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Commissioner	Martha Guzman Aceves
Administrative Law Judge	Gerald F. Kelly
ORA Witness	Jessica Allison



**OFFICE OF RATEPAYER ADVOCATES  
CALIFORNIA PUBLIC UTILITIES COMMISSION**

**Report on Sales, CARW and Conservation**

**Golden State Water Company  
Test Year 2019 General Rate Case  
A.17-07-010**

**San Francisco, California  
February 16, 2018**

**Memorandum**

This ORA Report on Sales, CARW and Conservation is prepared by Jessica Allison under the general supervision of Richard Smith, Program Manager of the *Office of Ratepayer Advocates (ORA) - Water Branch*. Shanna Foley serves as ORA legal counsel, and Pat Ma as project coordinator.

## Report on Sales, CARW, and Conservation

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## Chapter 1. Executive Summary

### A. Introduction

This report presents the Office of Ratepayer Advocate's (ORA) analysis and recommendations on Golden State Water Company's (GSWC's) sales estimates, California Alternative Rates for Water program (CARW), and conservation programs for the Test Year 2019 General Rate Case (GRC) Application 17-07-010.

### B. Key Recommendations

The California Public Utilities Commission ("Commission" or CPUC) should adopt the following recommendations regarding the sales estimates, CARW, and conservation programs for GSWC's eight ratemaking areas.

#### Chapter 2 - Sales

- Adopt ORA's proposed methodology for forecasting sales per customer, which considers the impacts of sales reduction in 2015-2016 due to the severe drought conditions and corresponding water use reduction mandates. ORA's proposed methodology is more realistic because it considers additional years of data to moderate the effects of the 2015-2016 water use reduction mandates in response to severe drought conditions.

#### Chapter 3 - CARW

- Adopt ORA's recommended CARW discounts, which are based on a 12 CCF/month average consumption level by CARW customers, rather than GSWC's proposed 10 CCF.<sup>1</sup> ORA's recommended discount amounts protect CARW customers by maintaining or slightly increasing current discount levels to keep pace with potential rate increases, mitigating the impact of attrition rate increases that erode the effective discount, and reducing customer confusion resulting from the statewide changes being considered by the state legislature and by the Commission.

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<sup>1</sup> 1 CCF = 100 cubic foot = 748 gallons.

Chapter 4 – Conservation

- Approve GSWC’s conservation budget requests subject to the conditions specified below.
- Limit the School Education Program’s fixture giveaways to “by-request” only. GSWC should only provide fixtures when requested by the students or their guardians. Reducing or eliminating unrequested giveaways will make funding available for GSWC to expand its instruction program to reach more students.
- Require GSWC to report in the next GRC application the School Education Program’s activities, costs and number of students covered, so the Commission has more reliable data on which to assess the effectiveness of these efforts.
- Continue to subject GSWC’s conservation program expenses to one-way balancing account treatment to ensure that any unspent amounts will be returned to ratepayers.
- Require GSWC to file a Tier 2 advice letters to refund unspent conservation budget amounts.
- Adopt spending caps for GSWC’s School Education Program, Conservation Promotional Items Program, and Conservation Outreach Program.
- Require GSWC to file Tier 1 advice letters for all ratemaking areas to demonstrate compliance to the specified program budget caps (i.e., showing spending recorded in the balancing account does not exceed the program-specific caps).

[END OF CHAPTER]

## Chapter 2. Sales

### A. Introduction

This chapter presents ORA’s analysis and recommendations on GSWC’s sales (consumption) forecasts.

### B. Summary of Recommendations

The Commission should adopt ORA’s proposed methodology for forecasting sales per customer, which considers the impacts of sales reduction in 2015-2016 due to the severe drought conditions and corresponding water use reduction mandates. ORA proposes forecasting methodologies that reflect 2014-2017 data and the conditions specific to each ratemaking area. ORA’s proposed methodology is more realistic because it considers additional years of data to moderate the effects of the 2015-2016 water use reduction mandates in response to severe drought conditions.

Appendix 2-1 of this report presents ORA’s resulting sales per customer forecasts. The table below provides a summary of total sales by ratemaking area.

**Table 2-1: Total Sales – by Ratemaking Area (KCCF<sup>2</sup>)**

<b>Ratemaking Area</b>	<b>GSWC</b>	<b>ORA</b>	<b>ORA &gt; GSWC</b>	<b>ORA as % of GSWC</b>
Arden Cordova	4,676.8	5,150.5	473.7	110.1%
Bay Point	655.2	683.3	28.1	104.3%
Clear Lake	138.7	142.8	4.1	103.0%
Los Osos	279.9	279.9	0.0	100.0%
Santa Maria	2,871.7	2,871.7	0.0	100.0%
Simi Valley	2,310.8	2,563.2	252.4	110.9%
Region 2	21,752.7	22,324.1	571.4	102.6%
Region 3	21,946.6	23,702.2	1,755.6	108.0%
<b>TOTAL</b>	<b>54,632.9</b>	<b>57,718.3</b>	<b>3,085.4</b>	<b>105.7%</b>

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<sup>2</sup> 100,000 cubic feet.

## **C. Discussion**

The following section presents GSWC's proposed methodology for forecasting sales per customer, and ORA's analysis and recommendations.

### **1. GSWC's Sales Forecasts**

GSWC uses average recorded data from 2015 and 2016 to develop its sales per customer forecasts for all ratemaking areas.<sup>3</sup> In support of its use of the 2015-2016 average, GSWC states:

Golden State believes that the continuing downward trend result from regression model – resulting in forecasted usage levels below their current levels – is not sustainable. Therefore, Golden State used the most recent two-year averages, as this reflects our recent experience and our anticipation for customer usage going forward.<sup>4</sup>

### **2. ORA's Analysis & Recommendations**

#### **a. Governor's Executive Orders and Schedule 14.1**

A number of important factors have affected sales in recent years including a multi-year drought and related water use reduction mandates and measures. This section discusses those factors and how ORA incorporates those factors into its analysis and recommendations.

#### *Governor's Executive Orders*

In January 2014, Governor Brown issued a State of Emergency in response to prolonged drought conditions and water shortages.<sup>5</sup> In the State of Emergency declaration, Governor Brown asked Californians to reduce their water consumption and informed all water rights holders that they may be required to reduce water diversion.<sup>6</sup> Throughout 2014, Governor Brown issued Executive Orders designed to assist families without water, help communities struggling to fight

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<sup>3</sup> GSWC Prepared Testimony of Keith Switzer, page 31.

<sup>4</sup> GSWC Prepared Testimony of Keith Switzer, page 32.

<sup>5</sup> Office of the Governor website (<https://www.gov.ca.gov/news.php?id=18368>, accessed on January 2, 2018).

<sup>6</sup> Office of the Governor website (<https://www.gov.ca.gov/news.php?id=18368>, accessed on January 2, 2018).



wildfires, and provide water sufficient to meet demand.<sup>7</sup> The 2014 drought-related Executive Orders did not place mandatory water use reduction requirements on urban water suppliers, but encouraged consumers and urban water suppliers to use water wisely.

In April 2015, Governor Brown issued Executive Order B-29-15 mandating a statewide 25% reduction in urban water usage relative to 2013 levels. Executive Order B-29-15's conservation requirements remained effective through February 2016. Subsequently, Governor Brown issued Executive Orders B-36-15 and B-37-16, which added additional water use restrictions and per capita water usage reduction goals.<sup>8</sup> Executive Order B-36-15 kept Executive Order B-29-15's water restrictions and reduction goals in place. Executive Order B-37-16 developed a new water use efficiency framework by establishing longer-term water conservation measures such as updated water use targets, and implementing a plan to reduce system leaks and eliminate wasteful water practices. Governor Brown lifted the State of Emergency declaration for most of California in April 2017 with the issuance of Executive Order B-40-17.<sup>9</sup> The following table outlines the drought-related Executive Orders and proclamations issued from 2014 to 2017.<sup>10</sup>

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<sup>7</sup> Department of Water Resources - Drought Information (<http://www.water.ca.gov/waterconditions/declaration.cfm>, accessed on January 2, 2018).

<sup>8</sup> Department of Water Resources - Drought Information (<http://www.water.ca.gov/waterconditions/declaration.cfm>, accessed on January 2, 2018).

<sup>9</sup> Department of Water Resources - Drought Information (<http://www.water.ca.gov/waterconditions/declaration.cfm>, accessed on January 2, 2018).

<sup>10</sup> Department of Water Resources - Drought Information (<http://www.water.ca.gov/waterconditions/declaration.cfm>, accessed on January 2, 2018).

**Table 2-2: 2014 – 2017 Drought-Related Declarations and Executive Orders**

<b>Executive Orders (EOs) &amp; Proclamations</b>	<b>Issue Date</b>	<b>Purpose</b>
State of Emergency	January 17, 2014	Proclaimed a State of Emergency and directed State officials to take actions to “make water available,” including requesting consumption reductions and authorizing new water projects
Continued State of Emergency	April 25, 2014	Strengthened the State’s drought response capacity and requested Californians further reduce consumption
EO B-26-14	September 18, 2014	Facilitated efforts to provide water to families in dire need due to extreme drought conditions
EO B-27-14	October 6, 2014	Directed state agencies to assist local governments in wildfire response efforts
EO B-28-14	December 22, 2014	Extended provisions in the January 17, 2014 Declaration of Emergency
B-29-15	April 1, 2015	Directed SWRCB to impose restrictions to achieve 25% reduction in water usage
B-36-15	November 13, 2015	Added additional actions to bolster state response to drought and to assist in wildfire recovery
B-37-16	May 9, 2016	Established water use efficacy framework including long term water conservation measures
B-40-17	April 7, 2017	Lifted the State of Emergency for most of California

*Schedule 14: Staged Mandatory Water Conservation and Rationing Tariff*

In response to Governor Brown’s Proclamation No. 1-17-2014 declaring a State of Emergency, the Commission issued Resolution W-4976 adopting Drought Procedures for Water Conservation, Rationing and Service Connection Moratoria based on CPUC Standard Practice U-40-W (SP 40).<sup>11</sup> SP 40 prescribes procedures for utilities to request and implement Tariff Rule 14.1 (Rule 14.1) and Schedule 14.1. The Commission can authorize implementation of Rule 14.1 in response to a utility’s request for voluntary rationing from customers in order to

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<sup>11</sup> CPUC Resolution W-4976, issued on February 28, 2014, page 1.

reduce consumption.<sup>12</sup> While Rule 14.1 relates to voluntary compliance with water use restrictions, Schedule 14.1 provides for mandatory rationing activated in response to a declaration of a water shortage, or in circumstances of prolonged or severe drought.<sup>13</sup> Resolution W-4976 ordered all Class A and B utilities to add, if not already in existence, and activate Rule 14.1 calling for a 20% voluntary reduction in water use.<sup>14</sup>

In response to Executive Order B-29-15, the Commission issued Resolution W-5034, ordering the implementation of mandatory conservation measures and requiring all Class A and B utilities to add Schedule 14.1 to their tariffs by filing a Tier 2 advice letter.<sup>15</sup> While Resolution W-4976 provided a sample Schedule 14.1, Resolution W-5034 directed utilities to develop necessary provisions to the schedules to achieve required reductions, including incorporating rate structures and other pricing mechanisms to reduce consumption.<sup>16</sup>

Beginning in July 2015, GSWC activated Schedule 14.1 in many ratemaking areas. The following table summarizes the Advice Letters (AL) associated with the activation of GSWC's Schedule 14.1.

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<sup>12</sup> CPUC Resolution W-4976, issued on February 28, 2014, page 1.

<sup>13</sup> CPUC Resolution W-4976, issued on February 28, 2014, page 1.

<sup>14</sup> CPUC Resolution W-4976, issued on February 28, 2014, page 16.

<sup>15</sup> CPUC Resolution W-5034, issued on April 10, 2015, page 17.

<sup>16</sup> CPUC Resolution W-5034, issued on April 10, 2015, pages 1-2, 4.

**Table 2-3: Activation of GSWC's Schedule 14.1**

<b>AL</b>	<b>Effective</b>	<b>Water System</b>	<b>Stage Activated</b>	<b>Ended</b>
1623	7/1/2015	Clearlake	Stage 1	4/7/2017
1621	7/1/2015	Region 2	Stage 1	4/7/2017
1622	7/1/2015	Bay Point	Stage 1	4/7/2017
1620	7/1/2015	Arden Cordova	Stage 1	4/7/2017
1619	7/1/2015	San Gabriel	Stage 1	4/7/2017
1625	7/1/2015	Claremont	Stage 1	4/26/2017
1624	7/1/2015	San Dimas	Stage 1	4/7/2017
1626	7/1/2015	Santa Maria (Tanglewood, Sisquoc, Lake Marie, Nipomo & Orcutt)	Stage 1	12/1/2016-4/7/2017
1634	7/1/2015	Wrightwood	Stage 1	4/7/2017
1627	7/1/2015	Orange County	Stage 1	4/7/2017
1628	7/1/2015	Los Osos	Stage 1	4/7/2017
1628	7/1/2015	Los Osos (Edna Road)	Stage 1	11/1/2016
1632	7/1/2015	Barstow	Stage 1	4/7/2017
1631	7/1/2015	Apple Valley	Stage 1	4/7/2017
1631	7/1/2015	Morongo Valley	Stage 1	4/7/2017
1630	7/1/2015	Simi Valley	Stage 1	4/7/2017
1633	7/1/2015	Calipatria	Stage 1	4/7/2017
1644	12/8/2015	Santa Maria (Cypress Ridge)	Stage 1	12/1/2016
1669	9/26/2016	Los Osos (Edna Road)	Stage 2	Still Active
1673	12/1/2016	Santa Maria (Cypress Ridge)	Stage 2	Still Active
1673	12/1/2016	Santa Maria (Nipomo)	Stage 2	Still Active

By activating Stage 1 or Stage 2 of Schedule 14.1, GSWC reduced water sales by encouraging water conservation through means outside of normal conservation programs. For example, Stage 1 of Schedule 14.1 includes permitting outdoor irrigation to only two days per week. Stage 2 of Schedule 14.1 sets water allocations for each household by a percentage level below the household's 2013 usage depending on the water system's conservation needs. Under Stage 2, customers are charged an additional \$2.50/CCF for water consumption over the allocated amount.

b. Demand Trends

The mandatory water restrictions put in place by Schedule 14.1 and the Executive Orders significantly reduced water sales in 2015 and 2016.<sup>17</sup> Setting sales forecasts equal to the 2015-2016 average, as proposed by GSWC, unreasonably assumes no bounce back will occur after the state lifted the mandatory restrictions. The only GSWC water systems that still have water use restrictions activated by Schedule 14.1 are the Cypress Ridge and Nipomo systems in Santa Maria CSA and the Edna Road system in Los Osos CSA.<sup>18</sup>

Sales data for 2015 and 2016 are not strong indicators of sales for this GRC's forecast period, with its first year (2019) being approximately two to three years removed from the lifting of water use restrictions in most GSWC systems. The graph below shows average sales per residential customer by month for Regions 1, 2, and 3. The data suggests that, on average, residential customers used more water in 2017 than in either 2016 or 2015 when water use restrictions were in effect.<sup>19</sup>

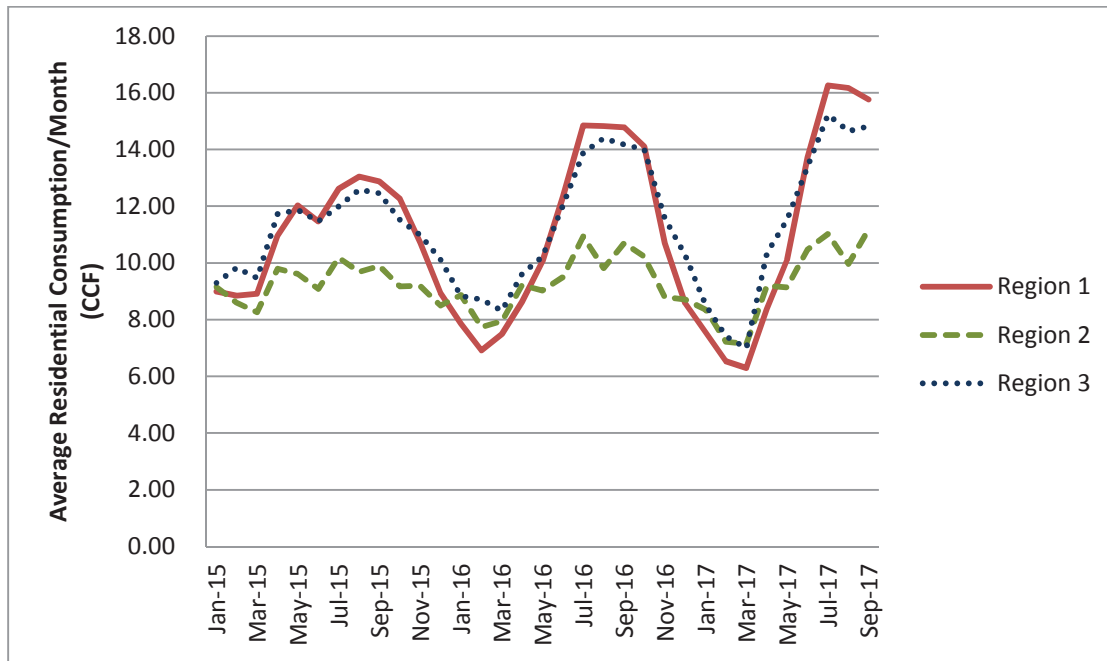
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<sup>17</sup> Department of Water Resources - Water Use Efficiency (<http://www.water.ca.gov/wateruseefficiency/>, accessed January 2, 2017).

<sup>18</sup> GSWC website (<http://www.gswater.com/mandatory-reductions/>, accessed on January 2, 2017).

<sup>19</sup> GSWC Response to ORA Data Requests JA5-004 and JA5-006.

**Figure 2-1: Average Residential Sales by Month – Total Company**



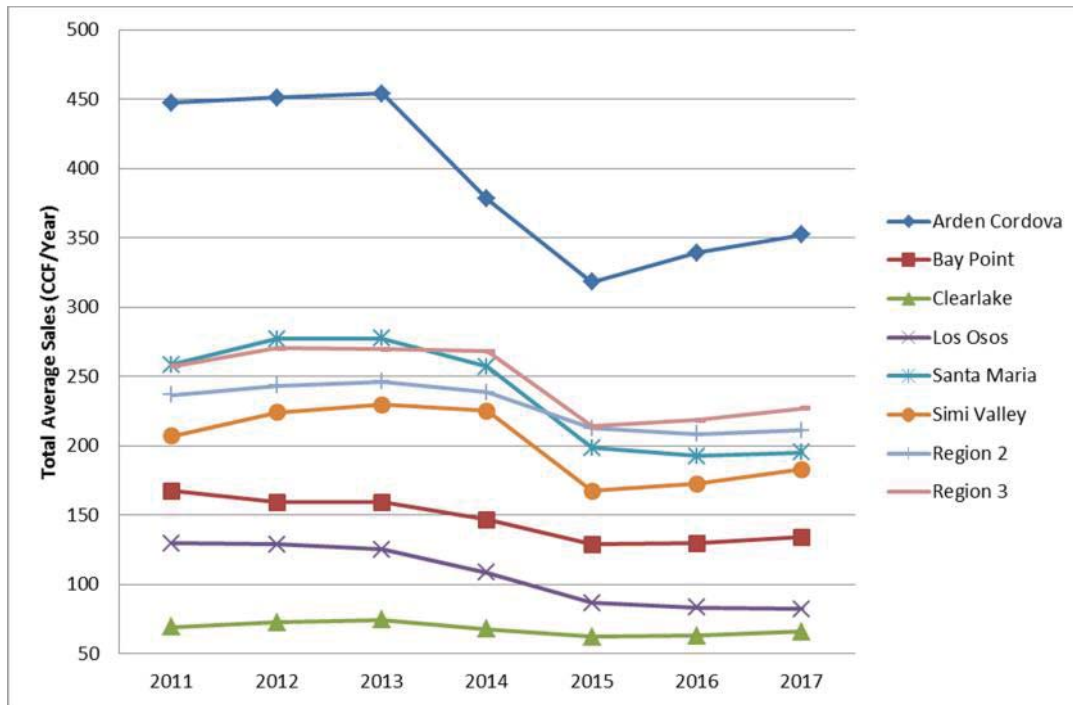
GSWC’s total average sales are another useful measure to track consumption trends. The following table and figure summarize GSWC’s 2011-2017 total average sales by ratemaking area.<sup>20</sup>

**Table 2-4: Total Average Sales - by Ratemaking Area (CCF/year)**

Ratemaking Area	2011	2012	2013	2014	2015	2016	2017
Arden Cordova	447	451	454	378	318	339	352
Bay Point	167	159	159	147	129	129	134
Clearlake	69	72	74	68	62	63	66
Los Osos	130	129	125	109	86	83	82
Santa Maria	258	277	277	257	198	192	195
Simi Valley	207	224	229	225	167	172	183
Region 2	237	243	246	238	213	208	211
Region 3	257	270	270	268	214	218	227

<sup>20</sup> Total average sales = total recorded water sales ÷ total recorded average number of customers. 2011-2016 from GSWC sales workpapers (ACSALES17, BYSALES17, CLSALES17, LOSALES17, SMSALES17, SVSALES17, MESALES17, R3SALES17); 2017 data from GSWC Response to ORA Data Request JA5-009.

**Figure 2-2: Total Average Sales - by Ratemaking Area (CCF/year)**



Similar to the trend seen in Figure 2-1, sales dramatically decreased in 2015 compared to 2014 levels. In all ratemaking areas except Los Osos, total average sales reached the lowest point in 2015 or 2016 then began to trend upward in 2017. In Arden Cordova for example, 2015-2017 sales increased by an average of 6% per year – this is a significant increase considering the on-going flat-to-metered conversion efforts in that area. Setting the 2019 forecasts based on the 2015-2016 average, as proposed by GSWC, ignores these trends and local conditions and is not reasonable.

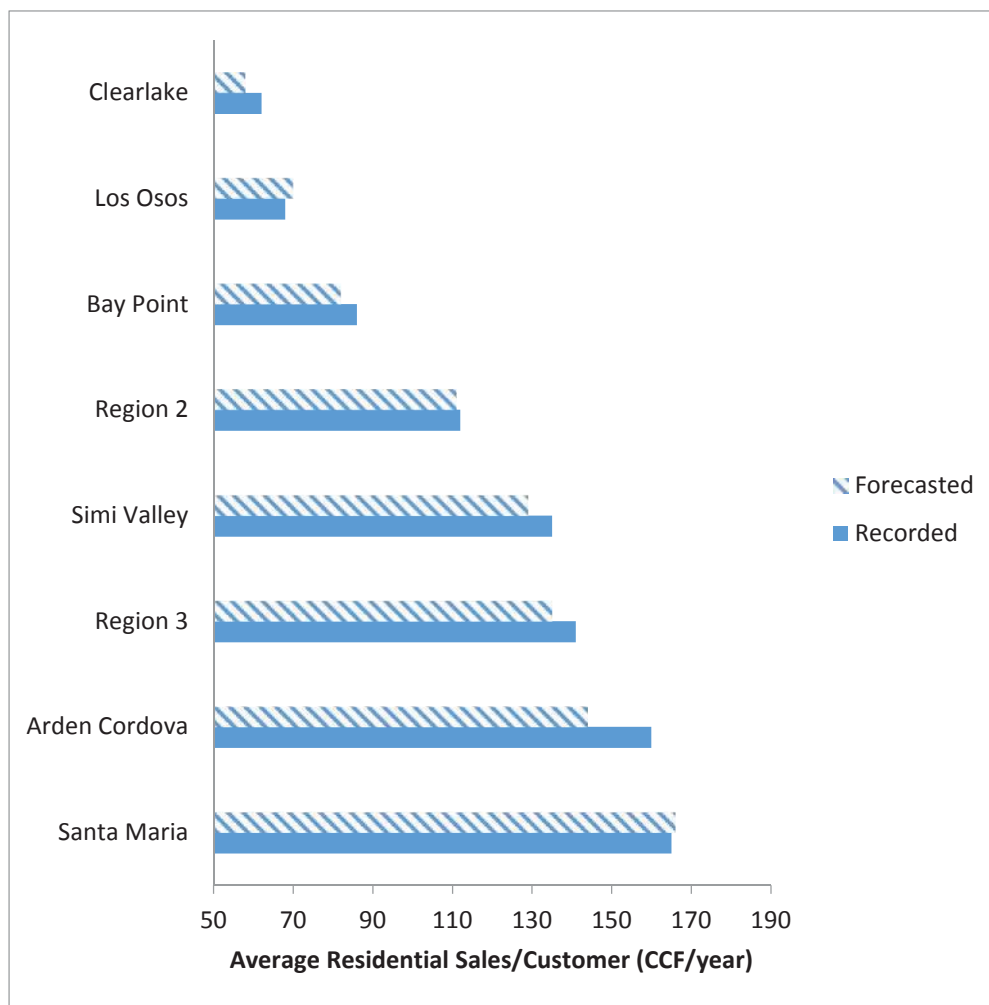
To further test the reasonableness of GSWC’s methodologies, ORA compares the recorded 2017 data with the 2017 “forecast” based on the 2015-2016 average.<sup>21</sup> As shown below, for many areas, 2017 recorded data is higher than the 2017 “forecast,” suggesting that there has been some bounce back in consumption after the lifting of water use restrictions.

<sup>21</sup> GSWC sales workpapers (ACSALES17, BYSALES17, CLSALES17, LOSALES17, SMSALES17, SVSALES17, MESALES17, R3SALES17); 2017 data from GSWC Response to ORA Data Request JA5-009.

**Table 2-5: Average Residential Sales/Customer – Recorded vs. “Forecasted” 2017 (CCF/year)**

Rate-making Area	2014	2015	2016	Recorded 2017	“Forecasted” 2017	Recorded > “Forecast” 2017
Arden Cordova	181	143	144	160	144	17
Bay Point	92	81	82	86	82	4
Clearlake	64	57	58	62	58	4
Los Osos	90	72	68	68	70	-2
Santa Maria	218	168	163	165	166	-1
Simi Valley	162	129	129	135	129	6
Region 2	128	111	111	112	111	1
Region 3	168	133	136	141	135	7

**Figure 2-3: Average Residential Sales/Customer – Recorded 2017 vs. “Forecasted” 2017 (CCF/year)**





c. [ORA's Forecasting Methodology](#)

The table below summarizes ORA's recommended forecasting methodology by ratemaking area.

**Table 2-6: ORA Recommended Forecasting Methodology for Sales/Customer**

<b>Ratemaking Area</b>	<b>Sales/Customer Calculation</b>
Arden Cordova	2014-2016 average
Bay Point	2014-2016 average
Clear Lake	2014-2016 average
Los Osos	2015-2016 average (same as GSWC's)
Santa Maria	2015-2016 average (same as GSWC's)
Simi Valley	2014-2016 average
Region 2	2014-2016 average with only 50% weight to 2014
Region 3	2014-2016 average

[General trends in 2014-2017 data](#)

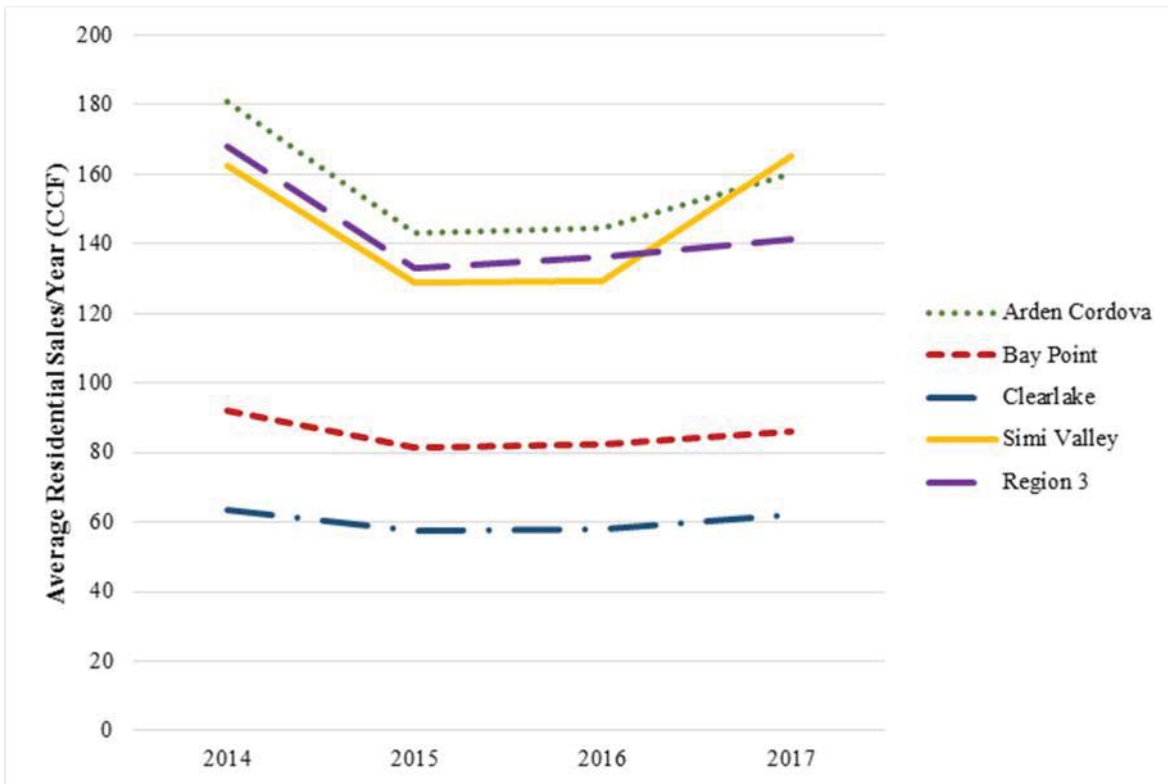
GSWC's forecasting methodology of considering only 2015-2016 data is not reasonable because its service areas were subject to severe water use reduction mandates in those two years. The Commission should consider data from additional years to mediate the effects of the water use reduction mandates in response to severe drought conditions.

The following graphs show the general trends for two groups of ratemaking areas.<sup>22</sup> Sales in Arden Cordova, Bay Point, Clearlake, Simi Valley and Region 3 reached a low point in 2015 and exhibited a general upward movement after that point. Meanwhile, sales in Los Osos, Santa Maria, and Region 2 decreased or remained relatively level after 2015.

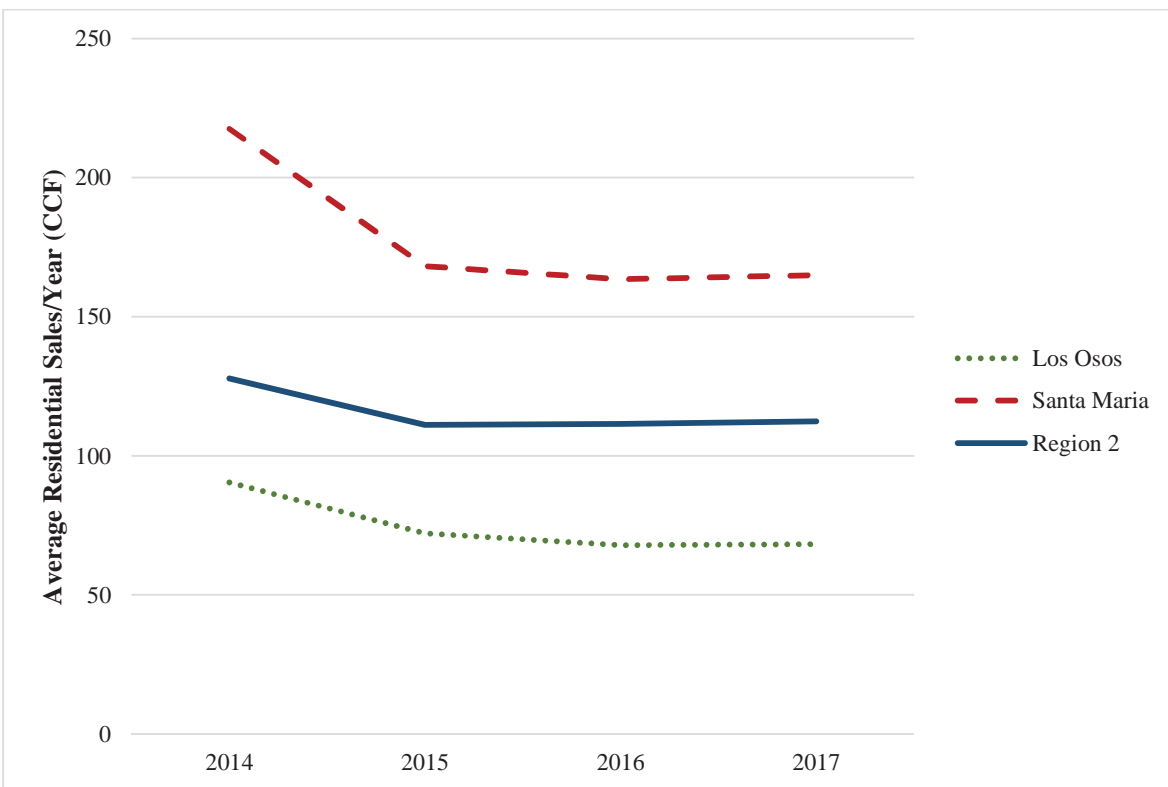
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<sup>22</sup> GSWC Response to ORA Data Requests JA5-004 and JA5-006.

**Figure 2-4: Sales Trend – Arden Cordova, Bay Point, Clearlake, Simi Valley and Region 3**



**Figure 2-5: Sales Trend – Los Osos, Santa Maria, and Region 2**



d. [Ratemaking Area-Specific Forecasting](#)

ORA proposes forecasting methodologies that consider the 2014-2017 data and the conditions specific to each ratemaking area to mediate the effects of the mandates on water use in 2015-2016. ORA primarily examines trends in residential sales/customer because the residential customer class makes up the greatest portion of total sales.

[Arden Cordova CSA](#)

Arden Cordova CSA's residential sales/customer increased at an average rate of 6% per year since 2015. This increase in average sales happened despite GSWC's ongoing process of converting flat rate services to metered rate services, a program that is intended to reduce usage. Moreover, using the 2015-2016 average, as GSWC proposes, would result in a 2017 forecast that is 10% lower than recorded data for 2017. These factors indicate a strong bounce back that should be considered. Therefore, ORA recommends sales/customer forecasts based on a three-year 2014-2016 average.

[Bay Point CSA](#)

Residential sales/customer in the Bay Point CSA decreased by 12% in 2015 from the 2014 level, and then increased by an average of 3% per year. GSWC's proposed methodology would produce a 2017 forecast that is 5% lower than actuals. Therefore, ORA recommends sales/customer forecasts based on a 2014-2016 average.

[Clearlake CSA](#)

Residential sales/customer in the Clearlake CSA decreased by 10% in 2015 from the 2014 level, and then increased by an average of 4% per year. Using GSWC's proposed methodology would result in a 2017 "forecast" that is 7% lower than actual 2017 sales. Therefore, ORA recommends sales/customer forecasts based on a 2014-2016 average.

[Los Osos CSA](#)

Los Osos CSA's residential sales/customer fell by 20% in 2015 from the 2014 level and continued to decrease at an average rate of 3% per year. The Edna Road water system is still subject to Schedule 14.1, Stage 2 restrictions, and has no set deactivation date due to local water supply conditions. Due to the decreasing sales trend and the continuing activation of Schedule

14.1, ORA agrees with GSWC’s proposed use of 2015-2016 average data to forecast sales/customer.

Santa Maria CSA

Similar to the Edna Road water system, the Cypress Ridge and Nipomo water systems are still subject to Schedule 14.1, Stage 2 restrictions with no set deactivation date. Residential sales/customer in the Santa Maria CSA fell by 23% in 2015 from the 2014 level and has not recovered appreciably. These factors support using GSWC’s proposed methodology of using the 2015-2016 average.

Simi Valley CSA

Simi Valley CSA’s residential sales/customer decreased by 21% in 2015 from the 2014 level, remained the same from 2015 to 2016, and then increased by 4% in 2017. Using GSWC’s proposed methodology would result in a 2017 “forecast” that is 4% lower than actual 2017 sales. Therefore, ORA recommends sales/customer forecasts based on a 2014-2016 average.

Region 2

The residential sales/customer in Region 2 fell by 13% in 2015 from 2014 level, and only started to increase slightly in 2017. Using GSWC’s proposed methodology would result in a 2017 forecast that is less than actual 2017 sales. The slight increase in recorded sales between 2016 and 2017 indicates some level of bounce back, although not as much in some other areas. Therefore, ORA recommends basing forecasts on the 2014- 2016 average but assigning only a 50% weight to 2014.<sup>23</sup>

Region 3

The residential sales/customer in Region 3 decreased by 21% in 2015 from 2014 level, then increased by an average of 3% per year since. Using GSWC’s proposed methodology would

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<sup>23</sup> A weighted average is a calculated average where not all included values are of equal importance. In this example, 2014 data is weighted at 50% (.5), while 2015 and 2016 are weighted 100% (1). The weighted average is calculated by multiplying each value by its intended weight, summing the weighted values, then dividing by the sum of the weights. The following formula details the process for calculating the weighted average:

$$W \text{ ht. } A = \frac{(2 \text{ D } *5\% )+(2 \text{ D } *1\% )+(2 \text{ D } *1\% )}{(5+1+1)}$$

result in a 2017 “forecast” that is 5% lower than actual 2017 sales. Therefore, ORA recommends sales/customer forecasts based on a 2014-2016 average.

#### **D. Conclusion**

GSWC’s methodology, which uses only data from years affected by the drought and related water usage reductions, will likely understate Test Year 2019 sales for most ratemaking areas. The Commission should adopt ORA’s methodology because it moderates the effects of water use reduction mandates in response to severe drought conditions. Appendix 2-1 summarizes ORA’s recommendation for estimated average sales/customer for each customer class and by ratemaking area. These values should be used to develop total sales forecasts for Test Year 2019.<sup>24</sup>

[END OF CHAPTER]

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<sup>24</sup> ORA does not contest GSWC’s number of customer forecasts.

## Chapter 3. California Alternative Rates for Water Program

### A. Introduction

This chapter presents the ORA's analysis and recommendations regarding GSWC's California Alternative Rates for Water (CARW) program, which provides a fixed monthly rate discount to eligible low-income customers.<sup>25</sup>

### B. Summary of Recommendations

The Commission should adopt ORA's recommended CARW discounts, which are based on a 12 CCF/month consumption level by CARW customers, rather than GSWC's proposed 10 CCF. ORA's recommended discount amounts protect CARW customers by maintaining or slightly increasing current discount levels to keep pace with rate increases likely to result from this GRC, mitigating the impact of attrition rate increases eroding the effective discount, and reducing customer confusion resulting from the statewide changes being considered by the state legislature and by the Commission.

The following table compares GSWC's and ORA's recommended CARW monthly discounts.

**Table 3-1: GSWC's and ORA's Proposed CARW Discounts/Month**

<b>Ratemaking Area</b>	<b>Present discount</b>	<b>GSWC proposed</b>	<b>ORA proposed</b>	<b>GSWC &gt; ORA</b>	<b>ORA as % of GSWC</b>
Arden Cordova (metered)	<b>\$6.00</b>	\$7.10	\$7.10	\$0.00	100%
Arden Cordova (flat)	<b>\$13.00</b>	\$17.10	\$17.10	\$0.00	100%
Bay Point	<b>\$17.00</b>	\$17.10	\$20.10	\$3.00	118%
Clearlake	<b>\$29.00</b>	\$28.10	\$31.10	\$3.00	111%
Los Osos	<b>\$28.00</b>	\$28.10	\$33.10	\$5.00	118%
Santa Maria	<b>\$10.00</b>	\$11.10	\$12.10	\$1.00	109%
Simi Valley	<b>\$12.00</b>	\$12.10	\$13.10	\$1.00	108%
Region 2	<b>\$12.00</b>	\$13.10	\$15.10	\$2.00	115%
Region 3	<b>\$13.00</b>	\$11.10	\$13.10	\$2.00	118%

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<sup>25</sup> Other CARW customers include: non-profit group living facilities, agricultural employee housing facilities, and migrant farm-worker housing centers (each receives a flat monthly credit of \$20.00).

## C. Discussion

This section presents ORA's recommended changes to GSWC's CARW program proposal.

### 1. GSWC's Proposal

GSWC states that it designed the fixed CARW monthly discount to represent 20% of an average CARW customer's bill.<sup>26</sup> GSWC develops the discount by first calculating the average consumption of CARW customers by region, then calculating the fixed monthly discount to represent 20% of the water charges (quantity and service charges, but not surcharges) associated with that consumption level, rounded to the nearest dollar.<sup>27</sup> GSWC's calculated average consumption level for CARW customers in Regions 1, 2 and 3 is 10 CCF per month,<sup>28</sup> based on 2016 CARW consumption data.<sup>29</sup>

Additionally, GSWC proposes to provide an additional \$0.10/month credit to offset the incremental cost of the credit card pilot program that GSWC proposes to include in base rates.<sup>30</sup> Assembly Bill (AB) 1180, which authorized water utilities to propose credit card pilot programs, requires that customers who qualified for rate assistance based on their household income be exempt from paying the costs of the credit card pilot program.<sup>31</sup>

### 2. ORA's Analysis

#### a. 2016 Data Likely Understates Future Consumption

GSWC estimates future CARW consumption using 2016 data.<sup>32</sup> As described in Chapter 2: Sales, mandatory conservation measures were in place for much of 2016. Executive Order B-29-

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<sup>26</sup> GSWC Prepared Testimony of Keith Switzer, page 39.

<sup>27</sup> GSWC Prepared Testimony of Keith Switzer, page 39.

<sup>28</sup> GSWC Workpaper R1 2019 CARW Estimate, tab CARW Discount and Workpaper Region 2 & 3 2019 CARW Estimate, tab CARW Discount.

<sup>29</sup> GSWC Workpaper R1 2019 CARW Estimate, tab CARW Discount and Workpaper Region 2 & 3 2019 CARW Estimate, tab CARW Discount.

<sup>30</sup> GSWC Prepared Testimony of Keith Switzer, page 41.

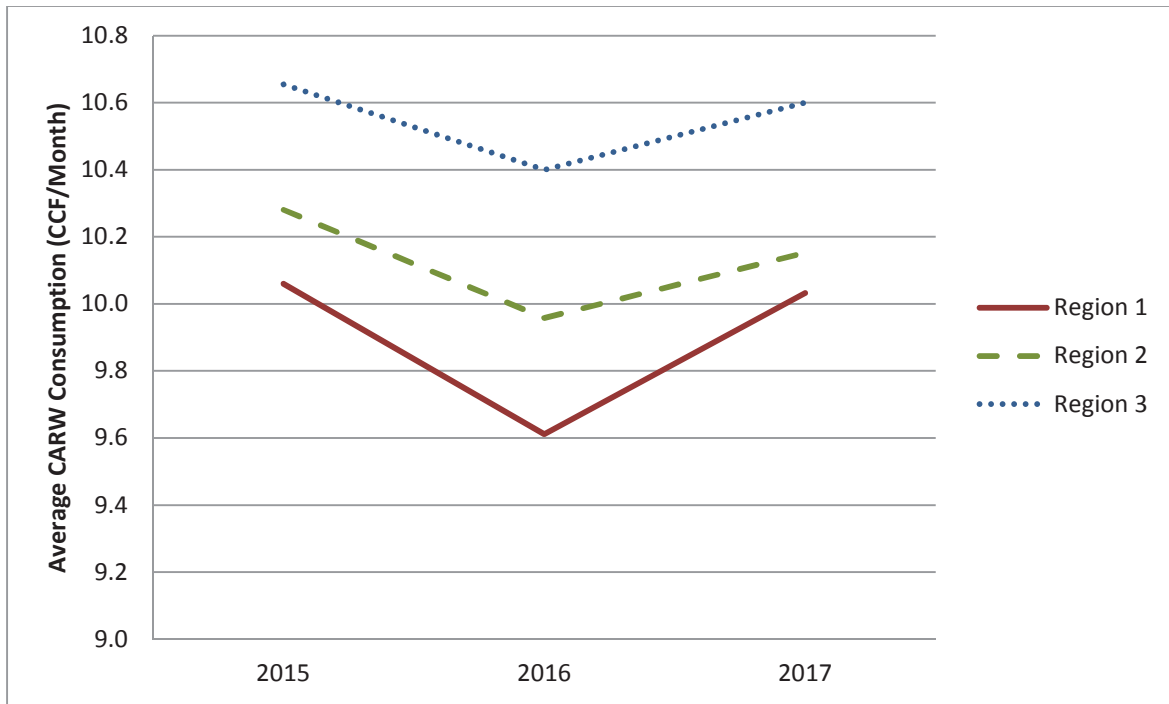
<sup>31</sup> GSWC Prepared Testimony of Keith Switzer, page 41.

<sup>32</sup> GSWC Prepared Testimony of Keith Switzer, page 41.

16, issued on April 1, 2015, imposed water restrictions designed to achieve a 25% reduction in water usage compared to 2013 levels statewide.<sup>33</sup> The State of Emergency related to the drought was not lifted until April 7, 2017.<sup>34</sup> Furthermore, GSWC activated Schedule 14.1 for many water systems effective July 1, 2015 through April 7, 2017.<sup>35</sup> These conservation measures reduced customer water consumption in 2016 in general, and likely depressed CARW customers' water consumption.

The following figure shows average monthly consumption per CARW customer from 2015 to 2017 by region.<sup>36</sup>

**Figure 3-1: Average Consumption per CARW Customer (CCF/Month)**



CARW consumption increased slightly from 2016 to 2017 in every ratemaking area except Clearlake and Los Osos, and consumption will likely continue to trend upward through the rate

<sup>33</sup> Department of Water Resources - Drought Information (<http://www.water.ca.gov/waterconditions/declaration.cfm>, accessed on January 9, 2018).

<sup>34</sup> Department of Water Resources - Drought Information (<http://www.water.ca.gov/waterconditions/declaration.cfm>, accessed on January 9, 2018).

<sup>35</sup> Schedule 14.1 are still in effect in some areas. See Chapter 2: Sales.

<sup>36</sup> GSWC Response to ORA Data Requests JA5-002 and JA5-007.



case cycle.<sup>37</sup> Using 2016 data will likely understate CARW consumption in forecast years 2019-2021.

**b. GSWC’s Proposal Decreases CARW Discounts**

In the last GRC, CARW discounts were calculated based on a 12-CCF monthly usage level for Regions 1 and 2, and 13-CCF level for Region 3 (D.16-12-067, as corrected by D.17-03-001).<sup>38</sup> In this GRC, GSWC’s proposes to calculate CARW discounts at a 10-CCF level for all regions, which lowers the discounts in some ratemaking areas. Refer to Table 3-1 for an overview of the present CARW discounts, GSWC’s proposed CARW discounts, and ORA’s recommended discounts.

If the Commission adopts GSWC’s proposed discounts, customers in the Clearlake CSA and Region 3 will receive a lower discount than they presently receive – an estimated 522 CARW customers in Clearlake will lose \$1.00/month in discount benefit; an estimated 13,352 CARW customers in Region 3 will lose \$2.00/month.<sup>39</sup> ORA’s recommended discounts will ensure that no CARW customer will receive a lower discount.

**c. GSWC’s Proposal Decreases the Effective CARW Discount Percentage**

GSWC proposes to increase rates in most ratemaking areas by a greater percentage than it proposes to increase CARW discounts. This will reduce the effective CARW discount.<sup>40</sup> If the Commission adopts GSWC’s proposed rates in this GRC, CARW customers will pay more for water rates but will not receive a proportional increase in their CARW discounts.

The following table compares GSWC-proposed change in monthly total bill (including quantity and service charges) with GSWC-proposed change in CARW monthly discount (an average 12

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<sup>37</sup> GSWC aggregates Region 1 data to calculate the CARW consumption average; in aggregate, Region 1 CARW consumption increased in 2017 (GSWC Response to ORA Data Request JA5-002).

<sup>38</sup> D.16-12-067, page 38; GSWC 2014 Workpapers, R1 2016 CARW Estimate, tab CARW Discount.

<sup>39</sup> GSWC Workpapers R1 2018 CARW Estimate, tab CARW & CR Card Surcharge and Regions 2&3 CARW Estimate, tab CARW& CR Card Surcharge. Excluding the \$0.10/month credit card pilot program credit.

<sup>40</sup> GSWC Workpaper R1 2019 CARW Estimate, tab CARW Discount and Workpaper Region 2 & 3 2019 CARW Estimate, tab CARW Discount.

CCF/bill is used for illustrative and comparative purpose, and does not reflect the ratemaking area's actual monthly average consumption).<sup>41</sup>

**Table 3-2: Change in Present and Proposed CARW Discounts<sup>42</sup>**

Ratemaking Area	Total Bill			CARW Discount		
	July 2017	GSWC Proposed	% Change	July 2017	GSWC Proposed	% Change
Arden Cordova (metered)	\$29.26	\$37.16	27%	\$6.00	\$7.00	17%
Arden Cordova (flat)	\$68.80	\$86.83	26%	\$13.00	\$17.00	31%
Bay Point	\$88.73	\$99.58	12%	\$17.00	\$17.00	0%
Clearlake	\$149.81	\$156.77	5%	\$29.00	\$28.00	-3%
Los Osos	\$145.21	\$164.86	14%	\$28.00	\$28.00	0%
Santa Maria	\$51.00	\$60.24	18%	\$10.00	\$11.00	10%
Simi Valley	\$62.03	\$66.53	7%	\$12.00	\$12.00	0%
Region 2	\$64.10	\$73.23	14%	\$12.00	\$13.00	8%
Region 3	\$61.62	\$65.04	6%	\$13.00	\$11.00	-15%

In most ratemaking areas, the proposed rates increase more than the proposed discounts. For example, while proposed rates in Region 3 increase by 6%, the proposed discount falls by 15%. Increasing rates without a proportionate increase in discounts places an additional burden on low-income customers. GSWC's proposal is not good policy because it is regressive and inequitable.

ORA's recommended use of 12 CCF to calculate CARW discounts minimizes the chances of the discounts falling below the intended 20% discount level as base rates escalate through the rate cycle (through attrition filings). In previous rate cycles, CARW discounts were initially set to represent 20% of the average customer bill. However, attrition increases erode that effective discount percentage. The following table demonstrates how GSWC's effective CARW discount

<sup>41</sup> GSWC Workpaper R1 2019 CARW Estimate, tab CARW Discount and Workpaper Region 2 & 3 2019 CARW Estimate, tab CARW Discount. These numbers do not include the additional \$0.10 credit to offset pilot credit card program.

<sup>42</sup> This analysis does not include the \$0.10 credit to offset pilot credit card program. This is to avoid overstating the CARW credit since basic rates include the cost of the pilot program.

will decrease over the course of the 2019-2021 rate cycle for Region 2 customers – under both 10-CCF and 12-CCF CARW monthly consumption level scenarios.

**Table 3-3: GSWC’s Effective CARW Discount Percentage (Region 2)**

Year	10-CCF Consumption		12-CCF Consumption	
	Total Bill	% Discount	Total Bill	% Discount
2019	\$62.81	20.7%	\$72.55	17.9%
2020	\$64.06	20.3%	\$74.00	17.6%
2021	\$65.86	19.7%	\$76.08	17.1%

ORA’s higher CARW discounts provide more protection from the impact of this erosion and mostly maintain the intended 20% discount rate over the course of the 2019-2021 rate cycle, falling below 20% only in 2021 under the 12-CCF scenario, as shown in the table below.

**Table 3-4: ORA’s Effective CARW Discount Percentage (Region 2)**

Year	10-CCF Consumption		12-CCF Consumption	
	Total Bill	% Discount	Total Bill	% Discount
2019	\$62.81	23.9%	\$72.55	20.7%
2020	\$64.06	23.4%	\$74.00	20.3%
2021	\$65.86	22.8%	\$76.08	19.7%

#### d. Statewide Initiatives Could Impact CARW

A number of recent and on-going statewide initiatives could impact CARW discounts in the near future. Assembly Bill 401 directed the State Water Resources Control Board (SWRCB) to develop a plan for funding and implementing a statewide low-income rate assistance program for water customers.<sup>43</sup> The SWRCB is required to report to the legislature by February 1, 2018,<sup>44</sup> and possible related legislative actions may affect the low-income rate assistance programs

<sup>43</sup> Assembly Bill No. 401, Dodd. Low-Income Water Rate Assistance Program. ([https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201520160AB401](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201520160AB401), accessed on January 5, 2018).

<sup>44</sup> The SWRCB report to the legislature was postponed until later in 2018 according to the State Water Resources Control Board and reported by Circle of Blue: California Water Board Delays Affordability Report (<http://www.circleofblue.org/2018/world/california-water-board-delays-affordability-report/>, accessed on February 8, 2018).

currently offered by water utilities, such as GSWC.<sup>45</sup> The SWRCB describes this initiative as follows:

The Low-Income Water Rate Assistance Act established through Assembly Bill 401 (Dodd, 2015) directs the State Water Resources Control Board (State Water Board) to prepare a plan, in collaboration with the State Board of Equalization, that covers funding and implementation of a Low-Income Water Rate Assistance Program. This Plan is due by January 1, 2018. Additionally, AB 401 directs the State Water Board to report to the Legislature by February 1, 2018 on its findings regarding the feasibility, financial stability, and desired structure of the program, including any recommendations for legislative action.

Furthermore, the Commission opened Rulemaking (R.) 17-06-024 in July 2017 to assess the feasibility of achieving program consistency across all Class A water utilities' low-income rate assistance programs.<sup>46</sup> A reduction in CARW discounts now if followed by possible additional changes due to Assembly Bill 401 and/or R.17-06-024 actions would create unnecessary customer confusion.

#### **D. Conclusion**

The Commission should adopt ORA's recommended CARW discounts to maintain or slightly increase current discount level to keep pace with rate increases, to mitigate the impact of attrition rate increases eroding the effective discount, and to reduce customer confusion resulting from the statewide changes being considered by the state legislature and by the Commission.

[END OF CHAPTER]

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<sup>45</sup> State Water Resources Control Board: Water Conservation Portal - Low-Income Water Rate Assistance Program ([https://www.waterboards.ca.gov/water\\_issues/programs/conservation\\_portal/assistance/](https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/assistance/)), accessed on January 5, 2018).

<sup>46</sup> R.17-06-024, page 2.

## Chapter 4. Conservation

### A. Introduction

This chapter presents ORA’s analysis and recommendations on GSWC’s proposed conservation programs and budgets.

### B. Summary of Recommendations

The Commission should adopt the following regarding GSWC’s proposed conservation programs:

- (1) Approve GSWC’s conservation budget requests, summarized in the table below, subject to the conditions specified below.

**Table 4-1: Test Year 2019 Conservation Expense**

<b>Ratemaking Area</b>	<b>GSWC</b>	<b>ORA</b>	<b>GSWC &gt; ORA</b>	<b>ORA as % of GSWC</b>
Arden Cordova	\$107,488	\$107,488	\$0	100%
Bay Point	\$12,252	\$12,252	\$0	100%
Clear Lake	\$4,143	\$4,143	\$0	100%
Los Osos	\$8,964	\$8,964	\$0	100%
Santa Maria	\$47,830	\$47,830	\$0	100%
Simi Valley	\$47,047	\$47,047	\$0	100%
Region 2	\$389,511	\$389,511	\$0	100%
Region 3	\$443,954	\$443,954	\$0	100%
<b>TOTAL</b>	<b>\$1,061,189</b>	<b>\$1,061,189</b>	<b>\$0</b>	<b>100%</b>

- (2) Limit the School Education Program’s fixture giveaways to “by-request” only. GSWC should only provide fixtures when requested by the students or their guardians. Reducing or eliminating unrequested giveaways will make funding available for GSWC to expand its instruction program to reach more students.
- (3) Require GSWC to report in the next GRC application the School Education Program’s activities, costs and number of students covered, so the Commission has more reliable data on which to assess the effectiveness of these efforts.
- (4) Require GSWC to continue tracking its conservation program expenses in a one-way balancing account to ensure that any unspent amounts will be returned to ratepayers.

- (5) Require GSWC to file a Tier 2 advice letters to refund unspent conservation budget amounts.
- (6) Adopt spending caps for GSWC's School Education Program, Conservation Promotional Items Program, and Conservation Outreach Program
- (7) Require GSWC to file Tier 1 advice letters for all ratemaking areas to demonstrate compliance to the specified program budget caps (i.e., showing spending recorded in the balancing account does not exceed the program-specific caps).

### **C. Discussion**

This section discusses ORA's recommended changes to GSWC's proposed conservation programs.

#### **1. Conservation Program Budget**

##### **a. GSWC's Proposal**

GSWC recommends no changes to the conservation budget amounts adopted in its last GRC.<sup>47</sup> GSWC states that "GSWC believes the level of currently adopted conservation dollars will be adequate in meeting current conservation standards within this GRC."<sup>48</sup> GSWC offers the following conservation programs: Conservation Promotional Items, Conservation Outreach, School Education Program, Workshops, and Residential Audits.<sup>49</sup> GSWC does not offer all conservation programs in every Customer Service Area (CSA), and states that it determined which programs to offer based on the program cost effectiveness and the customer interests in the program offering.<sup>50</sup>

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<sup>47</sup> D.16-12-067, page 25.

<sup>48</sup> GSWC Prepared Testimony of Edwin DeLeon, page 9.

<sup>49</sup> GSWC Prepared Testimony of Edwin DeLeon, page 9.

<sup>50</sup> GSWC Prepared Testimony of Edwin DeLeon, page 20.

**b. ORA’s Recommendation**

The Commission should approve GSWC’s proposed conservation budgets, as shown in Table 4-1 above. Executive Order (EO) B-37-16, signed by Governor Brown on May 9, 2016, tasked state agencies with developing a long-term framework for conservation and drought planning.<sup>51</sup> It established urban water use targets and sought to eliminate wasteful water practices.<sup>52</sup> ORA supports this statewide conservation effort and GSWC’s proposed budget for conservation programs, which are at the same level authorized in D.16-12-067. However, the Commission should adopt ORA’s proposed program changes described below.<sup>53</sup>

**2. School Education Program**

The Commission should limit the School Education Program’s fixture giveaways to “by-request” only. GSWC should only provide fixtures when requested by the students or their guardians. Reducing or eliminating unrequested giveaways will make funding available for GSWC to expand its instruction program to reach more students. The Commission should require GSWC to report in the next GRC application the School Education Program’s activities, costs and number of students covered so the Commission has more reliable data on which to assess the effectiveness of these efforts.

**a. GSWC’s Proposal**

GSWC provides water conservation education to 4<sup>th</sup> and 5<sup>th</sup> grade students through the School Education Program. GSWC contracts with vendors who provide participating students with classroom instruction, as well as “conservation kits” to all participating 4<sup>th</sup> grade students.<sup>54</sup>

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<sup>51</sup> EO B-37-16 Final Report, page 1 ([http://www.water.ca.gov/wateruseefficiency/conservation/docs/20170407\\_EO\\_B-37-16\\_Final\\_Report.pdf](http://www.water.ca.gov/wateruseefficiency/conservation/docs/20170407_EO_B-37-16_Final_Report.pdf), accessed on December 26, 2017).

<sup>52</sup> EO B-37-16 Final Report, page 1 ([http://www.water.ca.gov/wateruseefficiency/conservation/docs/20170407\\_EO\\_B-37-16\\_Final\\_Report.pdf](http://www.water.ca.gov/wateruseefficiency/conservation/docs/20170407_EO_B-37-16_Final_Report.pdf), accessed on December 26, 2017).

<sup>53</sup> D.16-12-067, page 25.

<sup>54</sup> GSWC Prepared Testimony of Edwin DeLeon, page 21.

These conservation kits include high efficiency showerheads and aerators.<sup>55</sup> According to GSWC’s workpapers, GSWC assumes that these conservation kits have a utilization rate of 60%, meaning GSWC estimates that 60% of all fixtures distributed to the students will be installed in the students’ homes and result in expected water savings.<sup>56</sup>

**b. ORA’s Analysis and Recommendation**

GSWC estimates the 60% deployment rate of conservation kits based on its “industry experience.”<sup>57</sup> GSWC provides no verifiable analysis or research information beyond its “industry experience.” A well-reasoned deployment rate estimate is crucial to determining the cost effectiveness of conservation programs, including the School Education Program. The expected water savings of the conservation kits provided to students in the School Education Program depends on the percentage of conservation kits assumed deployed (installed) in students’ homes. To illustrate, the following table presents the yearly water savings.<sup>58</sup>

**Table 4-2: Conservation Kit CCF Savings Estimate in Arden Cordova**

<b>Estimated Deployment Rate</b>	<b>Expected Water Savings Per Year (CCF)</b>
20%	745
30%	1,115
40%	1,485
50%	1,860
60%	2,230

ORA’s analysis indicates that the deployment rate is likely much lower than the 60% assumed by GSWC. According to economic data published on the Federal Reserve Economic Data,<sup>59</sup> only 53.8% of California households owned their homes in 2016.<sup>60</sup> The trend of home ownership is

<sup>55</sup> GSWC Prepared Testimony of Edwin DeLeon, Schedule 4, page 3, 9, 12, 17, 21, 24, 27, 33 & 37.

<sup>56</sup> GSWC Prepared Testimony of Edwin DeLeon, Schedule 4, page 3, 9, 12, 17, 21, 24, 27, 33 & 37: 10,297 gallons/year per showerhead and aerator kit.

<sup>57</sup> GSWC Response to ORA Data Request JA5-005, #2.a.

<sup>58</sup> GSWC Prepared Testimony of Edwin DeLeon, Schedule 4, page 3.

<sup>59</sup> A database maintained by the Research Division of the Federal Reserve Bank of St. Louis.

<sup>60</sup> Federal Reserve Bank of St. Louis Housing Statistics (<https://fred.stlouisfed.org/series/CAHOWN>, accessed on December 15, 2017).



generally on the decline following the 2008 economic recession and the rate of home ownership has yet to recover from its peak of 60.2% in 2006.<sup>61</sup> Rental units may have prohibitions against making alterations, so renters may not be able to install the water conservation kits.

Furthermore, given the existence of water conservation programs and messaging due to recent droughts, many households already have water conserving showerheads and aerators. Between renters unable to make fixture alterations, homeowners who already installed water saving fixtures, and fixtures that may go uninstalled for other reasons (e.g., never brought home by students), GSWC's assumed 60% deployment rate for the school education program may not be realistic.

GSWC has not provided clear evidence that providing students with fixtures will result in the expected rate of water savings. By providing in-classroom water conservation education without distributing unrequested fixtures, the program cost per student can be reduced without harming conservation efforts. Providing students with in-class education without handing out fixtures reduces the cost per student by over 50%.<sup>62</sup> The following table provides the cost per student for instruction and fixtures/materials.<sup>63</sup>

**Table 4-3: School Education Programs - Per Student Cost**

<b>Ratemaking Area</b>	<b>Instruction-Only Cost</b>	<b>Giveaway Fixture/Materials Cost</b>
Arden Cordova	\$15.00	\$17.00
Bay Point	\$15.00	\$17.00
Clearlake	\$15.00	\$17.00
Los Osos	\$15.00	\$17.00
Santa Maria	\$15.00	\$17.00
Simi Valley	\$17.17 <sup>64</sup>	
Region 2	\$10.00	\$14.16
Region 3	\$13.00	\$14.16

<sup>61</sup> Federal Reserve Bank of St. Louis Housing Statistics (<https://fred.stlouisfed.org/series/CAHOWN>, accessed on December 15, 2017).

<sup>62</sup> GSWC Response to ORA Data Request JA5-008, #2.

<sup>63</sup> GSWC Response to ORA Data Request JA5-008, #2.

<sup>64</sup> The cost of instruction, giveaway fixtures, and materials bundled as \$17.17 per student.

Eliminating or reducing giveaways frees up funding for GSWC to expand its instruction program to reach more students. The table below presents the estimated number of students that GSWC's program can cover using three levels of giveaways: GSWC's proposed giveaways (combination of conservation kits and booklets), just booklets, or no giveaways.<sup>65</sup>

**Table 4-4: Estimated Number of Students Covered by Student Education Program, By Giveaway Option**

Ratemaking Area	2019 Requested Budget	Estimated Number of Students		
		GSWC Proposed (+\$14 to \$17 per student)	With Booklets Only (+\$2 per student)	No Giveaways
Arden Cordova	\$6,750	211	397	450
Bay Point	\$8,552	267	503	570
Clearlake	\$976	31	57	65
Los Osos	\$2,259	71	133	151
Santa Maria	\$13,012	407	765	867
Simi Valley	\$10,946	637	637	637
Region 2	\$96,000	3,974	8,000	9,600
Region 3	\$96,320	3,546	6,421	7,409
<b>Total</b>	<b>\$228,065</b>	<b>9,143</b>	<b>16,914</b>	<b>19,749</b>

By limiting unrequested giveaways to only booklets, GSWC's program could reach as many as 7,771 more students (i.e., 85% more students). As explained earlier, the expected level of water use savings resulting from distributing unrequested fixtures to students is questionable. The Commission should direct GSWC to:

- (1) only provide fixtures when requested by the students or their guardians,
- (2) redirect the School Education Program funding toward covering more students, and
- (3) report the program's activities, costs and number of students reached in its next GRC application.

<sup>65</sup> GSWC Response to ORA Data Request JA5-008, #2.

### 3. Program Spending Caps

The Commission should continue imposing spending caps on the School Education Program and programs related to public outreach.

D.16-12-067 adopted a settlement that specifies that conservation program funds cannot be moved between ratemaking areas and subjects certain conservation programs' costs to spending caps.<sup>66</sup> The programs subject to spending caps are the School Education Program and the Public Outreach program.<sup>67</sup> In the adopted settlement, the term "Public Outreach Program" refers to marketing-related conservation programs that vary by ratemaking area, and include Miscellaneous and Customer Promotional Items, Program Marketing, Marketing and Local Partnerships, Marketing, and Conservation Printing and Mailing.<sup>68</sup> The table below summarizes the capped programs by ratemaking area.

**Table 4-5: Conservation Programs with Spending Caps Adopted in D.16-1-067**

<b>Ratemaking Area</b>	<b>Capped Programs</b>
Arden Cordova	School Education Program, Misc. and Customer Promotional Items
Bay Point	School Education Program, Program Marketing
Clearlake	School Education Program
Los Osos	School Education Program
Santa Maria	School Education Program
Simi Valley	School Education Program, Marketing and Local Partnerships
Region 2	School Education Program, Marketing, Misc. and Customer Promotional Items
Region 3	School Education Program, Marketing, Conservation Printing & Mailing

<sup>66</sup> D.16-12-067, page 26. Also adopted in GSWC's previous rate case, D.13-05-011 page 29.

<sup>67</sup> D.16-12-067, Attachment A - Joint Response and Settlement Agreement, page 104.

<sup>68</sup> D.16-12-067, Attachment A - Joint Response and Settlement Agreement, page 104, specifies that the School Conservation Education Program and the Public Outreach Program are subject to spending caps. The Public Outreach Program is described in A.14-07-006, Exhibit ORA-4: ORA Report on Demand-Related Issues, Rate Design, and Conservation, pages 103-113.

ORA recommends the Commission continue imposing the spending caps for the School Education Program and programs related to public outreach. In this GRC, GSWC proposes two programs related to public outreach: Conservation Promotional Items and the Conservation Outreach Program. GSWC describes Conservation Promotional Items as items designed to be useful and carry a conservation message.<sup>69</sup> The Conservation Outreach Program provides advertisements related to conservation, events, and marketing conservation programs. The following table summarizes GSWC's proposed average annual conservation program budgets and indicates programs for which ORA recommends the Commission adopt spending caps at the proposed budget level.

**Table 4-6: Conservation Program Budgets and Program Spending Caps**

<b>Ratemaking Area</b>	<b>Conservation Program</b>	<b>Budget<sup>70</sup></b>	<b>Spending Cap<sup>71</sup></b>
<b>Arden Cordova</b>			
	Regional Water Authority Dues	\$18,265	
	Conservation Promotional Items	\$2,500	<b>x</b>
	Conservation Outreach	\$2,000	<b>x</b>
	School Education Program	\$6,750	<b>x</b>
	Workshops	\$1,500	
	Residential Audits	\$3,000	
	CII Audits <sup>72</sup>	\$27,700	
	Outdoor Incentives	\$20,000	
	Direct Install Programs	\$25,773	
	<b>Total</b>	<b>\$107,488</b>	<b>x</b>
<b>Bay Point</b>			
	Conservation Promotional Items	\$1,000	<b>x</b>
	Conservation Outreach	\$1,200	<b>x</b>
	School Education Program	\$8,552	<b>x</b>
	Workshops	\$500	

<sup>69</sup> GSWC Prepared Testimony of Edwin DeLeon, page 21.

<sup>70</sup> GSWC Prepared Testimony of Edwin DeLeon, Schedule 4.

<sup>71</sup> Spending caps apply to 3-year totals.

<sup>72</sup> Audits for commercial, industrial, institutional customers.

<b>Ratemaking Area</b>	<b>Conservation Program</b>	<b>Budget<sup>70</sup></b>	<b>Spending Cap<sup>71</sup></b>
	CII Audits and Incentive	\$1,000	
	<b>Total</b>	\$12,252	
<b>Clearlake</b>			
	Conservation Promotional Items	\$250	<b>x</b>
	Conservation Outreach	\$250	<b>x</b>
	School Education Program	\$976	<b>x</b>
	Workshops	\$700	
	CII Audits and Incentive	\$1,967	
	<b>Total</b>	\$4,143.00	<b>x</b>
<b>Los Osos</b>			
	Conservation Promotional Items	\$1,000	<b>x</b>
	Conservation Outreach	\$1,000	<b>x</b>
	School Education Program	\$2,259	<b>x</b>
	Workshops	\$500	
	CII Audit and Incentive	\$3,000	
	Direct Install Programs	\$1,205	
	<b>Total</b>	\$8,964	<b>x</b>
<b>Santa Maria</b>			
	Conservation Promotional Items	\$1,318	<b>x</b>
	Conservation Outreach	\$500	<b>x</b>
	School Education Program	\$13,012	<b>x</b>
	Workshops	\$500	
	CII Audit and Incentive	\$6,000	
	Irrigation Audits & Incentives	\$2,000	
	Res Irrigation Incentives	\$2,500	
	Residential Audits	\$2,000	
	Direct Install Programs	\$10,000	
	Multifamily Direct Install	\$10,000	
	<b>Total</b>	\$47,830	<b>x</b>
<b>Simi Valley</b>			
	Conservation Promotional Items	\$1,100	<b>x</b>
	Conservation Outreach	\$1,000	<b>x</b>
	School Education Program	\$10,946	<b>x</b>
	CII Audit and Incentive	\$10,000	

<b>Ratemaking Area</b>	<b>Conservation Program</b>	<b>Budget<sup>70</sup></b>	<b>Spending Cap<sup>71</sup></b>
	Irrigation Audits	\$12,000	
	Direct Install Programs	\$12,000	
	<b>Total</b>	\$47,047	<b>x</b>
<b>Region 2</b>			
	Conservation Promotional Items	\$12,000	<b>x</b>
	Conservation Outreach	\$6,000	<b>x</b>
	School Education Program	\$96,000	<b>x</b>
	CII Audit and Incentive	\$50,000	
	Irrigation Audits	\$35,000	
	Direct Install Programs	\$190,511	
	<b>Total</b>	\$389,511	<b>x</b>
<b>Region 3</b>			
	Conservation Promotional Items	\$12,500	<b>x</b>
	Conservation Outreach	\$11,500	<b>x</b>
	School Education Program	\$96,320	<b>x</b>
	Workshops	\$7,000	
	CII Audit and Incentive	\$50,000	
	Irrigation Audits	\$25,000	
	Outdoor Incentives	\$35,000	
	Direct Install Programs	\$206,634	
	<b>Total</b>	\$443,954	<b>x</b>
<b>Total Conservation Budget</b>			<b>\$1,061,189</b>

#### 4. Conservation Expense One-Way Balancing Account (CEOWBA)

The Commission should continue the same ratepayer protection mechanism and subject GSWC's conservation expenses authorized in this GRC to the same one-way balancing account treatment. GSWC should also be required to file Tier 1 advice letters for all ratemaking areas to demonstrate compliance to the specified program budget caps.

Authorized in the last two GRCs, the one-way conservation balancing accounts CEOWBA and CEOWBA2016 track the difference between adopted and actual conservation expenses.<sup>73</sup> If adopted conservation expenses exceed actual conservation expenses, GSWC refunds customers the remaining balance.<sup>74</sup> Currently, GSWC is required to file a Tier 2 advice letter only if it underspends and needs to implement a refund. GSWC should also be required to file a Tier 1 advice letter at the conclusion of the budget period (ending on December 31, 2021) to report its expenditures by ratemaking area and by program to show compliance to the specified program budget caps.

#### **D. Conclusion**

The Commission should:

- (1) Approve GSWC's proposed conservation budget subject to the conditions specified below.
- (2) Limit the School Education Program's fixture giveaways to "by-request" only. GSWC should only provide fixtures when requested by the students or their guardians. Reducing or eliminating unrequested giveaways will make funding available for GSWC to expand its instruction program to reach more students.
- (3) Require GSWC to report in the next GRC application the School Education Program's activities, costs and number of students covered, so the Commission has more reliable data on which to assess the effectiveness of these efforts.
- (4) Require GSWC to continue tracking its conservation program expenses in a one-way balancing account to ensure that any unspent amounts will be returned to ratepayers.
- (5) Require GSWC to file a Tier 2 advice letters to refund unspent conservation budget amounts.

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<sup>73</sup> D.13-05-011 and D.16-12-067; GSWC Prepared Testimony of Ronald Moore, page 17. In this GRC, GSWC states that it will close the CEOWBA and that no action on the CEOWBA2016 is required at this time.

<sup>74</sup> A.14-07-006, Exhibit ORA-4: ORA Report on Demand-Related Issues, Rate Design, and Conservation, pages 103-113.

- (6) Adopt spending caps for GSWC's School Education Program, Conservation Promotional Items Program, and Conservation Outreach Program.
- (7) Require GSWC to file Tier 1 letters for all ratemaking areas to demonstrate compliance to the specified program budget caps (i.e., showing spending recorded in the balancing account does not exceed the program-specific caps).

[END OF CHAPTER]



**Statement of Qualifications – Jessica Allison**

Q.1 Please state your name, business address, and position with the California Public Utilities Commission (“Commission”).

A1. My name is Jessica Allison and my business address is 505 Van Ness Avenue, San Francisco, California 94102. I am a Public Utilities Regulatory Analyst in the Water Branch of the Office of Ratepayer Advocates.

Q2. Please summarize your education background and professional experience.

A2. I received a Bachelor of Arts Degree in Legal Studies from the University of California, Santa Cruz. Additionally, I received a Master of Business Administration Degree and a Master of Public Policy Degree from Mills College.

I have been employed by the California Public Utilities Commission since 2015. From 2015 to 2016 I worked with the Consumer Protection and Enforcement Division, where I analyzed data generated by consumers contacting the Commission in regards to their utility service. Additionally, I developed reports outlining trends in consumer contact data and presented recommendations for optimizing internal processes.

From 2016 through present, I have been a member of the Office of Ratepayer Advocates. My job responsibilities primarily involve regulatory matters related to Class A water utilities. I have worked on rulemakings, bill analyses, and rate cases.

Q3. What is your responsibility in this proceeding, GSWC GRC A.17-07-010?

A3. I am responsible for ORA Report on Sales, CARW and Conservation.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

[END OF SOQ]

## Appendix 2-1: Water Sales per Customer

REGION 1, Arden Cordova CSA Golden State Water Company A.17-07-010 WATER SALES PER CUSTOMER (OR PER CONNECTION)				
Test Year 2019 (CCF/connection/year)*	ORA	GSWC	GSWC > ORA	
<b>METERED</b>				
1a Residential	156.1	143.7	(12.4)	-8.7%
2a Commercial	1,591.4	1,511.1	(80.3)	-5.3%
3a Industrial	303.1	273.4	(29.7)	-10.9%
4a Public Authority	3,090.6	2,890.3	(200.3)	-6.9%
5a Irrigation	1,039.7	937.2	(102.5)	-10.9%
6a Resale	0.0	0.0	0.0	0.0%
7a Contract	0.0	0.0	0.0	0.0%
8a Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>				
9a Residential/Commercial	727.1	550.2	(176.9)	-32.2%
10a Public Authority	0.0	0.0	0.0	0.0%
11a Private Fire Protection	11.3	11.3	0.0	0.0%
Escalation Year 2020 (CCF/connection/year)*	ORA	GSWC	GSWC > ORA	
<b>METERED</b>				
1b Residential	156.1	143.7	(12.4)	-8.7%
2b Commercial	1,591.4	1,511.1	(80.3)	-5.3%
3b Industrial	303.1	273.4	(29.7)	-10.9%
4b Public Authority	3,090.6	2,890.3	(200.3)	-6.9%
5b Irrigation	1,039.7	937.2	(102.5)	-10.9%
6b Resale	0.0	0.0	0.0	0.0%
7b Contract	0.0	0.0	0.0	0.0%
8b Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>				
9b Residential/Commercial	727.1	550.2	(176.9)	-32.2%
10b Public Authority	0.0	0.0	0.0	0.0%
11b Private Fire Protection	11.3	11.3	0.0	0.0%

\* Hundred cubic feet per connection per year.

**REGION 1, Bay Point CSA**  
**Golden State Water Company A.17-07-010**  
**WATER SALES PER CUSTOMER (OR PER CONNECTION)**

<b>Test Year 2019 (CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>				
1a Residential	85.2	81.8	(3.4)	-4.2%
2a Commercial	941.2	926.0	(15.2)	-1.6%
3a Industrial	4,577.1	4,433.6	(143.5)	-3.2%
4a Public Authority	1,158.7	968.2	(190.5)	-19.7%
5a Irrigation	723.8	599.6	(124.2)	-20.7%
6a Resale	0.0	0.0	0.0	0.0%
7a Contract	0.0	0.0	0.0	0.0%
8a Other	111.3	107.5	(3.8)	-3.6%
<b>FLAT RATE</b>				
9a Commercial	0.0	0.0	0.0	0.0%
10a Public Authority	0.0	0.0	0.0	0.0%
11a Private Fire Protection	0.9	0.9	0.0	0.0%
<b>Escalation Year 2020 (CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>				
1b Residential	85.2	81.8	(3.4)	-4.2%
2b Commercial	941.2	926.0	(15.2)	-1.6%
3b Industrial	4,577.1	4,433.6	(143.5)	-3.2%
4b Public Authority	1,158.7	968.2	(190.5)	-19.7%
5b Irrigation	723.8	599.6	(124.2)	-20.7%
6b Resale	0.0	0.0	0.0	0.0%
7b Contract	0.0	0.0	0.0	0.0%
8b Other	111.3	107.5	(3.8)	-3.6%
<b>FLAT RATE</b>				
9b Commercial	0.0	0.0	0.0	0.0%
10b Public Authority	0.0	0.0	0.0	0.0%
11b Private Fire Protection	0.9	0.9	0.0	0.0%

\* Hundred cubic feet per connection per year.

**REGION 1, Clear Lake CSA**  
**Golden State Water Company A.17-07-010**  
**WATER SALES PER CUSTOMER (OR PER CONNECTION)**

<b>Test Year 2019</b>	<b>(CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>					
1a	Residential	59.5	57.6	(2.0)	-3.4%
2a	Commercial	188.2	189.0	0.8	0.4%
3a	Industrial	0.0	0.0	0.0	0.0%
4a	Public Authority	0.0	0.0	0.0	0.0%
5a	Irrigation	0.0	0.0	0.0	0.0%
6a	Resale	0.0	0.0	0.0	0.0%
7a	Contract	0.0	0.0	0.0	0.0%
8a	Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>					
9a	Commercial	0.0	0.0	0.0	0.0%
10a	Public Authority	0.0	0.0	0.0	0.0%
11a	Private Fire Protection	0.5	0.5	0.0	0.0%
<b>Escalation Year 2020</b>	<b>(CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>					
1b	Residential	59.5	57.6	(2.0)	-3.4%
2b	Commercial	188.2	189.0	0.8	0.4%
3b	Industrial	0.0	0.0	0.0	0.0%
4b	Public Authority	0.0	0.0	0.0	0.0%
5b	Irrigation	0.0	0.0	0.0	0.0%
6b	Resale	0.0	0.0	0.0	0.0%
7b	Contract	0.0	0.0	0.0	0.0%
8b	Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>					
9b	Commercial	0.0	0.0	0.0	0.0%
10b	Public Authority	0.0	0.0	0.0	0.0%
11b	Private Fire Protection	0.5	0.5	0.0	0.0%

\* Hundred cubic feet per connection per year.

**REGION 1, Los Osos CSA**  
**Golden State Water Company A.17-07-010**  
**WATER SALES PER CUSTOMER (OR PER CONNECTION)**

<b>Test Year 2019 (CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>				
1a Residential	70.0	70.0	0.0	0.0%
2a Commercial	304.1	304.1	0.0	0.0%
3a Industrial	381.0	381.0	0.0	0.0%
4a Public Authority	1,487.9	1,487.9	0.0	0.0%
5a Irrigation	84.8	84.8	0.0	0.0%
6a Resale	0.0	0.0	0.0	0.0%
7a Contract	0.0	0.0	0.0	0.0%
8a Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>				
9a Commercial	0.0	0.0	0.0	0.0%
10a Public Authority	0.0	0.0	0.0	0.0%
11a Private Fire Protection	1.1	1.1	0.0	0.0%
<b>Escalation Year 2020 (CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>				
1b Residential	70.0	70.0	0.0	0.0%
2b Commercial	304.1	304.1	0.0	0.0%
3b Industrial	381.0	381.0	0.0	0.0%
4b Public Authority	1,487.9	1,487.9	0.0	0.0%
5b Irrigation	84.8	84.8	0.0	0.0%
6b Resale	0.0	0.0	0.0	0.0%
7b Contract	0.0	0.0	0.0	0.0%
8b Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>				
9b Commercial	0.0	0.0	0.0	0.0%
10b Public Authority	0.0	0.0	0.0	0.0%
11b Private Fire Protection	1.1	1.1	0.0	0.0%

\* Hundred cubic feet per connection per year.

**REGION 1, Santa Maria CSA**  
**Golden State Water Company A.17-07-010**  
**WATER SALES PER CUSTOMER (OR PER CONNECTION)**

<b>Test Year 2019</b>	<b>(CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>					
1a	Residential	165.8	165.8	0.0	0.0%
2a	Commercial	732.2	732.2	0.0	0.0%
3a	Industrial	94.8	94.8	0.0	0.0%
4a	Public Authority	3,936.5	3,936.5	0.0	0.0%
5a	Irrigation	1,348.7	1,348.7	0.0	0.0%
6a	Resale	0.0	0.0	0.0	0.0%
7a	Contract	0.0	0.0	0.0	0.0%
8a	Other	686.1	686.1	0.0	0.0%
<b>FLAT RATE</b>					
9a	Commercial	0.0	0.0	0.0	0.0%
10a	Public Authority	0.0	0.0	0.0	0.0%
11a	Private Fire Protection	9.9	9.9	0.0	0.0%
<b>Escalation Year 2020</b>	<b>(CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>					
1b	Residential	165.8	165.8	0.0	0.0%
2b	Commercial	732.2	732.2	0.0	0.0%
3b	Industrial	94.8	94.8	0.0	0.0%
4b	Public Authority	3,936.5	3,936.5	0.0	0.0%
5b	Irrigation	1,348.7	1,348.7	0.0	0.0%
6b	Resale	0.0	0.0	0.0	0.0%
7b	Contract	0.0	0.0	0.0	0.0%
8b	Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>					
9b	Commercial	0.0	0.0	0.0	0.0%
10b	Public Authority	0.0	0.0	0.0	0.0%
11b	Private Fire Protection	9.9	9.9	0.0	0.0%

\* Hundred cubic feet per connection per year.

**REGION 1, Simi Valley CSA**  
**Golden State Water Company A.17-07-010**  
**WATER SALES PER CUSTOMER (OR PER CONNECTION)**

<b>Test Year 2019</b>	<b>(CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>					
1a	Residential	140.1	129.0	(11.1)	-8.6%
2a	Commercial	786.1	665.4	(120.7)	-18.1%
3a	Industrial	355.9	327.4	(28.5)	-8.7%
4a	Public Authority	1,796.4	1,530.4	(266.0)	-17.4%
5a	Irrigation	1,301.5	1,213.2	(88.3)	-7.3%
6a	Resale	0.0	0.0	0.0	0.0%
7a	Contract	0.0	0.0	0.0	0.0%
8a	Other	886.7	0.0	(886.7)	0.0%
<b>FLAT RATE</b>					
9a	Commercial	0.0	0.0	0.0	0.0%
10a	Public Authority	0.0	0.0	0.0	0.0%
11a	Private Fire Protection	0.9	0.9	0.0	0.0%
<b>Escalation Year 2020</b>	<b>(CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>					
1b	Residential	140.1	129.0	(11.1)	-8.6%
2b	Commercial	786.1	665.4	(120.7)	-18.1%
3b	Industrial	355.9	327.4	(28.5)	-8.7%
4b	Public Authority	1,796.4	1,530.4	(266.0)	-17.4%
5b	Irrigation	1,301.5	1,213.2	(88.3)	-7.3%
6b	Resale	0.0	0.0	0.0	0.0%
7b	Contract	0.0	0.0	0.0	0.0%
8b	Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>					
9b	Commercial	0.0	0.0	0.0	0.0%
10b	Public Authority	0.0	0.0	0.0	0.0%
11b	Private Fire Protection	0.9	0.9	0.0	0.0%

\* Hundred cubic feet per connection per year.

**REGION 2 RATEMAKING AREA**  
**Golden State Water Company A.17-07-010**  
**WATER SALES PER CUSTOMER (OR PER CONNECTION)**

<b>Test Year 2019 (CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>				
1a Residential	114.6	111.3	(3.3)	-3.0%
2a Commercial	460.9	452.4	(8.5)	-1.9%
3a Industrial	1,516.3	1,495.4	(20.9)	-1.4%
4a Public Authority	1,551.2	1,490.4	(60.8)	-4.1%
5a Irrigation	576.2	526.1	(50.1)	-9.5%
6a Resale	0.0	0.0	0.0	0.0%
7a Contract	7,322.8	6,614.0	(708.9)	-10.7%
8a Other	29.3	26.0	(3.3)	-12.7%
<b>FLAT RATE</b>				
9a Commercial	0.0	0.0	0.0	0.0%
10a Public Authority	0.0	0.0	0.0	0.0%
11a Private Fire Protection	0.0	0.0	0.0	0.0%
<b>Escalation Year 2020 (CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>				
1b Residential	114.6	111.3	(3.3)	-3.0%
2b Commercial	460.9	452.4	(8.5)	-1.9%
3b Industrial	1,516.3	1,495.4	(20.9)	-1.4%
4b Public Authority	1,551.2	1,490.4	(60.8)	-4.1%
5b Irrigation	576.2	526.1	(50.1)	-9.5%
6b Resale	0.0	0.0	0.0	0.0%
7b Contract	7,322.8	6,614.0	(708.9)	-10.7%
8b Other	0.0	0.0	0.0	0.0%
<b>FLAT RATE</b>				
9b Commercial	0.0	0.0	0.0	0.0%
10b Public Authority	0.0	0.0	0.0	0.0%
11b Private Fire Protection	0.0	0.0	0.0	0.0%

\* Hundred cubic feet per connection per year.



**REGION 3 RATEMAKING AREA**  
**Golden State Water Company A.17-07-010**  
**WATER SALES PER CUSTOMER (OR PER CONNECTION)**

<b>Test Year 2019 (CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>				
1a Residential	145.7	134.5	(11.1)	-8.3%
2a Commercial	845.9	793.5	(52.5)	-6.6%
3a Industrial	2,363.1	2,209.5	(153.6)	-6.9%
4a Public Authority	2,473.5	2,230.7	(242.8)	-10.9%
5a Irrigation	994.3	883.2	(111.1)	-12.6%
6a Resale	10,186.9	9,721.0	(465.9)	-4.8%
7a Contract	101,368.7	95,840.3	(5,528.4)	-5.8%
8a Other	917.8	830.0	(87.8)	-10.6%
<b>FLAT RATE</b>				
9a Commercial	0.0	0.0	0.0	0.0%
10a Public Authority	0.0	0.0	0.0	0.0%
11a Private Fire Protection	2.0	2.0	0.0	0.0%
<b>Escalation Year 2020 (CCF/connection/year)*</b>	<b>ORA</b>	<b>GSWC</b>	<b>GSWC &gt; ORA</b>	
<b>METERED</b>				
1b Residential	145.7	134.5	(11.1)	-8.3%
2b Commercial	847.5	794.7	(52.7)	-6.6%
3b Industrial	2,363.1	2,209.5	(153.6)	-6.9%
4b Public Authority	2,477.7	2,235.5	(242.1)	-10.8%
5b Irrigation	995.3	884.5	(110.8)	-12.5%
6b Resale	10,186.9	9,721.0	(465.9)	-4.8%
7b Contract	101,368.7	95,840.3	(5,528.4)	-5.8%
8b Other	917.8	830.0	(87.8)	-10.6%
<b>FLAT RATE</b>				
9b Commercial	0.0	0.0	0.0	0.0%
10b Public Authority	0.0	0.0	0.0	0.0%
11b Private Fire Protection	2.0	2.0	0.0	0.0%

\* Hundred cubic feet per connection per year.

[END OF APPENDIX]

[END OF REPORT]