



STAFF REPORT

DATE: NOVEMBER 20, 2012
 TO: HONORABLE MAYOR AND CITY COUNCIL
 FROM: ROD FOSTER, CITY MANAGER
 PREPARED BY: AMER JAKHER, P.E., PUBLIC WORKS DIRECTOR
 SUBJECT: AMENDED 2010 REGIONAL URBAN WATER MANAGEMENT PLAN

RECOMMENDED ACTION

It is recommended that the City Council approve Resolution No. R-74-12 adopting the amended 2012 Regional Urban Water Management Plan (“RUWMP”).

GOAL STATEMENT

The proposed action will support the City’s goal to improve quality of life, comply with State law, and maximized eligibility for water infrastructure grant funding sources.

BACKGROUND

Per Division 6 Part 2.6 of the California Water Code §§10610 – 10656 (Urban Water Management Planning Act), “urban water suppliers” are required to prepare and adopt an Urban Water Management Plan (URWMP) every 5 years. The Act defines an urban water supplier to be a supplier:

1. Publicly or privately owned.
2. Providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually.
3. A supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers.

Based upon this definition, most of the water agencies in the valley, including the City of Colton, are classified as urban water suppliers and are subject to this Act. The Act also requires that UWMPs be updated every 5 years. The most recent update was for 2010. As noted below, this item is an update of the submitted 2010 UWMP. Failure to comply with the Act results in a Supplier becoming ineligible to receive grant funding from the State of California. However, the benefit of Urban Water Management Plans goes beyond the possibility of receiving grant funds. These plans are important tools used by water agencies to ensure reliable supplies for their customers into the future. An Urban Water Management Plan (UWMP) focuses entirely on water and, among other things, requires the water agency to perform a detailed shortage

contingency analysis. The City of Colton 2010 Regional Urban Water Management Plan (RUWMP) provides the area's first ever regional UWMP; it also ensures that development does not outpace water supplies.

In 2009, a number of retail water agencies asked the San Bernardino Valley Municipal Water District to consider being the contracting agency for the collaborative development of a Regional Urban Water Management Plan that would cover Valley District's service area. The following agencies participated in the development of the RUWMP: City of Colton, East Valley Water District, City of Loma Linda, City of Redlands, Riverside Highland Water Company (not in the RUWMP), San Bernardino Municipal Water Department, Yucaipa Valley Water District and West Valley Water District.

ISSUES/ANALYSIS

The Regional Urban Water Management Plan (RUWMP) is the first regional UWMP in the valley and represents the cooperation and collaboration of eight (8) different agencies. The RUWMP was adopted by the City of Colton and the other seven agencies (Partners) in July 2011 and was submitted to the State of California Department of Water Resources (DWR). DWR provided review comments on the RUWMP and Valley District and its Partners identified some proposed revisions to the document. The revisions can be generally categorized as: (1) response to DWR comments, (2) corrections, (3) clarifications and (4) non-substantive (grammar, etc.). The revisions improve the RUWMP but do not change the conclusions published in the original RUWMP.

Per the Water Code, when an UWMP is revised, it must be re-adopted by the preparing agencies and re-filed with the State of California (§10621 and §10640). The law also requires that the amended plan be submitted to DWR 30 days after it is adopted. This requires coordination of the adoption of the amended plan by all of the participating agencies. For planning purposes, each of the agencies have scheduled consideration of the amended document in November 2012.

FISCAL IMPACTS

None.

ENVIRONMENTAL IMPACTS

This project is Categorically Exempt under the California Environmental Quality Act (CEQA) - Section 15306 Information Collection (basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.)

ALTERNATIVES

1. Provide alternative direction to staff.

ATTACHMENTS

Exhibit A - Resolution No. R-74-12
Exhibit B - RUWMP Revisions

Attachment "A"

Resolution R-74-12

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RESOLUTION NO. R-74-12

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF COLTON,
CALIFORNIA AMENDING THE 2010 REGIONAL URBAN WATER
MANAGEMENT PLAN**

WHEREAS, the City of Colton is a municipal corporation duly organized and existing pursuant to the Constitution and laws of the State of California (“City”); and

WHEREAS, the City Council of the City of Colton is dedicated to improving City infrastructure and the aesthetics of the City; and

WHEREAS, pursuant to Section 10620 et seq. of the California Water Code, the City of Colton prepared and adopted the 2010 Regional Urban Water Management Plan on July 5, 2011; and

WHEREAS, the City Council of the City of Colton, pursuant to Section 10621 of the Water Code has reviewed the Plan and directed that it be amended; and

WHEREAS, the amended Plan, entitled “Amended Final 2010 Regional Urban Water Management Plan” has been made available for public inspection and notice of a public hearing thereon has been given pursuant to Section 10642 of the California Government Code; and

WHEREAS, at the time set, the duly notice public hearing was held and all persons interested were given an opportunity to be heard concerning any matter set forth in the Plan.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF COLTON DOES HEREBY RESOLVE as follows:

SECTION 1: The Amended Final 2010 Regional Urban Water Management Plan is hereby adopted pursuant to Section 10642 of the California Water Code.

Attachment "B"

RUWMP Revisions

Proposed Revisions of the RUWMP

Updated July 16, 2012

✓	Ch	Final RUWMP (June 2011)	Proposed Change
✓	2	No Man's Land Subbasin not included in document	Add 2.2.7 No Man's Land Subbasin
✓	2	Recycled Water is its own section and not included in the section "Planned Water Supply Projects and Programs"	Make Recycled Water section 2.6.2
✓	2, 3	Yield of SBBA given as 232,100 AFY (plaintiffs and non-plaintiffs). However, plaintiff demands are not included in the document. The net effect is that the SBBA supply is overestimated.	Cap safe yield of SBBA at 167,238 AFY (non-plaintiffs). <i>Revise tables 2-8, 2-9, and 2-10.</i> <i>Change to Table 3-1.</i>
✓	2,3	Characterized return flows from direct SWP deliveries as reduction to recharge obligation (Chapter 3), but did not include return flows as a supply	Add return flows from direct SWP deliveries to supply (Chapter 2). Revise Tables 2-8, 2-9, and 2-10.
✓	3	Section 3.1 covers the recharge obligation under the Western Judgment but is titled Demands for SBBA Water.	Rename section 3.1 to "Recharge Obligation"
✓	3	Table 3-1 does not show all of the calculations.	Reformat/enhance Table 3-1.
✓	3	Table 3-4 has a line for the "recharge obligation". The terminology used elsewhere in the document is "imported water storage".	See revised Table 3-2.
✓	3	There is no section describing the demands on the Seven Oaks supply	Add section 3.2 Demands for Seven Oaks Supply
✓	3	The demands for imported water in Table 3-3 are overestimated because they are taken from the retail agency chapters where supplies are allowed to exceed demands. Revising this table would require the retail agencies to cap each supply to the demand which goes against the approach used in an UWMP (supplies can exceed demands). Total direct delivery demand from all of the agencies (capped by demand) is shown on Table 3-2.	Remove Table 3-3 and revise text for section 3.3.1.
✓	3	One of the primary management strategies in the IRWMP is storing SWP water in wet years for use during droughts. This is reflected on Tables 2-8, 9 and 10 but not explained in the text.	Add section 3.3.3 Storage of Imported Water
✓	3	There is no table summarizing demands from groundwater basins other than the SBBA.	Add Table 3-4
✓	3	There is no table summarizing recycled water demands.	Add Table 3-5
✓	3	There is no table that summarizes demands by water agency.	Revise Table 3-7 and re-number to Table 3-6

✓	Ch	Final RUWMP (June 2011)	Proposed Change
✓	4	The tables in Chapter 4 sum the demand, by source, from the retail agency chapters and exceed the sum of the total demand from all of retail agencies. This is because supplies are allowed to exceed demands in the retail agency chapters. The net effect is that the total demand in these tables is overestimated. This did not get noticed due to the overestimation of supply from the SBBA (see above).	Revise Table 4-1, 4-2 and 4-3
✓	10	The summary supply vs. demand tables (Tables 10-37, 10-38, and 10-39) do not include demands from specific developments (K/J mistake).	Include demands from specific developments.
✓	New		Revise the cover to indicate that the document has been revised.
✓	12	YVWD has some changes to their chapter	Incorporate changes
	11	WVWD has no changes	none
	13	Colton has no changes	none
	9	Redlands has no changes	none
	8	Loma Linda has no changes	none
✓	7	EVWD has some changes to their chapter	Incorporate changes
✓	3	Uses Rialto and Fontana demand figures from the Upper Santa Ana Watershed Integrated Regional Water Management Plan (IRWMP)	Update plan to reflect demands from the Rialto and Fontana UWMPs. Demands will be distributed amongst possible sources using the proportions from the IRWMP. Revise tables 3-2, 3-4, and 3-6.
✓	2,3	Judgment replenishment obligation language unclear	Clarify Judgment replenishment obligation language
✓	7-13	Are water losses (leaks) included in demand figures?	Check to be sure leaks are included. Explain that leaks are included within "return flow".
✓	7, 9, 10, 11, 12, 13	DWR had comments on sections 7.7.2.8, 8.7.1.8, 10.7.3.8, 11.7.4.4, 12.6.1.1, and 13.7.2.8. DWR noted that appropriate name for the BMP being discussed is "Water Sense Specification for Residential Development"	Modify sections as follows, "Water Sense Specification for New Residential Development"
✓	10	DWR expressed confusion over how SBx7-7 population calculations were done for the City of San Bernardino.	Add text to section 10.4.1 to clarify how SBx7-7 population calculations were conducted.
✓	10	DWR asked for clarification of how the San	Revise text in section 10.7.3.1.

		Bernardino Municipal Water Department is complying with BMP requirements for a conservation coordinator.	
✓	12	DWR expressed confusion over how SBx7-7 population calculations were done for the Yucaipa Valley Water District.	Add text to section 12.4.1 to clarify how SBx7-7 population calculations were conducted.
✓	13	DWR expressed confusion over how SBx7-7 population calculations were done for the City of Colton.	Add text to section 13.4.1 to clarify how SBx7-7 population calculations were conducted.

Revision Process

K/J will provide a revised PDF version of the document and updated electronic files.

Update Options

The water code requires that *any* changes to the UWMP be readopted and re-filed with DWR. Meaning it would be necessary to hold public hearings and have each board adopt the revised plan (water code section 10640 and 10621(c)).

Every urban water supplier [is] required to prepare a plan...[and] shall likewise periodically review the plan...any amendments or changes required as a result of that review shall be adopted pursuant to this article. (§10640)

...amendments to, or changes in, the plan shall be adopted and filed... (§10621)

Each agency will need to have their Board or Council adopt the revised plan.

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8 October 2012

Mr. Peter Brostrom
Chief, Urban Water Use Unit
Water Use and Efficiency Branch
California Department of Water Resources
901 P Street
Sacramento, CA 95814

Subject: Additional Responses, Department of Water Resources Comments on the 2010 San Bernardino Valley Regional Urban Water Management Plan
K/J 1089014*00

Dear Mr. Brostrom:

We very much appreciate the Department of Water Resources (DWR) review of the 2010 San Bernardino Valley Regional Urban Water Management Plan (RUWMP). The participating agencies of the RUWMP have met and have provided clarifications and responses to DWR's comments. Below, DWR's comments are listed followed by clarifications/responses by agencies that participated in the RUWMP.

DWR Comment 1. Population calculations related to SBX7-7 baseline water use calculations should be redone for City of Colton, City of San Bernardino, and Yucaipa Valley Water District. Calculations should be similar to those performed for other agencies participating in the RUWMP and should be based on analysis of Census tracts.

Response to Comment 1.

SBx7-7 calculations for the City of Colton were performed in a manner similar to those performed for the other agencies participating in the RUWMP. To clarify this, the following changes will be made to section 13.4.1 (page 13-9):

~~In order to calculate Base Daily Per Capita Water Use for past years, it was necessary to develop population estimates for past years. Under DWR's Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use, Colton is a "Category 3" water supplier, meaning Colton's water service area does not substantially (95 percent or more) overlap with city boundaries, and the City does not have a GIS map of the distribution area. Using GIS data it~~

Mr. Peter Brostrom
 California Department of Water Resources
 8 October 2012
 Page 2

was estimated that Colton's water service area (including the small portion in the unincorporated county) is about 90 percent of the size of the City of Colton and generally overlaps the City of Colton. Population for the City of Colton was taken from the 1990, 2000, and 2010 Census, with intervening years extrapolated. It was then assumed that the water service area contained 90 percent of the City of Colton population.

In order to calculate Base Daily per Capita Water Use for past years, it was necessary to develop population estimates for past years. The City of Colton is a Category 3 water supplier (as defined in the *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*). Limited data exists on the water service area. The City does not have a GIS system, but does have a map of the year 2010 service area. As part of the 2010 UWMP, a consultant digitized the available map and then used the digitized boundary to evaluate population within the City of Colton water service area. Individual Census Blocks within the water service area were evaluated and the population estimated. In those instances where the water service area did not include the entire Census Block it was assumed that population in that Census Block related to the percentage of physical area occupied by the water service area for that Census Block. In instances where it was clear that the water service area included the entire urbanized portion of the Census Block, then all the population of that Census Block was assumed to be within the water service area. This analysis determined that the City of Colton water service area contained 90 percent of the population of the City of Colton in 2010. However, the specific area served by the City of Colton Water Department is not known for years prior to 2010. The assumption was made that, similar to the present, in past years the water service area comprised approximately 90 percent of the City population. This assumption was necessary to estimate water service area population for the period 1995 to 2010. City of Colton population for years 1990, 2000, and 2010 was directly taken from Census data and the water service area was assumed to contain 90 percent of this population. Population for non-census years was estimated assuming consistent exponential growth 1990-2000 and 2000-2010.

The method described above was the preferred method for estimating population in the City of Colton water service area during the SBx7-7 Baseline Period. However, the Alternative Methodology for Service Area Population, as described in Appendix A of the *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use* (DWR February 2011) was also considered. Steps to complete the Alternative Methodology for Service Area Population include:

1. Finalize Census Blocks in the 2000 Distribution Area
2. Scale Population Information for Census Blocks to Distribution Area
3. Obtain Population by Structure Type
4. Obtain Active Connections Data (by multi-family and single-family connections)

Mr. Peter Brostrom
California Department of Water Resources
8 October 2012
Page 3

5. Develop Population Estimates for Non-Census Years

As described earlier, the year 2000 service area boundary is not know and it would be necessary again to make a simplifying assumption about what percentage of the City was served by the water system. Further, the data to do Step 4 is not available; the City of Colton does not categorize its connections into single-family or multi-family. From the data available it is not possible to determine the number of active connections in a given year. Data needed to estimate the number of single-family or multi-family connections, in year 2000, in a given Census Block Group, was not available. For these reasons the Alternative Methodology for Service Area Population was not used for the City of Colton.

SBx7-7 calculations for the San Bernardino Municipal Water Department were performed in a manner similar to those performed for the other agencies participating in the RUWMP. To clarify this, the following changes will be made to section 10.4.1 (page 10-10):

~~In order to calculate Base Daily Per Capita Water Use for past years, it was necessary to develop population estimates for past years. First the City of San Bernardino population was established for years 2000 and 2010 using Census data, with in between years extrapolated. Based on GIS data, SBMWD's service area is assumed to have 90% of the population of the City.~~

In order to calculate Base Daily per Capita Water Use for past years, it was necessary to develop population estimates for past years. The San Bernardino Municipal Water Department is a Category 2 supplier (as defined in the *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*). The San Bernardino Municipal Water Department baseline population projections are based on GIS analysis of the service area and data from the US Census. As part of its 2005 Urban Water Management Plan, the San Bernardino Municipal Water Department evaluated individual Census Blocks within the water service area and determined population within the water service area. As part of the 2005 Urban Water Management Plan it was determined that in 2000, the Municipal Water Department served a population approximately 88 percent of the population contained in the City of San Bernardino. Shortly thereafter, the water department service area expanded. As part of the 2010 Urban Water Management Plan, a GIS map of the service area was used. Individual Census Blocks within the water service area were evaluated and the population estimated. In those instances where the water service area did not include the entire Census Block it was assumed that the population in that Census Block related to the percentage of physical area occupied by the water service area for that Census Block. In instances where it was clear that the water service area included the entire urbanized portion of the Census Block, then all the population of that Census Block was assumed to be within the water service area. This

Mr. Peter Brostrom
California Department of Water Resources
8 October 2012
Page 4

analysis determined that the water service area included 90 percent of the population of the City of San Bernardino. Because it was necessary to estimate population for years between 2000 and 2010, to be conservative it was assumed that the water service area included a population of 90 percent of the City in all years. The 90 percent assumption had to be used to account for the change in the service area between 2000 and 2010. City of San Bernardino population for years 1990, 2000, and 2010 was directly taken from Census data and the water service area was assumed to contain 90 percent of this population. Population for non-census years was estimated assuming consistent exponential growth 1990-2000 and 2000-2010.

The method described above was the preferred method for estimating population in the City of San Bernardino Municipal Water Department service area during the SBx7-7 Baseline Period. However, the Alternative Methodology for Service Area Population, as described in Appendix A of the *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use* (DWR February 2011) was also considered. Steps to complete the Alternative Methodology for Service Area Population include:

1. Finalize Census Blocks in the 2000 Distribution Area
2. Scale Population Information for Census Blocks to Distribution Area
3. Obtain Population by Structure Type
4. Obtain Active Connections Data (by multi-family and single-family connections)
5. Develop Population Estimates for Non-Census Years

As described earlier, the year 2000 service area boundary is not know and it would be necessary again to make a simplifying assumption about what percentage of the City was served by the water department. Further, the data to do Step 4 is not available; the City of San Bernardino did not categorize its connections into single-family or multi-family until after year 2000. Data needed to estimate the number of single-family or multi-family connections, in year 2000, in a given Census Block Group, was not available. For these reasons the Alternative Methodology for Service Area Population was not used for the City of San Bernardino.

SBx7-7 calculations for Yucaipa Valley Water District were performed in a manner similar to those performed for the other agencies participating in the RUWMP. To clarify this, the following changes will be made to section 12.4.1 (page 10-10):

In order to calculate Base Daily per Capita Water Use for past years, it was necessary to develop population estimates for past years. Yucaipa Valley Water District (YVWD) is a Category 2 supplier, as defined in the *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*. YVWD's boundary covers portions of the Cities of Yucaipa and Calimesa. In addition, two

Mr. Peter Brostrom
California Department of Water Resources
8 October 2012
Page 5

mutual water companies are located within the YVWD service area, Western Heights Mutual Water Company and South Mesa Water Company. The Category 2 method was used in order to subtract the population numbers from these two retailers.

GIS maps of the actual service area boundary were used along with 2010 Census Bureau data. Aerial imagery represented the base layer with the 2010 Census data shapefile overlay. Block group population numbers were counted within YVWD's boundaries. In areas where only a portion of block groups were within YVWD's service area, a percentage was estimated. In those block groups where the YVWD boundary did not include the entire Census Block it was assumed that the population in that Census Block related to the percentage of physical area occupied by the water service area for that Census Block. In instances where it was clear that the water service area included the entire urbanized portion of the Census Block, then all the population of that Census Block was assumed to be within the water service area.

DWR Comment 2. Please add the Water Shortage Contingency Plan described in the 2007 IRWMP to Appendix G.

Response to Comment 2. The Water Shortage Contingency Plan will be added to Appendix G of the RUWMP.

DWR Comment 3. Please clarify how the San Bernardino Municipal Water Department is complying with DMM "Conservation Coordinator".

Response to Comment 3. The San Bernardino Municipal Water Department has revised the job description of its Community Liaison staff member to include the duties of the water conservation coordinator (the job description is attached to this memorandum).

Text in section 10.7.3.1 has been revised as follows:

To be in compliance with this DMM, SBMWD must employ (either as staff or consultant) a water conservation coordinator. SBMWD ~~currently~~ utilizes the community liaison as the conservation coordinator. ~~SBMWD is evaluating the staff resources necessary to establish a dedicated coordinator position.~~ There are no available estimates on the conservation savings resulting from the DMM or the effects of this DMM on SBMWD's ability to further reduce demand.

Mr. Peter Brostrom
California Department of Water Resources
8 October 2012
Page 6

DWR Comment 4. Please revise the document to make it clear that the DMM "WaterSense Specification for Residential Development" applies to all residential development, not just new residential development.

Response to Comment 4. The following revisions have been made to the document:

Page 7-20. "7.7.2.8 Water Sense Specification for ~~New~~ Residential Development"

Page 8-18. "8.7.1.8 Water Sense Specification for ~~New~~ Residential Development"

Page 10-19. "10.7.3.8 Water Sense Specification for ~~New~~ Residential Development"

Page 11-22. "11.7.4.4 Water Sense Specification for ~~New~~ Residential Development"

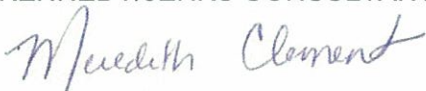
Page 12-15. "12.6.1.1 WSS Specification for ~~New~~ Residential Development"

Page 13-19. "13.7.2.8 Water Sense Specification for ~~New~~ Residential Development (Residential Plumbing Retrofit)"

Again, the RUWMP agencies greatly appreciate your review of the plan. Please feel free to contact me with any questions, I can be reached at (805) 973-5700 or MeredithClement@kennedyjenks.com.

Very truly yours,

KENNEDY/JENKS CONSULTANTS



Meredith Clement
Water Resources Project Manager

cc: Participating Agencies RUWMP
Mary Lou Cotton, Kennedy/Jenks
File