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ORA Witness : Eric Duran



ORA
OFFICE OF RATEPAYER ADVOCATES



OFFICE OF RATEPAYER ADVOCATES
CALIFORNIA PUBLIC UTILITIES COMMISSION

REPORT
ON SALES AND RATE DESIGN

California Water Service Company
Test Year 2017 General Rate Case
A.15-07-015

San Francisco, California
March 2016

MEMORANDUM

This Report on Sales and Rate Design for California Water Service Company GRC A.15-07-015 is prepared by Eric Duran of the *Office of Ratepayer Advocates (ORA) - Water Branch*, and under the general supervision of Program Manager Danilo Sanchez, and Program & Project Supervisors Lisa Bilir and Ting-Pong Yuen. Mr. Duran's Statement of Qualifications is in Chapter 7 of ORA's Company-Wide Report on Results of Operations. Kerriann Sheppard and Christa Salo serve as ORA legal counsels.

Report on Sales and Rate Design

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1 **CHAPTER 1: CUSTOMERS, SALES, REVENUES AND RATE DESIGN**

2 **A. INTRODUCTION**

3 This chapter presents ORA’s analysis and recommendations regarding the forecasted number
4 of customers, water sales, operating revenues, and rate design for all of CWS’s districts.
5 CWS’s proposed customer and sales forecasts are derived from a multitude of methods
6 depending on the characteristics of the district. This chapter will outline the specific areas in
7 which CWS deviates from the Rate Case Plan¹ (“RCP”) methodology to create customer and
8 sales forecasts and ORA’s recommendations when applicable. ORA reviewed CWS’s
9 application, exhibits, data responses, reports, and workpapers before formulating its own
10 estimates.

11 **B. SUMMARY OF RECOMMENDATIONS**

12 1. CWS should incorporate the 5-year average growth factors whether they result in
13 positive or negative growth

14 For many customer forecasts CWS assumes zero growth where the five-year average trend is
15 negative. ORA recommends customer growth estimates based on the five-year average
16 change in number of customers regardless of whether it is positive or negative. ORA allows
17 for modifications to this policy where the circumstances may be explained.

18 2. The Commission should adopt ORA’s forecasts for total sales

19 CWS hired an outside consultant to conduct a regression of sales on variables such as
20 weather, income, and prices. ORA accepts this methodology for the residential, multifamily,
21 and business customer classes. For the industrial, irrigation, public authority, and other

¹ D.07-05-062

1 customer classes, ORA recommends a 4-year average of sales per connection as opposed to
2 CWS's methodology of forecasting total sales.

3 3. CWS should implement a recycled water forecast for customers and sales in East Los
4 Angeles

5 In the East Los Angeles District CWS is requesting the implementation of a recycled water
6 tariff. ORA does not object to the implementation of this tariff but makes the
7 recommendation that the recycled water rate be based solely on the non-residential rate and
8 not the weighted average rate between residential and non-residential customers. Should this
9 request be granted, ORA recommends CWS reflect this tariff rate, customers, and sales in
10 their workpapers to be carried into the future. This allows for transparency in future reviews
11 of the recycled water customer class.

12 4. CWS should equalize the service charges for residential and non-residential
13 company-wide

14 Currently CWS provides separate service charges for the residential and non-residential
15 customer classes. The residential class generally pays a higher service charge than an equal
16 meter size service charge in the non-residential class. ORA recommends equalizing the
17 service charges for residential and non-residential customers company-wide.

18 5. In the Stockton and Visalia districts, CWS should merge non-residential quantity
19 rates into a single quantity rate respectively

20 In the Stockton and Visalia districts CWS currently provides differentiated quantity rates for
21 the non-residential customer classes. In Stockton the difference is derived in the amount of
22 water consumed while in Visalia it is the size of a customer's meter. ORA recommends
23 merging these rates in a single quantity rate in each district respectively.

24 6. CWS should shift revenues within its Antelope Valley district to correspond with
25 sales

26 The Antelope Valley District is comprised of three service areas each with their own rate
27 schedule. The total revenue requirement is allocated to each service area to create their

1 respective rates. ORA’s recommendation is to base this allocation on sales. CWS currently
2 does not use any established methodology to allocate revenues which has led to large
3 deviations between the ratio of sales in each service area and the revenues collected. ORA
4 recommends phasing in the shifting of current revenue allocation to avoid rate-shock.

5 7. CWS’s request to implement permanent conservation rate design should be granted

6 CWS requests their conservation rate design be implemented as a permanent fixture of their
7 rate design. CWS’s conservation rate design was established as a pilot program in D.08-02-
8 036. ORA does not oppose this request, however as part of the review process during the
9 GRC and to accommodate for varying factors, such as customer trends, or general
10 improvements to rate design, ORA recommends the rate design be open to modifications in
11 this current GRC and in future rate cases.

12 **C. DISCUSSION**

13 **1. Average Active Service Connections**

14 *a. Metered Connections*

15 Determining an accurate estimate of the average number of customers in the Test Year is an
16 important step before estimating the total amount of water supplied. The impacts of this step
17 can be far-reaching and significant. In some smaller districts, determining an accurate
18 customer forecast can be straightforward. An example of this is the Coast Springs service
19 area where CWS is currently under a moratorium by the California Department of Public
20 Health on new service hookups.² Conversely a district such as Bakersfield is experiencing
21 rapid customer growth due to the combined effects of new housing developments and the
22 Flat-to-Meter (“FTM”) conversion process in the residential class. In order to create

² <http://www.ptreyeslight.com/article/dillon-beach-water>, accessed 11/15/15.

1 representative average service connection forecasts, it is necessary to accommodate the
2 characteristics of each area to the methodology applied, while remaining consistent to the
3 methods outlined in the RCP.

4 The RCP outlines forecasting the number of average active service connections by “using a
5 five-year average of the change in the number of customers by customer class” and “[s]hould
6 an unusual event occur, or be expected to occur, such as the implementation or removal of
7 the limitation on the number of customers, then an adjustment to the five-year average will
8 be made.”³ In this application CWS incorporates 16 different methodologies to forecast
9 average service connections.⁴ ORA makes adjustments to CWS’s forecasts where appropriate
10 and agrees with CWS’s estimates in most instances. Out of a total of 275 customer
11 classification estimates company-wide, ORA recommends adjustments to 47 of these
12 estimates. Appendix A compares the differences between ORA’s and CWS’s customer
13 forecasts per district and customer class. For a comprehensive comparison see ORA RO
14 Tables 2-2.

15 Of the 275 customer estimates company-wide, CWS’s general forecasting policy was that no
16 customer class shall experience negative growth, or a contraction in its current size. The one
17 exception is for flat rate customers which are in decline due to their conversion to metered
18 residential customers. Whenever the five-year average change in the number of customers by
19 customer class resulted in a negative growth estimate, CWS limits the negative growth to
20 zero. In other words, CWS does not estimate negative growth even if the RCP method
21 results in negative growth. ORA’s most common adjustment removes this limitation of
22 negative customer growth to zero. ORA does this for two reasons. Firstly, the methodology

³ Rate Case Plan, D.07-05-062, P.A-23, footnote 4.

⁴ Attachment to Data Response ED3-007, 16 different methodologies listed under the “Forecast Methodology” column.

1 outlined in the RCP does not preclude negative growth rates from accurately estimating the
2 number of service connections.⁵ Secondly, negative growth is an appropriate estimate for
3 average active service connections when the growth factor is not overly influenced by a
4 single year as the RCP outlines by stating that “[s]hould an unusual event occur,” such as a
5 large decline in the number of customers in a single year, “then an adjustment to the five-
6 year average will be made.”⁶ Where ORA recommends negative growth rates, it is because
7 the prior five years of data have consistently shown declining growth.

8 There are some exceptions to ORA’s use of the five-year average for districts experiencing
9 negative growth. For districts where the economic recession caused large reductions in the
10 average number of service connections, a three-year (2012-2014) average growth rate
11 corrects for this by excluding the years immediately following the recession. A three-year
12 average excluding 2010 and 2011, for these districts, reduces the significant impact of
13 declining service connections from the Test Year 2017 forecast.

14 ORA makes an additional exception for the Kern River Valley residential customer class.
15 CWS in response to Data Request ED3-009 Question 2.c. explains that the Kern River Valley
16 district is comprised largely of vacation homes. CWS states that this characteristic of
17 customers disconnecting service during the winter months, combined with using end of year
18 numbers to forecast growth, is what causes “the active service connections [to] appear low.”⁷
19 Calculating the five-year average growth results in a loss of 27 service connections per year.
20 In the same data request response CWS provided monthly service connection data for the
21 five-year period of 2010-2014. ORA used this data to adjust the five-year average by
22 removing the last three months of 2014. This avoids incorporating the recently seasonally

⁵ Rate Case Plan, D.07-05-062, P.A-23, footnote 4

⁶ Ibid.

⁷ CWS response to Data Request ED3-009 Question 2.c.

1 disconnected services from the forecast. This seasonal effect for 2010 – 2013 had been
2 corrected by reconnections of those same services in the spring/summer of the following
3 year. ORA obtains a growth rate of negative 11 service connections per year (less than 1% of
4 Kern River Valley district’s 2014 recorded residential customers), suggesting that the
5 residential class is still contracting however not as rapidly as the end of year data indicates.
6 Results of all ORA’s modifications can be seen in Appendix A – Customer Differences.

7 *b. Flat-to-Meter Conversions*

8 CWS has completed FTM conversions for all districts except Bakersfield, Marysville, and
9 Selma. CWS estimates residential customers in these districts by adding the FTM conversion
10 rate (number of customers per year) to the estimated natural growth rate. CWS estimates the
11 natural growth rate by taking the five-year average of residential customer growth prior to
12 FTM conversions. ORA estimates the natural growth absent of FTM conversions by netting
13 together the incremental change in the number of metered customers and flat customers. This
14 gives the total residential customer incremental change excluding the growth due to FTM
15 conversions. ORA then takes the five-year average of these differenced incremental changes
16 as its growth estimate. This method allows for the natural growth rate to be based on more
17 recent data.

18 An example of this arises in the Willows residential customer class. ORA forecasts 165
19 fewer connections than CWS due to the differences in methodology. CWS calculates a three-
20 year average prior to 2010 (2007-2009) as this corresponds to residential growth prior to
21 CWS’s FTM conversions in Willows.⁸ ORA determines Willows’ growth rate by netting the
22 residential growth against the residential flat rate customer classification loss. Table 1.1

⁸ CWS, Willows workpaper tab WP4A1, note on cell C24

1 shows this calculation. ORA obtains a five-year average growth of nine customers per year
2 for the residential class, which is the average of the net growth column.

3 **Table 1.1: Willows Residential Incremental Growth Forecast**

Year	Residential Increment	Flat Increment	Net Growth
2007	32	(24)	NA
2008	99	(128)	NA
2009	95	(91)	NA
2010	122	(109)	13
2011	188	(165)	23
2012	92	(100)	(8)
2013	129	(131)	(2)
2014	104	(83)	21

4
5 CWS's growth forecast is 75 connections per year. Though this may have been the case
6 during the years of 2007-2009, ORA's growth rate is reflective of the most current years'
7 growth rates. CWS has completed all FTM conversions in Willows which will allow for
8 more conventional growth rate estimation in the next GRC with the exception of two years,
9 2013 and 2014, which will need to be adjusted to account for the FTM conversions during
10 those years.

11 *c. East Los Angeles Customer Reclassification*

12 CWS states that a reclassification of business customers to multi-family residential in East
13 Los Angeles occurred in 2011.⁹ Failing to account for this singular event when creating
14 customer forecasts will skew the result to indicate that the reclassification is continuous.
15 However, CWS's workpapers show that the customer forecast in both the multi-family and

⁹ CWS Sales Report, p. 10.

1 business classes do incorporate this one-time event. Customer growth should not include the
2 addition of existing customers from a reclassification because reclassification on net does not
3 add or remove customers from the system. For customer classes affected by reclassification,
4 ORA takes a four-year average of the change in the number of customers, excluding 2011.

5 **2. Metered Sales and Supply**

6 Company-wide, there are a total of 243 possible sales forecasts. A comprehensive
7 comparison between ORA’s and CWS’s proposed sales forecast is in ORA RO Table 2-1.
8 Appendix B to this chapter is a summary table showing those sales forecasts where ORA
9 recommends modifications. These recommendations modify only 71 of CWS’s 243
10 individual customer classification forecasts.

11 *a. M.CUBED/CWS Methodology*

12 CWS’s sales forecasts were prepared by consultant M.CUBED. M.CUBED used
13 econometric regression analysis premised on the RCP methodology to obtain 2017 Test Year
14 sales forecasts. M.CUBED’s regression includes variables such as income, unemployment
15 rates, and marginal water prices to account for more district-specific traits than those
16 provided by weather data. The model specification outlined in CWS’s Sales Report is a fixed
17 effects pooled model referring to the nature of the explanatory variables being non-random.
18 For water sales forecasting these explanatory variables include: temperature, precipitation,
19 conservation standards, marginal prices, income, and employment rates. The assumption that
20 these variables are non-random is valid given that the variables chosen generally have a
21 statistically significant pattern (or correlation) to determining water consumption.

22 For all forecasts CWS’s Sales Report states that “[p]er the Common Forecasting
23 Methodology, data from 2014 was excluded due to water use restrictions in place that

1 year.”¹⁰ The “Common Forecasting Methodology” is in reference to the RCP which states
2 forecasts shall “[r]emove periods from the historical data in which sales restrictions (e.g.,
3 rationing) were imposed...”¹¹

4 ORA accepts the results of this analysis to estimate water consumption per connection for the
5 residential, multifamily, and business classes. The extensive coverage of data in these
6 customer classes, along with the relative homogeneity in average monthly consumption,
7 allow for sensible econometric modelling. Any adjustments ORA makes to sales forecasts for
8 these three customer classes stem from the consistent use of sales per connection in
9 workpapers rather than differences in methodology. CWS is inconsistent when applying
10 M.CUBED’s sales forecasts. In some cases CWS would use M.CUBED’s total sales
11 forecasts and in others it would use sales per connection forecasts. ORA corrected this
12 inconsistency and always utilized M.CUBED’s sales per connection forecast. In some
13 instances this change resulted in discrepancies between ORA’s and CWS’s proposed sales
14 forecasts. These discrepancies are identified in Appendix B as “regression” under the “ORA
15 Method” column.

16 Other customer classes (industrial, irrigation, public authority, other, recycled, and residential
17 flat) display larger fluctuations in inter-monthly consumption. This is likely due to
18 heterogeneous characteristics among individual customers. It is therefore difficult to obtain
19 consistent regression estimation results. M.CUBED’s forecasting methodology is based on a
20 3-year average (2011-2013) of total sales volumes within each of these customer classes. For
21 these customer classes, ORA agrees with the decision to take an average of recorded sales as
22 opposed to a regression analysis. However a four-year average (2010-2013) of recorded
23 average sales per connection is more appropriate as described below.

¹⁰ CWS Sales Report p. 14.

¹¹ Rate Case Plan, R.06-12-016 P.A-23.

1 M.CUBED is consistent in its methodology with the exception of three districts. The sales
2 report states that: “[i]n the case of Antelope Valley, Kern River Valley, and Redwood Valley,
3 reliable water use data is only available starting in June 2007.”¹² Due to the limited
4 availability of 2007 data for these three districts, M.CUBED opts for a “weather normalized
5 3-year average use per service for 2011-13.”¹³ ORA accepts the results of this method for all
6 customer classes in these three districts. As explained, any differences are due to consistency
7 in the workpapers use of 3-year average rather than differences in methodology and are
8 identified in Appendix B as “regression” in the “ORA Method” column.

9 *b. ORA Methodology*

10 ORA’s largest methodological difference in its recommendations is twofold. First, ORA
11 recommends the use of a four-year average (2010-2013), as opposed to a three-year average
12 (2011-2013), for estimating sales in all customer classes except residential, multifamily, and
13 business. Second, ORA recommends using average use per connection as the basis to
14 determine its four-year average. This is opposed to CWS’s method of using recorded total
15 sales volumes as the basis.

16 *i. Four-Year Average*

17 Similar to the residential, multifamily, and business classes, M.CUBED removed 2014 from
18 all other customer class’ dataset in order to account for the drought declaration and additional
19 conservation measures in place during that year. ORA also excludes 2014 from its analysis
20 and recommends a four-year average spanning 2010-2013. M.CUBED uses a three-year
21 average beginning in 2011 and did not state why it excluded 2010.

¹² CWS Sales Report p. 14.

¹³ CWS Sales Report p. 23.

1 *ii. Average Consumption per Connection Forecasts*

2 ORA recommends consumption forecasts, for customer classes other than residential,
3 multifamily, and business, be made on a per customer basis. CWS’s methodology is to
4 forecast on a total sales basis. Forecasting based on recorded consumption per connection
5 provides a more reasonable forecast than one based on total consumption in the presence of
6 customer growth. To illustrate, Table 1.2 shows historical consumption for the recycled
7 customer class in Dominguez. CWS proposes using a five-year average of the total
8 consumption which results in a 2017 sales per connection forecast of 96,371
9 Ccf/customer/year. CWS calculates this by taking the forecast of total sales in 2017, 2,409
10 KCcf, divided by the number of customers forecasted in 2017, 25, and multiplied by 1,000 to
11 convert into Ccf.¹⁴

12 **Table 1.2: Recorded Usage Data for the Dominguez Recycled Customer Class**

Recorded			
Year	KCcf	Services	Ccf/Sv/Yr
2010	1,967	11	178,800
2011	2,218	11	201,677
2012	2,536	14	181,137
2013	2,474	19	133,708
2014	2,852	20	142,580
5 YR AVERAGE	2,409		167,581
4 YR AVERAGE	2,299		173,831

¹⁴ Doing this calculation results in an estimate of 96,360 Ccf/customer/year, however using unrounded numbers results in 96,371 Ccf.

1 **Table 1.3: Estimated Usage for the Dominguez Recycled Customer Class**

Forecast							
CWS				ORA			
Year	KCcf	Services	Ccf/Sv/Yr	Year	KCcf	Services	Ccf/Sv/Yr
2015	2,409	21	114,727	2015	3,650	21	173,831
2016	2,409	23	104,751	2016	3,998	23	173,831
2017	2,409	25	96,371	2017	4,346	25	173,831
2018	2,409	27	89,232	2018	4,693	27	173,831

2
3 The result of 96,371 Ccf per service per year in 2017, as shown in Table 1.3 under “CWS”, is
4 inconsistent with recent recorded sales per connection (Table 1.2 column “Cc/Sv/Yr”).

5 CWS’s forecast represents a drop in average recycled water customer consumption of 32% in
6 2017 compared to 2014.

7 ORA’s Test Year estimate of 173,831 Ccf/customer/year results in a 21% increase from
8 2014, however it is well within the range of historical data.¹⁵ By basing the forecast on
9 average total consumption, the forecast ignores the additional water demands of new
10 customers. The RCP states that “[w]ater sales for customer classes other than residential,
11 multifamily, and business . . . will be forecast on total consumption by class using the best
12 available data.”¹⁶ In districts and customer classes with substantial customer growth, the best
13 available data in this case must include an examination of that customer growth, and the only
14 way to accomplish that is by looking at usage per customer. ORA uses this methodology for
15 all customer classes other than residential, multifamily, and business in all districts whether
16 they are experiencing customer growth, contraction, or stabilization. The flexibility of this
17 method compared to a forecast made on total sales volumes allows it to be independent of the

¹⁵ Maximum of 201,677 Ccf (2011) and minimum of 133,708 Ccf (2013)

¹⁶ Rate Case Plan, D.07-05-062, P.A-23, footnote 5.

1 customer growth forecast. A forecast based on total sales volumes is based on the assumption
2 of a specific number of customers and therefore does not adjust to customer changes.

3 *iii. Recycled Water Sales per Connection in East Los Angeles*

4 CWS's special request discussed in Chapter 3, requests the Commission allow CWS to
5 establish a new recycled water tariff in its East Los Angeles district. CWS did not include a
6 sales forecast for those new customers in its workpapers. ORA recommends CWS implement
7 a sales forecast of 6,108 Ccf/customer/year. CWS identified three customers who would be
8 able to receive recycled water. The average potable water use of these customers was 6,108
9 Ccf/year during 2010 – 2013 for a total 2017 recycled water sales forecast of 18,323
10 Ccf/year. Additionally, CWS should account for sales in this classification by subtracting the
11 total amount from the non-residential classifications the customers switched from. For a
12 complete discussion see Chapter 3.

13 **3. Operating Revenues**

14 Total operating revenue is the sum of the quantity revenues and meter charge revenues
15 calculated for every customer class. Generally, CWS obtains quantity revenue at present rates
16 as the product of present rates as of October 2015, forecasted sales per customer, and the
17 forecasted number of customers. For districts with a tiered rate design, CWS apportions a
18 percentage of total sales to each tier. This percentage is based on a three-year average ratio of
19 tiers to total sales.

20 CWS determines meter charge revenues at present rates as the product of the present meter
21 charges, varying by meter size, and the forecasted number of customers for each meter size.
22 ORA does not object to this methodology. For a comparison between ORA's and CWS's
23 proposed operating revenues see ORA RO Table 1-1.

24 **4. Rate Design**

25 CWS is not proposing any changes to its current rate design, however ORA makes
26 recommendations in the following areas. First, ORA recommends CWS modify the service
27 charges so that they remain equal across all customer classes within a district. Second, ORA
28 recommends that the non-residential quantity rates in Stockton and Visalia be merged into a

1 single quantity rate. Lastly, ORA recommends that CWS adjust the revenue-collection ratio
2 in Antelope Valley in order to equally distribute revenues based on sales. This
3 recommendation should be phased-in over multiple rate cases. These issues are addressed
4 below.

5 *a. CWS Should Equalize the Service Charges for Residential and Non-*
6 *Residential Company-Wide*

7 Currently in districts with tiered rates, CWS provides differentiated pricing in service charges
8 such that non-residential customers receive a lower rate than residential customers.
9 Heterogeneity among non-residential customers makes it more difficult to implement tiered
10 rates. For this reason, quantity rates in most non-residential classes are single volumetric
11 rates.

12 When aggregating customers by meter size, as is done with service charges, customer
13 classifications should not determine rates. Rather, the service charge rate should be based on
14 the unifying characteristic, meter size. This therefore implies that a residential and non-
15 residential customer each with a 5/8" meter should pay the same. Overall, an average bill
16 would likely differ between the customer classes as the quantity rates incurred are different.
17 In most cases, residential customer would be subject to tiered rates while non-residential
18 customers are subject to a single quantity rate. ORA uses the same allocation of revenues
19 between the quantity rates and service charges as CWS's proposed allocation.

20 Table 1.4 provides a comparison of service charges between residential and non-residential
21 customer classes for three sample districts. ORA's proposal of service charges at CWS's

1 proposed revenue requirements are provided for illustrative purposes. All service charges
 2 shown are for the 5/8 x 3/4 - inch meter size.¹⁷

3 **Table 1.4: Service Charge Comparison at CWS’s Proposed Revenue**
 4 **Requirements**

District	Customer Class	Current Rate	CWS	ORA @ CWS RR	Difference
Bakersfield	Residential	\$14.83	\$16.14	\$16.02	\$0.12
	Non-Residential	\$12.44	\$13.54	\$16.02	-\$2.48
Willows	Residential	\$37.03	\$43.04	\$43.86	-\$0.82
	Non-Residential	\$33.21	\$38.60	\$43.86	-\$5.26
Hermosa- Redondo	Residential	\$11.54	\$12.74	\$12.59	\$0.15
	Non-Residential	\$9.28	\$10.24	\$12.59	-\$2.35

5
 6 Table 1.5 incorporates these service charges to formulate an average bill comparison. All
 7 bills were calculated using the average residential usage within each district as the basis.
 8 Both residential and non-residential bills were calculated at the average residential usage
 9 amount. Although the non-residential class typically would consume a significantly higher
 10 amount of water, this allows for a simplified comparison of ORA’s proposal. The
 11 “Difference” column in Table 1.4 (service charge rates) exactly equals the “Difference”
 12 column in Table 1.5 (average bills) meaning the only change is due entirely to the service
 13 charge rate and has no impact on quantity rates.

¹⁷ ORA kept constant the proportion of revenues collected from quantity rates and service charges.

**Table 1.5: Average Bill Comparison from Service Charge Equalization at CWS's
Proposed Revenue Requirements**

District	Customer Class	Current Bill	CWS	ORA @ CWS RR	Difference
Bakersfield	Residential	\$56.64	\$61.59	\$61.47	\$0.12
	Non-Residential	\$55.60	\$57.86	\$60.34	-\$2.48
Willows	Residential	\$59.86	\$68.71	\$69.53	-\$0.82
	Non-Residential	\$58.93	\$67.51	\$72.78	-\$5.26
Hermosa- Redondo	Residential	\$54.11	\$59.71	\$59.57	\$0.15
	Non-Residential	\$57.92	\$63.92	\$66.27	-\$2.35

As shown in table 1.5 above, in Bakersfield ORA's proposal would reduce the service charge for the residential 5/8 x 3/4 - inch meter and subsequently the average bill would decrease. For a non-residential customer of equal meter size, the average bill would increase as a result of their service charge increasing to a level which is equal to the residential meter service charge. A similar effect occurs in Hermosa-Redondo. However this result cannot be generalized across all districts. In Willows for example, ORA's proposal would increase the service charges for both the residential and non-residential service charges for a 5/8 x 3/4 - inch meter at CWS's proposed revenue requirements compared to CWS's proposed service charges. This stems from ORA's methodology of attaining revenue neutrality in the service charges by meter size. For this method, the revenue ratio for each meter size is fixed, meaning that the amount of revenue generated through proposed rates is proportional to the revenue generated at present rates for each meter size. Table 1.6 shows each service charge for Willows.

Table 1.6: Willows Service Charge Comparison at CWS’s Proposed Revenue Requirements

Meter Size	CWS		ORA @ CWS RR	Difference	
	Residential	Non-Residential	All Classes	Residential	Non-Residential
5/8 x 3/4	\$43.04	\$38.60	\$43.86	\$0.82	\$5.26
Fire Sprinkler 1"	\$44.33	#N/A	\$45.49	\$1.16	#N/A
1	\$94.35	\$84.60	\$77.35	-\$17.00	-\$7.25
1 1/2	\$149.04	\$133.65	\$120.36	-\$28.68	-\$13.29
2	\$208.86	\$187.30	\$169.09	-\$39.77	-\$18.21
3	\$421.06	\$377.60	\$340.04	-\$81.02	-\$37.56
4	\$626.53	\$561.88	\$505.99	-\$120.54	-\$55.89

The service charges using this methodology at CWS’s revenue requirements are lower for all but two meter sizes in the residential class and one meter size in the non-residential class. This is a result of merging the service charges into one and maintaining revenue proportionality in proposed rates compared to present rates. Overall, service charge revenue remains equal to CWS’s proposal.

ORA presented this proposal to CWS on December 7, 2015 and shared an example workpaper detailing the results for the Bakersfield district. On January 5, 2016 CWS shared a modified version of this workpaper which uses the meter service charge ratios outlined in Commission Standard Practice U-07-W.¹⁸ This is opposed to ORA’s original proposal which uses the present revenue allocation for each meter size to determine the consolidated meter service charge. This change results in minimal differences from ORA’s initial method. ORA is not opposed to CWS’s method and agrees that it is appropriate to determine the service charges based on the approved meter charge ratios. ORA will work collaboratively with

¹⁸ Email from Kitty Wong of CWS to Eric Duran of ORA.

1 CWS to implement this methodology for all districts where the service charges differ
2 between residential and non-residential customers.

3 *b. Non-Residential Quantity Rates in Stockton and Visalia*

4 Decision (“D.”) 08-02-036 authorized CWS to implement various rate design modifications
5 company-wide. As a result of these modifications, the non-residential customer class retained
6 a single quantity rate with the exception of Stockton and Visalia. At the time, and currently,
7 Stockton non-residential rate design includes two tiers which vary based on the consumed
8 amount. In Visalia non-residential rate design also includes two tiers, however the price in
9 each tier does not vary based on the amount of water consumed, but rather the meter size, in
10 essence two single quantity rates.

11 Currently the tier 1 rate for non-residential customers in Stockton is higher than the tier 2
12 rate. This situation is also reflected in CWS’s proposed rates for 2017. Therefore, CWS is
13 providing a quantity discount for customers who consume above the tier 1 rate. This rate
14 structure is contradictory to the Commission’s policies in place to encourage conservation.

15 A similar situation is occurring in Visalia, where customers with a larger meter size are
16 receiving a discounted rate compared to customers with smaller meter sizes. While it is much
17 more difficult for a customer to change meter sizes than it is to consume more or less water,
18 this rate structure is still opposed to conservation practices. In effect, by discounting their
19 single quantity rate, CWS is encouraging larger customers to consume more water than
20 smaller customers.

21 ORA recommends that CWS merge non-residential quantity rates into a single quantity rate
22 in each district Stockton and Visalia, respectively. This would eliminate the adverse effects
23 of the current rate structures, which are contrary to conservation price signals. Tables 1.7 and
24 1.8 show the consolidated rate for Stockton and Visalia respectively under CWS’s proposed
25 revenue requirements.

1

Table 1.7: Stockton Consolidated Non-Residential Quantity Rate

Rate	Tier	Consumption	Present Rate	Proposed Rate
CWS Rates	Tier 1	<300 Ccf	\$2.26	\$2.68
	Tier 2	>300 Ccf	\$2.25	\$2.67
ORA Consolidated Rate	SQR	all consumption levels	\$2.25	\$2.68

2

3 In Stockton, the current non-consolidated rates are close enough in proximity that the
4 consolidated rate does not impact either tier group by much. However, the current
5 disaggregated rates can change in future rate cycles creating a larger gap between the two
6 rates. During the time when D.08-02-036 was issued, the gap between rates was larger. Due
7 to this, it made sense for CWS to keep rates disaggregated to prevent rate shock. However, at
8 this time, it makes sense to consolidate the rates to prevent future discontinuity and rate
9 shock.

10

Table 1.8: Visalia Consolidated Non-Residential Quantity Rate

Rate	Meter Size	Present Rate	Proposed Rate
CWS Rates	<8"	\$1.45	\$1.58
	>8"	\$1.33	\$1.44
ORA Consolidated Rate	all meter sizes	\$1.44	\$1.56

11

12 The consolidated rates in Visalia align more closely to the non-consolidated rate for meters
13 less than 8” in size. This is consistent with the fact that 90% of non-residential sales fall

1 under the less than 8” meter category.¹⁹ For the seven non-residential customers with meters
2 larger than 8” and for a consumption amount of 100 Ccf, the quantity portion of their bill
3 would increase by \$12 compared to CWS’s proposed rates.²⁰ ORA recommends CWS merge
4 the non-residential quantity rate in Visalia during this rate cycle to prevent potentially greater
5 rate shock in the future.

6 *c. Antelope Valley Revenue Collection Ratios*

7 In the Antelope Valley district, CWS maintains three separate rate schedules for the areas of
8 Lancaster, Leona Valley, and Fremont. The Fremont subarea also contains smaller water
9 systems not immediately in the same vicinity. For these three service areas, CWS applies a
10 ratio to allocate the amount of total Revenue Requirement to each service area’s respective
11 rate design. In this GRC, CWS is proposing approximately 51% of total Revenue
12 Requirement be collected from Lancaster, 33% from Leona Valley, and 16% from Fremont.
13 CWS states that these ratios were chosen in order to “equalize rate increase in all service
14 areas.”²¹ However, the stated intentions are not materialized when looking at the revenue
15 increase for each service area.

16 The total district-wide revenue requirement increase CWS is proposing is approximately
17 37%. This 37% increase in total revenue requirement is spread between the three service
18 areas as a 35% increase in rates in Lancaster, a 33% increase in Leona Valley, and a 54%
19 increase in Fremont. CWS asserts the allocations of revenue requirement were developed

¹⁹ CWS, Visalia Workpapers, tab “Table4RateDesign”

²⁰ Seven customers forecasted with a meter size of 8” or higher in 2017. The quantity portion of a bill for these customers consuming 200 Ccf under CWS’s proposed rates would be \$144. Under a consolidated rate the quantity portion would amount to \$156.

²¹ CWS, Antelope Valley workpapers, tab “Ratios”

1 during the last GRC settlement.²² CWS did not update these revenue ratios in its application
 2 which therefore caused the disparity in revenue increases amongst the three service areas.
 3 Table 1.9 below shows what an equalized rate increase at CWS’s proposed Antelope Valley
 4 revenue requirement would result in for quantity rates.

5 **Table 1.9: Comparison with Equal Rate Increase at CWS Proposed Revenue**
 6 **Requirement**

Area	Rate	Present	At CWS Proposed Revenue Requirement				
			CWS Proposed	Equal Increase	CWS Rate Increase	Equal Rate Increase	Difference
Lancaster	Tier 1	\$2.88	\$3.88	\$3.94	35%	37%	2%
	Tier 2	\$3.09	\$4.17	\$4.24	35%	37%	2%
	Tier 3	\$3.71	\$5.00	\$5.08	35%	37%	2%
	Non-Res	\$3.71	\$5.00	\$5.08	35%	37%	2%
Leona Valley	Tier 1	\$4.73	\$6.30	\$6.47	33%	37%	3%
	Tier 2	\$5.25	\$7.00	\$7.19	33%	37%	3%
	Tier 3	\$6.31	\$8.40	\$8.63	33%	37%	3%
	Non-Res	\$5.57	\$7.42	\$7.63	33%	37%	3%
Fremont Valley	SQR	\$6.71	\$10.32	\$9.19	54%	37%	-11%

7
 8 As a result of equalizing the revenue change across the three service areas, each individual
 9 service areas’ rates increased by 37% compared to present rates at CWS’s proposed revenue
 10 requirements. The change in this equalization process is a 2% increase in rates from CWS’s
 11 proposed rate increase in Lancaster, a 3% increase in Leona Valley, and an 11% decrease in
 12 Fremont.

13 However, applying an equal revenue increase to each service area maintains the current
 14 revenue collection of approximately 52% in Lancaster, 34% in Leona Valley, and 14% in

²² CWS response to ORA data request ED3-010

1 Fremont Valley. This is an issue of concern in itself considering that the 2014 recorded
2 proportion of sales differed greatly from the revenue collection ratios. The following table
3 compares the two.

4 **Table 1.10: Antelope Valley Revenue and Sales Proportions Recorded in 2014**

Area	Revenue	Sales
Lancaster	51.61%	48.14%
Leona Valley	34.41%	48.50%
Fremont Valley	13.97%	3.36%

5
6 In Leona Valley revenues have been considerably lower than what would be expected if the
7 unit cost of water was equal across all three areas. Conversely the revenues collected in
8 Fremont Valley have been substantially higher than the relative amount of sales. This is
9 concerning given the affordability issues already present within the Fremont Valley service
10 area. CWS's proposed revenue ratios from each area and sales proportions are shown in the
11 following table.

12 **Table 1.11: Antelope Valley Revenue and Sales Proportions at CWS Proposed Revenue**
13 **Requirement**

Area	Revenue	Sales
Lancaster	50.80%	64.67%
Leona Valley	33.50%	28.94%
Fremont Valley	15.70%	6.39%

14
15 It would be equitable for revenues to be allocated across the service areas of Antelope Valley
16 based on the amount of sales forecasted for each service area. Therefore approximately 65%
17 of revenues should be from Lancaster, 29% in Leona Valley, and 6% in Fremont Valley. This
18 would result in the following bill impacts.

Table 1.12: Average Bill Comparison (Revenue Shift) at CWS Proposed Revenue Requirement

Area	CWS Reported Average Use	Present	CWS	2017 Sales Based
Lancaster	28 Ccf	\$138.21	\$186.22	\$237.07
Leona Valley	22 Ccf	\$159.76	\$212.89	\$183.95
Fremont Valley	7 Ccf	\$97.47	\$149.91	\$60.98

Due to the dramatic shifts in revenue collection compared to the present or CWS’s proposed ratios, the bill impacts are an equally dramatic change. Lancaster would receive the largest bill increase compared to CWS’s proposed average bill while the Leona and Fremont Valley’s average bills would decrease. However due to the large changes from present average bills, ORA recommends shifting revenues over multiple years. The following table shows the bill impacts in the Test Year when the revenue shift is split over three rate cycles.

Table 1.13: Average Bill Comparison (Phase-In Revenue Shift) at CWS Proposed Revenue Requirement

Area	Phase In
Lancaster	\$191.87
Leona Valley	\$209.68
Fremont Valley	\$140.03

This approach provides a more gradual shift in appropriate revenue collections from each service area which translates into a less dramatic average bill changes for customers. It is important to be mindful of the potential for rate-shock in all three areas. CWS should use its annual escalation filing to implement this gradual shift of revenues in between rate cases.

1 Combined with the 2015 average reductions to consumption in Antelope Valley in excess of
2 40%, customers' average bills under CWS's proposed revenue requirements would be lower.
3 Table 1.14 presents a comparison of these average bills.²³

4 **Table 1.14: Average Bill Comparison (Phase-In Revenue Shift) at CWS Proposed**
5 **Revenue Requirement**

Area	Consumption	Reduced Consumption by 40%	Phase-In Average Bill with Reduced Consumption
Lancaster	28	17	\$144.62
Leona Valley	22	12	\$147.62
Fremont Valley	7	4	\$111.10

6
7 Under a consumption reduction and a phase-in of the revenue shift over three rate cycles
8 customers are able to maintain comparable average bills to their present average bills even in
9 the unlikely case where CWS receives its full requested revenue requirement increase.

10 *d. CWS's Request to Permanently Implement Conservation Rate Design*

11 CWS requests that its conservation rate design be implemented as a permanent program, as
12 opposed to its current implementation as a pilot program. ORA agrees, but notes that the
13 Commission retains the flexibility to update and change rate design mechanics and ORA
14 reserves the right to recommend rate design changes in future proceedings. Further, issues
15 regarding rate design are currently being addressed in Phase II of Rulemaking 11-11-008 and
16 changes to CWS's rate design may also be made outside of this GRC.

²³ The cumulative (June 2015 – November 2015) consumption reduction in Antelope Valley was 48.38% in November 2015 compared to June 2013 – November 2013 as reported to the State Water Resources Control Board.

1 **D. CONCLUSION**

2 ORA recommends the Commission adopt ORA’s forecasts for average number of customers
3 and sales per connection. ORA obtains total sales in each customer class by taking the
4 product of annual average number of customers and sales per connection per year. In the East
5 Los Angeles district, CWS should incorporate forecasted sales and customers for recycled
6 water service due to its new tariff. For Rate Design, ORA recommends that the service
7 charges across customer classifications be equalized within each district. For Stockton and
8 Visalia, ORA recommends CWS merge its two non-residential rates into a single quantity
9 rate to promote conservation. Finally, in Antelope Valley, ORA recommends that the
10 revenue allocation between the three service areas be shifted to align with sales.

1 **CHAPTER 2: SPECIAL REQUEST #3 Remove Cap on LIRA Benefits**

2 **A. INTRODUCTION**

3 California Water Service (“CWS”) proposes to remove the established caps of the Low-
4 Income Ratepayer Assistance (“LIRA”) Program. These caps limit the amount LIRA funds
5 credited to individual ratepayers at \$18 per bill for non-Rate Support Fund (“RSF”) districts
6 and \$30 per bill for RSF districts. Removing the cap would allow CWS to provide a greater
7 credit to ratepayers in districts where the established 50% discount on a residential meter
8 service exceeds the cap. CWS also states that if the Commission were to approve their
9 request to consolidate districts and eliminate the RSF program, LIRA benefits would be
10 restrictively low for some customers. This is based on the assumption that RSF is eliminated
11 along with the \$30, meaning all districts will be capped at the \$18 non-RSF discount.

12 **B. SUMMARY OF RECOMMENDATIONS**

13 ORA recommends an increase in the caps on LIRA benefits and proposes a new method to
14 calculate an appropriate cap. Adjusting the LIRA benefits cap would allow for an increase in
15 the benefits to coincide with CWS’s proposed rate increases. Further the cap provides a
16 safeguard against unintended, unjustified, or unexamined increases to the LIRA benefits.

17 **C. DISCUSSION**

18 The current LIRA credit is a 50% discount from the service charge of a 5/8” meter. The
19 credit is determined during a rate case and remains fixed at this amount. LIRA customers
20 with larger meter sizes therefore receive a less than 50% credit from their service charge. The
21 5/8” meter size directly addresses the needs of approximately 93% of all LIRA customers.²⁴
22 The credit is currently capped at \$30 for RSF districts and \$18 for non-RSF districts. Table

²⁴ This includes flat rate customers who are not billed by meter size.

1 2.1 below illustrates the current LIRA credit including a cap, and the modification to the
 2 credit at CWS's proposed rates.

3 **Table 2.1: CWS's Current LIRA Credit and Proposed LIRA Modifications at CWS's**
 4 **Proposed Rates²⁵**

Rate Area	Current LIRA credit	Proposed LIRA credit at CWS proposed rates
Antelope Valley – Fremont	\$ 25.24	\$ 38.87
Antelope Valley – Lancaster	\$ 18.00	\$ 36.83
Antelope Valley – Leona Valley	\$ 27.60	\$ 36.83
Bakersfield	\$ 7.41	\$ 8.06
Bayshore	\$ 7.34	\$ 8.26
Bear Gulch	\$ 9.81	\$ 10.96
Chico	\$ 8.12	\$ 9.10
Dixon	\$ 11.96	\$ 15.22
Dominguez	\$ 7.77	\$ 9.25
East Los Angeles	\$ 9.39	\$ 10.48
Hermosa Redondo	\$ 5.77	\$ 6.36
Kern River Valley	\$ 30.00	\$ 35.52
King City	\$ 10.45	\$ 13.89
Livermore	\$ 8.86	\$ 9.33
Los Altos	\$ 8.67	\$ 9.41
Marysville	\$ 10.34	\$ 12.81
Oroville	\$ 15.60	\$ 17.12
Palos Verdes	\$ 9.15	\$ 10.56
Redwood - Coast Springs	\$ 30.00	\$ 37.80
Redwood – Lucerne	\$ 25.79	\$ 36.96
Redwood – Unified	\$ 30.00	\$ 36.70
Salinas	\$ 7.70	\$ 10.04
Selma	\$ 9.47	\$ 12.74
Stockton	\$ 7.93	\$ 9.43
Visalia	\$ 5.07	\$ 5.81
Westlake	\$ 13.12	\$ 14.50
Willows	\$ 18.00	\$ 24.95

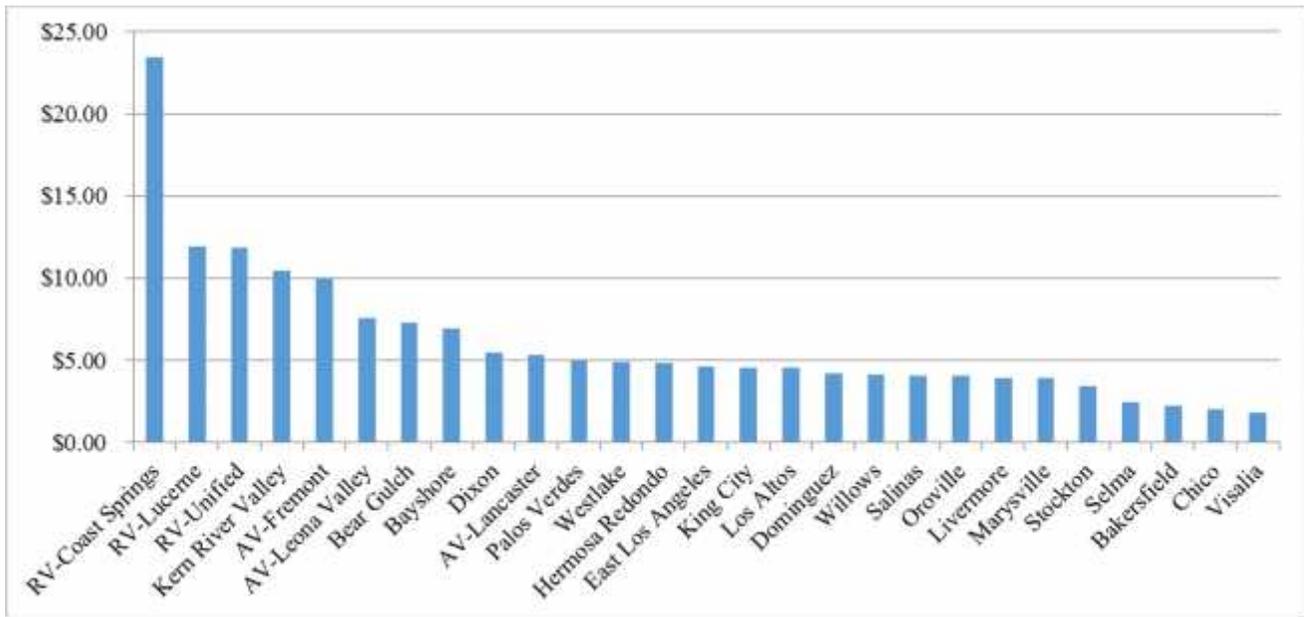
5

²⁵ Current RSF districts are in **Bold**. Proposed credits exceeding the current caps are *italicized*. In this rate case, CWS assumes that with its consolidation proposal and the associated elimination of the RSF program, all districts would be capped at the current \$18 non-RSF cap.

1 At CWS’s proposed rates eight rate areas would exceed the current cap, and all six RSF
2 districts would exceed the \$30 RSF cap.

3 The effective price per Ccf (total average bill divided by the residential average
4 consumption) can be useful as a comparison of rates across districts.²⁶ Figure 2.1 below
5 shows the effective prices from the highest district (far left) to the lowest.

6 **Figure 2.1: District Effective Price per Ccf for LIRA Customers**



7
8 Seven of the eight rate areas which would exceed the LIRA cap at CWS’s proposed rates fall
9 in the top ten rate areas with the highest effective price per Ccf. Increasing the LIRA caps to
10 reflect proposed rate increases would address the needs of low-income customers
11 experiencing the highest effective rates in the company.

²⁶ The average bill includes CWS’s proposed credit for RSF and LIRA.

1 **1. Calculation of LIRA Benefits Cap**

2 ORA agrees that the cap on LIRA benefits should be increased to address increasing
3 affordability pressures that in part arise from CWS’s proposed rate increases. However the
4 cap on benefits also serves as a tool to better predict program costs and revenues.

5 It is important to consider multiple metrics when calculating an appropriate cap on benefits.
6 The median household income (“MHI”) for each district is used to provide an index of
7 monthly water bill amounts within 2.5% of the MHI.²⁷ A bill consisting of 2.5% of MHI has
8 been cited by the EPA, CDPH, and AWWA as the minimum bill amount for household
9 drinking water considered affordable.²⁸ ORA calculated 2.5% of each districts monthly MHI
10 and compared this against CWS’s proposed average bills. CWS’s average bill consists of
11 projected average usage at the proposed quantity and service rates and excludes surcharges
12 and credits. The difference between these two bill amounts served as the basis to quantify
13 ORA’s proposed cap on LIRA benefits.

14 Table 2.2 shows CWS’s average bill at proposed rates for each rate area compared to a bill
15 consisting of 2.5% of the estimated LIRA monthly income. Rate areas with MHI’s above the
16 LIRA qualifying income of \$48,500 for a household of 4, were capped at this amount to
17 generate a monthly bill of \$101.04.²⁹ The difference column shows the amount of subsidy
18 which would bring the median low income bill to 2.5% of the estimated LIRA monthly
19 income.

²⁷ Median household incomes were obtained in CWS’s workpapers for Advice Letter 2146 with updates made to Leona Valley, Lancaster, Kern River Valley, Coast Springs, Unified, and Lucerne.

²⁸ <http://www.awwa.org/Portals/0/files/legreg/documents/affordability/AffordabilityAssessmentTool.pdf>, accessed November 24, 2015. Further, the Commission has made use of this figure to outline an affordability framework in R.11-11-008, D.14-10-047, p. 12.

²⁹ \$48,500 / 12 * 2.5%

1 **Table 2.2: Average Bill Difference from 2.5% of District’s Median Household Income**
 2 **(MHI)³⁰**

Rate Area	Proposed Average Bill	2.5% MHI Bill	Difference Between Bills
Antelope Valley – Fremont	\$ 109.38	\$ 56.07	\$ (53.31)
Antelope Valley – Lancaster	\$ 186.44	\$ 101.04	\$ (85.40)
Antelope Valley – Leona Valley	\$ 195.95	\$ 101.04	\$ (94.91)
Bakersfield	\$ 61.54	\$ 101.04	\$ 39.50
Bayshore	\$ 77.48	\$ 101.04	\$ 23.56
Bear Gulch	\$ 193.49	\$ 101.04	\$ (92.45)
Chico	\$ 52.20	\$ 86.73	\$ 34.54
Dixon	\$ 86.14	\$ 101.04	\$ 14.90
Dominguez	\$ 59.71	\$ 101.04	\$ 41.34
East Los Angeles	\$ 70.71	\$ 77.65	\$ 6.94
Hermosa Redondo	\$ 59.66	\$ 101.04	\$ 41.39
Kern River Valley	\$ 98.15	\$ 61.13	\$ (37.02)
King City	\$ 73.64	\$ 101.04	\$ 27.41
Livermore	\$ 72.05	\$ 101.04	\$ 28.99
Los Altos	\$ 104.99	\$ 101.04	\$ (3.94)
Marysville	\$ 47.87	\$ 78.83	\$ 30.96
Oroville	\$ 69.63	\$ 74.33	\$ 4.70
Palos Verdes	\$ 125.27	\$ 101.04	\$ (24.22)
Redwood - Coast Springs	\$ 84.64	\$ 101.04	\$ 16.40
Redwood – Lucerne	\$ 96.52	\$ 66.16	\$ (30.36)
Redwood – Unified	\$ 96.00	\$ 89.47	\$ (6.53)
Salinas	\$ 62.86	\$ 101.04	\$ 38.18
Selma	\$ 66.63	\$ 88.46	\$ 21.83
Stockton	\$ 50.78	\$ 98.68	\$ 47.90
Visalia	\$ 40.16	\$ 101.04	\$ 60.89
Westlake	\$ 156.10	\$ 101.04	\$ (55.06)
Willows	\$ 78.82	\$ 90.61	\$ 11.79

3

³⁰ Average bills calculated at CWS’s proposed rates and the districts’ average usage for residential customers. MHI values greater than the qualifying low-income were capped at the qualifying low-income of \$48,500.

1 Negative values in the far right column indicate a subsidy is necessary while positive values
2 show rate areas where the average bill is already lower than 2.5% of monthly MHI.

3 ORA determined a single LIRA cap for all districts by averaging only the negative subsidy
4 values to obtain a cap estimate of \$48. While the cap is substantially higher than the current
5 caps in place, the program will still operate by distributing LIRA subsidies up to 50% of the
6 service charge. The new cap is calculated so that on average customers will not be overly
7 compensated. Further, ORA's proposal of retaining a cap can mitigate excessive increases in
8 program costs without review. As ORA's proposed cap does not exceed 50% of any districts
9 service charge at CWS's proposed rates, the impact is the same as CWS's proposal of
10 removing the caps entirely. ORA recommends that the cap be updated in future GRC's with
11 this methodology and updated data.

12 **D. CONCLUSION**

13 ORA supports an increase in the caps on LIRA benefits. However, removal of the caps
14 would ignore the merits of imposing a cap. Using ORA's method, CWS can increase LIRA
15 benefits for all rate areas mirroring the results of removing the LIRA caps, while maintaining
16 a tool to effectively assess future cap increases. For this rate case cycle, ORA recommends
17 the LIRA benefits cap increase to \$48 for both RSF and non-RSF districts.

1 **C. DISCUSSION**

2 CWS cites Central Basin’s Southeast Water Reliability Project (“SWRP”) as the genesis of
3 this special request. The SWRP will include the extension of a recycled water pipeline which
4 will terminate just inside CWS’s East Los Angeles service area.³¹ CWS foresees no services
5 requiring additional extensions as a result of this tariff.³² Central Basin will be responsible
6 for the installation and maintenance of the service laterals while CWS is responsible for the
7 meter and meter box and cover.³³ As a result, CWS anticipates that the new service will not
8 result in “a significant impact on its operations or revenues.”³⁴

9 In response to Data Request ED3-003, CWS clarifies that there would be three customers
10 likely to receive recycled water service under the new tariff. ORA obtained historical potable
11 water consumption of these three customers and calculates a five-year average sales per
12 customer of 6,108 Ccf/year. For three customers this results in a total use of 18,323 Ccf/year
13 for the new recycled water customer class. At this consumption amount and at CWS’s
14 proposed rate of \$2.34/Ccf, the total quantity revenues would amount to \$42,876. Total
15 service revenues would amount to \$5,216/year.³⁵ Therefore total revenues amount to
16 \$48,092 or approximately 0.0014% of CWS’s proposed operating revenue for the East Los
17 Angeles district.³⁶ Under the current potable water rate of \$3.49 for non-residential
18 customers, CWS earns approximately \$63,947 of quantity revenues and an equal amount of

³¹ CWS Testimony (July 2015), p. 193.

³² CWS Testimony (July 2015), p. 194.

³³ CWS Testimony (July 2015), p. 194.

³⁴ CWS Testimony (July 2015), p. 193.

³⁵ Three 2” meter customers * \$144.88 (current monthly service charge) * 12 months.

³⁶ CWS’s 2017 proposed operating revenue is 33,893,000 from CWS’s East Los Angeles workpapers, tab “Table11SOE” cell J12.

1 service charge revenues. Therefore the difference of \$21,071 is a loss in quantity revenue
2 from CWS providing the cheaper recycled water service.

3 CWS does not account for this loss of revenue in workpapers. ORA recommends that in
4 order to ensure the sales from this new tariff are accounted for, CWS should incorporate the
5 forecasted recycled water sales per connection into its workpapers. Additionally, CWS
6 should also remove the total of 18,323 Ccf/year (the total forecasted recycled water use) from
7 non-residential potable water sales.

8 To determine the recycled water rate itself, CWS calculates the price difference in Central
9 Basin's potable water rate and CWS's weighted average rate. The weighted average rate
10 consists of residential tiered quantity rates and the non-residential quantity rate.³⁷ Using this
11 price difference, which amounts to \$1.06 per Ccf, CWS adds on Central Basin's recycled
12 water rate of \$1.28 per Ccf to obtain CWS's proposed recycled water rate of \$2.34.

13 Considering only non-residential customers will receive recycled water service through this
14 tariff, ORA recommends the use of the non-residential quantity rate as the basis for the
15 recycled water rate. Although this does not result in a drastic change from CWS's proposed
16 rate, \$2.34/Ccf and ORA's \$2.33/Ccf, this policy would ensure consistency and equitability
17 through future rate changes. ORA recommends CWS adopt this method so long as all
18 recycled water customers are non-residential. CWS should update the recycled water rate in
19 future rate cases to reflect current rates from Central Basin, sales forecasts, and customer
20 forecasts.

³⁷ Attachment to CWS response to ORA Data Request ED3-003, calculated as the quantity revenues earned from the two residential tiers and the non-residential quantity revenue divided by the total (residential + non-residential) sales.

1 **D. CONCLUSION**

2 ORA recommends that the Commission approve CWS’s request for a recycled water tariff in
3 the East Los Angeles district. APPENDIX [ELA Recycled Water]-C provides a draft
4 recycled water tariff.³⁸ Further ORA proposes a slight modification in the calculation of the
5 rate, as described above, in order to address consistency and equitability for customers
6 receiving the recycled water.

³⁸ Attachment to CWS response to ORA data request ED3-009, Q. 1.a.

1 **CHAPTER 4: SPECIAL REQUEST #8 Eliminating 10% Cap on WRAM**

2 **Amortization**

3 **A. INTRODUCTION**

4 CWS proposes to eliminate the 10% cap on Water Revenue Adjustment Mechanism
5 (“WRAM”)/Modified Cost Balancing Account (“MCBA”) balances. The Commission
6 established the cap in Decision (“D.”)12-04-048. This cap limits the net WRAM/MCBA
7 surcharges to 10% of the annual authorized revenue requirement.

8 **B. SUMMARY OF RECOMMENDATIONS**

9 ORA recommends the Commission disallow this special request and that CWS retain its
10 authorized amortization schedule of WRAM/MCBA balances and cap on total surcharges as
11 outlined in D.12-04-048 Appendix A. The Commission should uphold the decision of a 10%
12 cap on WRAM/MCBA surcharges as the cap provides ratepayer protection against
13 extraordinary rate shock.

14 **C. DISCUSSION**

15 Application (“A.”) 10-09-017 set out to examine large WRAM/MCBA balances. The scope
16 of this proceeding included an “examination of whether the high volatility experienced in
17 some districts comports with the Commission’s expectations in adopting the
18 mechanisms...”³⁹ CWS, along with four other class A water utilities, requested a
19 modification to the adopted WRAM/MCBA amortization schedule. The utilities requested
20 faster recovery of WRAM/MCBA balances in order to mitigate the need for financial
21 restatements, which they claimed could trigger a chain reaction of lowered credibility and

³⁹ A.10-09-017 “Assigned Commissioner and Administrative Law Judge’s Ruling and Scoping Memo,”
submitted June 8, 2011.

1 confidence in the company, lower credit ratings, and higher borrowing costs, resulting in
2 potentially less viable utilities.⁴⁰

3 D.12-04-048 modified the existing amortization schedule.⁴¹ While the Commission did
4 agree to shorten the amortization schedule for balances between 5% and 30%, in recognition
5 of the consequential potential for larger WRAM/MCBA surcharges, the Commission also
6 adopted a cap of 10% of total net WRAM/MCBA surcharges.⁴² The Commission states:

7 [W]e cannot support parties' proposals to pass-through on a ministerial basis, with no
8 customer notice or formal Commission resolution, surcharges increasing rates by
9 10% or more a year between GRC proceedings. Rather, we should place a ceiling on
10 annual and cumulative WRAM/MCBA surcharge increases at a level that will not
11 require additional PHCs as a safeguard to address potential future massive under-
12 collections.⁴³

13 The Commission saw the 10% cap as a ratepayer safeguard. ORA agrees that it is a safeguard
14 against excessive ministerial surcharge increases and should not be eliminated.

15 In response to question 1.a. of Data Request ED3-006, CWS agrees that in its opening brief
16 filed in A.10-09-017, CWS did state that it “would be very unlikely for a WRAM/MCBA
17 under-collection in a given year to exceed 30% of revenue requirement.” However CWS
18 indicates that the current situation is different than when that opening brief was submitted on
19 October 17, 2011. CWS states that this statement was made “prior to the severe drought
20 concerns that are impacting customer usage behavior” and that it is “unclear how customers

⁴⁰ A.10-09-017 “Regarding the Amortizations of WRAM-Related Accounts” filed September 20, 2010, pp. 8-9.

⁴¹ Ordering Paragraph 3, at 41.

⁴² Balances greater than 30% would be amortized over 36 months and be subject to the 10% cap on total net WRAM/MCBA surcharges.

⁴³ D.12-04-048, p. 22.

1 will behave as the weather grows cooler, and as the state continues to refine its directives
2 regarding the drought.”⁴⁴

3 However, ORA notes that drought considerations were made during the proceeding
4 establishing the cap along with the economic recession and sales forecasting errors.⁴⁵ The
5 current drought does not present new information making the cap any less effective as a
6 safeguard or causing any unanticipated harm to the utility. Further, any excessive
7 WRAM/MCBA balances which are due to drought effects will be mitigated by the revenues
8 collected from CWS’s drought surcharges. CWS’s approved Schedule 14.1 states:

9 Except in the case of Grand Oaks, all monies collected by Cal Water through drought
10 surcharges, as established by the Mandatory Water Budgets found in Schedule 14.1,
11 shall be recorded in the appropriate Water Revenue Adjustment Mechanism
12 (“WRAM”) account and used to offset under-collected revenues.⁴⁶

13 In CWS’s recent earnings call with investors, CWS states that it’s WRAM/MCBA account
14 has “benefited from \$23.6 million of drought surcharges.”⁴⁷ In response to ORA Data
15 Request ED3-013, CWS shows that its December 31, 2015 drought surcharge revenues have
16 exceeded 36.5 million dollars.⁴⁸ CWS’s request to eliminate the 10% cap on WRAM/MCBA
17 surcharges is rash without considering the impacts of the drought surcharge revenues.

18 Finally, CWS is in a unique situation compared to the other Class A utilities in that it has an
19 authorized drought SRM pilot program. This pilot program enables CWS to adjust sales

⁴⁴ CWS response to ORA Data Request ED3-006, Q. 1.a.

⁴⁵ D.12-04-048, p. 14.

⁴⁶ CWS Schedule 14.1, Section B.3

⁴⁷ “California Water Service's (CWT) CEO Martin Kropelnicki on Q3 2015 Results - Earnings Call Transcript,” p. 2.

⁴⁸ Attachment to ORA Data Request ED3-013.

1 forecasts during a rate cycle due to drought. ORA’s recommendation of continuing this pilot
2 program to collect additional data for analysis would also allow for an analysis of the drought
3 SRM’s impact on the 10% WRAM cap. ORA’s recommendation to continue the drought
4 SRM pilot program is discussed in Chapter 5.

5 **D. CONCLUSION**

6 ORA recommends that the Commission uphold its Findings of Fact and Conclusions of Law
7 as identified in D.12-04-048.⁴⁹ Contrary to CWS’s belief, the current drought should have no
8 bearing on the modification of this Conclusion of Law, given that the proceeding, A.10-09-
9 017, did present the possibility of large WRAM/MCBA balances due to drought. Further, the
10 offsetting effect of the drought surcharge revenues collected in excess of \$36.5 million can
11 address CWS’s concerns of large account balances due to the drought. The cap of 10% from
12 authorized annual revenue requirement on total WRAM/MCBA surcharges remains a
13 safeguard to ministerial authorizations of excessive amortizations.

⁴⁹ Conclusions of Law, “It is reasonable to limit the level of WRAM/MCBA surcharges passed through on customers’ bills by Tier 1 Advice Letters to 10% of the last authorized revenue requirement.” D.12-04-048.

CHAPTER 5: SPECIAL REQUEST #9 Continuation of SRM

A. INTRODUCTION

CWS's drought Sales Reconciliation Mechanism (SRM) pilot program is an adjustment to forecasted sales based on realized sales volumes. CWS proposed the SRM (non-drought) in its 2012 general rate case Application 12-07-007 filed July 5, 2012. However, the Commission authorized a drought SRM as a pilot program, in light of the ongoing drought, on August 14, 2014 in D.14-08-011.

B. SUMMARY OF RECOMMENDATIONS

ORA recommends the Commission continue CWS's drought SRM pilot program because CWS has not provided conclusive evidence supporting the elimination, permanent implementation, nor modification of the program. By CWS's next GRC application, which will be filed in July 2018, there will be three full years of data available on SRM rate adjustments (2014, 2015, and 2017). This should allow for a more detailed analysis in CWS's 2018 rate case to provide justification for continuing, eliminating, or modifying the mechanism. ORA further recommends that the Commission adopt a formal process for filing drought SRM adjustments separate from the escalation year adjustment process, as well as limiting the drought SRM to years of drought only while remaining frozen (inactive) during non-drought years. Additionally, ORA recommends approval of CWS's request to eliminate the drought SRM balancing account ("SRM BA").

C. DISCUSSION

1. Drought SRM Pilot Program Background and Proposed Modifications

CWS's pilot drought SRM program was approved under D.14-08-011 and implemented beginning with the use of recorded sales in January 2014 applied to sales forecast adjustments effective January 2015. The basic mechanics of drought SRM allows CWS to adjust sales in the second and third year of its 2014-2017 GRC cycle by half the deviation between adopted and actual sales from the prior year. Thus the drought SRM utilizes recorded sales data from the prior year and a new forecasting methodology to create a sales forecast. The underlying rationale behind the drought SRM is that sales forecasts would

1 likely be more accurate if they reflect the most recent observations. In this GRC CWS is
2 requesting two important modifications to the drought SRM pilot program.

3 First, CWS requests to eliminate the trigger which allows CWS to file drought SRM
4 adjustments. The trigger is currently set at a 5% deviation of actual sales from forecasted
5 sales. Eliminating this trigger would allow CWS to file drought SRM adjustments to sales in
6 any situation in which actual sales deviate from forecasted sales. Second, CWS proposes to
7 set the adjustment at the full amount of deviation, 100% rather than the current 50%
8 adjustment of the deviation. This change would make the sales forecast exactly equal to the
9 amount of sales in the reference year.

10 **2. CWS's Preliminary Analysis of the Drought SRM Pilot Program**

11 In its application, CWS's states that it has "only had one opportunity to make drought SRM
12 adjustments" and that a "preliminary analysis shows some promising results."⁵⁰ However, the
13 data and results of this preliminary analysis are not well documented in CWS's application.
14 In Advice Letters 2150 and 2151 filed November 2014, thirteen districts triggered the
15 drought SRM adjustment. However, CWS only presented the estimated WRAM savings for
16 two districts, Selma and Bayshore.

17 In Selma, CWS estimates that drought SRM has reduced WRAM balances by approximately
18 \$19,000 (6% of adopted revenue) compared to what would have been in the account had
19 drought SRM not been implemented. Similarly in Bayshore, the estimated reduction to
20 WRAM was \$133,000 (2% of adopted revenue). Both figures are estimated savings for only
21 the first three months of 2015.

⁵⁰ CWS Direct Testimony Book, p. 154.

1 In response to Data Request ED3-004, ORA obtained the same information for all thirteen
2 districts which filed for drought SRM in November 2014.⁵¹ This data is presented in the
3 Table 5.1.

4 **Table 5.1: Estimated Change in WRAM Balance (January 2015 through March,**
5 **2015)**

District	Change in the WRAM balance
Apple Valley	\$5,800.00
Bayshore	(\$133,073.00)
Chico	\$54,539.00
RWV - Coast Springs	(\$4,567.00)
Dominguez	\$156,577.00
Kern River Valley	(\$24,828.00)
Livermore	(\$45,772.00)
RWV - Lucerne	(\$15,992.00)
Marysville	(\$5,468.00)
Palos Verdes	\$33,634.00
Salinas	\$124,977.00
Selma	(\$18,883.00)
Westlake	\$28,689.00
Total	\$155,632.00

6
7 Following CWS's logic, the estimated balances indicate that in some districts drought SRM
8 reduced WRAM balances from estimated (negative values), while other districts experienced
9 an opposite effect.

10 However, ORA proposes that the effectiveness of the drought SRM should be measured by
11 its ability to reduce the gap between authorized quantity revenue and quantity revenue
12 recovered through rates, the actual and adopted costs tracked through the MCBA, and the

⁵¹ Advice Letters 2150 & 2151, filed November 2014. The reference period for sales comparison was January 2014 through September 2014. CWS compares actual sales during this period to adopted sales over the same period by aggregating the proportioned monthly sales.

1 overall impact on WRAM/MCBA balances. This is opposed to CWS’s analysis which only
 2 looks at the net change in WRAM balances without considering under which scenario (with
 3 or without SRM) the WRAM balance was less. Table 5.2 below shows the revenue gap for
 4 both scenarios, with and without drought SRM, over the first six months of 2015.⁵² The
 5 “Benefit From:” column lists which scenario was more favorable to reducing the gap
 6 between adopted revenue and revenue generated.

7 **Table 5.2: Summary of Estimated WRAM Balances**

SRM Impact by District As of June 30, 2015							
District	Adopted Revenue	SRM		No SRM		Change in the WRAM balance	Benefit From:
		Billings with SRM	WRAM Balance with SRM	Billings without SRM	WRAM Balance without SRM		
Apple Valley	\$431,336	\$371,431	\$59,905	\$387,525	\$43,811	\$16,094	No SRM
Bayshore	\$21,000,962	\$17,498,939	\$3,502,022	\$17,214,496	\$3,786,465	(\$284,443)	SRM
Chico	\$5,199,309	\$4,700,118	\$499,191	\$4,843,672	\$355,637	\$143,554	No SRM
Coast Springs	\$118,621	\$120,992	-\$2,371	\$113,861	\$4,760	(\$7,131)	SRM
Dominguez	\$21,281,525	\$22,864,928	-\$1,583,404	\$23,199,819	-\$1,918,294	\$334,891	SRM
Kern River Valley	\$957,093	\$952,968	\$4,124	\$896,954	\$60,139	(\$56,014)	SRM
Livermore	\$5,311,984	\$4,070,471	\$1,241,513	\$3,957,791	\$1,354,192	(\$112,680)	SRM
Lucerne	\$567,614	\$497,241	\$70,373	\$463,274	\$104,340	(\$33,967)	SRM
Marysville	\$649,864	\$549,011	\$100,853	\$536,071	\$113,793	(\$12,940)	SRM
Palos Verdes	\$14,099,402	\$12,983,459	\$1,115,942	\$13,061,947	\$1,037,455	\$78,487	No SRM
Salinas	\$7,320,508	\$7,314,814	\$5,694	\$7,600,773	-\$280,265	\$285,959	SRM
Selma	\$922,637	\$793,796	\$128,841	\$744,414	\$178,222	(\$49,382)	SRM
Westlake	\$5,243,937	\$5,181,511	\$62,426	\$5,258,424	-\$14,487	\$76,913	No SRM
Total	\$83,104,789	\$77,899,680	\$5,205,108	\$78,279,021	\$4,825,768	\$379,340	No SRM

8
 9 Table 5.2 shows there was a benefit (reduction to the WRAM balance) from the drought
 10 SRM to 9 of the 13 districts. The benefit comes directly through a reduction of WRAM
 11 balances, or, a reduction in the gap between adopted revenues and actual revenues.⁵³
 12 However, when aggregated on a company-wide basis, the net benefit is greater without an
 13 SRM adjustment. This is due to the magnitude and direction of the individual district WRAM

⁵² CWS response to Data Request ED3-004.

⁵³ This is when comparing the “Billings with SRM” and “Billings without SRM” columns to the “Adopted Revenue” column.

1 balances. The total adopted quantity revenue for these 13 districts during the first six months
2 of 2015 was \$83.1 million. With SRM the total quantity revenue generated was \$77.9
3 million, and without SRM would have been \$78.3 million. This highlights the prevailing
4 issue with drought SRM that it is prone to the uncertainties of water sales forecasting. It is
5 also important to assess the overall impact the drought SRM pilot has had on revenue
6 requirements. When put in this perspective, over the first six months of 2015, the drought
7 SRM had a marginal impact of increasing WRAM balances by 0.45% of company-wide
8 revenue requirements.⁵⁴

9 According to CWS's estimates, the outcome of this pilot during the first six months of
10 implementation has in fact increased WRAM balances on a company-wide basis. Had
11 CWS's proposed modifications been in place (which loosen restrictions to adjustments
12 made), WRAM balances would likely be even larger for the company as a whole. This is
13 because CWS's proposal of a full adjustment to sales would amplify the impact of decreased
14 billings decreased as a result of SRM rates. Similarly, areas with higher billings under SRM
15 as currently implemented would likely see even higher billings under CWS's proposed
16 changes, resulting in lower WRAM balances for those areas. Yet because the balance
17 between these two occurrences currently resides in larger WRAM balance with the SRM, the
18 impacts of CWS's proposed changes would likely exacerbate this resulting in a larger
19 company-wide WRAM balance. CWS's claim that a 100% adjustment would not "leave a
20 large amount of revenue flowing to the WRAM/MCBA balance," is therefore unsupported.⁵⁵

⁵⁴ Change in WRAM balance (\$379,340) over company-wide adopted revenue over six months (\$83,104,789).

⁵⁵ CWS Direct Testimony Book, p. 155.

1 ORA received the following summary data outlining CWS’s preliminary analysis of
 2 estimated WRAM balances through December 31, 2015.⁵⁶ The results echo previous
 3 iterations of this analysis.

4 **Table 5.3: Summary of Estimated WRAM Balances as of December 31, 2015**

SRM Impact by District As of December 31, 2015						
District	Adopted Revenue	Estimated Billings with SRM		Estimated Billings without SRM		Change in the WRAM balance
		Billings with SRM	WRAM Balance with SRM	Billings without SRM	WRAM Balance without SRM	
Apple Valley	\$1,305,617	\$845,651	\$459,967	\$882,291	\$423,326	\$36,641
Bayshore	\$54,492,856	\$36,439,276	\$18,053,580	\$35,846,960	\$18,645,895	(\$592,315)
Chico	\$13,747,946	\$10,581,138	\$3,166,808	\$10,904,230	\$2,843,716	\$323,092
Coast Springs	\$294,703	\$267,806	\$26,896	\$252,022	\$42,681	(\$15,785)
Dominguez	\$47,403,876	\$44,759,222	\$2,644,654	\$45,414,786	\$1,989,090	\$655,565
Kern River Valley	\$2,899,330	\$2,164,062	\$735,268	\$2,036,861	\$862,469	(\$127,201)
Livermore	\$14,016,882	\$9,467,072	\$4,549,810	\$9,205,002	\$4,811,880	(\$262,070)
Lucerne	\$1,440,932	\$1,073,984	\$366,948	\$1,000,618	\$440,314	(\$73,365)
Marysville	\$1,651,491	\$1,225,222	\$426,269	\$1,196,449	\$455,042	(\$28,773)
Palos Verdes	\$34,220,256	\$26,441,878	\$7,778,378	\$26,601,724	\$7,618,532	\$159,846
Salinas	\$17,618,781	\$15,924,990	\$1,693,791	\$16,547,547	\$1,071,234	\$622,557
Selma	\$2,388,659	\$1,864,978	\$523,681	\$1,748,961	\$639,698	(\$116,017)
Westlake	\$13,665,424	\$11,055,903	\$2,609,521	\$11,222,325	\$2,443,099	\$166,422
Total	\$205,146,753	\$162,111,181	\$43,035,571	\$162,859,777	\$42,286,976	\$748,596

5
 6 Estimated WRAM balances for 2015 on a company-wide basis are \$43,035,571 with the
 7 drought SRM, 21% of the company-wide revenue requirement. Estimated WRAM balances
 8 without the drought SRM is slightly less at \$42,286,976, also 21% of the company-wide
 9 revenue requirement. The drought SRM increased WRAM balances by approximately
 10 \$748,596 or 0.36% of the company-wide revenue requirement. Within each district the
 11 results are too varied to come to any favorable conclusion of the drought SRM. For example
 12 in the Selma district, the drought SRM reduced WRAM balances from 27% to 22% of
 13 revenue requirement. However in the Salinas district, WRAM balances increased from 6% of
 14 revenue requirement to 10% as a result of the drought SRM.

⁵⁶ CWS response to ORA Data Request ED3-011 (SRM-2).

1 **3. Inherent Issues with Sales Forecasting Unresolved with Drought SRM**

2 The drought SRM does not resolve issues with inaccurate sales forecasts in all scenarios.
3 Sales volumes have and will likely continue to change annually. Without perfect information
4 as to how water consumption varies in relation to all influential variables and perfect
5 information as to how those variables will change in the future, sales forecasting will rely on
6 predictions rather than certainties. The current process for drought SRM adjustments relies
7 on the assumption that sales in the future will trend toward sales in the prior year. CWS's
8 proposed modification to change the SRM adjustment to 100% of the difference between
9 actual and adopted sales takes this assumption further by implying that future sales will
10 exactly equal prior year sales. However, low sales in the present year do not always indicate
11 that sales will continue to be low in subsequent years. This is especially true given the
12 unpredictability of long-term climactic and economic conditions.

13 A key assumption of the drought SRM is that the adjusted sales forecast will be more
14 accurate than sales forecasts made during the rate case. However, as CWS's most recent
15 SRM filing (AL 2197, submitted on November 13, 2015) shows, this is not always the case.
16 For example, the Westlake district triggered an SRM adjustment in 2014 and sales were
17 adjusted for 2015. Because actual sales were higher than adopted, SRM increased sales from
18 the adopted amount of 3,331 KCcf to an adjusted amount of 3,564 KCcf.⁵⁷ Hence the implicit
19 assumption was that sales for January through September 2015 would be higher than
20 forecasted. However, in direct contradiction to this assumption, actual sales volume over this
21 time period was lower at 3,016 KCcf.⁵⁸ In this example, sales forecasts would have been
22 more accurate if they had remained unadjusted.

⁵⁷ Time frame of January through September 2015.

⁵⁸ AL 2197-A Proforma Workpapers.

1 Specifically, because WRAM balances are calculated using rates determined by the adjusted
2 sales volume, if there had been no SRM adjustment in 2014 for Westlake, the adopted sales
3 volume forecast would have resulted in a lower WRAM balance (see Table 5.3). Only in
4 districts where the drought SRM made appropriate adjustments would CWS's proposed
5 modifications likely reduce WRAM balances. However for a district like Westlake, the
6 modifications would only exacerbate large WRAM balances by replacing the sales forecast
7 with a more inaccurate drought SRM-based forecast. Similar to this instance, CWS's
8 preliminary analysis shows that adjusted sales may not always be more accurate than those
9 made during the rate case. CWS's own admission of this occurrence is documented in their
10 response to Data Request ED3-011 (SRM-2) by stating the following:

11 In districts where actual 2014 sales were higher than expected [...] the SRM
12 adjustments decreased rates in 2015. As is to be expected mathematically, the 2015
13 rate decreases in those districts, coupled with lower actual sales in 2015, served to
14 increase WRAM balances.

15 CWS cites the SWRCB's mandatory reductions in sales as a reason to modify the drought
16 SRM to adjust sales forecast to exactly equal the latest recorded year sales.⁵⁹ However this
17 modification is not guaranteed to mitigate large WRAM balances as CWS implies by stating
18 that "[t]he current drought SRM mechanism... still leaves a large amount of revenue flowing
19 to the WRAM/MCBA balance."⁶⁰ This is only true when current sales volumes exactly
20 equal sales volumes from the prior year, which in turn is an assumption that sales always
21 remain constant. This assumption is obviously flawed as historical sales data has shown that
22 sales total and sales volumes do not remain constant. Allowing the drought SRM to fully
23 replicate recorded sales volumes from the most recent recorded year as its forecast could
24 potentially cause greater WRAM/MCBA balances than the current 50% adjustment. CWS

⁵⁹ CWS Direct Testimony Book, p. 155

⁶⁰ CWS Direct Testimony Book, p. 155

1 has no substantive reasoning behind modifying the drought SRM to the full recorded sales
2 amount aside from the one scenario mentioned where sales in any given year exactly match
3 the prior year.

4 CWS’s other proposal is to remove the 5% threshold which determines the decision of
5 whether sales should be adjusted or not. ORA does not agree with this proposal, and the 5%
6 threshold should remain in place. Removing the 5% threshold would expose all districts to
7 the risks as described above which negates the benefits of the SRM. Another important
8 reason for the threshold to remain in place is to provide a comparison between districts which
9 trigger SRM and those that do not during this pilot program analysis phase.

10 Considering the limited experience CWS has with the drought SRM, it would be premature
11 to modify the mechanics of the drought SRM without fully understanding the benefits and
12 risks of the current mechanism.

13 **4. Other Means for Conservation Signaling in Times of Supply Shortage**

14 In regards to the rate adjustments SRM provides, CWS speculates that “customers are not
15 receiving the correct price signals in regards to the cost of delivering water during periods of
16 drought and declining usage.”⁶¹ However, as ORA explained in the past, this reasoning is
17 counterintuitive:

18 A sales adjustment mechanism would increase rates when triggered by reduced usage
19 and decrease rates when triggered by usage greater than forecasted. In other words, in
20 instances where drought mandated levels are not met and customers are using too
21 much water, this type of sales adjustment mechanism would decrease rates through
22 increasing sales forecasts.⁶²

⁶¹ CWS Direct Testimony Book, p. 155

⁶² “COMMENTS OF THE OFFICE OF RATEPAYER ADVOCATES ON THE WORKSHOP REPORT” in Phase II of Proceeding R.11-11-008, submitted November 16, 2015

1 An inappropriate price change during times of drought could send conflicting messages to
2 ratepayers. An automatic rate decrease stemming from an SRM adjustment may send to
3 ratepayers a message that their conservation efforts were sufficient in spite of not meeting
4 conservation mandates.

5 The recent drought has brought new opportunities to measure the amount of conservation in
6 relation to SRM and CWS's intention of correct price signaling. The following analysis
7 shows that CWS's intended price signals generally do not coincide with conservation efforts,
8 and that ORA's prior assertions are validated.

9 In June of 2015, the State Water Resources Control Board (SWRCB) implemented
10 conservation standards for water systems in excess of 3,000 service connections throughout
11 the state. The CPUC later adopted these conservation standards to regulated water utilities in
12 Resolution W-5041. All of CWS's districts are subject to mandatory conservation reductions
13 ranging from 8% to 36% from 2013 levels depending on the district's average gallons per
14 capita per day (gpcd) amount. Since June 2015, CWS has reported to the SWRCB their
15 districts' efforts on meeting their respective conservation standard. The most recent of these
16 reports covers November 2015. The following table summarizes this report showing each
17 districts' conservation standard, the actual November 2015 percentage of water saved
18 compared to November 2013, and the difference between the two ("Conservation Factor").⁶³

⁶³ ORA excludes the Antelope Valley, Redwood Valley, and Bayshore districts due to reporting inconsistencies from CWS to the CPUC and SWRCB.

1 **Table 5.4: Summary of CWS’s November 2015 Conservation Reporting to the**
 2 **SWRCB⁶⁴**

District	Conservation Standard	Monthly Percent Saved	Conservation Factor
Bakersfield	32%	29.59%	-2.41%
Bear Gulch	36%	42.38%	6.38%
Chico	32%	40.18%	8.18%
Dixon	28%	32.53%	4.53%
East Los Angeles	8%	12.38%	4.38%
Hermosa Redondo	20%	14.91%	-5.09%
Kern River Valley	28%	17.60%	-10.40%
King City	12%	28.82%	16.82%
Livermore	24%	41.25%	17.25%
Los Altos	32%	42.30%	10.30%
Marysville	24%	25.86%	1.86%
Oroville	28%	32.00%	4.00%
Palos Verdes	36%	18.18%	-17.82%
Salinas	16%	20.21%	4.21%
Stockton	20%	24.09%	4.09%
Visalia	32%	33.55%	1.55%
Westlake	36%	25.94%	-10.06%
Willows	28%	29.10%	1.10%

3
 4 Table 5.4 shows that during the month of November 2015, the Bakersfield district conserved
 5 29.59% compared to November 2013. This results in a shortfall of 2.41% from the
 6 conservation standard of 32% set in Bakersfield. On whole, five of the 18 districts listed
 7 above did not meet the conservation standard (Bakersfield, Hermosa Redondo, Kern River,
 8 Palos Verdes, and Westlake). Therefore, if CWS is aiming to send appropriate price signals

⁶⁴ Data obtained from the SWRCB conservation reporting portal for December 1, 2016,
http://www.waterboards.ca.gov/water_issues/programs/conservation_portal/conservation_reporting.shtml,
 accessed 2/9/2015

1 to incentivize conservation, the prices for districts which are lagging in conservation should
 2 increase more steeply than those whom already met or exceeded their respective conservation
 3 standard. However, ORA finds that the SRM is in fact causing the opposite to occur, that is
 4 districts which have conserved the least experience the lowest rate increase, while those who
 5 conserved the most face the highest rate increases.

6 In order to come to this conclusion ORA conducted a bill analysis of residential bills just
 7 prior to SRM implementation and one with SRM-adjusted rates.⁶⁵ The following table
 8 provides a summary of this average bill calculation for SRM adjusted rates implemented
 9 January 2016.

10 **Table 5.6: SRM Average Bill Comparison of December 2015 Rates to January 2016**

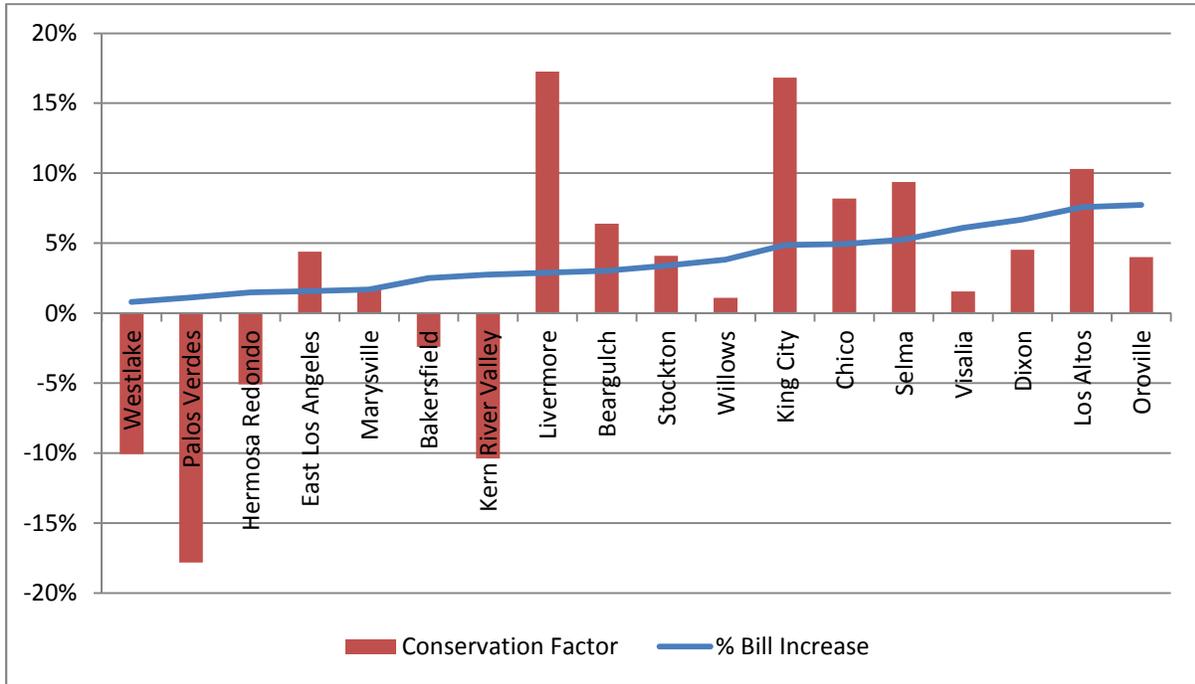
11 **Rates**

District	Pre-SRM Bill	Post-SRM Bill	Difference	% Bill Increase
Bakersfield	\$53.73	\$55.07	\$1.34	2.50%
Bear Gulch	\$146.80	\$151.23	\$4.43	3.02%
Chico	\$43.00	\$45.12	\$2.12	4.93%
Dixon	\$64.54	\$68.86	\$4.32	6.70%
East Los Angeles	\$65.05	\$66.08	\$1.03	1.58%
Hermosa Redondo	\$49.93	\$50.67	\$0.74	1.48%
Kern River Valley	\$115.94	\$119.14	\$3.20	2.76%
King City	\$52.33	\$54.88	\$2.55	4.88%
Livermore	\$58.52	\$60.22	\$1.70	2.90%
Los Altos	\$82.73	\$88.99	\$6.26	7.57%
Marysville	\$39.73	\$40.40	\$0.67	1.69%
Oroville	\$43.60	\$46.98	\$3.37	7.73%
Palos Verdes	\$107.30	\$108.50	\$1.20	1.11%
Salinas	\$48.81	\$51.38	\$2.57	5.26%
Stockton	\$42.37	\$43.81	\$1.44	3.40%
Visalia	\$35.11	\$37.25	\$2.14	6.09%
Westlake	\$147.59	\$148.76	\$1.18	0.80%
Willows	\$62.61	\$65.01	\$2.39	3.82%

⁶⁵ Using rates from Advice Letters 2197 & 2198, average bills were calculated using average consumption per customer in each district and the service charge for a 5/8 x3/4” meter.

1 For Bakersfield Table 5.6 shows that average bills increased by \$1.34 which amounts to a
 2 2.5% bill increase from pre-SRM rates. The following graph correlates the conservation
 3 factors, or difference between actual conservation and the conservation standard, and the
 4 percentage bill increase.

5 **Figure 5.7: Conservation Factor and Percentage Bill Increase**



6
 7 The graph shows that districts which failed to meet their conservation standard (left side of
 8 graph) received the least percentage bill increase due to SRM, while those which exceeded
 9 their conservation standard (right side of graph) received the highest rate increases as a result
 10 of SRM rates. For example, the Westlake district received the lowest average bill increase of
 11 all districts in this analysis at 0.8% even though they failed meet their conservation standard
 12 of 36% by 10%. A similar situation occurs in the Palos Verdes district where they received a
 13 1.11% bill increase in spite of missing their conservation standard by 17.82%.

14 On the opposite end of the spectrum, Oroville received the highest percentage bill increase of
 15 7.73% while meeting and exceeding their conservation standard of 28% by 4%, conserving a
 16 total of 32%. Similarly areas such as King City and Livermore which have met and exceeded

1 their conservation standards by 16.85% and 17.25% respectively received average bill
2 increases of 4.88% and 2.90%.

3 Although this preliminary analysis makes use of only one year's worth of SRM adjusted
4 data, it is clear that CWS's claim of the SRM sending correct pricing signaling is not only
5 unsubstantiated but incorrect. In the above analysis correct price signaling would have shown
6 the districts not meeting their conservation standard resulting in larger bill increases.
7 Conversely correct price signaling would result in districts which exceed their conservation
8 standard seeing lower bill increases (or even decreases).

9 ORA encourages the use of other Commission mechanisms to send conservation pricing
10 signals during times of supply restrictions, mandatory rationing, or drought. These
11 mechanisms include conservation budgets, and Rule and Schedule 14.1. Further, these
12 mechanisms are not prone to the uncertainty of sales forecast and therefore produce better
13 and more direct results for conservation price signaling and reducing demand. CWS assigned
14 water budgets to every customer and applied a drought surcharge to any customer consuming
15 more than their allotted volume. As of November 1, 2015 CWS states that approximately
16 75% of their customer base has stayed within their assigned water budget.⁶⁶ The remaining
17 25% of customers have been subject to drought surcharges for exceeding their water budget.
18 This is a good example of sending direct price signals to customers who failed to meet
19 conservation mandates.

20 **5. The Drought SRM Mechanism Should Continue**

21 With the currently available data, the Commission does not have enough information to fully
22 assess the empirical value of drought SRM beyond a preliminary analysis. Without an

⁶⁶ "California Water Service's (CWT) CEO Martin Kropelnicki on Q3 2015 Results - Earnings Call Transcript," P.6

1 extensive examination of the results of this pilot, it would be untimely for the Commission to
2 modify the drought SRM or eliminate it. Rigorous analysis of WRAM changes due to
3 modifications to the drought SRM is necessary to ensure the program meets the objective of
4 reducing WRAM balances. The effect of SRM on MCBA balances should also be studied to
5 verify that the adjustments made to sales are reflected and consistent with actual supply
6 costs.

7 The Commission should allow CWS to continue the drought SRM pilot program to obtain
8 the data necessary to complete such an analysis. The Commission should also direct CWS to
9 provide detailed analysis of the program in its next general rate case including:
10 WRAM/MCBA balances compared to baseline balances, customer bill comparisons, and
11 consumption comparisons including a breakdown by district and customer type, adopted
12 sales, actual sales, adjusted sales, adopted revenues, drought SRM revenues, adopted
13 customers, actual customers, and adjusted customers (based on escalation filings) for all
14 districts as well as any other pertinent information relating to the effectiveness of this pilot.
15 This analysis should not be limited to only those districts where SRM triggers. As the 5%
16 threshold is a component of the drought SRM, it implicitly engages all districts to the effects
17 (or lack of effects) of the drought SRM. This will allow a better understanding of the
18 effectiveness of the drought SRM pilot program on a comprehensive level and avoid any bias
19 in the results that could arise from only observing the districts where SRM adjustments were
20 made.

21 Finally, this analysis can be combined with CWS's testimony to justify the position of
22 whether the pilot should be continued, removed, modified, or implemented permanently.

1 **6. Drought as a Trigger of Drought SRM**

2 ORA recommends an important clarification that the drought SRM should be triggered only
3 during drought years. As the basis for allowing CWS’s SRM proposal is tied to drought,⁶⁷ the
4 drought SRM should only apply for Governor declared drought years. For example, if the
5 Governor declares a drought going forward in April 2017, then sales forecasts for 2018
6 should be updated via established drought SRM procedures using the drought year of 2017 as
7 the basis. This enables CWS with an additional tool to combat sales uncertainties during
8 drought. This clarification could prevent inaccurate sales forecast during drought years where
9 a year of higher than forecasted sales could potentially increase sales forecasts during a
10 drought year with increased conservation efforts. During non-drought years, the drought
11 SRM should be frozen until a declared drought activates the mechanism. ORA recommends
12 CWS update their tariff sheets to reflect this change.

13 ORA further recommends that the Commission adopt an expedited annual process to
14 examine the forecast updates and ensure the reasonableness of the adjustments. Currently
15 CWS provides drought SRM adjustments in their annual escalation filing advice letters.
16 However, a formal application process for SRM would allow for better examination of price
17 signals and drought issues. This process would be completed in a timely manner in order to
18 implement appropriate drought SRM-based rates.

⁶⁷ Ordering Paragraph 43, D.14-08-011

1 **7. CWS’s Request to Eliminate the SRM Balancing Account**

2 CWS requests to eliminate the SRM balancing account through a tier 1 advice letter.⁶⁸ CWS
3 identifies the reason behind this request being that they believe “no balance should be tracked
4 in the SRM BA.”⁶⁹ ORA does not oppose this request.

5 **D. CONCLUSION**

6 The condition adopted by D.14-08-011 was that the drought SRM pilot program was only
7 authorized for one rate case period, and would be considered in CWS’s next general rate
8 case. ORA recommends this condition be repeated going forward to CWS’s next GRC. This
9 pilot program has not yet produced meaningful data for the Commission to decide whether or
10 not to modify or make the program permanent. In summary, the Commission should
11 disallow CWS’s requests to modify its pilot drought SRM program and allow CWS’s request
12 to eliminate the drought SRM pilot program balancing account.

⁶⁸ CWS Direct Testimony Book, p. 183

⁶⁹ Ibid., p. 184

1 **APPENDIX [Customer Differences]-A [Differences in CWS's and ORA's customer**
 2 **forecasts]**⁷⁰

District	Customer Classification	2017 Forecast		CWS > ORA	Forecast Methodology	
		CWS	ORA		CWS	ORA
Antelope Valley	Leona Valley Residential	402	403	-1	zero out negative growth	five-year average
Bakersfield	Residential	53,633	49,182	4,451	Due to know future development projects in Bakersfield plus accelerated Flat to Meter program.	five-year average (accounting for FTM conversions)
	Residential - Flat	11,074	13,854	-2,780	CWS Proposed FTM	ORA Proposed FTM
Bayshore	Business	5,288	5,286	2	zero out negative growth	five-year average
	Industrial	152	150	2	zero out negative growth	five-year average
Bear Gulch	Business	1,359	1,352	7	zero out negative growth	five-year average
	Other	20	18	2	zero out negative growth	five-year average
Chico	Residential	24,354	24,317	37	Approx. average	five-year average (accounting for FTM conversions)
	Business	2,982	2,974	8	zero out negative growth	five-year average
	Multiple Family	995	988	7	4 year average	five-year average
	Public Authority	430	416	14	zero out negative growth	five-year average
	Other	46	31	15	2 years average	five-year average
Dixon	Public Authority	25	20	5	zero out negative growth	five-year average
East Los Angeles	Business	4418	4556	-138	5 year average	four-year average (accounting for reclassification)
	Multiple Family	945	805	140	5 year average	four-year average (accounting for reclassification)
	Industrial	108	105	3	zero out negative growth	five-year average
	Public Authority	349	341	8	zero out negative growth	five-year average
Hermosa Redondo	Business	1,844	1,829	15	zero out negative growth	five-year average
	Multiple Family	1,854	1,872	-18	5 year average	five-year average
Kern River Valley	Residential	3,967	3,940	27	zero out negative growth	five-year average (adjusting for 2014 winter disconnections)
Livermore	Business	1,013	1,008	5	zero out negative growth	five-year average
	Other	11	9	2	zero out negative growth	five-year average

3

⁷⁰ Information obtained in CWS response to DR ED3-007

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APPENDIX [Customer Differences]-A (cont.)

District	Customer Classification	2017 Forecast		CWS > ORA	Forecast Methodology	
		CWS	ORA		CWS	ORA
Marysville	Residential	2,680	2,620	60	Estimated average for FTM Conversion	five-year average (accounting for FTM conversions)
	Business	482	478	4	zero out negative growth	five-year average
	Public Authority	39	27	12	zero out negative growth	five-year average
	Residential - Flat	313	393	-80	CWS Proposed FTM	ORA Proposed FTM
Oroville	Residential	2,685	2,658	27	5 year average of 2004-2008	five-year average (accounting for FTM conversions)
	Business	653	622	31	zero out negative growth	five-year average
	Multiple Family	86	95	-9	3 year average	five-year average
	Public Authority	73	57	16	zero out negative growth	five-year average
Redwood - Lucerne	Residential	1,135	1,127	8	zero out negative growth	three year post-recession average
	Business	40	37	3	zero out negative growth	three year post-recession average
Redwood - Unified	Residential	413	411	2	zero out negative growth	five-year average
Salinas	Business	2,551	2,544	7	zero out negative growth	five-year average
	Public Authority	294	285	9	zero out negative growth	five-year average
Selma	Residential	5,588	5,288	300	5 year average + accelerated Flat to Meter conversion	accounting for ORA's FTM conversion
	Business	439	436	3	zero out negative growth	five-year average
	Public Authority	119	116	3	zero out negative growth	five-year average
	Residential - Flat	12	412	-401	CWS Proposed FTM	ORA Proposed FTM
Stockton	Business	3,826	3,807	19	zero out negative growth	three year post-recession average
	Industrial	81	79	2	zero out negative growth	five-year average
	Public Authority	318	314	4	zero out negative growth	five-year average
	Other	53	54	-1	5 year average	five-year average
Visalia	Residential	38,885	38,148	737	Approx. average	five-year average (accounting for FTM conversions)
Westlake	Business	524	519	5	zero out negative growth	three year post-recession average
Willows	Residential	2,203	2,038	165	3 year average of 2007-2009	five-year average (accounting for FTM conversions)
	Business	259	253	6	zero out negative growth	five-year average
	Public Authority	48	46	2	zero out negative growth	five-year average

2

1 **APPENDIX [Sales Differences]-B: [Differences in CWS's and ORA's sales forecasts]**

District	Subdistrict	Customer Class	CWS	ORA	CWS>ORA	ORA Method
Bayshore		Industrial	2,344	2,282	62	4 year average
		Public Authority	940	889	51	4 year average
		Other	953	1,309	(356)	4 year average
Bakersfield		Industrial	785	716	70	4 year average
		Public Authority	3,837	3,981	(145)	4 year average
		Other	493	1,003	(510)	4 year average
Bear Gulch		Residential	305	303	2	regression
		Multiple Family	935	991	(56)	regression
		Industrial	1,990	1,953	37	4 year average
		Public Authority	1,214	1,192	22	4 year average
		Other	467	300	166	4 year average
		Irrigation	1,440	1,486	(46)	4 year average
Chico		Industrial	7,956	7,908	48	4 year average
		Public Authority	1,018	1,021	(2)	4 year average
		Other	222	559	(337)	4 year average
Dixon		Industrial	46	43	4	4 year average
		Public Authority	1,075	916	159	4 year average
		Other	283	384	(101)	4 year average
Dominguez		Industrial	28,117	28,455	(338)	4 year average
		Public Authority	2,073	2,103	(29)	4 year average
		Other	725	1,214	(490)	4 year average
		Recycled	96,373	173,831	(77,458)	4 year average
East Los Angeles		Industrial	4,855	4,866	(10)	4 year average
		Public Authority	2,015	1,944	71	4 year average
		Other	350	394	(44)	4 year average
Hermosa Redondo		Industrial	10,133	10,546	(413)	4 year average
		Public Authority	647	624	23	4 year average
		Other	237	350	(114)	4 year average
		Recycled	2,409	3,038	(628)	4 year average
Kern River Valley		Public Authority	618	575	43	sales report
King City		Industrial	1,903	1,773	130	4 year average
		Public Authority	1,323	1,257	66	4 year average
		Other	1,095	1,030	65	4 year average

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APPENDIX [Sales Differences]-B (cont.)

District	Subdistrict	Customer Class	CWS	ORA	CWS>ORA	ORA Method
Livermore		Multiple Family	2,425	2,683	(258)	regression
		Public Authority	1,828	1,763	65	4 year average
		Other	403	233	170	4 year average
		Irrigation	5,541	4,411	1,130	4 year average
Los Altos		Industrial	1,826	1,834	(8)	4 year average
		Public Authority	1,141	1,135	6	4 year average
		Other	171	289	(118)	4 year average
Marysville		Industrial	596	649	(53)	4 year average
		Public Authority	2,487	2,398	89	4 year average
		Other	1,674	685	989	4 year average
Oroville		Industrial	13,038	12,585	453	4 year average
		Public Authority	923	1,145	(223)	4 year average
		Other	630	716	(87)	4 year average
		Irrigation	-	7,896	(7,896)	4 year average
Palos Verdes		Public Authority	1,419	1,389	29	4 year average
		Other	301	339	(38)	4 year average
Redwood Valley	Lucerne	Residential	56	58	(2)	regression
		Business	133	132	1	regression
		Multiple Family	904	967	(63)	regression
Salinas		Industrial	19,238	17,246	1,993	4 year average
		Public Authority	1,381	1,252	129	4 year average
		Other	658	599	59	4 year average
Selma		Industrial	1,287	1,331	(44)	4 year average
		Public Authority	1,204	1,221	(17)	4 year average
		Other	611	560	51	4 year average
Stockton		Industrial	10,436	10,349	87	4 year average
		Public Authority	3,389	3,216	174	4 year average
		Other	213	554	(340)	4 year average
Visalia		Multiple Family	1,537	766	770	regression
		Industrial	2,281	2,187	94	4 year average
		Public Authority	1,537	1,505	32	4 year average
		Other	829	832	(2)	4 year average
Westlake		Public Authority	1,390	1,349	41	4 year average
		Other	51	347	(296)	4 year average
		Recycled	14,373	13,918	454	4 year average
Willows		Public Authority	912	899	13	4 year average
		Other	347	302	45	4 year average

1 APPENDIX [ELA Recycled Water]-C [CWS example recycled water tariff sheet]

CALIFORNIA WATER SERVICE COMPANY
 1720 North First Street, San Jose, CA 95112
 (408) 367-8200

Revised
Canceling

CPUC Sheet No. XXXXX-W
 CPUC Sheet No. XXXXX-W

Schedule No. EL-6
 East Los Angeles Tariff Area
RECLAIMED METERED SERVICE

APPLICABILITY

Applicable to all metered reclaimed water service

TERRITORY

East Los Angeles, Commerce and vicinity, Los Angeles County.

RATES

1 CCF is 100 cubic feet (748 gallons)

Quantity Rates:			
Per CCF		\$2.3372	(N)
Service Charge:			
For	5/8 x 3/4 - inch meter	\$18.11	(N)
For	3/4 - inch meter	\$26.64	
For	1 - inch meter	\$45.28	
For	1-1/2 - inch meter	\$90.55	
For	2 - inch meter	\$144.88	
For	3 - inch meter	\$271.66	
For	4 - inch meter	\$452.76	
For	6 - inch meter	\$816.35	
For	8 - inch meter	\$1,232.96	
For	10 - inch meter	\$2,082.69	
For	12 - inch meter	\$2,930.57	
For	14 - inch meter	\$3,996.23	(N)

The service charge is a readiness-to-serve charge which is applicable to all metered service and to which is added the charge for water used computed at the quantity rates.

SPECIAL CONDITIONS

1. Reclaimed water will be supplied only as available from Central Basin Municipal Water District.
2. As a condition of service under this schedule, all customers are required to comply with the Company's Rule 18, Section D, Reclaimed Water Service.
3. All bills are subject to the following tariff schedules: Schedule UF (CPUC reimbursement fee) and applicable surcharges and surcredits on Schedule RSF (Rate Support Fund), Schedule LIRA (Low-Income Ratepayer Assistance), and Schedule AS (Additional Surcharges and Surcredits).

(continued)

(To be inserted by utility)
 Advice Letter No. _____
 Decision No. _____

Issued by
PAUL G. TOWNSLEY
 Name
 Vice President
 TITLE

(To be inserted by CPUC)
 Date Filed _____
 Effective _____
 Resolution No. _____