forty (40) percent reduction in water use when measured against the baseline period.

(2) The City Council shall declare a water shortage response level three – water shortage critical condition by resolution when response level two actions have been taken, but the City Council determines, in its sole discretion, that there are still insufficient supplies available to meet anticipated demands. The City Council may then determine which actions listed below are necessary by resolution.

(3) In addition to water use restrictions and measures identified in subsections a and b, the following requirements shall be applicable as determined by resolution:

(A) Maintaining ornamental lakes, ponds, or fountains is prohibited, except to the extent needed to sustain aquatic life, provided that such aquatic life is of significant value and have been actively managed within the water feature prior to declaration of a water shortage response level under this policy;

(B) A pool or spa must be covered during non-use periods;

(C) Any washing of vehicles must be sone at commercial car washes or by mobile high pressure/low volume commercial services that recycle water;

(D) Annexations to the City's water service area will be suspended;

(E) Other water uses may be prohibited as determined by the director, after public notice to customers; and

(F) No new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as, "will serve" letters, certificates, or letters of availability) shall be issued. This does not apply when (1) a valid, unexpired building permit has been issued prior to the level three declaration for the project or (2) the project is necessary to protect the public's health, safety and welfare.

This subsection (c)(3)(F) shall not be construed to preclude the resetting or turn on of meters to provide continuation of water service or to restore service that has been interrupted for up to a period of one (1) year.

(d) Response Level Four – Water Shortage Emergency Condition.

(1) Prohibited Uses of Water in a Water Shortage Response Level Four – Water Shortage Emergency Condition. This level will achieve the maximum possible percentage reduction in water use from the baseline period.

(2) Declaration. The City Council shall declare a water shortage response level four – water shortage emergency condition by resolution when all response level three actions have been taken, but the City Council determines, in its sole discretion, that there are still insufficient supplies available to meet anticipated demands. The City Council may then determine that the actions outlined in this section are necessary.

(3) Restrictions and Rates. In addition to all prohibited uses of water identified in subsections a through c, the City Council may, in its sole discretion, adopt a resolution to impose additional restrictions or prohibitions on the use of water to achieve reductions from the baseline period, or make additional adjustments to the water rates based on the City's increased costs to provide water to its customers.

SECTION 3. SEPARABILITY. If any section, subsection sentence, clause, phrase or portion of this Ordinance is held invalid or unconstitutional for any reason by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions.

SECTION 4. That as of the effective date of this ordinance, all ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 5. That the City Clerk is hereby directed to certify to the passage of this ordinance and to cause the same or a summary to be published one time within 15 days of its passage in a newspaper of general circulation, printed and published in the City of Escondido.

PASSED, ADOPTED AND APPROVED by the City Council of the City of Escondido at a regular meeting thereof this 10th day of June, 2015 by the following vote to wit:

AYES : Councilmembers: DIAZ, GALLO, MORASCO, MASSON, ABED

NOES : Councilmembers: NONE

ABSENT : Councilmembers: NONE

APPROVED:

SAM ABED, Mayor of the
City of Escondido, California

ATTEST:

DIANE HALVERSON, City Clerk of the
City of Escondido, California

*****

STATE OF CALIFORNIA)
COUNTY OF SAN DIEGO : ss.
CITY OF ESCONDIDO)

I, DIANE HALVERSON, City Clerk of the City of Escondido, hereby certify that the foregoing ORDINANCE NO. 2015-12 passed at a regular meeting of the City Council of the City of Escondido held on the 10th day of June, 2015, after having been read at the regular meeting of said City Council held on the 3rd day of June, 2015.

DIANE HALVERSON, City Clerk of the
City of Escondido, California

ORDINANCE NO. 2015-12 R

ARTICLE 5. WATER CONSERVATION PLAN

Sec. 31-225. Scope.

There is hereby established a water conservation and water shortage response plan (the "plan"), pursuant to California Water Code Section 375 et seq. (Ord. No. 2008-30(R), § 2, 10-22-08)

Sec. 31-226. Objectives.

The objectives of the plan are:

(a) To prevent water supply shortages through aggressive and effective water management programs such as water conservation, water education and use restrictions;

(b) To minimize the impact of a water supply shortage on the city's population and economy;

(c) To provide first for public health and fire protection and other essential services, then to provide for the economic health of the city, and then to provide for other uses of water;

(d) To ensure that water users who have implemented exemplary conservation practices during normal-year hydrology and wet-year hydrology are not disadvantaged by the plan during shortages, a "lifeline allowance" will be established to reflect the minimum amount necessary to sustain an average household. This allowance will be established periodically by resolution of the city council. (Ord. No. 2008-30(R), § 2, 10-22-08)

Sec. 31-227. Definitions.

The following words and phrases whenever used in this chapter shall have the meaning defined in this section.

(a) "Baseline period" means the period of time during which a customer's water use in prior years shall be used to compare to the same customer's water use during a declared water shortage. The baseline period will be determined by the city council at the time the city council declares the appropriate water shortage response level, as outlined in section 31-232 of this article.

(b) "City" means the City of Escondido.

(c) "Customer" means any natural person, corporation, public or private entity, public or private association, public or private agency, government agency or institution, school district, college, or any other user of water provided by the city.

(d) "Department" means the utilities department of the City of Escondido.

(e) "Director" means the director of utilities of the City of Escondido.

(f) "IAWP" means the Metropolitan Interim Agricultural Water Program.

(g) "Measurable rainfall" means total rainfall within a twenty-four (24) hour period that measures at least 0.2 inches.

(h) "Metropolitan" means the Metropolitan Water District of Southern California.

(i) "Water authority" and "SDCWA" means the San Diego County water authority.

(j) "Wholesale supplier" means the San Diego County water authority. (Ord. No. 2008-30(R), § 2, 10-22-08; Ord. No. 2015-12R, § 1, 6-10-15)

Sec. 31-228. Exemptions and applications.

(a) The provisions of this article shall apply to all persons and property served water by the City of Escondido wherever situated, unless an exemption or variance clearly applies.

(b) The provisions of this article do not apply to use of water from private wells or to recycled water.

(c) Nothing in this chapter shall apply to use of water that is subject to a special supply program, such as the IAWP or the SDCWA special agricultural rate programs. Violations of the conditions of special supply programs are subject to the penalties established under such applicable program. A customer using water subject to a special supply program and water provided by the city is subject to this article only with respect to the customer's use of water provided by the city. (Ord. No. 2008-30(R), § 2, 10-22-08)

Sec. 31-229. Authorization for exceptions.

The city manager or designee is authorized to make minor and limited exceptions to the provisions of this article, on a customer wide basis, to prevent undue hardship or unreasonable restrictions, provided that water shall not be wasted or used unreasonably, and that the purposes of this article can be accomplished. Any such exceptions should be made in writing. (Ord. No. 2008-30(R), § 2, 10-22-08; Ord. No. 2015-12R, § 2, 6-10-15)

Sec. 31-230. Water use restrictions and measures (at all times).

(a) The following water uses are prohibited:

(1) Watering or irrigating lawns or landscape areas in a manner causing significant runoff.

(2) Operating a fountain or other water feature that does not recirculate water.

(3) Washing any vehicle with a hose not having a water shut-off nozzle.

(4) Allowing water to run continuously from a hose while washing any vehicle.

(5) Washing driveways, sidewalks, parking areas, patios or other hardscape areas with water, except when necessary to alleviate safety or sanitation hazards.

(6) Using water (unnecessarily) for construction operations, receiving water from a construction meter or water truck for any purpose other than those required by regulatory agencies.

(7) Watering or irrigating outdoor landscaping with potable water during a measurable rainfall event or within forty-eight (48) hours of measurable rainfall.

(8) The installation of single pass cooling systems in buildings requesting new water connections.

(9) The installation of non-recirculating systems in new or remodeled conveyor or automatic car wash systems.

(10) The installation of non-recirculating systems in new commercial laundry systems.

(b) The following water use restrictions are required at all times:

(1) The loss or escape of water by means of breaks, leaks or other malfunctions in the water user's plumbing or distribution system must be repaired within five (5) days of notification by the utilities department, or within such other time as determined by the director of utilities or designee.

(2) Golf courses, parks, school grounds, landscapes, and recreational fields must only be watered between the hours of 6:00 p.m. and 10:00 a.m., except for very short periods of time for the express purpose of adjusting or repairing the irrigation system. Tees and greens may be watered at any time. New plantings including grass may be watered as needed until established.

(3) Recycled water must be used, after the department has provided to the customer an analysis showing

that recycled water, if available, is a cost-effective alternative to potable water and the customer has had a reasonable amount of time, as determined by the director or the director's designee to make the conversion to recycled water.

(4) A hotel or motel must provide guests the option of refusing daily laundering of towels and linens. The hotel or motel shall prominently display notice of this option in each bathroom and sleeping room using clear and easily understood language. The department shall make suitable displays available.

(5) Restaurants or other public places where food is served, sold, or offered for sale, will not serve drinking water to any customer unless expressly requested by the customer. The department shall make "table tents" available to restaurants and these types of other public places alerting customers to this restriction.

(6) All conveyor or automatic car wash systems shall have installed operational water recycling systems, or shall have secured a waiver of this requirement from the director.

(7) All laundromats shall have converted one hundred (100) percent of their washers to high efficiency models, as determined by the Consortium for Energy Efficiency, by November 22, 2015.

(8) Irrigating landscapes with potable water for new construction must be consistent with regulations established by the California Building Standards Commission and the department of housing and community development. (Ord. No. 2008-30(R), § 2, 10-22-08; Ord. No. 2009-16, § 1, 6-3-09; Ord. No. 2009-28, § 1, 1-6-10; Ord. No. 2015-12R, § 2, 6-10-15)

Sec. 31-231. Reserved.

Editor's note: Section 31-231, Additional water use restrictions, derived from Ord. Nos 2008-30(R), 2009-16 and 2009-28, was repealed by Ord. No. 2015-12R, § 2, 6-10-15.

Sec. 31-232. Water shortage response levels.

(a) Response level one—Water shortage watch condition.

(1) It is the intent of response level one to achieve up to a ten (10) percent reduction in water use when measured against the baseline period.

(2) Declaration. The city council shall declare a water shortage response level one—water shortage watch condition by resolution when the city council determines, in its sole discretion that a declaration will help to avoid or lessen the impact of an impending water supply shortage. The types of events which may prompt the city council to declare a water shortage response level one—water shortage watch condition may include, among other factors, a finding that the city's wholesale supplier or metropolitan experiences shortages in their imported water supply, or must remove water from storage to meet normal demands.

(3) Public awareness/education. During a water shortage response level one—water shortage watch condition, the city will increase its public awareness and education efforts of water use restrictions and measures as outlined in this article.

(b) Response level two—Water shortage alert condition.

(1) It is the intent of response level two to achieve up to a twenty (20) percent reduction in water use when measured against the baseline period.

(2) Declaration. The city council shall declare a water shortage response level two—water shortage alert condition by resolution when response level one actions have been taken, but the city council determines, in its sole discretion, that there are still insufficient supplies available to meet anticipated demands. The city council may then determine that the actions outlined in this section are necessary.

(3) In addition to the water use restrictions and measures identified in subsection (a), the following restrictions and measures shall be applicable:

(A) Irrigating landscape with potable water shall be limited in frequency as determined necessary by the

city council by resolution.

(B) Irrigating landscapes shall not exceed ten (10) minutes per station. This provision does not apply to irrigating landscapes using water efficient devices including, but not limited to, drip-micro-irrigation systems and stream rotor sprinklers.

(C) Operating irrigation systems that result in water not being applied to the landscaped area by virtue of any or all of the following: excessive over spray, misting, over pressurization, misaligned or tilted spray heads, or any other malfunction or out-of-adjustment condition, is prohibited.

(D) Water from a construction meter or water truck for irrigation purposes must be applied between the hours of 6:00 p.m. and 10:00 a.m. Note: if the city is notified in writing that initial landscape materials will be adversely affected by these restrictions, the city may establish a reasonable schedule for initial irrigation. The city has the right to inspect all construction sites using water from a city construction meter for the efficient use of water.

(c) Response level three—Water shortage critical condition.

(1) It is the intent of response level three to achieve up to a forty (40) percent reduction in water use when measured against the baseline period.

(2) The city council shall declare a water shortage response level three—water shortage critical condition by resolution when response level two actions have been taken, but the city council determines, in its sole discretion, that there are still insufficient supplies available to meet anticipated demands. The city council may then determine which actions listed below are necessary by resolution.

(3) In addition to water use restrictions and measures identified in subsections (a) and (b), the following requirements shall be applicable as determined by resolution:

(A) Maintaining ornamental lakes, ponds, or fountains is prohibited, except to the extent needed to sustain aquatic life, provided that such aquatic life is of significant value and have been actively managed within the water feature prior to declaration of a water shortage response level under this policy;

(B) A pool or spa must be covered during non-use periods;

(C) Any washing of vehicles must be done at commercial car washes or by mobile high pressure/low volume commercial services that recycle water;

(D) Annexations to the city's water service area will be suspended;

(E) Other water uses may be prohibited as determined by the director, after public notice to customers; and

(F) No new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as, "will serve" letters, certificates, or letters of availability) shall be issued. This does not apply when: (1) a valid, unexpired building permit has been issued prior to the level three declaration for the project; or (2) the project is necessary to protect the public's health, safety and welfare.

This subsection (c)(3)(F) shall not be construed to preclude the resetting or turn on of meters to provide continuation of water service or to restore service that has been interrupted for up to a period of one (1) year.

(d) Response level four—Water shortage emergency condition.

(1) Prohibited uses of water in a water shortage response level four—Water shortage emergency condition. This level will achieve the maximum possible percentage reduction in water use from the baseline period.

(2) Declaration. The city council shall declare a water shortage response level four—water shortage emergency condition by resolution when all response level three actions have been taken, but the city council determines, in its sole discretion, that there are still insufficient supplies available to meet anticipated demands. The city council may then determine that the actions outlined in this section are necessary.

(3) Restrictions and rates. In addition to all prohibited uses of water identified in subsections (a) through (c), the city council may, in its sole discretion, adopt a resolution to impose additional restrictions or prohibitions

on the use of water to achieve reductions from the baseline period, or make additional adjustments to the water rates based on the city's increased costs to provide water to its customers. (Ord. No. 2008-30(R), § 2, 10-22-08; Ord. No. 2009-16, § 3, 6-3-09; Ord. No. 2009-28, § 3, 1-6-10; Ord. No. 2015-12R, § 2, 6-10-15)

Sec. 31-233. Sudden catastrophic water supply shortage.

In accordance with the department's emergency response plan and at the direction of the city manager, the director may determine that a sudden event has diminished, or threatens to significantly diminish, the reliability or quality of the city's water supply. The director may declare a catastrophic water supply shortage and impose whatever emergency water allocation or conservation actions are deemed necessary, in the director's professional judgment, to protect the reliability and quality of the city's water supply, until the emergency passes, or until the city council may be convened to adopt a resolution or declaration of emergency, or to take other action. (Ord. No. 2008-30(R), § 2, 10-22-08)

Sec. 31-234. Notification.

(a) When a water shortage response level one—water shortage watch condition, a water shortage response level two—water shortage alert condition, a water shortage response level three—water shortage critical condition, a water shortage response level four—water shortage emergency condition, or a sudden catastrophic water supply shortage is declared, the city shall: (1) prior to the declaration provide notice of a public hearing, pursuant to California Water Code Section 352; and (2) after the declaration, publish the water shortage level in a local newspaper of general circulation, including the implementation date of the declaration. All media will be notified by e-mail and/or fax. Notification will also be posted on the city's website, the water conservation hot line and on the customer's utility bills.

(b) The department will inform its customers of the effective date, of the prohibited uses of water associated with the relevant stage, and encourage its customers to take additional voluntary actions to conserve water.

(c) The department will inform and prepare its customers about possible restrictions on use of water and rate increases related to the higher levels of water conservation required by this plan. The department will continue to educate its customers for the duration of an impending and actual water supply shortage. (Ord. No. 2008-30(R), § 2, 10-22-08)

Sec. 31-235. Enforcement, civil and criminal penalties.

(a) Any person, who uses, causes to be used, or permits the use of water in violation of this article is guilty of an offense punishable as provided herein.

(b) Each day that a violation of this article occurs is a separate offense.

(c) Administrative fines may be levied for each violation of any provision of this article, pursuant to the procedures outlined in Chapter 1A of the Escondido Municipal Code, in the following amounts:

(1) One hundred dollars ($100.00) for a first violation;

(2) Two hundred dollars ($200.00) for a second violation of any provision of this article during a level two—water shortage alert condition within one (1) year;

(3) Three hundred dollars ($300.00) for a second violation of any provision of this article during a level three—water shortage critical condition within one (1) year;

(4) Four hundred dollars ($400.00) for a second violation of any provision of this article during a level four—water shortage emergency condition within one (1) year;

(5) Five hundred dollars ($500.00) for each additional violation of any provision of this article within one (1) year.

(d) Pursuant to California Water Code Section 377, any customer failure to implement any of the conservation measures outlined in sections 31-230 through 31-233 above may be prosecuted as a misdemeanor. Upon conviction thereof, such person may be punished by imprisonment in the county jail for not more than thirty (30) days, or by fine not exceeding one thousand ($1,000.00) dollars, or both.

(e) Violation of any provision of this policy is subject to enforcement through installation of a flow-restricting device in the meter, pursuant to California Water Code Section 356.

(f) Willful violations of the mandatory conservation measures and water use restrictions set forth in section 31-232(d)(3) and applicable during a level four water shortage emergency condition may be enforced by discontinuing service to the property at which the violation occurs, as provided by California Water Code Section 356.

(g) All remedies provided for herein both civil and criminal shall be cumulative, and not exclusive. (Ord. No. 2008-30(R), § 2, 10-22-08)

Sec. 31-236. Surcharges; Additional charges.

The city council shall establish the additional charges by resolution as follows:

(a) A water rate penalty for excess water usage during a response level two—water shortage watch condition;

(b) A water rate penalty for excess water usage during a response level three—water shortage critical condition;

(c) A water rate penalty for excess water usage during a response level four—water shortage emergency condition; or

(d) A surcharge for excess water use that reflects the city's increased wholesale costs of purchasing water to provide to its customers. (Ord. No. 2008-30(R), § 2, 10-22-08)

Sec. 31-237. Variance for hardship or pending appeal.

(a) Hardship. The director or designee may grant a variance in cases of hardship for uses of water otherwise prohibited by the regulations. Water customers who feel they need an adjustment in the prohibitions must complete an application for a variance, stating the justification and circumstances. If the variance is not granted, the customer may ask for a review in writing. If the variance is granted, it shall be temporary, and last only as long as the hardship shall continue.

(b) Interim Measures. Pending receipt of a request for a hardship variance, or pending a hearing following the appeal of an administrative citation pursuant to Section 1A-9 of this code, the director, the director's designee, or enforcement officer may take appropriate steps to prevent the unauthorized use of water as appropriate to the nature and extent of the violation and the current declared water condition.

(c) Offsets. The city council shall establish by resolution a program to provide water use credits, new meter connections, or a variance from the prohibitions of this article where water customers can demonstrate that they will offset their water use with other conservation measures. (Ord. No. 2008-30(R), § 2, 10-22-08)

Secs. 31-238—31-249. Reserved.

View the mobile version.

Appendix F - CUWCC Reports

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CUWCC BMP Retail Coverage Report 2014

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

56 City of Escondido

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Elisa Marrone
Title:	Environmental Programs Specialist
Email:	emarrone@escondido.org

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://qcode.us/codes/escondido/	See Chapter 31 Article 5 Conservation Plan. Additional water waste prevention regulations can be found in Chapter 33 Article 62 Water Efficient Landscaping and Chapter 6 Article 7 Plumbing Code Amendment
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

At Least As effective As No

Exemption No

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control **ON TRACK**

56 City of Escondido

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
FY14 AWWA worksheet.xls	
AWWA Water Audit Validity Score?	76
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
314	219029	484710	0	False		

At Least As effective As No

Exemption No

Comments:

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

ON TRACK

56 City of Escondido

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	Yes
Feasibility Study provided to CUWCC?	Yes

Date: 6/1/2012

Uploaded file name:

Completed a written plan, policy or program to test, repair and replace meters	Yes
At Least As effective As	No
Exemption	No

Comments:

Meters are scheduled to be read every month, so 12 readings/year. The table above wouldn't accept an entry in that field.

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Conservation Pricing

On Track

56 City of Escondido

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Increasing Block	Yes	17759557	8796270
Multi-Family	Increasing Block	Yes	6460313	1587734
Commercial	Uniform	Yes	3314992	1258150
Industrial	Uniform	Yes	385535	15963
Institutional	Uniform	Yes	1002013	252865
Agricultural	Uniform	Yes	4600074	286627
Dedicated Irrigation	Uniform	Yes	3283049	612777
			36805533	**12810386**

Calculate: V / (V + M) **74 %**

Implementation Option: Use Annual Revenue As Reported

☐ Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: Yes

Customer Class	Rate Type	Conserving Rate?
Single-Family	Uniform	Yes
Multi-Family	Uniform	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Institutional	Uniform	Yes
Agricultural	Uniform	Yes
Dedicated Irrigation	Uniform	Yes

At Least As effective As No

Exemption No

Comments:

Section A is on-track as the overall total volume v. service charge is over 70%. Sewer charges in Section D are based on a percentage of customer's winter water use.

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

56 **City of Escondido** **Retail**

Does your agency perform Public Outreach programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

San Diego County Water Authority

The name of agency, contact name and email address if not CUWCC Group 1 members

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

Public Outreach Program List	Number
General water conservation information	
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	10
General water conservation information	26
Website	125
Newsletter articles on conservation	5
Total	**166**

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

Number Media Contacts	Number
News releases	3
Television contacts	5
Articles or stories resulting from outreach	2
Total	**10**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Outreach	3500
Total Amount:	**3500**

Public Outreah Additional Programs
Speakers Bureau
City Website
Facebook ("Escondido Water")

Description of all other Public Outreach programs

CUWCC BMP Coverage Report 2014

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs

ON TRACK

56 City of Escondido **Retail**

Does your agency implement School Education programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

San Diego County Water Authority

Agencies Name	ID number
San Diego County Water Authority	196

Materials meet state education framework requirements? Yes

k-1st grade - Wabby; 2nd grade - Water Cycle; 3rd grade - Water Resources; 4th grade - Water Quality & Water is Life; 5th grade - Got Water?

Materials distributed to K-6? Yes

Grade - appropriate worksheets: games, puzzles, coloring; physical models; interactive science station.

Materials distributed to 7-12 students? Yes (Info Only)

Water quality testing science kit for teachers to use in their classroom.

Annual budget for school education program: 2500.00

Description of all other water supplier education programs

"Splash Van" mobile field trips - 4 trips to elementary schools, upper grades.

Comments:

youth are included in almost all public events by offering activities, games, handouts, etc.

At Least As effective As No

Exemption No 0

56 City of Escondido

GPCD 1997-2006 Baseline: 227.28

GPCD in 2014: 173.09

GPCD Target for 2018: 186.40

Biennial GPCD Compliance Table

ON TRACK

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%	**219.10**	100%	**227.30**
2012	2	92.8%	**210.90**	96.4%	**219.10**
2014	3	89.2%	**202.70**	92.8%	**210.90**
2016	4	85.6%	**194.60**	89.2%	**202.70**
2018	5	82.0%	**186.40**	82.0%	**186.40**

CUWCC BMP Retail Coverage Report 2013

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

ON TRACK

56 City of Escondido

1. Conservation Coordinator provided with necessary resources to implement BMPs?

Name:	Elisa Marrone
Title:	Environmental Programs Specialist
Email:	emarrone@escondido.org

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://qcode.us/codes/escondido/	See Chapter 31 Article 5 Conservation Plan. Additional water waste prevention regulations can be found in Chapter 33 Article 62 Water Efficient Landscaping and Chapter 6 Article 7 Plumbing Code Amendment
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

At Least As effective As No

Exemption No

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control **ON TRACK**

56 City of Escondido

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
FY13 AWWA worksheet.xls	
AWWA Water Audit Validity Score?	76
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	Yes
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
277	633970	414912	0	False		

At Least As effective As No

Exemption No

Comments:

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

ON TRACK

56 City of Escondido

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	Yes
Feasibility Study provided to CUWCC?	Yes

Date: 6/1/2012

Uploaded file name:

Completed a written plan, policy or program to test, repair and replace meters	Yes
At Least As effective As	No
Exemption	No

Comments:

Meters are scheduled to be read every month, so 12 readings/year. The table above wouldn't accept an entry in that field.

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Conservation Pricing

On Track

56 City of Escondido

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Increasing Block	Yes	15034721	8010858
Multi-Family	Increasing Block	Yes	5517856	1439027
Commercial	Uniform	Yes	2829258	1144671
Industrial	Uniform	Yes	337252	14323
Institutional	Uniform	Yes	828067	228251
Agricultural	Uniform	Yes	4182873	276932
Dedicated Irrigation	Uniform	Yes	3491987	548430
			32222014	**11662492**

Calculate: V / (V + M) **73 %**

Implementation Option: Use Annual Revenue As Reported

☐ Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: Yes

Customer Class	Rate Type	Conserving Rate?
Single-Family	Uniform	Yes
Multi-Family	Uniform	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Institutional	Uniform	Yes
Agricultural	Uniform	Yes
Dedicated Irrigation	Uniform	Yes

At Least As effective As No

Exemption No

Comments:

Section A is on-track as the overall total volume v. service charge is over 70%. Sewer charges in Section D are based on a percentage of customer's winter water use.

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

ON TRACK

56 **City of Escondido** **Retail**

Does your agency perform Public Outreach programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

San Diego County Water Authority

The name of agency, contact name and email address if not CUWCC Group 1 members

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

Public Outreach Program List	Number
General water conservation information	
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	6
General water conservation information	26
Website	125
Newsletter articles on conservation	5
Total	**162**

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

Number Media Contacts	Number
News releases	3
Television contacts	5
Articles or stories resulting from outreach	2
Total	**10**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Outreach	3500
Total Amount:	**3500**

Public Outreah Additional Programs
Speakers Bureau
City Website
Facebook ("Escondido Water")

Description of all other Public Outreach programs

CUWCC BMP Coverage Report 2013

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs

ON TRACK

56 City of Escondido **Retail**

Does your agency implement School Education programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

San Diego County Water Authority

Agencies Name	ID number
San Diego County Water Authority	196

Materials meet state education framework requirements? Yes

K-1st grade - Wabby; 2nd grade - Water Cycle; 3rd grade - Water Resources; 4th grade - Water Quality & Water is Life; 5th grade - Got Water?

Materials distributed to K-6? Yes

Grade - appropriate worksheets: games, puzzles, coloring; physical models; interactive science station

Materials distributed to 7-12 students? Yes (Info Only)

Water quality testing science kit for the teachers to use in their classroom.

Annual budget for school education program: 2500.00

Description of all other water supplier education programs

"Splash Van" mobile field trips

Comments:

Youth are included in almost all public events by offering activities, games, handouts, etc.

At Least As effective As No

Exemption No 0

CUWCC BMP Coverage Report 2012

56 City of Escondido

GPCD in 2006: 211.19

GPCD in 2012: 151.49

GPCD Target for 2018: 177.39

ON TRACK

Biennial GPCD Compliance Table

		Target		Highest Acceptable Bound	
Year	Report	% Base	GPCD	% Base	GPCD
2010	1	96.4%	**208.54**	100%	**216.33**
2012	2	92.8%	**200.76**	96.4%	**208.54**
2014	3	89.2%	**192.97**	92.8%	**200.76**
2016	4	85.6%	**185.18**	89.2%	**192.97**
2018	5	82.0%	**177.39**	82.0%	**177.39**

CUWCC BMP Retail Coverage Report 2012

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

On Track

56 City of Escondido

1. Conservation Coordinator provided with necessary resources to implement BMPs?	Name:	Elisa Marrone
	Title:	Environmental Programs Specialist
	Email:	emarrone@escondido.org

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		See Chapter 31 Article 5 Water Conservation Plan	See Chapter 31 Article 5 Water Conservation Plan Additional water waste prevention regulations can be found in: Chapter 33 Article 62 Water Efficient Landscape Chapter 6 Article 7 Plumbing Code Amendments
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

No

CUWCC BMP Retail Coverage Report 2012

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices **On Track**

At Least As effective As

Exemption

Comments:

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control **On Track**

56 City of Escondido

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
AWWA Worksheet FY12 BMP 1.2.xls	
AWWA Water Audit Validity Score?	76
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	No
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
834	1414400	8094			3372540	

At Least As Effective As No

Exemption 0

Comments:

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

On Track

56 City of Escondido

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No
Feasibility Study provided to CUWCC?	Yes

Date: 6/1/2012

Uploaded file name: Copy_of_Feasibility_memo.docx

Completed a written plan, policy or program to test, repair and replace meters	Yes
At Least As Effective As	No
Exemption	No

Comments:

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Consrvation Pricing On Track

56 City of Escondido

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Increasing Block	Yes	12438029	7237350
Multi-Family	Increasing Block	Yes	5199843	1760455
Commercial	Uniform	Yes	2154439	944913
Industrial	Uniform	Yes	317499	12810
Institutional	Uniform	Yes	685917	216177
Agricultural	Uniform	Yes	3420702	254071
Dedicated Irrigation	Uniform	Yes	2932269	496709
			27148698	**10922485**

Calculate: V / (V + M) **71 %**

Implementation Option: Use Annual Revenue As Reported

☐ Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: Yes

Customer Class	Rate Type	Conserving Rate?
Single-Family	Uniform	Yes
Multi-Family	Uniform	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Institutional	Uniform	Yes
Agricultural	Uniform	Yes
Dedicated Irrigation	Uniform	Yes

At Least As Effective As No

Exemption No

Comments:

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

On Track

56 **City of Escondido** **Retail Only**

Does your agency perform Public Outreach programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

San Diego County Water Authority

The name of agency, contact name and email address if not CUWCC Group 1 members

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

Public Outreach Program List	Number
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	6
General water conservation information	26
Website	125
Newsletter articles on conservation	5
Total	**162**

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

Number Media Contacts	Number
News releases	3
Television contacts	5
Articles or stories resulting from outreach	2
Total	**10**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Outreach	3500
Total Amount:	**3500**

Public Outreah Additional Programs
Speakers Bureau
Phone Hotline
Facebook ("Escondido Water")

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach **On Track**

Description of all other Public Outreach programs

Comments:

At Least As Effective As Exemption: No

CUWCC BMP Coverage Report 2012

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs On Track

56 City of Escondido **Retail Only**

Does your agency implement School Education programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

San Diego County Water Authority

Materials meet state education framework requirements? Yes

K-1st grade - Wabby; 2nd grade - Water Cycle; 3rd grade - Water Resources; 4th grade - Water Quality & Water is Life; 5th grade - Got Water?

Materials distributed to K-6? Yes

Grade-appropriate worksheets: games, puzzles, coloring; physical models; interactive science station

Materials distributed to 7-12 students? Yes (Info Only)

Water quality testing science kit for teachers to use in their classrooms

Annual budget for school education program: 2500.00

Description of all other water supplier education programs

K-1st grade - Wabby; 2nd grade - Water Cycle; 3rd grade - Water Resources; 4th grade - Water Quality & Water is Life; 5th grade - Got Water? Grade-appropriate worksheets: games, puzzles, coloring; physical models; interactive science station "Splash Van" mobile field trips - 4 trips to elementary schools, upper grades City Hall lobby displays with handouts of information and games "Water is Life" 4th grade poster contest presented to students; calendars created with winning art Presentations to summer camps and afterschool clubs

Comments:

Youth are included in almost all public events by offering activities, games, handouts, etc.

At Least As Effective As No

Exemption No

CUWCC BMP Retail Coverage Report 2011

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices

On Track

56 City of Escondido

1. Conservation Coordinator provided with necessary resources to implement BMPs?		
	Name:	Elisa Marrone
	Title:	Environmental Programs Specialist
	Email:	emarrone@escondido.org

2. Water Waste Prevention Documents

WW Document Name	WWP File Name	WW Prevention URL	WW Prevention Ordinance Terms Description
Option A Describe the ordinances or terms of service adopted by your agency to meet the water waste prevention requirements of this BMP.		http://qcode.us/codes/escondido/	See Chapter 31 Article 5 Water Conservation Plan Additional water waste prevention regulations can be found in: Chapter 33 Article 62 Water Efficient Landscape Chapter 6 Article 7 Plumbing Code Amendments
Option B Describe any water waste prevention ordinances or requirements adopted by your local jurisdiction or regulatory agencies within your service area.			
Option C Describe any documentation of support for legislation or regulations that prohibit water waste.			
Option D Describe your agency efforts to cooperate with other entities in the adoption or enforcement of local requirements consistent with this BMP.			
Option E Describe your agency support positions with respect to adoption of legislation or regulations that are consistent with this BMP.			
Option F Describe your agency efforts to support local ordinances that establish permits requirements for water efficient design in new development.			

No

CUWCC BMP Retail Coverage Report 2011

Foundational Best Managemant Practices for Urban Water Efficiency

BMP 1.1 Operation Practices **On Track**

At Least As effective As

Exemption

Comments:

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.2 Water Loss Control **On Track**

56 City of Escondido

Completed Standard Water Audit Using AWWA Software?	Yes
AWWA File provided to CUWCC?	Yes
Copy1_of_AWWA_Worksheet_FY11_BMP_1.2.xls	
AWWA Water Audit Validity Score?	76
Complete Training in AWWA Audit Method	Yes
Complete Training in Component Analysis Process?	Yes
Component Analysis?	No
Repaired all leaks and breaks to the extent cost effective?	Yes
Locate and Repar unreported leaks to the extent cost effective?	Yes
Maintain a record keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Yes

Provided 7 Types of Water Loss Control Info

Leaks Repairs	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Of Interventions	Water Saved (AF)
764	170136	6233	0		430581	

At Least As Effective As No

Exemption 0

Comments:

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.3 Metering With Commodity

On Track

56 City of Escondido

Numbered Unmetered Accounts	No
Metered Accounts billed by volume of use	Yes
Number of CII Accounts with Mixed Use Meters	
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?	No
Feasibility Study provided to CUWCC?	Yes

Date: 6/1/2012

Uploaded file name: Feasibility memo.docx

Completed a written plan, policy or program to test, repair and replace meters	Yes
At Least As Effective As	No
Exemption	No

Comments:

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 1.4 Retail Consrvation Pricing On Track

56 City of Escondido

Implementation (Water Rate Structure)

Customer Class	Water Rate Type	Conserving Rate?	(V) Total Revenue Comodity Charges	(M) Total Revenue Fixed Carges
Single-Family	Increasing Block	Yes	11214886	6592509
Multi-Family	Increasing Block	Yes	4583409	1156329
Commercial	Uniform	Yes	2237945	951060
Industrial	Uniform	Yes	285598	10904
Institutional	Uniform	Yes	596433	176107
Agricultural	Uniform	Yes	2912490	195777
Dedicated Irrigation	Uniform	Yes	2653758	482728
			24484519	**9565414**

Calculate: V / (V + M) **72 %**

Implementation Option: Use Annual Revenue As Reported

☐ Use 3 years average instead of most recent year

Canadian Water and Wastewater Association

Upload file:

Agency Provide Sewer Service: Yes

Customer Class	Rate Type	Conserving Rate?
Single-Family	Uniform	Yes
Multi-Family	Uniform	Yes
Commercial	Uniform	Yes
Industrial	Uniform	Yes
Institutional	Uniform	Yes
Agricultural	Uniform	Yes
Dedicated Irrigation	Uniform	Yes

At Least As Effective As No

Exemption No

Comments:

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

On Track

56 **City of Escondido** **Retail Only**

Does your agency perform Public Outreach programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

San Diego County Water Authority

The name of agency, contact name and email address if not CUWCC Group 1 members

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

Public Outreach Program List	Number
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets	5
General water conservation information	25
Website	130
Newsletter articles on conservation	5
Total	**165**

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

Number Media Contacts	Number
News releases	2
Television contacts	4
Articles or stories resulting from outreach	1
Total	**7**

Did at least one website update take place during each quater of the reporting year? Yes

Public Information Program Annual Budget

Annual Budget Category	Annual Budget Amount
Public Outreach	3500
Total Amount:	**3500**

Public Outreah Additional Programs
Speakers Bureau
Phone Hotline
Facebook ("Escondido Water")

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.1 Public Outreach

On Track

Description of all other Public Outreach programs

North County Water Administrators - coord. programs; networking

Comments:

At Least As Effective As Exemption: No

CUWCC BMP Coverage Report 2011

Foundational Best Management Practices For Urban Water Efficiency

BMP 2.2 School Education Programs On Track

56 City of Escondido **Retail Only**

Does your agency implement School Education programs? Yes

The list of wholesale agencies performing public outreach which can be counted to help the agency comply with the BMP

San Diego County Water Authority

Materials meet state education framework requirements? Yes

K-1st grade - Wabby; 2nd grade - Water Cycle; 3rd grade - Water Resources; 4th grade - Water Quality & Water is Life; 5th grade - Got Water?

Materials distributed to K-6? Yes

Grade-appropriate worksheets: games, puzzles, coloring; physical models; interactive science station

Materials distributed to 7-12 students? Yes (Info Only)

Water quality testing science kit for teachers to use in their classrooms

Annual budget for school education program: 2500.00

Description of all other water supplier education programs

K-1st grade - Wabby; 2nd grade - Water Cycle; 3rd grade - Water Resources; 4th grade - Water Quality & Water is Life; 5th grade - Got Water? Grade-appropriate worksheets: games, puzzles, coloring; physical models; interactive science station "Splash Van" mobile field trips - 4 trips to elementary schools, upper grades City Hall lobby displays with handouts of information and games "Water is Life" 4th grade poster contest presented to students; calendars created with winning art Presentations to summer camps and afterschool clubs

Comments:

Youth are included in almost all public events by offering activities, games, handouts, etc.

At Least As Effective As No

Exemption No

Appendix G - AWWA Water Audit

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AWWA WLCC Free Water Audit Software: Reporting Worksheet

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WAS v4.1

Back to Instructions

? Click to access definition

Water Audit Report for: City of Escondido
Reporting Year: FY14 7/2013 - 6/2014

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	7	8,244.367	Million gallons (US)/yr (MG/Yr)	
Master meter error adjustment (enter positive value):	7	90.688	under-registered	MG/Yr
Water imported:	n/a	0.000	MG/Yr	
Water exported:	8	164.881	MG/Yr	
WATER SUPPLIED:		8,170.174	MG/Yr	

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:
Billed metered:	9	7,896.937	MG/Yr		
Billed unmetered:	n/a	0.000	MG/Yr		
Unbilled metered:	n/a	0.000	MG/Yr		
Unbilled unmetered:		102.127	MG/Yr	1.25%	

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

Use buttons to select percentage of water supplied OR value

AUTHORIZED CONSUMPTION:		7,999.064	MG/Yr

WATER LOSSES (Water Supplied - Authorized Consumption)

171.110 MG/Yr

Apparent Losses

				Pcnt:	Value:
Unauthorized consumption:		20.425	MG/Yr	0.25%	

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	5	79.767	MG/Yr	1.00%	
Systematic data handling errors:	9	1.000	MG/Yr		
Apparent Losses:		101.192			

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

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 69.917 MG/Yr

WATER LOSSES: 171.110 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 273.237 MG/Yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	5	440.0	miles	
Number of active AND inactive service connections:	7	26,544		
Connection density:		60	conn./mile main	
Average length of customer service line:	8	0.0	ft	(pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	7	85.0	psi	

COST DATA

Total annual cost of operating water system:	10	$55,133,400	$/Year
Customer retail unit cost (applied to Apparent Losses):	9	$4.79	$/1000 gallons (US)
Variable production cost (applied to Real Losses):	8	$3,132.57	$/Million gallons

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	3.3%
Non-revenue water as percent by cost of operating system:	1.9%
Annual cost of Apparent Losses:	$484,712
Annual cost of Real Losses:	$219,021

Operational Efficiency Indicators

Apparent Losses per service connection per day:	10.44	gallons/connection/day
Real Losses per service connection per day*:	7.22	gallons/connection/day
Real Losses per length of main per day*:	N/A	
Real Losses per service connection per day per psi pressure:	0.08	gallons/connection/day/psi
Unavoidable Annual Real Losses (UARL):	197.38	million gallons/year
From Above, Real Losses = Current Annual Real Losses (CARL):	69.92	million gallons/year
Infrastructure Leakage Index (ILI) [CARL/UARL]:	0.35	

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

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 76 out of 100 *****

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

PRIORITY AREAS FOR ATTENTION:

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

1: Volume from own sources
2: Customer metering inaccuracies
3: Master meter error adjustment

For more information, click here to see the Grading Matrix worksheet

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