

Docket	: A.14-07-006
Exhibit Number	: ORA - _____
Commissioner	: Michael Picker
Administrative Law Judges	: Rafael Lirag : Douglas Long
ORA Witnesses	: Daphne Goldberg : Alex Lau



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

**REPORT ON PLANT – REGION 1
Golden State Water Company
Test Year 2016 General Rate Case
A.14-07-006**

**San Francisco, California
March 6, 2015**

MEMORANDUM

This Report on Plant – Region 1 for GSWC GRC A.14-07-006 is prepared by Daphne Goldberg and Alex Lau of the *Office of Ratepayer Advocates (ORA) - Water Branch*, and under the general supervision of Program & Project Manager Danilo Sanchez, and Program & Project Supervisor Lisa Bilir. The witnesses' Statement of Qualifications are in ORA's Company-Wide Report on the Results of Operations. Shanna Foley and Kerriann Sheppard serve as ORA legal counsels.

Report on Plant - Region 1

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Chapter 1. PLANT, REGION 1 – NORTHERN DISTRICT

A. INTRODUCTION

This chapter presents ORA’s analyses and recommendations for Plant in Service for the Northern District in GSWC’s Region 1. ORA presents its review and adjustments of GSWC’s plant requests for the Northern District Office and three Customer Service Areas (CSAs) – Arden-Cordova, Bay Point, and Clearlake. ORA’s estimated Capital Budgets include cost estimates that also reflect recommendations in ORA’s Common Plant Issues testimony regarding contingency, design, vehicle replacement, and various other adjustments.

B. SUMMARY OF RECOMMENDATIONS

Table 1-A below presents a summary of capital budgets in GSWC’s Region 1’s Northern District. In the following sections, ORA presents its recommended adjustments to GSWC’s budget and specific project requests. Cost estimates also reflect recommendations in ORA’s Common Plant Issues testimony on contingency, design cost, vehicles and various other issues. For purposes of comparison, ORA presents its recommended plant estimates using GSWC’s proposed construction overhead factor (17.42%). ORA’s recommendations on capital overhead loading presented in its Report on General Office should be used to develop final authorized project costs.

1

Table 1-A: Capital Budget Summary – Region I Northern District.¹

Region 1 - Northern	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
N. District Office	\$ 65,560	\$ 16,800	\$ 67,430	\$ 17,300	\$ 60,830	\$ 55,300
Arden-Cordova CSA	\$ 5,489,180	\$ 2,204,200	\$ 5,734,030	\$ 1,903,100	\$ 5,054,470	\$ 1,684,400
Bay Point CSA	\$ 1,069,530	\$ 420,100	\$ 944,690	\$ 392,900	\$ 1,289,690	\$ 467,500
Clearlake CSA	\$ 632,950	\$ 295,300	\$ 663,620	\$ 539,700	\$ 681,540	\$ 219,000
Total Cap. Budget	\$ 7,257,220	\$ 2,936,400	\$ 7,409,770	\$ 2,853,000	\$ 7,086,530	\$ 2,426,200
3-YEAR TOTAL:					\$ 21,753,520	\$ 8,215,600
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:					\$ 13,537,920	
3-YEAR DIFFERENCE, (GSWC-ORA)/(GSWC):					62%	

2

3 **C. NORTHERN DISTRICT - Vehicles**

4 GSWC requests 10 vehicles in Region 1 Northern District’s Office and three CSAs. For reasons
5 identified in ORA’s testimony on vehicle replacements, ORA recommends the adjustments
6 shown in **Table 1-B** below.

7

Table 1-B: Region 1 Northern District – Vehicle Replacements

CSA/District	Vehicle #	Vehicle Description	GSWC Request Replacement Year	ORA Recommended Replacement Year	GSWC Request Budget	ORA Recommended Budget
REGION 1						
Northern District	#1045	Ford F-Series 3/4 ton SD	2015	-	\$ 42,800	\$ -
Northern District	#586	Ford F-Series 3/4 ton SD	2016	-	\$ 44,000	\$ -
Northern District	#500255	Ford Taurus SE	2017	2017	\$ 37,500	\$ 37,500
Arden-Cordova CSA	#1160	Ford F-Series 3/4 ton SD	2015	-	\$ 46,450	\$ -
Arden-Cordova CSA	#1204	Ford F-Series 3/4 ton SD	2015	2017	\$ 46,450	\$ 49,000
Arden-Cordova CSA	#1256	Ford F-Series 3/4 ton SD	2016	-	\$ 47,700	\$ -
Arden-Cordova CSA	#1241	Ford F-Series 3/4 ton SD	2017	-	\$ 48,950	\$ -
Arden-Cordova CSA	#1275	Ford F-Series 3/4 ton SD	2017	-	\$ 48,950	\$ -
Bay Point CSA	#1226	Ford Fusion SE	2015	2015	\$ 35,700	\$ 35,700
Clearlake CSA	#1211	Ford F-Series 3/4 ton SD	2016	-	\$ 47,700	\$ -

8

¹ GSWC’s Report on Results of Operations – Region 1 Northern District Headquarters, dated July 2014, Table 4-M.

1 **D. NORTHERN DISTRICT OFFICE**

2 **Table 1-C** below presents a summary of capital budgets for the Northern District Office.
 3 Differences in ORA’s and GSWC’s estimates are due to ORA’s disallowance of the Contingency
 4 budget and a vehicle replacement as explained in ORA’s Common Plant Issues testimony.

5 **Table 1-C: Capital Budgets – Northern District Office**

Northern District Office	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
Total Contingency Budget	\$ 5,960	\$ -	\$ 6,130	\$ -	\$ 5,530	\$ -
Office Furniture and Equipment	\$ 10,800	\$ 10,800	\$ 11,100	\$ 11,100	\$ 11,400	\$ 11,400
Transportation Equipment:						
i. Vehicle # 1045	\$ 42,800	\$ -	\$ -	\$ -	\$ -	\$ -
ii. Vehicle # 586	\$ -	\$ -	\$ 44,000	\$ -	\$ -	\$ -
iii. Vehicle # 500255	\$ -	\$ -	\$ -	\$ -	\$ 37,500	\$ 37,500
Tools and Safety Equipment	\$ 6,000	\$ 6,000	\$ 6,200	\$ 6,200	\$ 6,400	\$ 6,400
Total Blanket Budget	\$ 59,600	\$ 16,800	\$ 61,300	\$ 17,300	\$ 55,300	\$ 55,300
TOTAL CAPITAL BUDGET	\$ 65,560	\$ 16,800	\$ 67,430	\$ 17,300	\$ 60,830	\$ 55,300
3-YEAR TOTAL:					\$ 193,820	\$ 89,400
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:					\$	104,420
3-YEAR TOTAL DIFFERENCE, (GSWC-ORA)/(GSWC):						54%

6
 7 **E. ARDEN-CORDOVA CSA**

8 **Table 1-D** below presents a summary of capital budgets for the Arden-Cordova CSA in Region
 9 1.

Table 1-D: Capital Budget Summary – Arden-Cordova CSA

Arden-Cordova CSA	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
Arden						
Arden Water Supply, Acquire Land	\$ 273,500	\$ -	\$ -	\$ -	\$ -	\$ -
Total Land	\$ 273,500	\$ -	\$ -	\$ -	\$ -	\$ -
Arden						
Trussel Plant, Well, Res & Boosters	\$ 1,657,300	\$ 91,000	\$ 3,070,200	\$ -	\$ -	\$ -
Arden Water Supply, New well	\$ -	\$ -	\$ -	\$ -	\$ 308,900	\$ -
Cordova						
Coloma WTP, Grounding Survey	\$ 140,600	\$ -	\$ -	\$ -	\$ -	\$ -
Coloma WTP, Recoat Res #2	\$ 397,900	\$ 282,000	\$ -	\$ -	\$ -	\$ -
Negrara Plant, Des. well & raze site	\$ 109,400	\$ 104,400	\$ -	\$ -	\$ -	\$ -
Gold Country Plant, Des well & raze	\$ 109,400	\$ 104,400	\$ -	\$ -	\$ -	\$ -
Coloma WTP, Additional booster	\$ 39,200	\$ 37,400	\$ 274,200	\$ 261,800	\$ -	\$ -
South Bridge Plant, Relocate meter	\$ -	\$ -	\$ 5,400	\$ 5,100	\$ 37,400	\$ 35,700
Total Water Supply	\$ 2,453,800	\$ 619,200	\$ 3,349,800	\$ 266,900	\$ 346,300	\$ 35,700
Misc Street Improvements	\$ 116,000	\$ 116,000	\$ 120,000	\$ 120,000	\$ 124,000	\$ 124,000
Total Street Improvements	\$ 116,000	\$ 116,000	\$ 120,000	\$ 120,000	\$ 124,000	\$ 124,000
Arden						
Greenhills Rd Area Main Repla.	\$ -	\$ -	\$ 181,300	\$ -	\$ 1,572,100	\$ -
Cordova						
Chassella Way Area Main Repla.	\$ 836,300	\$ -	\$ -	\$ -	\$ -	\$ -
Hwy 50 Crossing, Abandonment	\$ 57,000	\$ 52,900	\$ -	\$ -	\$ -	\$ -
Install fire hydra. on dead-end mains	\$ 10,800	\$ 7,100	\$ 112,800	\$ 107,600	\$ -	\$ -
Brenda Way, Dawes to Chase	\$ 32,500	\$ -	\$ 341,400	\$ -	\$ -	\$ -
Mills Park Dr, Olson to Silverwood	\$ -	\$ -	\$ 98,300	\$ -	\$ 852,200	\$ -
Zinfandel Dr Area Main Repla.	\$ -	\$ -	\$ -	\$ -	\$ 270,100	\$ -
Paseo Dr Area Main Replacements	\$ -	\$ -	\$ -	\$ -	\$ 166,200	\$ -
Total Distribution Improvements	\$ 936,600	\$ 60,000	\$ 733,800	\$ 107,600	\$ 2,860,600	\$ -
Coloma WTP, Repla. filter (N5&6)	\$ 156,200	\$ 149,100	\$ -	\$ -	\$ -	\$ -
Coloma WTP, Repla. filter (N1&S1)	\$ -	\$ -	\$ -	\$ -	\$ 148,700	\$ 141,900
Total Water Quality	\$ 156,200	\$ 149,100	\$ -	\$ -	\$ 148,700	\$ 141,900
UWMP, Cordova System	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Total Miscellaneous	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Contingency Budget	\$ 135,280	\$ -	\$ 139,130	\$ -	\$ 143,170	\$ -
Total Contingency Budget	\$ 135,280	\$ -	\$ 139,130	\$ -	\$ 143,170	\$ -
New Business Funded by GSWC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total New Business	\$ -	\$ -				
Meters	\$ 83,000	\$ 83,000	\$ 148,400	\$ 148,400	\$ 120,000	\$ 120,000
Services	\$ 523,800	\$ 523,800	\$ 537,900	\$ 537,900	\$ 552,400	\$ 552,400
Services (Meter Retrofit Program)	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000
Minor Main Replacements	\$ 54,900	\$ 54,900	\$ 56,400	\$ 56,400	\$ 57,900	\$ 57,900
Minor Pumping Plant Equip.	\$ 49,500	\$ 49,500	\$ 50,800	\$ 50,800	\$ 52,200	\$ 52,200
Minor Purification Equip.	\$ 33,100	\$ 33,100	\$ 34,000	\$ 34,000	\$ 34,900	\$ 34,900
Office Furniture and Equip.	\$ 10,100	\$ 10,100	\$ 10,400	\$ 10,400	\$ 10,600	\$ 10,600
Transportation Equipment	\$ 92,900	\$ -	\$ 47,700	\$ -	\$ 97,900	\$ 49,000
Tools and Safety Equip.	\$ 5,500	\$ 5,500	\$ 5,700	\$ 5,700	\$ 5,800	\$ 5,800
Total Blanket Budget	\$ 1,352,800	\$ 1,259,900	\$ 1,391,300	\$ 1,343,600	\$ 1,431,700	\$ 1,382,800
TOTAL CAPITAL BUDGET	\$ 5,489,180	\$ 2,204,200	\$ 5,734,030	\$ 1,903,100	\$ 5,054,470	\$ 1,684,400
3-YEAR TOTAL:					\$ 16,277,680	\$ 5,791,700
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:					\$ 10,485,980	
3-YEAR TOTAL DIFFERENCE, (GSWC-ORA)/(GSWC):					64%	

1 **1. Arden – Trussel Plant Well, Tank, and Boosters (\$4,727,500)**

2 In this GRC, GSWC proposes to (1) destroy the Windsor Well, and (2) construct at the Trussel
3 site one 1,000 gallon-per-minute (gpm) well,² three 500-gpm booster pumps with Variable
4 Frequency Drive (VFD),³ one 1,500 gpm booster pump,⁴ and a 0.5-million gallon (MG) tank
5 (herein referred to as the Trussel Plant project).⁵ GSWC requests \$1,657,300 in 2015 and
6 \$3,070,200 in 2016 for a total of \$4,727,500 for this project.⁶ As explained below, this project is
7 not needed at this time.

8 According to GSWC, the Windsor Well had been experiencing sanding problems since 2001⁷
9 and has been out of service since October 2007.⁸ GSWC first proposed to replace the Windsor
10 Well in the 2011 GRC. In that GRC, the Commission adopted a settlement that authorized
11 \$272,500 for the design and permitting of the well replacement and associated supply
12 projects.^{9,10} GSWC has spent \$107,889 of the \$272,500 design and permitting budget as of
13 October 6, 2014.¹¹ In the same settlement the land and other assets related to the Trussel Well
14 were removed from the Utility Plant In Service and placed into Non-Operating Plant.¹²

15 ORA’s analysis shows that even with the retirement of the Windsor Well, there is no need to
16 proceed with the Trussel Plant project because the existing Arden system has sufficient capacity.

² GSWC Response to ORA Data Request AL7-001, Question 3 (c) i and 3 (c) ii.

³ GSWC Spreadsheet – PCE_RI - Arden (Trussel Plant, Equip Well & Boosters), tab “Construction Cost.”

⁴ Ibid.

⁵ GSWC Spreadsheet – PCE_RI - Arden (Trussel Plant, Construct Reservoir), tab “Construction Cost.”

⁶ GSWC Testimony of Robert McVicker and Mark Insko, p. 44.

⁷ Ibid, p. 44.

⁸ GSWC Response to ORA Data Request AL7-001 (Wells and Abandonment), Attachment 1, Cell Q10.

⁹ D.13-05-011, Attachment 3, p. 19, Table 3-4.

¹⁰ 2011 GRC - GSWC Testimony of Ernest Gisler, Adrian Combes, Mark Insko, and Dane Sinagra, p. 36.

¹¹ GSWC Response to ORA Data Request AL7-001, Question 3 (a) ii.

¹² D.13-05-011, Attachment 3, p. 71, Section 3.12 – Out of Service Assets.

1 System Supply

2 The Arden system is a single pressure zone system that, according to the 2013 CDPH/DDW¹³
3 inspection report, has six active wells.¹⁴ In GSWC’s current GRC application, ORA found
4 significant discrepancies in the reported supply capacity data for the Arden system.

5 GSWC’s 2013 Annual Report shows a total system capacity of 3,600 gpm, with the Windsor
6 Well having a capacity of 550 gpm.¹⁵ Based on to these numbers, the removal of the Windsor
7 Well would result in a system capacity of **3,050 gpm** (4.39 MGD or million gallons per day).¹⁶

8 GSWC’s 2007 Arden System Water Master Plan reports the total system capacity is at 3,250 -
9 3,550 gpm,¹⁷ with Windsor well at 450-500 gpm.¹⁸ Based on this data, if the Windsor Well is
10 removed, the remaining total system capacity would be **2,750-3,100 gpm** (3.96-4.46 MGD).^{19,20}

11 The CDPH/DDW’s 2013 Inspection Report for the Arden system (2013 Arden CDPH/DDW
12 Report) lists the total system capacity at 4,100 gpm, with the Windsor Well’s capacity listed at

¹³ The State Regional Water Resources Board’s Division of Drinking Water (DDW), formerly a part of the California Department of Public Health (CDPH).

¹⁴ 2013 Arden CDPH/DDW Report, p. 2, Section B.

¹⁵ GSWC’s 2013 Annual Report of District Water System Operations - Arden-Cordova, p.13, D-1 Plant Facility Index - Region I – 2013.

¹⁶ 3600 gpm – 550 gpm = 3050 gpm.

¹⁷ 2007 Arden System Water Master Plan, p. 4-2, Table 4-1.

¹⁸ Ibid.

¹⁹ 3,250 gpm – 500 gpm = 2,750 gpm; 3,550 gpm – 450 gpm = 3,100 gpm .

²⁰ Although the 2007 Water Master Plan designated two of the six wells - Greenhills and Shadowglen - as “back-up” wells the 2013 Arden CDPH/DDW report designate them as “active.” GSWC’s 2007 Arden System Water Master Plan, p. 9-2, Table 9-1, explains these wells are designated as “back-up” because the wells are “[l]ocated on very small site and approaching end of its useful service life.” No other reasons such as water quality or functionality of the well were brought up by GSWC. P. 9-2 to 9-3 further states: “It is very important that although these wells are considered “backup,” they remain in working order until the new supply improvement is online.” This further confirms that these two “back-up” wells are in working condition and consistent with the CDPH’s “active” designation. In addition, the Greenhills and Shadowglen wells continue to produce water as indicated in GSWC’s 2013 Annual Report of District Water System Operations – Arden-Cordova, p.13, D-1 Plant Facility Index. For these reasons, these two wells’ capacities should be considered as part of the available supply for the system.

1 750 gpm.²¹ The retirement of the Windsor Well would leave a total supply capacity of **3,350**
2 **gpm** (4.82 MGD). ORA uses the well supply information from the 2013 Arden CDPH/DDW
3 Report, as it reflects the latest available information reviewed by the CDPH/DDW regional
4 engineers.

5 In addition to its well supply, the Arden system has two existing 8-inch interconnections with the
6 Sacramento Suburban Water District (SSWD). GSWC can utilize these emergency connections
7 in any of the following situations:

8 catastrophic loss of power, a fire event that exceeds the system’s ability to meet
9 necessary demand, and the loss of wells due to equipment failure or water quality issues
10 that require the use of outside water to flush or maintain system pressure, demand, and/or
11 fire protection and/or ensure public health and safety.²²

12 System Demand

13 Similar to the system supply data, there are varying values reported for the system’s Maximum
14 Daily Demand (MDD).

15 Title 22 of the California Code of Regulations (CCR) on drinking water standards (Waterworks
16 Standards) states that MDD is determined by identifying the highest day of usage during the past
17 ten years.²³ The Peak Hour Demand (PHD) is determined by multiplying the average hourly
18 flow during MDD by a peaking factor of at least 1.5.²⁴ Both MDD and PHD exclude fire flow in
19 its definition.²⁵

20 The 2013 Arden CDPH/DDW Report shows that the highest recorded MDD in 2002-2012
21 occurred in 2007 at 2.96 MGD²⁶ (2,055 gpm). This 2007 MDD with the 1.5 peaking factor
22 produces a PHD of 4.44 MGD (3,083 gpm) for the Arden system.²⁷

²¹ 2013 Arden CDPH/DDW Report, p. 2, Section B.

²² GSWC Response to ORA Data Request AL7-002, Question 2 c.

²³ California Code of Regulations, Title 22, Division 4, Chapter 16, Article 2, Section 64554(b)(1).

²⁴ Ibid.

²⁵ California Code of Regulations, Title 22, Division 4, Chapter 16, Article 1, Section 64551.30 and 64551.35.

²⁶ 2013 Arden CDPH/DDW Report, p. 1, Section A.3 – Water Usage Table.

1 In response to ORA’s data request, GSWC reported a 2010 MDD of 4.76 MGD (3,309 gpm).²⁸
2 This MDD is 2.5 times higher than that reported in the 2013 Arden CDPH/DDW Report for
3 2010 (1.92 MGD).²⁹ Moreover, according to the same data request, during the 2009-2013
4 period, GSWC’s reported 2010 MDD was almost two-times higher than the next highest MDD
5 (4.76 MGD in 2010 vs. 2.62 MGD in 2012).³⁰ An additional reason to question the accuracy of
6 the 2010 MDD number given in response to ORA’s data request is that 2010 had the lowest
7 recorded total water production in the years 2009-2013, at 335.34 MG.³¹ ORA inquired about
8 this unusually high 2010 MDD value but did not receive a satisfactory explanation. GSWC
9 simply stated that:

10 High ‘maximum day’ demand (based on daily production reads) can be attributed to a
11 number of factors, including increased customer usage due to high temperature and/or
12 special events (holidays, etc.), fire events, main breaks, etc. One or more of these factors
13 may have contributed to the higher MDD values in the Arden System for July 2010.³²

14 Without a satisfactory explanation for the unusually high 2010 MDD value reported to ORA,
15 ORA uses the demand data found in the 2013 Arden CDPH/DDW Report in its supply and
16 demand analysis for the Arden system.

17 The 2013 Arden CDPH/DDW Report data shows that demand in the Arden system has been
18 decreasing since 2007.³³ The recorded 2012 MDD is 1.96 MGD (1,361 gpm) or 33% less than
19 the 2007 MDD (2.96 MGD).³⁴ The 2012 PHD, based on this 2012 MDD, is 2.94 MGD (2,042
20 gpm).³⁵

²⁷ 2.96 MGD x 1.5 = 4.44 MGD; 2,055 gpm x 1.5 = 3,083 gpm.

²⁸ GSWC Response to ORA Data Request SN2-001, Attachment “SN2-001 - Q1 Response.xls.”

²⁹ 2013 Arden CDPH/DDW Report, p. 1, Section A.3 – Water Usage Table.

³⁰ GSWC Response to ORA Data Request SN2-001, Attachment “SN2-001 - Q1 Response.xls.”

³¹ Ibid.

³² GSWC Response to ORA Data Request AL7-002, Q1b.

³³ 2013 Arden CDPH/DDW Report, p.1, Section A.3, Water Usage Table.

³⁴ Ibid.

³⁵ 1.96 MGD x 1.5 = 2.94 MGD.

1 One factor that may have contributed to the downward trend is the conversion of flat rate to
2 metered connections to comply with the requirements set forth in Assembly Bill 2572.³⁶
3 According to the 2013 Arden CDPH/DDW Report, in 2012, there were only 244 metered
4 connections; the remaining 1,412 connections were non-metered (flat rate) connections.³⁷
5 GSWC plans to convert approximately 300 connections per year for the whole Arden-Cordova
6 CSA to be in compliance with the law by 2025.³⁸ ORA's analysis indicates that on average,
7 metered connections use at least 30% less water than non-metered connections.³⁹ Therefore, it is
8 reasonable to assume system demand will continue to decrease as more flat rate connections get
9 converted to metered connections in the future.

10 The following graph shows that the Arden system's MDDs began decreasing between 2007 and
11 2009, and have stabilized since 2009. To reflect system demand stabilizing in the most recent
12 period, ORA uses the 2012 MDD from the 2013 Arden CDPH/DDW Report in its demand
13 analysis. Using the 2007 MDD would significantly overstate the system's supply needs resulting
14 in overbuilding of supply infrastructure and increase rates unnecessarily.

³⁶ In 2004, the Legislature passed AB 2572, requiring all urban water suppliers to install water meters on all customer connections constructed before 1992 by January 1, 2025.

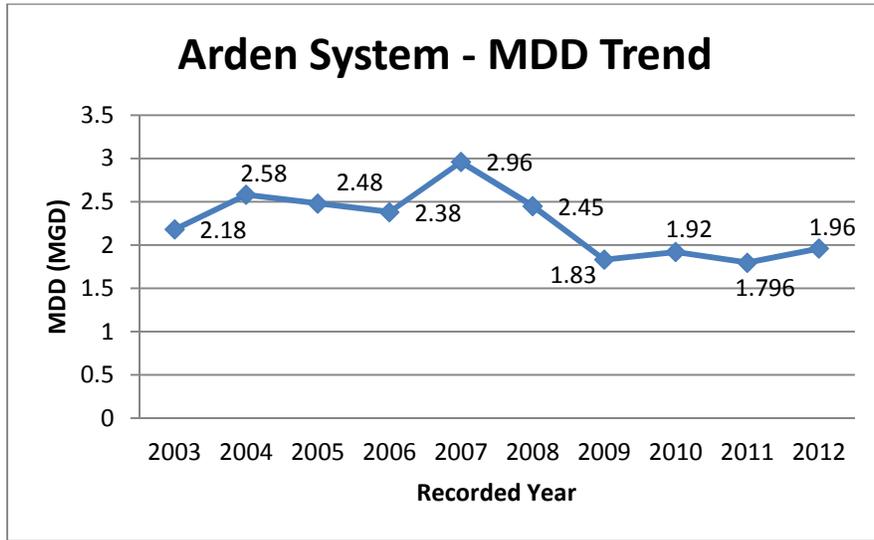
³⁷ 2013 Arden CDPH/DDW Report, p. 1, Section A.3.

³⁸ GSWC Testimony of Robert McVicker and Mark Insko, p. 59.

³⁹ ORA's testimony on customer and sales forecasts in this proceeding.

1

Figure 1-A 2009-2012 MDD Trend in the Arden System.⁴⁰



2

3 System Demand vs Supply

4 To be consistent with the use of system demand data from the 2013 CDPH/DDW report, ORA’s
5 analysis also uses the system capacity data from the same report.

6 The Waterworks Standards specifies that: “At all times, a public water system's water source(s)
7 shall have the capacity to meet the system's maximum day demand (MDD).”⁴¹ The Standards
8 also states that “For systems with 1,000 or more service connections, the system shall be able to
9 meet four hours of peak hourly demand (PHD) with source capacity, storage capacity, and/or
10 emergency source connections.”⁴²

11 The Commission’s General Order (GO) 103-A does not require an existing system to have
12 supply and storage facilities to meet MDD **plus fire flow demands**. This requirement only
13 applies to new portions of a system.⁴³

⁴⁰ Data on MDD from 2013 Arden CDPH/DDW Report, Section A.3, Water Usage Table.

⁴¹ California Code of Regulations, Title 22, Division 4, Chapter 16, Article 2, Section 64554(a)(1).

⁴² Ibid, Section 64554(a)(2).

⁴³ G.O. 103-A, p. 11, Section II.2.B.(3).(b) states: “If a system provides potable water for fire protection service, new portions of the system shall have supply and storage facilities that are designed to meet MDD plus the required fire flow at the time of design.”

1 ORA’s analysis shows, even with the removal of the Windsor Well, the Arden system has
2 enough capacity to meet both MDD and PHD. No new wells or tanks are needed to supplement
3 the existing supply. The following table illustrates the Supply vs. Demand scenario based on
4 2012 MDD data from the 2013 Arden CDPH/DDW Report.

5 **Table 1-E: Existing Arden Supply vs Demand, excluding Windsor Well⁴⁴**

2012 Demand Scenario	Demand (gpm)	Capacity (gpm)	Surplus (gpm)
MDD	1,361	3,350	1,989
PHD	2,042	3,350	1,308

6 Even if the system’s demand reverts back to the highest level for the past 10 years, which
7 occurred in 2007, there would still be a system surplus under both the MDD and PHD
8 scenarios.⁴⁵ Moreover, the Windsor Well has been inactive since October 2007,⁴⁶ yet the system
9 has been able to satisfy customer demands and passed its most recent CDPH/DDW inspection.
10 Additionally, GSWC has not had to use its two emergency connections with SSWD for at least
11 the past 10 years (2004-2014).⁴⁷

12 It is important to note that GSWC defines firm capacity as the total well capacity excluding the
13 capacity from the largest well. ORA disagrees with the firm capacity requirement that GSWC
14 uses in analyzing its system supply and demand as explained in detail in ORA’s testimony on the
15 Pomelo Well #5 project in Region 3’s Claremont CSA.

16 [Recommendation](#)

17 ORA’s analysis shows that even with the removal of the Windsor Well, the existing source
18 capacity is enough to satisfy both MDD and PHD. In the case of an emergency, GSWC can

⁴⁴ 2013 Arden CDPH/DDW Report, Section A.3 - Water Usage Table and Section B – Source Data Table.

⁴⁵ 2007 MDD Scenario: 3,350 gpm (Capacity) – 2,056 gpm (Demand) = 1,294 gpm (Surplus); 2007 PHD Scenario: 3,350 gpm (Capacity) – 3,083 gpm (Demand) = 267 gpm (Surplus).

⁴⁶ GSWC Response to ORA Data Request AL7-001, Question 1, Attachment “DR A1407006-ORA-AL7-001 (Wells and Abandonment) Attachment 1,” Tab “Region I,” Cell Q10.

⁴⁷ GSWC Response to ORA Data Request AL7-002, Question 2 a.

1 utilize its existing interconnections with SSWD. Therefore, ORA recommends that the
2 Commission reject GSWC’s request for the Trussel Plant project, and only approve GSWC’s
3 request to destroy and raze the site of the Windsor Well, at a budget of \$91,000 in 2015
4 including escalation, contingency and company overhead. ORA also recommends that the
5 Trussel site (land cost) continue to be excluded from ratebase, per the settlement in the last
6 GRC.⁴⁸

7 **2. Arden - Arden Supply Project (Watt Well #2 Replacement): Land Acquisition**
8 **(\$273,500) and Design & Permitting Phase (\$308,900)**

9 GSWC requests \$273,500 in 2015 and \$308,900 in 2017 for land purchase and
10 designing/permitting for a new well in the Arden system. GSWC states that this well is needed
11 to replace the existing Watt Well #2.

12 The supply and demand analysis presented in the discussion for the Trussel Plant project above
13 shows that existing wells (including Watt Well #2) are sufficient to meet the various demand
14 scenarios in the Arden system.

15 GSWC states that its reason for abandoning Watt Well #2 is not because of “declining well
16 production.”⁴⁹ Indeed, ORA’s review of Watt Well #2’s production history shows that it has
17 been, and continues to be, a reliable producer for the Arden system.⁵⁰

18 According to the July 2014 Testimony of Robert McVicker and Mark Insko, one of the reasons
19 for replacing Watt Well #2 is because the well “has a pump base of insufficient height (less than
20 18 inches).”⁵¹ GSWC references Title 22, California Code of Regulations, Section
21 64560(c)(3)C, and provides the link to a file titled “*California Regulations Related to Drinking*
22 *Water*,” dated July 1, 2013.⁵² Indeed, according to the CPDH’s May 24, 1996 Inspection Report

⁴⁸ D.13-05-011, Attachment 3, p. 72, Table 3.9 “Out of Service Assets.”

⁴⁹ GSWC Response to ORA Data Request AL7-002, Question 6 c.

⁵⁰ GSWC Response to ORA Data Request AL7-002, Question 6 c, Attachment “AL7-002 response Q6c – Watt 2004-13.pdf.”

⁵¹ GSWC Testimony of Robert McVicker and Mark Insko, p. 42.

⁵² Ibid.

1 on the Arden System (1996 Arden CDPH Report), the current base pump height of Watt Well #2
2 was noted as being 10 inches.⁵³ What GSWC fails to mention in its justification is that the
3 referenced regulations are applicable to “New Well Siting, Construction, and Permit
4 Application.”⁵⁴ Section 64560(c) specifies the pump base height for new wells. This provision
5 specifically states that “Each new public water supply well shall....terminate[] a minimum of 18
6 inches above the finished grade.”⁵⁵ [Emphasis added.] The regulations cited by GSWC do not
7 contain any requirements for old, existing wells.

8 Watt Well #2 was drilled in 1950.⁵⁶ Therefore, it is grandfathered and exempt from the pump
9 base height requirement imposed on new well construction. ORA’s interpretation is consistent
10 with the fact that while the CDPH in its 1996 report noted the well’s pump base as being 10
11 inches high, neither that report nor the 2013 report required corrective actions regarding the
12 pump base.

13 GSWC also states that Watt Well #2 has “no sanitary seal (a current requirement for wells...)”⁵⁷
14 GSWC references the California Department of Water Resources’ *Water Well Standards*
15 (Bulletins 74-81 & 74-90 combined), Part II, Section 9 as setting the “current requirement” for
16 sanitary well seals.⁵⁸

17 However, the Water Well Standards states the following: “[t]he standards presented in this
18 chapter are intended to apply to the construction (including major reconstruction) or destruction
19 of water wells throughout the State of California.”⁵⁹ Therefore, the annular seal requirement
20 applies only to new well construction or “major reconstructions,” neither of which are being

⁵³ GSWC Response to ORA Data Request AL7-002, Question 6 d, Attachment “AL7-002 response Q6d - 1996 Inspection Report,” Appendix 3.

⁵⁴ California Code of Regulations, Title 22 Cal. Code of Regs. § 64560.cali.

⁵⁵ California Code of Regulations, Title 22 Cal. Code of Regs. § 64560(c)(3)(C).

⁵⁶ GSWC Testimony of Robert McVicker and Mark Insko, p. 42.

⁵⁷ Ibid.

⁵⁸ Ibid, footnote 11.

⁵⁹ California Department of Water Resources, Water Well Standards, Chapter II Standards;
http://www.water.ca.gov/groundwater/well_info_and_other/california_well_standards/wws/wws_combined.html

1 proposed here.⁶⁰ In addition, the Water Well Standards (Bulletin 74-90), under the
2 Introduction's Applicability subsection states: "Construction standards presented in this
3 supplement apply to all water wells, monitoring wells, and cathodic protection wells constructed
4 after the date of this supplement."⁶¹ These statewide standards for water wells were first
5 formally published in 1968 as DWR Bulletin 74.⁶² Watt Well #2 was constructed in 1950;
6 therefore, it is not subjected to those standards unless it undergoes a "major reconstruction"
7 which is not the case here. Moreover, ORA reviewed the 1996 and 2013 CDPH/DDW Reports
8 and did not find any evidence of deficiency to support the Watt Well #2 replacement. Although
9 the 1996 CDPH Report did note that there is no annular seal, neither the 1996 nor 2013 Report
10 mentioned violations or required corrective actions concerning the lack of an annular seal at Watt
11 Well #2.

12 GSWC also states that the well "is exposed to potential flood risk..."⁶³ In support, GSWC
13 references a letter from the Department of Water Resources' Flood Risk Assessment and
14 Mitigation Office.⁶⁴ The purpose of the letter is to "provide an annual written notice of residual
15 flood risks to owners of property."⁶⁵ However, the notice was issued to owners of parcels in the
16 area, and cannot be considered a specific call for action requiring the utility to relocate its well.⁶⁶

⁶⁰ Ibid.

⁶¹ California Department of Water Resources, Water Well Standards, Chapter I Introductions, Section titled Applicability;

http://www.water.ca.gov/groundwater/well_info_and_other/california_well_standards/b74-90introduction.html#applicability

⁶² California Department of Water Resources, Water Well Standards, Introduction (Bulletin 74-90), Section titled History of DWR Standards;

http://www.water.ca.gov/groundwater/well_info_and_other/california_well_standards/b74-90introduction.html#applicability

⁶³ GSWC Testimony of Robert McVicker and Mark Insko, p. 42.

⁶⁴ Ibid, footnote 12.

⁶⁵ GSWC's Attachment AC01 - California Department of Water Resources Flood Risk Assessment and Mitigation Office letter dated October 24, 2013.

⁶⁶ California Department of Water Resource, Levee History – Construction;

<http://www.water.ca.gov/levees/history/construction.cfm>. The levees protecting the Central Valley were constructed as part of the Sacramento Flood Control Project authorized by then Congress in 1917, and

1 Furthermore, GSWC currently has standard operating procedures in place for its wells in the
2 unlikely event of a flood.⁶⁷

3 Watt Well #2 is a crucial and reliable producer for the Arden system. The well is in compliance
4 with standards applicable to existing wells, and has not been required by the CDPH/DDW to be
5 replaced due to compliance issues, or relocated due to flood risks. GSWC should continue to
6 maintain and make full use of this existing resource. Prematurely retiring Watt Well #2 is
7 imprudent and should not be allowed. Therefore, ORA recommends that the Commission reject
8 this project.

9 **3. Arden System - Greenhills Rd. Area Main Replacements (\$1,753,400)**

10 GSWC requests \$181,300 in 2016 and \$1,572,100 in 2017 to replace 4,100 feet of existing 4-
11 inch and 6-inch asbestos concrete (“AC”) mains.⁶⁸ GSWC states that the project is needed to
12 initiate a backyard main replacement program, replace aging mains, and improve the hydraulics
13 of the system.⁶⁹

14 GSWC states: “[b]ackyard mains pose several problems to Operations personnel, including
15 difficult access to in-line gate valves, repair of main breaks, installation of water meters, meter
16 reading, and issues of physical safety (entering private property, dog bites, etc.).”⁷⁰ However,
17 the proposed pipe segment has not had any leaks in the past five years; therefore, access to repair
18 this segment of main has not been necessary.⁷¹ Moreover, in general, backyard access for meter
19 reading is rarely needed because if a connection is unmetered there is no need for GSWC’s
20 employees to enter the backyards of its customers for reading meters.⁷² If the connections are

some Sacramento-San Joaquin levees were even built more than 150 years ago. The potential flood risk for the location of Watt Well #2 was known before the well’s construction.

⁶⁷ GSWC Response to ORA Data Request AL7-002, Question 6.h.i.

⁶⁸ GSWC Workpapers Region I Arden Cordova, Ratebase, Sheet No. 53.

⁶⁹ Ibid.

⁷⁰ GSWC Testimony of Robert McVicker and Mark Insko, p. 32

⁷¹ GSWC Response to ORA Data Request DK4-001, Question 1 b, spreadsheet “DK4-001 Q.1.b (Pipelines) Attachment 1b”.

⁷² 2013 Arden CDPH/DDW Report, dated August 27, 2013, p. 1, Section A.3.

1 metered, “GSWC utilizes vehicles equipped with radio-read equipment to drive by and record
2 individual meter readings.”⁷³ This makes regular access to a customer’s backyards unnecessary.
3 Therefore, replacing this segment of main because of accessibility issues is not an acceptable
4 justification.

5 As mentioned earlier, there have been no leaks recorded for this pipe segment in the past five
6 years. The pipe segment is 54 years old.⁷⁴ According to the Chrysotile Institute, AC pipes
7 typically have a lifespan of 70 years depending on water chemistry and the soil environment.⁷⁵
8 In fact, GSWC estimates that AC pipes can last as long as 90 years in the Arden system area.⁷⁶

9 Also, GSWC has not provided evidence that this pipe segment is hydraulically deficient. Even at
10 peak hour demand, the pipe segment is able to provide 45 psi of pressure.⁷⁷ GSWC’s Pipeline
11 Management Program (PMP) Report, submitted in this rate case, indicates that this pipe segment
12 has “negligible” hydraulic deficiency and gave this pipeline a score of 1 out of 10, the best score.
13 (see ORA’s discussion on the Alley project in the Bay Point CSA section).^{78,79}

14 For the above reasons, ORA recommends that the Commission reject this project request.

15 **4. Cordova System – Coloma WTP, Grounding Survey (\$140,600)**

16 GSWC requests \$140,600 to conduct a grounding survey at its Coloma Water Treatment Plant
17 (WTP). GSWC proposes the actual implementation of the survey’s findings in a later GRC.

⁷³ 2007 Arden System Water Master Plan, p. 9-6.

⁷⁴ GSWC Response to ORA Data Request DK4-001, Question 1 a, spreadsheet “DK4-001 Q.1.a Response – RI”, Tab “PIPELINE PROJECTS.”

⁷⁵ http://www.chrysotile.com/en/sc_publi/sr.aspx#2; The Chrysotile Institute is a trade group for the asbestos industry in Canada. The non-profit organization, established in 1984, promotes the mining, application and use of a variety of asbestos called "chrysotile."

⁷⁶ GSWC’s July 2014 Pipeline Management Program Report, p. 8-9.

⁷⁷ GSWC Response to ORA Data Request DK4-001, Question 1 a, spreadsheet “DK4-001 Q.1.a Response – RI”, Tab “PIPELINE PROJECTS.”

⁷⁸ Ibid, Appendix D, Project List.

⁷⁹ GSWC’s July 2014 Pipeline Management Program Report , p. 5-4, Table 5.1.

1 This project was previously authorized in the 2010 GRC as an Advice Letter project,⁸⁰ but as
2 explained by GSWC, the two bid proposals it received were in excess of the funding limit for the
3 advice letter project and the time allowance for the advice letter later expired. In this GRC,
4 GSWC is requesting this project again and at a higher budget.⁸¹

5 GSWC claims that bad grounding at the Coloma WTP creates issues such as “difficulty
6 maintaining transducer calibration, Variable Frequency Drive (“VFD”) radio frequency (“RF”)
7 noise that causes transducer fluctuation (and results in inaccurate flow and pressure readings),
8 flow positioners not opening correctly, electrolysis corroding copper pipes and fittings, and
9 failure of high pressure sodium lighting fixtures.”⁸² When ORA asked for more specifics to
10 substantiate these claims, GSWC stated low voltage equipment required constant maintenance,
11 sensors tied to the SCADA system required recalibration four to five times a year instead of once
12 every three years as recommended by the manufacturer, VFDs were not functioning properly,
13 truck mounted radios have interfered with some plant instrumentation, and one pump motor
14 required rewinding four times in five years.⁸³ However, there is no evidence that directly links
15 the above stated maintenance issues to inadequate grounding. It is conceivable that the
16 malfunctioning of equipment is not entirely related to grounding issues. Regular maintenance
17 and recalibration are a normal part of any utility’s operation.

18 GSWC states that “in the past, the entire plant has had to shut down due to grounding-related
19 issues.”⁸⁴ It states that a planned shutdown had to be implemented in 2009, and the WTP went
20 offline for four hours so GSWC staff could remedy the problems of “significant
21 ‘noise’/interference on the electrical network, and failure of low voltage electrical components
22 and sensors tied to the SCADA system.”⁸⁵ During the planned shutdown, grounding was added

⁸⁰ D.10-12-059, p. 33, Order 1; A.10-01-009 – Joint Motion of Golden State Water Company and the Division of Ratepayer Advocates to Approve Settlement Agreement, Exhibit 1, p. 28.

⁸¹ Ibid; A maximum cost of \$98,800 was authorized for the Advice Letter project.

⁸² GSWC Testimony of Robert McVicker and Mark Insko, p. 47.

⁸³ GSWC Response to ORA Data Request AL7-003, Question 1 a.

⁸⁴ GSWC Testimony of Robert McVicker and Mark Insko, p. 47.

⁸⁵ GSWC Response to ORA Data Request AL7-003, Question 1 e ii.

1 to the main Programmable Logic Controller and the network noise problem was solved.⁸⁶
2 GSWC has not reported any other electrical interference severe enough to warrant another plant
3 shutdown after this incident. This also indicates that electrical network interference can be
4 readily resolved by adding grounding to existing equipment. Instead of requesting a grounding
5 survey, GSWC's staff should, as part of its routine maintenance and operations, check all
6 equipment for proper grounding and add grounding if necessary as it has previously done.
7 Furthermore, in response to ORA's inquiry, GSWC states:

8 While there is an interconnected ground mat buried on site, its effectiveness and
9 continuity are not verified; past construction was known in at least one instance to have
10 severed one of the grounding cables requiring repairs to be made, and there may have
11 been other unreported or undetected instances of damage to the ground mat during
12 construction activities. It is also possible that some grounding applications were never
13 properly installed, or, as the Plant was expanded, the existing ground mat became
14 insufficient.⁸⁷

15 From GSWC's response, it is clear that the Coloma WTP already has a grounding system.
16 However, this asset has not been fully utilized and maintained, as even its effectiveness and
17 continuity is unknown to GSWC. It appears that GSWC has not adequately protected this asset
18 as its own construction activities have caused damage to the grounding mat. In addition, GSWC
19 states that *it is possible* that grounding applications were never properly installed. Instead of
20 spending money on the grounding survey, GSWC should verify that existing grounding
21 applications were properly installed, make the necessary repairs, and maximize the use of the
22 existing grounding mat.

23 Lastly, as mentioned earlier, this same project was authorized as an Advice Letter project in the
24 2010 GRC (two rate cases ago). In that GRC, as well as in this GRC, GSWC brought up a host
25 of reasons why the grounding issues need to be investigated and addressed. The reasons include
26 increasing maintenance costs, impacting "successful operation" of the WTP, and impacting the
27 water supply reliability for the Cordova system.⁸⁸ Yet, even with the Advice Letter project

⁸⁶ GSWC Response to ORA Data Request AL7-003, Question 1 e iii, iv.

⁸⁷ GSWC Response to ORA Data Request AL7-003, Question 1 a.

⁸⁸ GSWC Testimony of Robert McVicker and Mark Insko, p. 47.

1 authorization and despite one of the bids coming in lower than the Advice Letter cap (Bid =
2 \$85,134.50 vs. Advice Letter Cap = \$98,800), the company took no action.^{89,90} GSWC chose to
3 let the Advice Letter project provision expire. These facts suggest imprudent planning and poor
4 management of resources.

5 GSWC's inaction on the previously authorized project calls into question the need of the project.
6 A more critical look at the need for the project as described above suggests that GSWC should
7 reevaluate the problem and take appropriate corrective actions as part of its normal operation and
8 maintenance practice, and not ask for more ratepayer funding for unnecessary capital projects.
9 ORA recommends that the Commission reject this request and require GSWC to report actions
10 taken regarding grounding at the Coloma WTP in the next GRC.

11 **5. Cordova system – Coloma WTP, Recoat Reservoir #2 (\$397,900)**

12 GSWC is requesting \$397,900 for recoating the interior of the Coloma Reservoir #2, reinforcing
13 the center baffle, and installing a cathodic protection system. Based on its review of the tank
14 inspection report provided by GSWC,⁹¹ ORA agrees with the need for the proposed
15 rehabilitation but disagrees with the costs provided in the Project Cost Estimate (PCE).⁹²

16 GSWC's PCE for this project used an estimated unit cost of \$10 per sq. ft. for the sandblasting of
17 the tank interior and an estimated unit cost of \$2.50 per sq. ft. for applying a coating of epoxy to
18 the tank interior.⁹³ GSWC derived these costs by taking the unit costs from a project that was

⁸⁹ GSWC Response to ORA Data Request AL7-003, attachment "AL7-003 response Q1gii - CTP grounding survey (RFPs and quotes) – NEW," p. 38.

⁹⁰ D.10-12-059, p. 33, Order 1; A.10-01-009 – Joint Motion of Golden State Water Company and the Division of Ratepayer Advocates to Approve Settlement Agreement, Exhibit 1, p. 28.

⁹¹ GSWC Testimony of Robert McVicker and Mark Insko, Attachment AC07 – Coloma Reservoir 2 Corrosion Evaluation, Harper & Associates Engineering, Inc., January 2014.

⁹² GSWC Spreadsheet – PCE_RI - Cordova (Coloma WTP, Recoat Res #2).

⁹³ GSWC Spreadsheet – PCE_RI - Cordova (Coloma WTP, Recoat Res #2), tab "Construction Cost", cells I15 and I16

1 completed in December 2007 (WO 11600148),⁹⁴ and escalating this unit cost by 3.34% per year
2 to arrive at the 2013 unit costs used in its PCE calculations.

3 GSWC should have considered the costs from more recent tank recoating projects instead of
4 using six-year old cost data. ORA calculates the unit cost of the above mentioned cost
5 components from the winning bid of a recently completed reservoir recoating project in the Bay
6 Point system in the same Northern District of Region 1. The Evora Reservoir #1 recoating
7 project was authorized in the 2011 GRC and was placed back in service on January 24, 2014.⁹⁵
8 ORA's unit cost calculations are based on the bid price of \$75,290 for prepping and coating the
9 interior surface with epoxy, and \$1,400 for wash down and disinfection of interior surfaces.⁹⁶
10 ORA calculates a unit cost of \$8.40 per sq. foot for "Sandblast existing interior coating" plus
11 "Apply epoxy coating to tank interior" of the Coloma Reservoir #2, the equivalent line items
12 found in the winning bid for Evora Reservoir #1. The Evora Reservoir #1 is a 0.4 MG tank and
13 the Coloma Reservoir #2 is a 1.0 MG tank. Due to economies of scale, the Coloma Reservoir #2
14 would have a lower unit cost than the Evora Reservoir #1 for preparation and epoxy application
15 of the interior. Therefore, by using the same unit costs for these two cost components, ORA's
16 cost estimate falls on the conservative side (likely higher). ORA's analysis does not modify any
17 other unit cost or quantity for each line item found in the PCE.

18 ORA recommends that the Commission approve this project at the adjusted cost of \$282,000,
19 based on ORA's updated unit cost data from a recent tank recoating project also in the Region 1
20 Northern District.

⁹⁴ GSWC Spreadsheet – Master Cost Cross-Reference (All Regions), tab "Previous Unit costs-2008", cell H125

⁹⁵ GSWC Response to ORA Data Request SN2-004, Question 1, Attachment "Combined List ORA SN2 004"

⁹⁶ GSWC Response to ORA Data Request AL7-003, Question 6 a, Attachment "AL7-003 response Q6a - Evora Reservoirs"

1 **6. Cordova System – Main Replacement Projects: Chassella Way Area (\$836,300);**
2 **Brenda Way, Dawes to Chase (\$373,900); Mills Park Drive, Olson to**
3 **Silverwood (\$950,500); Paseo Drive Area (\$166,200)**

4 For the Chassella Way Area Main Replacement project, GSWC requests \$836,300 in 2015 to
5 replace 2,300 feet of existing 4-inch AC mains.⁹⁷ GSWC states the project will be part of a
6 backyard main replacement program, and is needed to replace an old and undersized main that
7 has had one leak in the past five years, and improve the hydraulics of the system.⁹⁸

8 For the Brenda Way, Dawes to Chase Main Replacement project, GSWC requests \$32,500 in
9 2015 and \$341,400 in 2016 to replace 700 feet of existing 6-inch and 8-inch AC mains.⁹⁹

10 GSWC states the project will be part of a backyard main replacement program, and is needed to
11 replace an old and undersized main, and improve the hydraulics of the system.¹⁰⁰

12 GSWC requests \$98,300 in 2016 and \$852,200 in 2017 to replace 1,800 feet of existing 4-inch
13 and 6-inch AC mains for the Mills Park Drive, Olson to Silverwood Main Replacement
14 project.¹⁰¹ GSWC states the project will be part of a backyard main replacement program, and is
15 needed to replace an old and undersized main, and improve the hydraulics of the system.¹⁰²

16 For the Paseo Drive Area Main Replacement project, GSWC requests \$166,200 in 2017 for the
17 design phase of the project to replace 900 feet of existing 6- inch mains and 2,100 feet of
18 existing 8 inch AC mains.¹⁰³ GSWC states the project will be part of a backyard main

⁹⁷ GSWC Workpapers Region I Arden Cordova, Ratebase, Sheet No. 55.

⁹⁸ Ibid.

⁹⁹ GSWC Workpapers Region I Arden Cordova, Ratebase, Sheet No. 62.

¹⁰⁰ Ibid.

¹⁰¹ GSWC Workpapers Region I Arden Cordova, Ratebase, Sheet No. 63.

¹⁰² Ibid.

¹⁰³ GSWC Workpapers Region I Arden Cordova, Ratebase, Sheet No. 67.

1 replacement program, and is needed to close a hydraulic loop, replace an old and undersized
2 main that has had one leak in the past five years,¹⁰⁴ and improve the hydraulics of the system.¹⁰⁵

3 The stated needs for the proposed main replacements are similar to those given for the Arden
4 system's proposed Greenhills Road Area Main Replacement discussed above. GSWC's stated
5 deficiencies include mains located in backyards, being old and undersized, and hydraulically
6 deficient. As ORA explained regarding the mains of the Arden system, these arguments are
7 invalid.

8 The proposed pipe segments of the Brenda Way, Dawes to Chase Main Replacement project and
9 the Mills Park Drive, Olson to Silverwood Main Replacement project has had no recorded leaks
10 in the past six years. The pipe segments in the Chassella Way Area Main Replacements project
11 and the Paseo Dr. Area Main Replacements project each only had one recorded leak in the past
12 six years.¹⁰⁶ As explained in the Greenhills Road Area Main Replacement, accessibility to repair
13 leaks is an insufficient reason to replace these mains.

14 Regarding GSWC's claims of "aging," all four pipe segments are 54 years old and have had
15 zero/low number of leaks.¹⁰⁷ However, according to GSWC's Pipeline Management Program
16 Report, AC pipes can last as long as 90 years in the Cordova system.¹⁰⁸ Again, these facts do not
17 support replacement.

18 Also, GSWC has not provided evidence that any of these pipe segments are hydraulically
19 deficient to substantiate its claim that these projects are needed to improvement the system's
20 hydraulics. In fact, except for the Paseo Drive Area project, GSWC's PMP Report indicates that

¹⁰⁴ GSWC Response to ORA Data Request DK4-001, Question 1 b, spreadsheet "DK4-001 Q.1.b (Pipelines) Attachment 1b."

¹⁰⁵ Ibid.

¹⁰⁶ GSWC Response to ORA Data Request DK4-001, Question 1 a, spreadsheet "DK4-001 Q.1.a Response – RI," Tab "PIPELINE PROJECTS."

¹⁰⁷ Ibid.

¹⁰⁸ GSWC's July 2014 Pipeline Management Program Report, p. 8-14.

1 these pipe segments have no hydraulic deficiency and gave three out of the four pipelines an
2 attribute score of “1,” indicating “negligible” hydraulic deficiency (the best score).^{109,110}
3 GSWC gave the Paseo Drive Area project a hydraulic deficiency score of “10,” (the worst
4 possible score) based on the following characteristics: “Pressure <20psi at meters, service
5 interruption affecting ≥ 1000 services, or impact on fire protection. Loss of service to any
6 "critical customer" (e.g., hospital, food manufacturing).”¹¹¹ For reasons already indicated in
7 ORA’s testimony on Pipeline Replacements, the operating pressure should be the main
8 determining factor to decide whether the pipe segment is hydraulically deficient; the number of
9 services served by the segment should be part of the Risk Reduction assessment. All of the pipes
10 at peak hourly demand (PHD conditions) can provide 40 to 45 psi of pressure.¹¹² Furthermore,
11 in the case of the Paseo Drive Area project, GSWC states the project is needed to: “close a
12 hydraulic loop at the corner of the System, and improve the distribution network near the new
13 Paseo Well #24.”¹¹³ The hydraulic loop is currently not closed, but the segment pressure
14 remains within an acceptable range (45 psi at PHD),¹¹⁴ and GSWC has not received any
15 warnings or citations from the DDW related to this unclosed loop. Without a valid need,
16 prematurely replacing the proposed segment is not cost effective. There is no need to replace
17 these pipe segments for hydraulic improvement.

¹⁰⁹ GSWC’s July 2014 Pipeline Management Program Report, Appendix D, Project List.

¹¹⁰ Ibid, p. 5-4, Table 5.1; Score of 1 indicates “Pressure ≥ 40 psi at meters, <100 services interrupted, and no impact to fire protection.”

¹¹¹ GSWC’s July 2014 Pipeline Management Program Report, p. 5-4, Table 5.1.

¹¹² GSWC Response to ORA Data Request DK4-001, Question 1 a, spreadsheet “DK4-001 Q.1.a Response – RI,” Tab “PIPELINE PROJECTS.”

¹¹³ GSWC Spreadsheet – PCE_RI - Cordova (Paseo Dr), tab “Front Sheet.”

¹¹⁴ GSWC Response to ORA Data Request DK4-001, Question 1 a, spreadsheet “DK4-001 Q.1.a Response – RI,” Tab “PIPELINE PROJECTS”

1 All of the main replacement projects except for the Mills Park Drive project cite that the pipe
2 segments are undersized. Yet, as stated above, all pipe segments have a recorded pressure
3 between 40 psi and 45 psi even at PHD.¹¹⁵

4 GSWC has not demonstrated the need to replace these four pipeline segments. ORA
5 recommends that the Commission reject all four of GSWC's project requests.

6 **7. Urban Water Management Plan (\$65,000)**

7 GSWC requests \$65,000 in 2015 to update its UWMP for the Cordova system. ORA does not
8 oppose this request but recommends that the estimated cost be shifted from the 2015 to the 2016
9 capital budget. For more details, see ORA's Common Plant Issues testimony on UWMP.

10 **F. BAY POINT CSA**

11 **Table 1-F** below presents a summary of capital budgets for the Bay Point CSA in Region 1.

¹¹⁵ California Code of Regulations, Title 22, Division 4, Chapter 16, Article 8, Section 64602.a states:
"Each distribution system shall be operated in a manner to assure that the minimum operating pressure in
the water main at the user service line connection throughout the distribution system is not less than 20
pounds per square inch at all times."

1

Table 1-F: Capital Budgets – Bay Point CSA

Bay Point CSA	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
CCWD WTP (GSWC SOC)	\$ 28,200	\$ -	\$ 174,900	\$ -	\$ 225,600	\$ -
Madison Reservoir, Re-roof res.	\$ 515,800	\$ -	\$ -	\$ -	\$ -	\$ -
Hill St. Plant, Recoat/seismic Res #3	\$ -	\$ -	\$ -	\$ -	\$ 70,700	\$ 54,000
Skyline Reservoir, Recoat interior	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 34,300
Total Water Supply	\$ 544,000	\$ -	\$ 174,900	\$ -	\$ 346,300	\$ 88,300
Misc Street Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Street Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ambrose Park, Abandon main	\$ 68,600	\$ 63,800	\$ -	\$ -	\$ -	\$ -
Pacifica Ave to Port Chicago Hwy	\$ -	\$ -	\$ 360,100	\$ -	\$ -	\$ -
North & Franklin, Cleve. to EBMUD	\$ -	\$ -	\$ 49,000	\$ -	\$ 509,400	\$ -
Willow Pass Rd, Alberts to Ambrose	\$ -	\$ -	\$ -	\$ -	\$ 63,400	\$ 42,300
Total Distribution Improvements	\$ 68,600	\$ 63,800	\$ 409,100	\$ -	\$ 572,800	\$ 42,300
Total Water Quality	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UWMP, Bay Point	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Total Miscellaneous	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Contingency Budget	\$ 35,630	\$ -	\$ 32,790	\$ -	\$ 33,690	\$ -
Total Contingency Budget	\$ 35,630	\$ -	\$ 32,790	\$ -	\$ 33,690	\$ -
New Business Funded by GSWC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total New Business	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meters	\$ 6,400	\$ 6,400	\$ 5,300	\$ 5,300	\$ 5,400	\$ 5,400
Services	\$ 218,000	\$ 218,000	\$ 223,900	\$ 223,900	\$ 230,000	\$ 230,000
Minor Main Replacements	\$ 76,900	\$ 76,900	\$ 78,900	\$ 78,900	\$ 81,100	\$ 81,100
Minor Pumping Plant Equip.	\$ 7,900	\$ 7,900	\$ 8,100	\$ 8,100	\$ 8,400	\$ 8,400
Minor Purification Equip.	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Office Furniture and Equip.	\$ 8,100	\$ 8,100	\$ 8,300	\$ 8,300	\$ 8,500	\$ 8,500
Transportation Equipment	\$ 35,700	\$ 35,700	\$ -	\$ -	\$ -	\$ -
Tools and Safety Equip.	\$ 2,800	\$ 2,800	\$ 2,900	\$ 2,900	\$ 3,000	\$ 3,000
Total Blanket Budget	\$ 356,300	\$ 356,300	\$ 327,900	\$ 327,900	\$ 336,900	\$ 336,900
TOTAL CAPITAL BUDGET	\$ 1,069,530	\$ 420,100	\$ 944,690	\$ 392,900	\$ 1,289,690	\$ 467,500
3-YEAR TOTAL:					\$ 3,303,910	\$ 1,280,500
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:					\$ 2,023,410	
3-YEAR TOTAL DIFFERENCE, (GSWC-ORA)/(GSWC):					61%	

2

1. CCWD Randall-Bold WTP - GSWC share-of-cost (\$458,700)

GSWC requests \$28,200 in 2015, \$174,900 in 2016, and \$255,600 in 2017 to fund its share-of-cost for improvements at the Contra Costa Water District's (CCWD) Randall-Bold Water Treatment Plant (WTP). GSWC is allocated 4.4 MGD out of this WTP's 40 MGD total capacity. GSWC's share of treated water from the WTP is delivered through its existing Hill Street Interconnection.¹¹⁶ The cost of the plant improvements is also allocated among five

¹¹⁶ GSWC Testimony of Robert McVicker and Mark Insko, p. 64.

1 participating agencies.¹¹⁷ Per the Commission’s conditionally approved Asset Lease Agreement,
2 GSWC is responsible for its proportionate share of any future improvements to the WTP and
3 associated facilities deemed reasonably necessary in the opinion of the CCWD to comply with
4 federal or state regulatory requirements.¹¹⁸

5 ORA agrees with the need for GSWC to pay its share of cost for improvements at the WTP but
6 objects to GSWC’s estimates and ratemaking treatment of the costs.

7 The CCWD calculates GSWC’s share for the Randall-Bold WTP at \$17,000 in 2015, \$125,000
8 in 2016, and \$157,000 in 2017, for a total of \$299,000.¹¹⁹ GSWC’s request of \$28,200 in 2015,
9 \$174,900 in 2016, and \$255,600 in 2017 for a total of \$458,700 is 53.4% above the CCWD’s
10 estimates and is unreasonable.^{120,121} The difference is GSWC’s application of escalation,
11 contingency, escalation and construction (company) overhead factors,¹²² all of which are
12 inappropriate cost adders.

13 Regarding GSWC’s escalation add-on, GSWC’s shared cost estimates generated by the CCWD
14 already include a 4% inflation factor.¹²³

15 Regarding GSWC’s contingency add-on, as this is essentially a bill from the CCWD to be paid
16 by GSWC, a contingency add-on is not warranted.¹²⁴

¹¹⁷ Ibid.

¹¹⁸ D.10-06-031, Appendix A – Asset Lease Agreement, p. 3, Section 1.3.2.

¹¹⁹ GSWC Testimony of Robert McVicker and Mark Insko, Attachment BP01 -Contra Costa Water District, FY2015-2024 Capital Improvement Program (Randall-Bold WTP Improvements), dated 2/7/2014.

¹²⁰ GSWC Testimony of Robert McVicker and Mark Insko, p. 64.

¹²¹ $[\text{GSWC's project request} = (\$28,200 + \$174,900 + \$255,600) = \$458,700] / [\text{GSWC's calculated share by CCWD} = (\$17,000 + \$125,000 + \$157,000) = \$299,000] = 153.4\%$

¹²² GSWC Response to ORA Data Request AL7-004 (Region I – Bay Point), Question 1 c.

¹²³ Ibid, Question 1 b.

¹²⁴ D.10-06-031, Appendix A – Asset Lease Agreement, p. 6, Section 2.4.2 (i).

1 Regarding GSWC’s construction overhead add-on, again this is essentially a bill from the
2 CCWD. Moreover, as explained below, this cost should be treated as an expense and not as a
3 capital project. Thus, the construction OH add-on is inappropriate.

4 In the last GRC, GSWC estimated a total of \$155,000 for 2012-2014 and included the above
5 three adders. That amount significantly overstated the true cost to GSWC, because the actual
6 payment was only \$104,119.¹²⁵ This actual payment, 67% of GSWC’s 2011 GRC request, was
7 more in line with the CCWD’s original estimate.¹²⁶ Excluding the escalation, contingency and
8 overhead adders will produce a more accurate estimate of GSWC’s shared cost for future years.

9 With regard to ratemaking treatment, GSWC mistakenly states that “as with all capital projects,”
10 the request includes escalation, contingency, and company overhead.¹²⁷ This project should not
11 be treated as a capital addition since GSWC is only responsible for paying its share of cost as
12 determined by the CCWD. D.11-09-017 addresses the ratemaking treatment of the CCWD’s
13 capacity charge for the WTP states.¹²⁸

14 It is equally inappropriate to place the prepaid costs of the Contra Costa replacement
15 water agreement in rate base. Golden State has no operational control over the facility,
16 has made no investment, and does not acquire any ownership interest under the
17 agreement with Contra Costa. **Golden State is simply buying water, and water**
18 **purchases are usually recovered in a purchased water balancing account.** Golden
19 State has negotiated with Contra Costa to prepay \$4.7 million, but prepayments are not
20 entitled to rate base treatment simply by virtue of being paid upfront. [Emphasis added.]

21 D.11-09-017, in the following Conclusions of Law, provides a clear guidance and rationale on
22 the proper ratemaking treatment of GSWC’s shared costs associated the WTP.

¹²⁵ GSWC Response to ORA Data Request AL7-004 (Region I – Bay Point), Question 1 e.

¹²⁶ 2011 GRC – GSWC Testimony of Ernest Gisler, Adrian Combes, Mark Insko, and Dane Sinagra, Attachment 27; \$109,000.

¹²⁷ GSWC Response to ORA Data Request AL7-004 (Region I – Bay Point), Question 1 c.

¹²⁸ D.11-09-017 (A.10-01-009) – Decision on the Ratemaking Treatment for the Abandoned Hill Street Water Treatment Facility and the Agreement with the Contra Costa Water District to Acquire Replacement Water to Serve the Bay Point Service Area, p. 7.

1 Conclusion of Law #3. “It is not reasonable to capitalize the water purchase agreement because
2 it is not an investment suitable for inclusion in rate base.”¹²⁹

3 Conclusion of Law #6. “The water purchase agreement with Contra Costa should have correctly
4 characterized the agreement as a purchase agreement and not a lease.”¹³⁰

5 The Commission in D.11-09-017 also found that “Golden State has consistently mischaracterized
6 the Contra Costa agreement in numerous ways, and by its ratemaking proposals has endeavored
7 to unfairly enrich itself even in the face of the water quality violations of its Hill Street plant.”¹³¹

8 In the 2011 GRC, ORA inadvertently accepted GSWC’s requested cost estimate calculations
9 (with a minor adjustment) and inclusion of the cost estimates in the capital budget for Bay
10 Point.¹³² This was an error that should be corrected going forward starting in this GRC. The
11 CCWD’s charge for the WTP should be expensed (not capitalized and included in rate base), and
12 the estimated charge should exclude escalation, contingency and overhead adders. GSWC
13 should book the costs in its Purchased Water expense account, which is subject to the Modified
14 Cost Balancing Account’s (MCBA) ratemaking treatment. The added benefit of including the
15 cost in the MCBA is that any adjustments to the payments made to the CCWD can be trued-up,
16 thus avoiding problems associated with over- and under-estimation of the CCWD’s charges.
17 Ratepayers as a result would pay no more or less than what the CCWD actually charges GSWC.

18 For expense forecasting purposes, ORA recommends amortizing the charges estimated by the
19 CCWD for the years in this rate case cycle, 2016-2018; the CCWD’s estimates for those years
20 are: \$125,000, \$157,000, and \$137,000 for 2016, 2017, 2018, respectively.¹³³ The annual
21 amortized expense is therefore \$140,000 for the Test Year 2016. This \$140,000 amortized
22 amount should be reviewed and updated in each future GRC, because ORA notes that the

¹²⁹ Ibid, p. 12.

¹³⁰ Ibid, p. 12.

¹³¹ Ibid, p. 8, Discussion.

¹³² D.13-05-011, Attachment 3, p. 21, Table 3-4.

¹³³ GSWC Testimony of Robert McVicker and Mark Insko, Attachment BP01 -Contra Costa Water District, FY2015-2024 Capital Improvement Program (Randall-Bold WTP Improvements), dated 2/7/2014.

1 CCWD’s 10-year estimates (2015-2024) shows substantial variation in the shared cost estimates
2 after 2018.¹³⁴

3 ORA recommends that the Commission reject GSWC’s budget request to capitalize expenses
4 related to its share-of-cost for improvements at the CCWD’s WTP. ORA also recommends that
5 payments to the CCWD be booked in the Purchased Water expense account subject to balancing
6 account treatment, and the Test Year 2016 estimated amount should be \$140,000.

7 **2. Madison Reservoir, Re-roof Reservoir (\$ 1,184,200)**

8 GSWC requests \$515,800 for this project. This request is in addition to the \$668,374.30 that
9 GSWC claims as “available BP [Bay Point] budget as of 2/24/14).¹³⁵ Therefore, the total
10 requested budget for this re-roofing project is \$1,184,200.

11 In 2010, the roof of the Madison Reservoir collapsed and the tank has been out of service since.
12 GSWC states this project is necessary to restore the operational, fire, and emergency storage to
13 customers in the Bay Point System’s Madison Reservoir Zone.¹³⁶

14 The Madison Reservoir has been out of service for close to five years,¹³⁷ and yet GSWC is still
15 able to serve its customers in the Madison Reservoir Zone. ORA’s analysis reveals that the
16 existing booster stations along with the Madison Reservoir Zone’s existing interconnection with
17 the City of Pittsburg is sufficient to meet operational and emergency storage requirement.

18 According to GSWC’s 2009 Bay Point Water Master Plan, prior to being taken out of service,
19 the Madison Reservoir provided a total capacity of 0.52 MG (361 gpm).¹³⁸ GSWC designated
20 0.23 MG (160 gpm)¹³⁹ for operational purposes and the remaining 0.29 MG (201 gpm)¹⁴⁰ for

¹³⁴ Ibid. Estimated share for GSWC for 2019-2024 are: \$39,000, \$20,000, \$80,000, \$105,000, \$159,000 and \$148,000, respectively.

¹³⁵ GSWC Workpapers Region I Bay Point – Volume 2 of 2, dated July 2014, p. 30, Project Cost Estimate.

¹³⁶ GSWC Testimony of Robert McVicker and Mark Insko dated July 2014, p. 65.

¹³⁷ Ibid.

¹³⁸ 2009 Bay Point Water Master Plan, p. 5-7, Table 5-6.2; 520,000 gallons/1440 gallons per 24 hours = 361 gpm.

¹³⁹ 230,000 gallons/1440 gallons per 24 hours = 160 gpm.

1 emergency purposes.¹⁴¹ Currently the Madison Reservoir Zone draws water from the Hill St.
2 Reservoir Zone through two boosters, the Chadwick Booster A and B.¹⁴² These boosters have a
3 combined capacity of 250 gpm,¹⁴³ sufficient to cover the 0.23 MG operational capacity specified
4 by GSWC. The Madison Reservoir Zone has an existing 600 gpm emergency interconnection
5 with the City of Pittsburg;¹⁴⁴ that connection is more than sufficient to cover the 202 gpm
6 emergency storage specified by GSWC.

7 As demonstrated above, the storage capacity from the Madison Reservoir is not needed in the
8 Bay Point system, and GSWC has been operating the system without the reservoir since 2010.
9 There is no need to invest \$1.2 million in re-roofing the reservoir at this time. Therefore, ORA
10 recommends that the Commission reject this project request.

11 **3. Hill Street Plant, Recoat Reservoir #3 and Install Seismic Improvements;**
12 **Design & Permit (\$70,700) and Skyline Reservoir, Recoat Interior; Design &**
13 **Permit (\$50,000)**

14 GSWC requests \$70,700 in 2017 for the design and permit portion of the proposed Hill Street
15 Reservoir #3 interior recoating and seismic upgrade project. GSWC is not asking for the
16 construction portion in this GRC; according to GSWC’s workpapers, the total recoating project
17 cost would be \$543,000 if designed and constructed in 2017.¹⁴⁵

18 Similarly, GSWC requests \$50,000 in 2017 for the design and permit portion of a proposed
19 project to recoat the interior of the Skyline Reservoir and to install a cathodic protection system.
20 Again, GSWC is not asking for the construction portion of the total project cost in this GRC.

¹⁴⁰ 290,000 gallons/1440 gallons per 24 hours = 201 gpm.

¹⁴¹ 2009 Bay Point Water Master Plan, p. 5-7, Table 5-6.2.

¹⁴² GSWC’s Report on Results of Operations – Region 1 Bay Point, dated July 2014, Table 3-A.

¹⁴³ GSWC’s 2013 Annual Report of District Water System Operations – Bay Point, p. 13, Plant Facility Index.

¹⁴⁴ 2003 Bay Point CDPH/DDW Report, p. 5, Section B.

¹⁴⁵ GSWC’s Workpaper – “2015-17 Budget Project List RI.”, Tab “Project List - DO NOT SORT!”

1 According to GSWC's workpapers, the total project cost would be \$384,600 if designed and
2 constructed in 2017.¹⁴⁶

3 Based on ORA's review of the inspection reports for these reservoirs, ORA agrees with the need
4 to recoat. However, for the same reasons presented for the Cordova WTP Reservoir #2 recoating
5 project, ORA adjusts the estimated construction costs of these projects, and therefore reduces the
6 estimated design costs (which is calculated as a percentage of the construction cost).

7 Thus, for the Hill Street tank, ORA recommends that the Commission allow a design and permit
8 cost of \$54,000, including escalation, contingency and company overhead (based on an estimate
9 of \$263,260 for construction). For the Skyline Reservoir, ORA recommends that the
10 Commission allow a design and permit cost of \$34,300 escalation, contingency and company
11 overhead (based on an estimate of \$167,300 for construction).

12 Moreover, ORA's support to include the design costs for these projects in this GRC is based on
13 the following conditions:

- 14 • GSWC's agreement and commitment to complete the design in 2017 as proposed.
- 15 • GSWC's agreement and commitment to include in its eventual request in the next GRC
16 application, a complete design and a minimum of three construction bids to support its
17 construction budget request.
- 18 • GSWC's agreement and commitment to resubmit its justification for recoating these two
19 tanks, including support for design, and construction cost estimates in the event that
20 GSWC does not complete the design for these two tank recoating project and obtains the
21 bids as specified above by the time it submits its next GRC application (assuming the
22 well is still needed at that time).
- 23 • GSWC's acceptance that ORA's support for a budget to perform the design of these two
24 tank recoating project is not an automatic support for the resulting design and proposed
25 construction budget.

¹⁴⁶ Ibid.

1 These conditions are necessary to ensure that GSWC proceeds in accordance with its capital
2 budget plans and to ensure adequate design information is available to determine the
3 construction cost for these projects in the next GRC.

4 **4. Alley between Pacifica Ave and Port Chicago Hwy – Service Connection**
5 **Replacements (\$360,100)**

6 GSWC requests \$360,100 in 2016 to replace approximately 1,000 feet of existing 2-inch copper
7 service connection lines. The project also involves upsizing the line to 6-inch ductile iron and
8 replacing 10 service connections.¹⁴⁷ GSWC states that this project “is necessary in order to
9 address leaks in the existing long distance service connections.”¹⁴⁸ GSWC also states that this
10 project will “improve the hydraulics of the system” and “provide more reliable service to our
11 customers.”¹⁴⁹

12 ORA inquired about the number of leaks for the pipe segment to be replaced.¹⁵⁰ GSWC’s
13 response was the proposed segment of pipe has had **zero** leaks in the past five years.¹⁵¹ A
14 history of no leaks is a drastic departure from the GSWC’s assertion of “leaks in the existing
15 long distance service connections” requiring pipeline replacement.¹⁵² ORA recommends that the
16 Commission require GSWC to explain whether this is (1) a case of purposeful misrepresentation
17 of facts to the Commission, or (2) an indication of inaccurate recordkeeping of one of the
18 company’s most vital infrastructure (pipelines), which in itself is a cause for concern.

19 Furthermore, while GSWC represented in its project justification that this project would
20 “improve the hydraulics of the system,” it did not elaborate on how the system’s hydraulics
21 would be improved. According to GSWC’s own Pipeline Prioritization Results (from its

¹⁴⁷ GSWC Workpapers Region I Bay Point, Ratebase, Sheet No. 39.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid.

¹⁵⁰ GSWC Response to ORA Data Request DK4-001, Question 1 b, Attachment “DK4-001 Q.1.b (Pipelines) Attachment 1b.”

¹⁵¹ GSWC Response to ORA Data Request DK4-001, Question 1 b, Attachment “DK4-001 Q.1.b (Pipelines) Attachment 1b.”

¹⁵² GSWC Workpapers Region I Bay Point, Ratebase, Sheet No. 38.

1 Pipeline Management Program Report), this pipe was rated a “7” under the “Hydraulic
2 Deficiencies.”¹⁵³ GSWC gives a score of “7” or “Moderate” to pipelines with the following
3 characteristics: “Pressure <30 psi but ≥ 20 psi at meters.”¹⁵⁴ However, GSWC’s response to
4 ORA’s inquiry indicates that this pipeline’s pressure at peak hour demand is at 60 psi.¹⁵⁵ It is
5 unclear whether and how this pipeline is hydraulically deficient.

6 For the foregoing reasons, ORA recommends that the Commission (1) reject this request, and (2)
7 require GSWC to explain why its leak records do not support its claim on this pipeline’s
8 condition (i.e., having leaks necessitating pipeline replacement).

9 **5. North St & Franklin, Cleveland to EBMUD (\$558,400)**

10 GSWC requests \$49,000 in 2016 and \$509,400 in 2017 to replace approximately 1,400 feet of
11 existing 4-inch steel pipes.¹⁵⁶ GSWC states this project “is necessary in order to address
12 hydraulic deficiencies, age, and condition of the existing pipeline(s).”¹⁵⁷ GSWC also describes
13 that the pipe is “64 years old, and has only 12 inches of cover.”¹⁵⁸

14 While GSWC claims that this replacement project is needed to “address hydraulic deficiencies,”
15 its own pipeline assessment gives the segment in question a Total Benefit Score of “1” in the
16 “Hydraulic Deficiencies” category which means it has “negligible” hydraulic deficiency.¹⁵⁹
17 Again, as in the case of the Pacific Ave. Alley project discussed in the preceding subsection,
18 GSWC’s own assessment of this pipeline segment does not support the claimed need in its
19 project justification. GSWC’s Pipeline Management Program Report states steel pipes can last

¹⁵³ GSWC’s July 2014 Pipeline Management Program Report, Appendix D – Pipeline Prioritization Results (Attachment E 250 of 257).

¹⁵⁴ Ibid, p. 5-4, Table 5.1

¹⁵⁵ GSWC Response to ORA Data Request DK4-001, Question 1 a, Attachment “DK4-001 Q.1.a Response - RI,” tab “PIPELINE PROJECTS”, cell K15.

¹⁵⁶ GSWC Workpapers Region I Bay Point, Ratebase, Sheet No. 40.

¹⁵⁷ Ibid.

¹⁵⁸ Ibid.

¹⁵⁹ GSWC’s July 2014 Pipeline Management Program Report, Appendix D - Pipeline Prioritization Results (Attachment E 250 of 257) and pp. 5-3 to 5-4.

1 as long as 75 years in the Bay Point system.¹⁶⁰ Moreover, there have been no leaks recorded in
2 the past five years.¹⁶¹ Thus, ORA recommends that the Commission reject this request.

3 **6. Urban Water Management Plans (\$65,000)**

4 GSWC requests \$65,000 to update its UWMPs for the Bay Point water systems. ORA does not
5 oppose this request but recommends that the estimated cost be shifted from 2015 to 2016 capital
6 budget. For more details, see ORA’s Common Plant Issues testimony on UWMP.

¹⁶⁰ Ibid, p. 8-19.

¹⁶¹ GSWC Response to ORA Data Request DK4-001, Question 1 b, Attachment “DK4-001 Q.1.b (Pipelines) Attachment 1b.”

1 **G. CLEARLAKE CSA**

2 **Table 1-G** below presents a summary of capital budgets for the Clearlake CSA in Region 1.

3 **Table 1-G: Capital Budgets – Clearlake CSA**

Clearlake CSA	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
Sonoma WTP, Clearwell roof & int.	\$ 179,100	\$ 131,200	\$ -	\$ -	\$ -	\$ -
Lakeshore Plant, Generator conn.	\$ -	\$ -	\$ -	\$ -	\$ 4,400	\$ -
Sonoma WTP, Generator connection	\$ -	\$ -	\$ -	\$ -	\$ 6,500	\$ -
Total Water Supply	\$ 179,100	\$ 131,200	\$ -	\$ -	\$ 10,900	\$ -
Misc Street Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Street Improvements	\$ -	\$ -				
Park Terrace Dr, w/o Parkview	\$ 262,700	\$ -	\$ -	\$ -	\$ -	\$ -
Lakeshore Dr, Palo Alto to end	\$ 39,900	\$ 26,600	\$ 418,200	\$ 399,200	\$ -	\$ -
West 40th St, Hill to Sunset	\$ -	\$ -	\$ 38,400	\$ -	\$ 399,300	\$ -
Wilder Ave, West 40th to Hillcrest	\$ -	\$ -	\$ -	\$ -	\$ 34,300	\$ -
Total Distribution Improvements	\$ 302,600	\$ -	\$ 456,600	\$ -	\$ 433,600	\$ -
Sonoma WTP, Change-out GAC	\$ -	\$ -	\$ -	\$ -	\$ 77,100	\$ 73,600
Total Water Quality	\$ -	\$ -	\$ -	\$ -	\$ 77,100	\$ 73,600
Total Miscellaneous	\$ -	\$ -				
Contingency Budget	\$ 13,750	\$ -	\$ 18,820	\$ -	\$ 14,540	\$ -
Total Contingency Budget	\$ 13,750	\$ -	\$ 18,820	\$ -	\$ 14,540	\$ -
New Business Funded by GSWC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total New Business	\$ -	\$ -				
Meters	\$ 5,300	\$ 5,300	\$ 5,000	\$ 5,000	\$ 6,100	\$ 6,100
Services	\$ 58,700	\$ 58,700	\$ 60,200	\$ 60,200	\$ 61,900	\$ 61,900
Minor Main Replacements	\$ 36,100	\$ 36,100	\$ 37,000	\$ 37,000	\$ 38,000	\$ 38,000
Minor Pumping Plant Equip.	\$ 16,000	\$ 16,000	\$ 16,400	\$ 16,400	\$ 16,900	\$ 16,900
Minor Purification Equip.	\$ 12,600	\$ 12,600	\$ 12,900	\$ 12,900	\$ 13,300	\$ 13,300
Office Furniture and Equip.	\$ 4,000	\$ 4,000	\$ 4,100	\$ 4,100	\$ 4,200	\$ 4,200
Transportation Equipment	\$ -	\$ -	\$ 47,700	\$ -	\$ -	\$ -
Tools and Safety Equip.	\$ 4,800	\$ 4,800	\$ 4,900	\$ 4,900	\$ 5,000	\$ 5,000
Total Blanket Budget	\$ 137,500	\$ 137,500	\$ 188,200	\$ 140,500	\$ 145,400	\$ 145,400
TOTAL CAPITAL BUDGET	\$ 632,950	\$ 268,700	\$ 663,620	\$ 140,500	\$ 681,540	\$ 219,000
3-YEAR TOTAL:					\$ 1,978,110	\$ 628,200
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:						\$ 1,349,910
3-YEAR TOTAL DIFFERENCE, (GSWC-ORA)/(GSWC):						68%

5 **1. Sonoma WTP, Clearwell Roof and Interior (\$179,100)**

6 GSWC requests \$179,100 in 2015 to recoat the interior of the Sonoma Water Treatment Plant’s
7 (WTP) clearwell reservoir, replace deteriorated structural elements of the roof, and install a
8 cathodic protection system. The Sonoma WTP clearwell is a 0.22 MG bolted steel tank. GSWC
9 states the project is needed because the interior coating of the reservoir and some parts of the
10 roof’s structural elements have deteriorated.

11 Based on ORA’s review of the inspection reports for these reservoirs, ORA agrees with the need
12 to recoat. However, for the same reasons presented for the Cordova WTP Reservoir #2 recoating

1 project, ORA adjusts the estimated cost for this project. ORA recommends the Commission
2 allow only \$131,200 for this project.

3 **2. Lakeshore Plant, Generator Connection (\$4,400) and Sonoma WTP, Generator**
4 **Connection (\$6,500)**

5 GSWC requests \$4,400 in 2017 as the design budget for a generator connection panel with
6 manual transfer switch at the Lakeshore Plant, with the eventual installation in 2018 for
7 approximately \$34,000. GSWC also requests \$6,500 in 2017 as the design budget for a similar
8 panel at the Sonoma WTP, with an eventual construction in 2018 for about \$50,000.¹⁶² GSWC
9 states that the installation of these projects will allow it to run its Lakeshore plant and Sonoma
10 WTP in the case of a power outage and if/when water is not available from the neighboring
11 purveyor, Highland Water Company, via the Manchester Interconnection.¹⁶³

12 The proposed projects are not needed because Clearlake has enough storage in its existing tanks
13 to meet any potential short-term power interruptions and because Clearlake has an
14 interconnection with Highland Water Company. The 2012 Clearlake CDPH/DDW Report does
15 not include a recommendation for the addition of emergency power generators. Presumably, the
16 following CDPH/DDW findings are based on the assessment of the likelihood of power outages
17 and availability of supply from Highland Water Company:

18 Pressure zones (1 & 2) meet the required capacity demand with storage alone. Zone 3
19 meets capacity demand based on its booster pump.¹⁶⁴

20 Zone 3...Auxiliary power (propane-fueled generator) is available for the zone so that
21 water can be pumped from the Oakcrest tank to the connections during a power outage.¹⁶⁵

22 ...the system can float off the storage system for at least 20 hours during peak day
23 demands. Longer term power outage, water can be taken from the Highlands Mutual
24 Water Company intertie connection.¹⁶⁶

¹⁶² GSWC Workpapers, Region 1 Clearlake, Ratebase, Sheet Nos. 29-34.

¹⁶³ GSWC Workpapers, Region 1 Clearlake, Ratebase, Sheet Nos. 29 and 33.

¹⁶⁴ 2012 Clearlake CDPH/DDW Report, p. 25, Section “Storage Requirement – Compliance with Waterworks Standards.”

¹⁶⁵ Ibid., p. 26, Section “Pressure Zones.”

1 Based on the above findings by the CDPH/DDW, ORA recommends that the Commission reject
2 these two requests.

3 **3. Park Terrace Dr, West of Parkview (\$262,700)**

4 GSWC requests \$262,700 in 2015 to replace approximately 1,000 feet of existing 2-inch and 4-
5 inch steel pipelines in Park Terrace Dr. and to add an additional 200 feet of pipe to loop the main
6 back down to Lakeshore Dr.¹⁶⁷ GSWC states this project is needed because the pipeline is 64
7 years old and “has had two leaks in the past 5 years.”¹⁶⁸

8 GSWC’s Pipeline Management Program Report states steel pipes can last as long as 75 years in
9 the Clearlake system.¹⁶⁹ The leak history shows that one of the leaks occurred more than four
10 years ago, in February 2010, while the other occurred in August 2013.¹⁷⁰

11 With the limited number of leaks, ORA recommends that GSWC continue to monitor this
12 pipeline segment and that the Commission reject this project.

13 **4. West 40th St, Hill to Sunset (\$437,700)**

14 GSWC requests \$38,400 in 2016 and \$399,300 in 2017 to replace approximately 800 feet of
15 existing 2-inch steel pipelines in West 40th St, from Hill to Sunset.¹⁷¹ GSWC states this project
16 “is necessary in order to address hydraulic deficiencies, age and condition of the existing
17 pipeline(s).”¹⁷² GSWC also states that the “pipeline consists of 2” Steel, and is 64 years old” and
18 “has had seven leaks in the past 5 years.”¹⁷³

¹⁶⁶ Ibid., p. 21, Section “Power Outage Plan.”

¹⁶⁷ GSWC Workpapers Region I Clearlake, Ratebase, Sheet No. 35.

¹⁶⁸ Ibid.

¹⁶⁹ GSWC’s Pipeline Management Program Report, p. 8-24.

¹⁷⁰ GSWC Response to ORA Data Request DK4-001, Question 1 b, attachment “DK4-001 Q.1.b (Pipelines) Attachment 1b.”

¹⁷¹ GSWC Workpapers Region I Clearlake, Ratebase, Sheet 39.

¹⁷² Ibid.

¹⁷³ Ibid.

1 Similar to the Alley project in the Bay Point CSA, GSWC’s PMP Report assigned a hydraulic
2 deficiency score of “7” which suggests the pipeline segment as having pressure less than 30
3 psi,¹⁷⁴ while its response to ORA’s inquiry shows that the pipeline at peak hour demand has a
4 pressure reading of 100 psi.¹⁷⁵

5 ORA found additional inconsistencies in the information GSWC provided to support this project.
6 GSWC claims in its workpapers that this pipe segment has had seven leaks in the past five
7 years.¹⁷⁶ However, GSWC’s response to ORA’s data request shows that there has been only four
8 leaks in the past five years.¹⁷⁷ Three out of the four leaks occurred at the same address/location,
9 within two months of initial detection.¹⁷⁸ This can indicate an inadequate repair of the initial
10 leak. There have been no leaks recorded for this pipeline since 2012. This indicates that the leak
11 problem was isolated, was eventually adequately repaired, and the pipe does not require
12 replacement at this time. Again, GSWC’s Pipeline Management Program Report states steel
13 pipes can last as long as 75 years in the Clearlake system.¹⁷⁹

14 For the foregoing reasons, ORA recommends that the Commission reject this request and that
15 GSWC continue to monitor this pipeline segment

16 **5. Wilder Ave, West 40th to Hillcrest (\$34,300)**

17 GSWC is requesting \$34,300 in 2017 for the design budget to replace approximately 700 feet of
18 existing 2-inch steel pipeline in Wilder Ave, from West 40th to Hillcrest.¹⁸⁰ GSWC states this
19 project “is necessary in order to address hydraulic deficiencies, age, and condition of the existing

¹⁷⁴ GSWC’s July 2014 Pipeline Management Program Report, p. 5-4, Table 5.1.

¹⁷⁵ GSWC Response to ORA Data Request DK4-001, Question 1 a, attachment “DK4-001 Q.1.a Response - RI”, Tab “PIPELINE PROJECTS”, Cell K20

¹⁷⁶ GSWC Workpapers Region I Clearlake, Ratebase, Sheet No. 39.

¹⁷⁷ GSWC Response to ORA Data Request DK4-001, Question 1 b, Attachment DK4-001 Q.1.b (Pipelines) Attachment 1b, tab “Region I”, Cell F32.

¹⁷⁸ Ibid.

¹⁷⁹ GSWC’s Pipeline Management Program Report, p. 8-24.

¹⁸⁰ GSWC Workpapers Region I Clearlake, Ratebase, Sheet No. 41.

1 pipeline(s).”¹⁸¹ GSWC also states that this “pipeline consists of 2” Steel, and is 64 years old,”
2 and “has had 4 leaks in the past 5 years.”¹⁸²

3 Similar to the proposed West 40th St., Hill to Sunset Project, GSWC in its Pipeline Prioritization
4 Results gave this pipeline a hydraulic deficiency score of “7.”^{183,184} GSWC’s response to ORA’s
5 inquiry showed pressure data of 100 psi at peak hour demand, which contradicts the hydraulic
6 deficiency score.¹⁸⁵

7 GSWC’s workpapers claim that this pipe segment has had four leaks in the past five years.¹⁸⁶
8 This again contradicts information provided by GSWC in response to ORA’s inquiry, which
9 shows there have been three instead of four leaks in the past five years.¹⁸⁷ This is one of multiple
10 instances where GSWC provided inconsistent “recorded” leak information on pipelines proposed
11 to be replaced in this CSA (as well as in other CSAs), and is highly concerning.

12 ORA recommends that the Commission reject this request and that GSWC continue to monitor
13 this pipeline segment.

14 **H. CONCLUSION**

15 ORA recommends that the Commission adopt ORA’s recommended adjustments presented
16 above since they are consistent with the Commission’s Water Action Plan principles for water
17 utilities providing safe, high quality water, reliable water supplies, and efficient use of water at
18 reasonable rates.

¹⁸¹ Ibid.

¹⁸² Ibid.

¹⁸³ GSWC’s July 2014 Pipeline Management Program Report, Appendix D - Pipeline Prioritization Results (Attachment E 251 of 257).

¹⁸⁴ GSWC’s July 2014 Pipeline Management Program Report, p. 5-4, Table 5.1.

¹⁸⁵ GSWC Response to ORA Data Request DK4-001, Question 1 a, spreadsheet “DK4-001 Q.1.a Response – RI,” Tab “PIPELINE PROJECTS.”

¹⁸⁶ GSWC Workpapers Region I Clearlake, Ratebase, Sheet No. 41.

¹⁸⁷ GSWC Response to ORA Data Request DK4-001, Question 1 b, Attachment DK4-001 Q.1.b (Pipelines) Attachment 1b, tab “Region I”, cell F36

1 **Chapter 2. PLANT, REGION 1 - COASTAL DISTRICT**

2 **A. INTRODUCTION**

3 This chapter presents ORA’s analyses and recommendations for Plant in Service for GSWC’s
4 Region 1 Coastal District service areas. The Region 1 Coastal District consists of one district
5 office – Central Coast District Office – and four Customer Service Areas (CSAs) – Los Osos,
6 Ojai, Santa Maria, and Simi Valley. In this chapter, ORA presents its review and adjustments of
7 GSWC’s plant requests by District Office and CSA. ORA’s estimated Capital Budgets include
8 cost estimates that also reflect recommendations in ORA’s Common Plant Issues testimony
9 regarding contingency, design, vehicle replacement and various other adjustments.

10 **B. SUMMARY OF RECOMMENDATIONS**

11 **Table 2-A** below presents a summary of capital budgets for the Region 1 Coastal District.
12 Additional adjustments to on-going or previously authorized projects (“CWIP” projects) are
13 presented near the end of each CSA section. In the following sections, ORA presents its
14 recommended adjustments to GSWC’s budget and specific project requests. Cost estimates also
15 reflect recommendations in ORA’s Common Plant Issues testimony.

16 For purposes of comparison, ORA presents its recommended plant estimates using GSWC’s
17 proposed construction overhead factor (17.42%). ORA’s recommendations on capital overhead
18 loading presented in its Report on General Office should be used to develop final authorized
19 project costs.

1

Table 2-A: Capital Budget Summary – Region I Coastal District

Region 1 - Coastal	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
Coastal Dist. Office	\$ 25,300	\$ 23,000	\$ 94,160	\$ 85,600	\$ 13,750	\$ 12,500
Los Osos CSA	\$ 1,638,400	\$ 1,277,500	\$ 1,778,950	\$ 307,000	\$ 1,210,050	\$ 144,500
Ojai CSA	\$ 703,220	\$ 531,900	\$ 2,906,300	\$ 2,444,300	\$ 3,787,530	\$ 1,028,200
Santa Maria CSA	\$ 940,300	\$ 799,000	\$ 3,534,250	\$ 1,292,800	\$ 4,329,250	\$ 2,107,900
Simi Valley CSA	\$ 1,782,110	\$ 796,000	\$ 1,233,080	\$ 294,400	\$ 1,477,230	\$ 402,600
Total Cap. Budget	\$ 5,089,330	\$ 3,427,400	\$ 9,546,740	\$ 4,424,100	\$ 10,817,810	\$ 3,695,700
3-YEAR TOTAL:					\$ 25,453,880	\$ 11,547,200
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:					\$ 13,906,680	
3-YEAR DIFFERENCE, (GSWC-ORA)/(GSWC):					55%	

2

C. COASTAL DISTRICT OFFICE

3

4 **Table 2-B** below presents a summary of capital budgets for the Region 1 Coastal District Office.
5 Differences in ORA's and GSWC's estimates for the Coastal District Office are due to ORA's
6 disallowance of the Contingency budget as explained in ORA's Common Plant Issues testimony.

7

Table 2-B: Capital Budget Summary – Coastal District Office

Coastal District Office	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
Total Contingency Budget	\$ 2,300	\$ -	\$ 8,560	\$ -	\$ 1,250	\$ -
Office Furniture and Equipment	\$ 5,000	\$ 5,000	\$ 5,200	\$ 5,200	\$ 5,400	\$ 5,400
Transportation Equipment:						
Vehicle # 500825 and # 70594	\$ -	\$ -	\$ 73,500	\$ 73,500	\$ -	\$ -
Tools and Safety Equipment	\$ 18,000	\$ 18,000	\$ 6,900	\$ 6,900	\$ 7,100	\$ 7,100
Total Blanket Budget	\$ 23,000	\$ 23,000	\$ 85,600	\$ 85,600	\$ 12,500	\$ 12,500
TOTAL CAPITAL BUDGET	\$ 25,300	\$ 23,000	\$ 94,160	\$ 85,600	\$ 13,750	\$ 12,500
3-YEAR TOTAL:					\$ 133,210	\$ 121,100
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:					\$ 12,110	
3-YEAR TOTAL DIFFERENCE, (GSWC-ORA)/(GSWC):					9%	

8

1 GSWC’s 2009 Los Osos Water Master Plan. According to the 2009 Water Master Plan, the Los
 2 Osos system will have supply deficiencies under 2015 and 2030 demand scenarios.¹⁸⁸
 3 ORA will demonstrate that capacity from this requested new well is not needed to meet expected
 4 customer demand in the Los Osos system.

5 Sources of Supply

6 The Los Osos water system currently has five active wells, with a total capacity of 1,000 gallons
 7 per minute (gpm). The water supply available in Los Osos has changed since the preparation of
 8 the 2009 Los Osos Water Master Plan. **Table 2-D** below shows a comparison between 2009 and
 9 2014 sources of supply data.

10 **Table 2-D: Los Osos System’s Water Supply - 2009 vs. 2014 (in gpm)**

WELL	2009*	2014**
South Bay	270	225
Los Olivos #3	150	150
Skyline	0	105 – reactivated 7/2014
Pecho	450	0 – inactive since November 2011
Rosina	400	295
Cabrillo	220	225
Total	1,490 gpm	1,000 gpm

11 **2009 Los Osos Water Master Plan, Table 5-5.*
 12 *** GSWC Response to ORA Data Request DG-016, Q. 4.*

13 As presented in the table above, Los Osos has experienced a decrease in supply capacity from
 14 1,490 gpm to 1,000 gpm. For wells with a reduction in capacity, GSWC explains that the
 15 reduction can be attributed to factors such as age and wear of the pump, reduced yield of the
 16 aquifer and/or increased head.¹⁸⁹ Specifically, GSWC explains that the Pecho Well capacity

¹⁸⁸ 2009 Los Osos System Water Master Plan, Tables 5-8, 5-13, and 5-18.

¹⁸⁹ GSWC Response to ORA Data Request DG-016, Q.4.

1 decreased as a result of the installation of pump liner (to address casing failure). GSWC stated
2 that on-going problems with the liner and casing have also lead to pump failures.¹⁹⁰

3 In July 2014, GSWC activated the Skyline Well, which was inactive since at least 1997 due to a
4 “high level of nitrate in the groundwater (currently 80 to 100 mg/L as NO₃).”¹⁹¹ The current
5 State Maximum Contaminant Level (MCL) for nitrate in California is 45 mg/L as Nitrate (NO₃)
6 or 10 mg/L as Nitrogen.¹⁹² To restore Skyline Well to active status, GSWC constructed a
7 transmission main to bring the Skyline Well’s supply to its Rosina Well for blending to produce
8 water that can meet the Nitrate MCL.¹⁹³

9 During its field visit to Los Osos on October 8, 2014, ORA learned that there was nearly a three
10 year period of time when both the Skyline and Pecho Wells were inactive at the same time.
11 Specifically, Skyline was inactive since at least 1997 to July 2014 and Pecho was inactive
12 beginning in November 2011.¹⁹⁴ Nevertheless, GSWC was still able to meet the system’s
13 demand despite the inactivity of both of these wells.

14 [The 2009 Los Osos Water Master Plan](#)

15 GSWC’s 2009 Water Master Plan evaluated demand by comparing what it determined as “firm
16 capacity” to the existing customer demand. The firm capacity was 820 gpm.¹⁹⁵ The 2009 Plan
17 thus concluded that the Los Osos system would not meet the projected 2015 Maximum Day
18 Demand (MDD) and recommended installing a new well with a 200 gpm capacity.¹⁹⁶

¹⁹⁰ GSWC Response to ORA Data Request DG-005, Q.5.

¹⁹¹ GSWC Response to ORA Data Request DG-005, Q.2.

¹⁹² California Department of Public Health, Nitrate Fact Sheet, May 2014
http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/nitrate/Fact%20Sheet%20-%20Nitrate_May2014%20update.pdf.

¹⁹³ GSWC Response to ORA Data Request DG-005, Q.2.

¹⁹⁴ GSWC Response to ORA Data Request DG-016, Q.5.

¹⁹⁵ 2009 Los Osos Water Master Plan, Chapter 5, Table 5-6.

¹⁹⁶ 2009 Los Osos Water Master Plan, pp. 6-7 and Table 6-3, Deficiency 1.1.1.

1 GSWC Self-Imposed “Firm Capacity” Requirement

2 As explained below, GSWC’s self-imposed “firm capacity” requirement on its existing water
3 systems is overly restrictive and serves to overstate its needs for supply infrastructure
4 investment, and thereby serves to support unjustified expansion of its ratebase. Neither the
5 Commission’s General Order 103-A (GO 103-A) nor Title 22 of the California Code of
6 Regulations (CCR) on drinking water standards (“California Waterworks Standards”) requires
7 that capacity from the largest well in a water system be discounted when determining supply
8 availability.

9 GO 103-A’s general requirement regarding “Standards of Service” is that “[e]ach water utility
10 shall ensure that it complies with the Department’s permit requirements and all applicable
11 drinking water regulations.”^{197,198} With regards to capacity requirements, GO 103-A refers
12 specifically to “the Waterworks Standards, CCR Title 22, Section 64554.”¹⁹⁹ GO 103-A, Section
13 II.B.3.a states:

14 3) Potable Water System Capacity

15 (a) A system’s facilities shall have the capacity to meet the source capacity requirements
16 as defined in the Waterworks Standards, CCR Title 22, Section 64554, or its successor.
17 If, at any time, the system does not have this capacity, the utility shall request a service
18 connection moratorium until such time as it can demonstrate the source capacity has been
19 increased to meet system requirements.²⁰⁰

20 Therefore, in determining a system’s available supply capacity, ORA relies on the California
21 Waterworks Standards (CCR Title 22). For existing systems such as GSWC’s Los Osos system,
22 there is simply no requirement to remove the largest source of supply capacity when calculating
23 available supply capacity to meet system demands. Therefore, ORA rejects GSWC’s election to
24 apply the “firm capacity” requirement to Los Osos.

¹⁹⁷ “Department” as referenced in GO 103-A refers to the then California Department of Public Health Services, whose public drinking water system regulatory functions are now performed by the State Water Resources Control Board’s Division of Drinking Water or DDW.

¹⁹⁸ GO 103-A, Section II.1.B.

¹⁹⁹ GO 103-A, Section II.2.B.3.a.

²⁰⁰ Ibid.

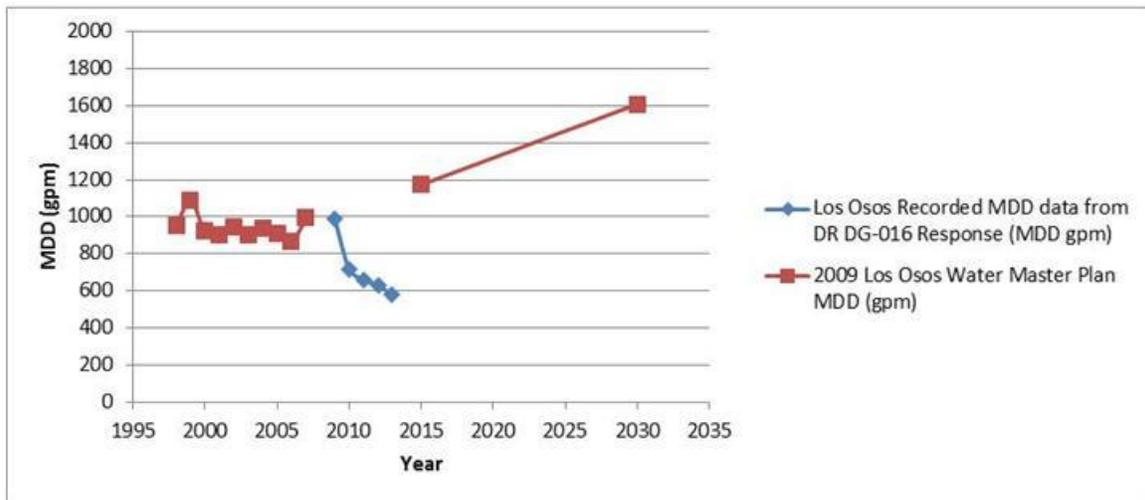
1 However, even with GSWC’s overly restrictive “firm capacity” requirement, Los Osos *still* has
2 sufficient capacity to meet its expected customer demands.

3 Customer Demand

4 The 2009 Plan’s system capacity analysis based on GSWC’s firm capacity requirement shows a
5 supply deficiency of 173 gpm.²⁰¹ However, the Los Osos CSA has not experienced the demand
6 growth envisioned in the 2009 Plan. In fact, demand has been decreasing steadily since the mid-
7 2000s.

8 The declining trend is clearly reflected in **Figure 2-A** below, which shows recorded MDD data
9 as compared to the 2009 Plan’s MDD projections.

10 **Figure 2-A Recorded MDDs vs. 2009 Los Osos Water Master Plan MDD Projections**



11
12 GSWC relied on the 2009 Los Osos Water Master Plan data in formulating the request for a new
13 well in Los Osos, without reconsideration of demand assumptions. As shown in **Figure 2-A**
14 above, the recorded demand in terms of MDDs have been significantly lower than in the 2009
15 Plan. Every year from 2009 to 2013, the MDD decreased steadily, from 989 gpm in 2009 to 577
16 gpm in 2013.²⁰² In comparison, GSWC’s 2009 Plan assumed a 2015 MDD of 1,174 gpm,²⁰³

²⁰¹ 2009 Los Osos Water Master Plan, Chapter 5, Table 5-7.2 and pp. 5-12.

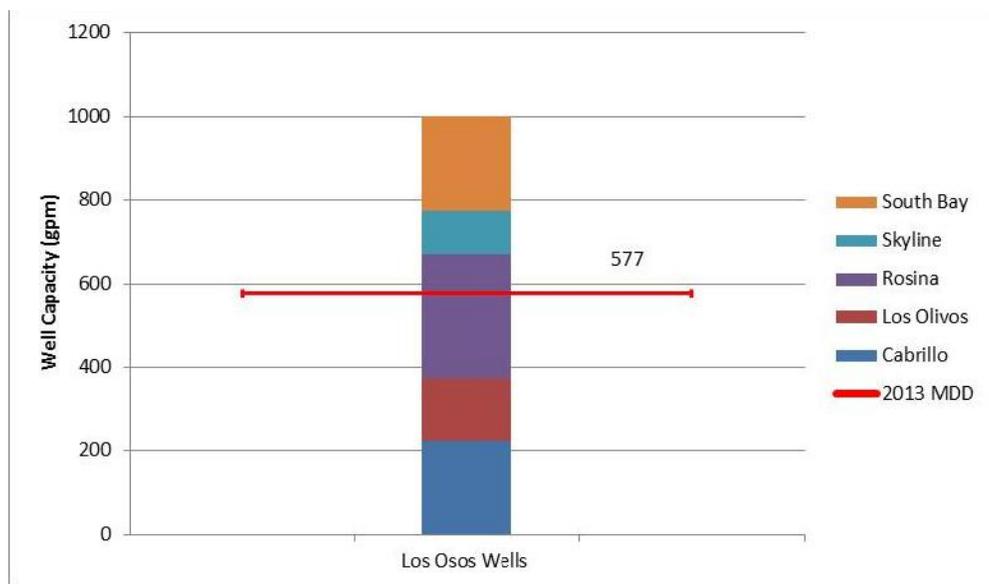
²⁰² GSWC Response to ORA Data Request DG-016, Q. 1.

²⁰³ 2009 Los Osos Water Master Plan, Section 5, Tables 5-9 and 5-14.

1 which is about twice that of the recorded 2013 demand. It is highly unlikely that Los Osos will
2 experience a doubling in demand (MDD) in two short years, especially with the State’s current
3 drought conditions.

4 A more accurate representation of the supply and demand situation in Los Osos is shown in
5 **Figure 2-B** below. As shown, Los Osos’s total well supply far exceeds its MDD in 2013. It is
6 reasonable to expect that supply excess will continue or even expand as GSWC continues
7 conservation efforts as directed by the Commission and funded by its ratepayers.

8 **Figure 2-B Los Osos System’s Well Capacities and 2013 MDD.**



9
10 ORA recommends that the Commission reject this project request because more current demand
11 and supply conditions, as shown above, do not indicate a supply deficiency and therefore do not
12 support the need for a new well.

13 **2. Los Osos - Realign Bayview Heights Pressure Zone (\$364,600)**

14 GSWC requests \$46,000 in 2016 to design and \$318,600 in 2017 to realign the Bayview Heights
15 Pressure Zone in the Los Osos system. GSWC developed a hydraulic model simulation
16 indicating the Bayview Heights Reservoir Gradient is out of compliance with the pressure
17 requirements set forth in GO 103-A and customers complained about low pressure. To address
18 claimed low pressure issues, GSWC proposes to extend the Calle Cordoniz Reservoir Gradient
19 into the Bayview Heights Reservoir Gradient by installing additional mains and pressure
20 reducing valve (PRV) stations.

1 Upon ORA’s inquiry, GSWC could not provide any customer complaint data that indicates low
2 pressure problems in this area. As explained in ORA testimony on GO 103-A minimum pressure
3 requirements, ORA is recommending that the Commission reconsider those requirements,
4 evaluate the benefit and cost impacts to ratepayers, and revise them to reflect industry and Title
5 standards. Thus, ORA cannot support projects where the sole objective is to address those GO
6 103-A requirements, and recommends that this project be rejected until after the Commission has
7 fully reconsidered its pressure requirements in GO 103-A.

8 **3. Los Osos – Design to Recoat Cabrillo and Calle Cardoniz Tanks and to Replace**
9 **Alamo Tank (\$147,200)**

10 GSWC requests \$147,200 in 2017 for the design cost to (1) recoat the interior of the Cabrillo
11 Tank, (2) to recoat the exterior of the Calle Cardoniz Tank, and (3) to demolish and replace the
12 Alamo Tank.

13 (1) & (2) - Cabrillo and Calle Cardoniz tank recoating

14 The 2010 Cabrillo Tank Inspection Report by Superior Tank Solutions explains that “the interior
15 shell coatings below the water line are spent and cannot be spot repaired or over-coated.”²⁰⁴ The
16 2010 Calle Cardoniz Tank Inspection Report, also by Superior Tank Solutions, explains that
17 “[a]ll exterior coatings have exceeded their anticipated maximum service life expectation and
18 should be rehabilitation with the next 2-4 years.”²⁰⁵ ORA does not dispute that these tanks will
19 need to be recoated in the near future, but opposes GSWC’s bundling of these projects and
20 funding proposal in this GRC.

21 (3) Alamo Tank demolition and replacement (design phase only)

22 The 2013 Alamo Tank Inspection Report by Inland Potable Services Inc. explains that “[s]ince
23 most areas are too thin to have a blast and recoat done (.050 [inches]), we recommend replacing

²⁰⁴ GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 92, Attachment LO04 – Cabrillo Tank Inspection Report, Superior Tank Solutions, 2010 (page 42).

²⁰⁵ GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 92, Attachment LO05 – Calle Cardoniz Tank Inspection Report, Superior Tank Solutions, 2010 (page 53).

1 the tank.”²⁰⁶ The inspection report did not specify a timeframe for replacement. The tank is
2 located at the top of a hill surrounded by a wooded area, and only accessible via a long, steep
3 staircase, making demolition and replacement difficult. GSWC explained that it will try to
4 arrange vehicular access to the site through the adjacent property. However, that property was
5 for sale when ORA visited the site on October 8, 2014. ORA agrees that eventual replacement is
6 necessary. However, because of the uncertainty in how the demolition/construction will be done
7 (via vehicular transport/access of adjoining property or by helicopter, which is the other option if
8 vehicular access cannot be arranged) and the uncertainty in implementation schedule, ORA
9 recommends the Commission reject this project. Rejection of the project in the current
10 proceeding will allow GSWC to present a more defined scope and cost estimate for the entire
11 project in the next GRC.

12 [ORA’s summary recommendation on the three projects discussed above](#)

13 GSWC groups these three projects together and estimates that the total design cost of all three
14 projects will be \$147,200. In this GRC, GSWC assumes that projects with “overall gross cost
15 over \$500,000” will require design work done by an consultant, and consequently applies a
16 design cost percentage that is 20% higher than its estimated in-house design cost
17 percentage.^{207,208}

18 There is no practical or operational reason why these projects should be combined into one
19 project request. These projects are independent of each other, with their own separable costs and
20 schedules. By bundling the projects, GSWC causes the “overall gross cost” of the combined
21 “project” to exceed the \$500,000 construction threshold, thereby unreasonably necessitating the
22 imposition of the 20% design consultant cost adder. Unbundled, the 20% design adder would
23 not apply, and as explained in ORA’s Common Plant Issues testimony on outside design cost,

²⁰⁶ GSWC Prepared Testimony of Robert McVicker and Mark Insko, Attachment LO03 –Alamo Tank Inspection Report, Inland Portable Services, Inc., June 17, 2013.

²⁰⁷ GSWC groups these three projects together and estimates that the total construction cost of all three projects will be \$656,133.

²⁰⁸ E-mail from Nanci Tran of Golden State Water Company, to Daphne Goldberg of ORA (September 3, 2014, 11:11 AM PT) (on file with author).

1 the adder is unnecessary. Moreover, it is unusual for the design cost to be separated from the
2 construction cost for recoating projects.

3 All three projects are not urgent and can be delayed until the next GRC. ORA recommends that
4 the Commission (1) reject GSWC's request, and (2) the CPUC should not allow GSWC to
5 bundle unrelated projects and use convoluted cost estimating methodology to inflate design cost
6 estimates. GSWC should resubmit its individual project request in the next GRC with more
7 defined cost estimates. For the Alamo Tank, GSWC needs to include cost estimates that resolve
8 accessibility issues with great certainty.

9 **4. Edna Road – Replace East Tank at the Country Club Site (\$386,400)**

10 GSWC requests \$48,700 in 2016 for design and \$337,700 in 2017 for permitting and
11 construction of the East Tank at the Country Club site. There are two tanks at the site, but
12 GSWC states only the East Tank needs replacing. GSWC reports that the tank's overall
13 structural elements are failing, including the interior and exterior coating.²⁰⁹ Based on ORA's
14 site inspection on October 8, 2014 and review of the inspection report, ORA finds this project
15 necessary and recommends the Commission approve the design budget in this GRC but to defer
16 approving the construction budget in a future GRC. GSWC should complete its design in 2016
17 as requested so it can develop estimates based on the design in time for its next GRC.

18 **5. Edna Road – New Pipeline, Caballeros Ave., cul-de-sac to Miraleste (\$143,900)**

19 GSWC requests \$12,600 in 2016 and \$131,300 in 2017 for this new 200-ft pipe installation that
20 GSWC states will provide a redundant supply to the Rolling Hills Zone, improve hydraulics of
21 the system, and provide more reliable service for the 125 customer connections in this zone.
22 ORA asked for supporting details on the claimed hydraulic deficiency, but GSWC only
23 responded generally that “the criticality of the project was determined based on field
24 knowledge/engineering and use of the Edna Road System Hydraulic model.”²¹⁰ GSWC did not
25 provide additional, more specific justification for this project, such as how the hydraulic model

²⁰⁹ GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 93 and Attachment LO06, Country Club East Reservoir Inspection Report. DIVE/CORR, Inc., January 31, 2013.

²¹⁰ GSWC Response to ORA Data Request DG-017, Q. 1b.

1 was used, and how the results supported this project. Upon ORA’s inquiry, GSWC also admitted
2 that there have been no customer complaints regarding pressure in the Rolling Hills Zone.²¹¹
3 GSWC has failed to provide the necessary information for ORA to determine the need of this
4 project. While it is possible that the project could improve some aspects of the system, GSWC
5 has not demonstrated such improvement is needed or cost effective. ORA recommends that the
6 Commission reject the project request.

7 **6. Edna Road – Design for Hacienda Ave., Caballeros to Machado Pipeline**
8 **Replacement (\$116,300)**

9 GSWC requests \$116,300 in 2017 for the design of this replacement pipeline project. Although
10 not requested in this GRC, GSWC provides the estimated construction cost, which is close to
11 \$800,000. The existing pipeline consists of 3,600 feet of 6” Asbestos Cement (AC) and is 51
12 years old. GSWC is proposing to replace the existing AC pipe with 8” ductile iron pipe.

13 Re. leaks and age – According to GSWC’s Pipeline Management Program Report, AC pipes can
14 last as long as 91 years in the Edna Road system.²¹² The pipelines have had seven leaks in the
15 past five years (2009-2013).²¹³

16 Making repairs and continuing monitoring can be an appropriate course of action for this 51
17 year-old pipeline. Therefore, ORA recommends that the Commission reject this project.

18 **7. Replace Vehicle #1231 (\$48,300)**

19 GSWC requests \$48,300 the replacement of Vehicle #1231 (heavy-duty truck) in 2015. For
20 reasons identified in ORA’s testimony on vehicle replacement, ORA removes Vehicle #1231
21 from this GRC’s capital budgets.

²¹¹ GSWC Response to ORA Data Request DG-017, Q. 1d.

²¹² GSWC’s Pipeline Management Program Report, p. 8-34.

²¹³ GSWC Response to ORA Data Request DK4-001, Attachment 1b.

1 **8. Additional Adjustments to Requested Capital Expenditures – Edna Road**
2 **System**

3 This section addresses projects included as “CWIP to be closed” for 2014 and 2015 in GSWC’s
4 Table 4-M, Utility Plant. These “CWIP to be closed” amounts in Table 4-M are made up of
5 capital expenditures from projects listed in GSWC’s “CWIP” workpapers. In its application,
6 GSWC did not provide detailed project description or cost details for these projects. While
7 GSWC labelled these projects as CWIP (Construction Work In Progress), this is not an accurate
8 description for many of these projects. As ORA discovered, some projects have not started (and
9 therefore cannot be considered “CWIP”), are no longer needed, have been cancelled by GSWC,
10 or have changed in scope and schedule significantly. ORA makes the following adjustments to
11 reflect its findings.

12 Edna Road - Drill and Equip Well (\$2,234,041 in 2015), Land Acquisition (\$356,213 in 2014),
13 Air Mitigation (\$190,000 in 2014)

14 This discussion applies to these three related projects in the Edna Road system – Drill and Equip
15 Well, Land Acquisition, and Air Mitigation listed above. The land acquisition is needed to
16 acquire the site for the Edna Well. During ORA’s site inspection of the Edna Road system on
17 October 8, 2014, GSWC explained that it still has not found a necessary site to drill a new
18 groundwater well and has encountered difficulties in locating and acquiring an appropriate well
19 site. GSWC also explained that past test wells drillings have emitted foul odors and neighboring
20 residents requested air mitigation measures be put in place during drills. The well was originally
21 scheduled to be completed in 2013.²¹⁴ Given the delay and the difficulty with locating and
22 acquiring the appropriate well site, ORA recommends that the Commission remove the cost of
23 the land acquisition, drilling and equipping the well, and air mitigation from CWIP. ORA
24 further recommends that GSWC resubmit its justification for this combined project in the next
25 GRC with detailed information on updated supply-demand analysis and a specific well site (or at
26 least specific well site alternatives).

²¹⁴ Per D.13-05-011, GSWC GRC, Attachment 3, (Exhibit JB-1), (Table 3-7), request for well was made in 2010, land purchase was scheduled to be completed in 2012, and well construction was scheduled to be completed in 2013.

1 **E. SANTA MARIA CSA**

2 The Santa Maria CSA consists of five water systems: Orcutt, Sisquoc, Tanglewood, Nipomo,
3 and Lake Marie. **Table 2-E** below presents a summary of capital budgets for the Region 1 Santa
4 Maria CSA.

Table 2-E: Capital Budget Summary – Santa Maria CSA

Santa Maria CSA	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
Orcutt - Water Supply						
Systemwide Zone Realignment Study	\$ -	\$ -	\$ 80,400	\$ -	\$ -	\$ -
Rice Ranch Subzone, Install PRV	\$ -	\$ -	\$ 53,100	\$ -	\$ -	\$ -
Mira Flores #6, MCC & SCADA	\$ -	\$ -	\$ 149,400	\$ -	\$ -	\$ 146,800
Oak Plant, MCC & install VFD	\$ -	\$ -	\$ 132,500	\$ -	\$ -	\$ -
Orcutt Plant, MCC & install VFD	\$ -	\$ -	\$ 147,800	\$ -	\$ -	\$ -
Orcutt Hill Plant, Recoat Res #1	\$ -	\$ -	\$ 77,700	\$ 50,000	\$ 538,800	\$ 347,000
Mira Flores #1, Res and electrical	\$ -	\$ -	\$ -	\$ -	\$ 300,700	\$ 13,400
Tanglewood - Water Supply						
Pinewood Plant, Res and boosters	\$ -	\$ -	\$ 1,171,200	\$ -	\$ -	\$ -
Nipomo - Water Supply						
Vista Reservoir Plant, Demo tank	\$ -	\$ -	\$ 48,200	\$ 46,000	\$ -	\$ -
Vista #3, Destroy wells, raze site	\$ -	\$ -	\$ 152,600	\$ 145,700	\$ -	\$ -
Alta Mesa Plant, wells, electrical, etc.	\$ -	\$ -	\$ 57,400	\$ 46,100	\$ 398,000	\$ 319,600
Eucalyptus Plant, Disinfection facility	\$ -	\$ -	\$ 9,400	\$ 7,900	\$ 65,400	\$ 54,900
La Serena Plant, Disinfection facility	\$ -	\$ -	\$ 27,300	\$ 23,300	\$ 189,700	\$ 161,800
Osage Plant, Disinfection facility	\$ -	\$ -	\$ 9,900	\$ -	\$ 69,000	\$ -
Total Water Supply	\$ -	\$ -	\$ 2,116,900	\$ 319,000	\$ 1,561,600	\$ 1,043,500
Orcutt Misc Street Improvements						
Misc Street Improvements	\$ 36,000	\$ 36,000	\$ 38,000	\$ 38,000	\$ 40,000	\$ 40,000
Total Street Improvements	\$ 36,000	\$ 36,000	\$ 38,000	\$ 38,000	\$ 40,000	\$ 40,000
Lake Marie - Distribution						
Arrowhead Dr. e/o Crystal to end	\$ -	\$ -	\$ 10,100	\$ -	\$ 104,700	\$ -
Orcutt - Distribution						
Bradley Rd., Stubblefield to Clark	\$ -	\$ -	\$ -	\$ -	\$ 1,487,300	\$ -
Tanglewood - Distribution						
Willowood Area Main Replacements	\$ -	\$ -	\$ -	\$ -	\$ 163,400	\$ -
Driftwood Area Main Replacements	\$ -	\$ -	\$ -	\$ -	\$ 166,500	\$ -
Total Distribution Improvements	\$ -	\$ -	\$ 10,100	\$ -	\$ 1,921,900	\$ -
Lake Marie - Water Quality						
Systemwide, Residual Analyzers	\$ -	\$ -	\$ 21,300	\$ 2,200	\$ -	\$ 15,400
Orcutt - Water Quality						
Systemwide, Residual Analyzers	\$ -	\$ -	\$ 275,600	\$ 28,700	\$ -	\$ 199,700
Nipomo - Water Quality						
Systemwide, Residual Analyzers	\$ -	\$ -	\$ 106,000	\$ 11,100	\$ -	\$ 76,800
Total Water Quality	\$ -	\$ -	\$ 402,900	\$ 42,000	\$ -	\$ 291,900
UWMP - Orcutt	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Total Miscellaneous	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Contingency Budget	\$ 76,300	\$ -	\$ 87,850	\$ -	\$ 73,250	\$ -
Total Contingency Budget	\$ 76,300	\$ -	\$ 87,850	\$ -	\$ 73,250	\$ -
New Business Funded by GSWC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total New Business	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meters	\$ 59,500	\$ 59,500	\$ 41,600	\$ 41,600	\$ 41,600	\$ 41,600
Services	\$ 292,300	\$ 292,300	\$ 300,200	\$ 300,200	\$ 308,300	\$ 308,300
Minor Main Replacements	\$ 111,600	\$ 111,600	\$ 114,600	\$ 114,600	\$ 117,700	\$ 117,700
Minor Pumping Plant Equip.	\$ 222,200	\$ 222,200	\$ 342,600	\$ 342,600	\$ 234,300	\$ 234,300
Minor Purification Equip.	\$ 15,900	\$ 15,900	\$ 16,300	\$ 16,300	\$ 16,700	\$ 16,700
Office Furniture and Equip.	\$ 8,400	\$ 8,400	\$ 8,600	\$ 8,600	\$ 8,900	\$ 8,900
Transportation Equipment	\$ 48,300	\$ 48,300	\$ 49,700	\$ -	\$ -	\$ -
Misc. Tools and Safety Equip.	\$ 4,800	\$ 4,800	\$ 4,900	\$ 4,900	\$ 5,000	\$ 5,000
Total Blanket Budget	\$ 763,000	\$ 763,000	\$ 878,500	\$ 828,800	\$ 732,500	\$ 732,500
TOTAL CAPITAL BUDGET	\$ 940,300	\$ 799,000	\$ 3,534,250	\$ 1,292,800	\$ 4,329,250	\$ 2,107,900
				3-YEAR TOTAL:	\$ 8,803,800	\$ 4,199,700
				3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:		\$ 4,604,100
				3-YEAR TOTAL DIFFERENCE, (GSWC-ORA)/(GSWC):		52%

1 **1. Orcutt - System-wide Zone Realignment Study (\$80,400)**

2 GSWC requests \$80,400 in 2016 to hire a consultant to perform a detailed study and hydraulic
3 modeling analysis to address pressure readings in the Orcutt system that, according to GSWC,
4 fall outside of the GO 103-A requirements.

5 Upon ORA’s inquiry, GSWC could not provide any data on pressure complaints from customers
6 in this area.²¹⁵ As explained in ORA’s testimony on GO 103-A minimum pressure requirements,
7 ORA is recommending that the Commission reconsider those requirements, evaluate the benefit
8 and cost impacts to ratepayers, and revise minimum pressure requirements to reflect industry and
9 Title 22 standards. Thus, ORA cannot support projects such as this whose sole objective is to
10 address those GO requirements, and recommends that this project be rejected until after the
11 Commission has fully reconsidered its pressure requirements in GO 103-A.

12 **2. Orcutt – Install PRV in Rice Ranch Subzone (\$53,100)**

13 GSWC requests \$53,100 in 2016 to install a PRV station/vault on Sage Crest Drive, south of
14 Rice Ranch Road. GSWC provided pressure readings in the Upper Orcutt area showing
15 pressures below 40 psi. In response to ORA’s inquiry, GSWC provided an email containing one
16 customer complaint.²¹⁶ The complaint was from the developer of a new housing project in the
17 area and appears to be the sole customer complaint.

18 It appears that GSWC’s sole purpose for this project is to address a GO 103-A pressure
19 requirements, which as explained earlier ORA is recommending reconsideration by the
20 Commission. Furthermore, Rule 15 in GSWC tariff states:

21 If special facilities consisting of items not covered by Section C.1. are required for the
22 service requested and, when such facilities to be installed will supply both the main
23 extension and other parts of the utility’s system, at least 50 percent of the design capacity
24 (in gallons, gpm, or other appropriate units) is required to supply the main extension, the
25 cost of such special facilities may be included in the advance, subject to refunds as

²¹⁵ GSWC Response to ORA Data Request DG-002, Santa Maria, Orcutt – Systemwide Zone Realignment Study.

²¹⁶ GSWC Response to ORA Data Request DG-002, Santa Maria, Orcutt – Rice Ranch Subzone.

1 hereinafter provided along with refund of the advance of the cost of the extension
2 facilities described in Section C.1.a. above.²¹⁷

3 So, even if a valid pressure problem exists and requires additional infrastructure investment, the
4 developers should pay an advance for the project construction, as the investment is needed for a
5 new development and GSWC has not proposed a corresponding advance. For both of these
6 reasons, ORA recommends that the Commission reject this project.

7 **3. Orcutt - Mira Flores Well #6: Replace Motor Control Center (MCC); Add SCADA** 8 **(\$149,400)**

9 GSWC requests \$149,400 in 2016 to replace the MCC and add SCADA²¹⁸ equipment at the Mira
10 Flores Well #6. The well was constructed in 1978. GSWC states that the MCC at the well is
11 near the end of its useful life. GSWC also states that installing SCADA at the site will automate
12 operations.

13 ORA asked GSWC to provide documentation to support the need for replacement. GSWC
14 provided the August 31, 1994 Oak Plant Boyle Report (Boyle Report).²¹⁹ GSWC explained in
15 its response that “[e]xcessive rust exists throughout MCC. Replacement parts are
16 unobtainable.”²²⁰ ORA recommends that the Commission approve this project. However,
17 because the urgent need for the project has not been established, ORA recommends that GSWC
18 complete the project in 2017 instead of 2016.

19 **4. Orcutt - Oak Plant: Replace MCC and install VFD (\$132,500)**

20 GSWC requests \$132,500 in 2016 to replace the MCC and to install a Variable Frequency Drive
21 (VFD) at the Oak Well #1. The well was constructed in 1989.

²¹⁷ GSWC Rule No. 15, Section C.1.b.

²¹⁸ SCADA: Supervisory Control and Data Acquisition.

²¹⁹ GSWC Response to ORA Data Request DG-015.

²²⁰ GSWC Response to ORA Data Request DG-015.

1 MCC Replacement

2 GSWC stated that the MCC at the well is near the end of its useful life. In response to ORA’s
3 inquiry, GSWC provided the Boyle Report and other information.²²¹ The Boyle Report gives the
4 current MCC a score of “4 – Long Life Expectancy.” However, the report is from twenty years
5 ago. ORA recommends that GSWC perform a similar assessment of the MCC to determine the
6 need for replacement based on more current conditions, and if warranted, submit its replacement
7 request in the next GRC. Therefore, ORA recommends the Commission reject the MCC
8 replacement request.

9 VFD installation

10 GSWC explains that “to run the system more efficiently and prevent pressure fluctuation in this
11 area, a VFD should be installed.”²²² While VFD may provide some benefits as described, it is
12 not necessarily cost effective at this time. Replacing the VFD necessitates the MCC replacement
13 and upgrade, which as discussed above, may be premature. Furthermore, as explained earlier in
14 regards to the system-wide realignment study in this GRC, GSWC should defer this type of
15 project until the issue regarding GO 103-A pressure requirements is addressed by the
16 Commission as requested by ORA. For all these stated reasons, ORA recommends that the
17 Commission reject the VFD request as well.

18 **5. Orcutt - Orcutt Plant: Replace MCC; Install VFD (\$147,800)**

19 GSWC requests \$147,800 in 2016 to replace the MCC for the booster station and install a VFD
20 at the Orcutt Plant. GSWC states that the MCC is near the end of its useful life.

21 This MCC and VFD project request is near identical to that for the Oak Plant, and for the same
22 reasons previously elaborated, ORA recommends that the Commission reject this.

²²¹ Ibid.

²²² GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 123.

1 **6. Orcutt - Orcutt Hill Plant, Recoat Reservoir #1 (\$616,500)**

2 GSWC requests \$77,700 in 2016 for design and permit costs and \$538,800 in 2017 for
3 construction costs to recoat the interior of Reservoir #1, and to install a cathodic protection
4 system, a manhole, and seismic improvements. The reservoir is a 1.5 million gallon (MG) steel
5 tank. GSWC provided a summary page of a 2011 tank inspection report that recommends
6 adding a cathodic protection system and recoating.²²³ GSWC did not include the complete 2011
7 inspection report in the application. GSWC asserts that the existing tank needs to be upgraded to
8 meet seismic standards set forth in the AWWA M42 (American Water Works Association).

9 ORA does not contest the need to recoat the reservoir and agrees that to minimize service
10 interruptions, it is appropriate to make the seismic improvements and to add cathodic protection
11 when the tank is taken out of service for recoating activities. However, GSWC did not provide
12 any supporting justification for the construction of a new manhole. The 2011 tank inspection
13 report summary page did not mention the need. Therefore, ORA recommends that the
14 Commission approve the project with the exception of the new manhole addition, and at a lower
15 cost as discussed below.

16 ORA asked GSWC to provide a five-year history of recently completed tank recoating projects.
17 ORA used GSWC-provided recorded cost data for a recently completed 1.5 MG Gardena
18 Heights steel tank recoating project to evaluate the cost estimate for this requested project.²²⁴
19 The Gardena Heights tank recoating project was similar to this requested project with a final
20 project cost of \$258,000. Therefore, with the adjustment made for the new manhole (\$5,000),
21 ORA recommends only \$253,000 in construction cost (before adders) be authorized for this
22 project.

23 **7. Orcutt- Mira Flores #1, Reservoir Roof and Electrical (\$300,700)**

24 GSWC requests \$300,700 in 2017 for the design and permit costs associated with a project to
25 demolish and replace the existing Mira Flores #1 reservoir roof, increase the reservoir wall

²²³ Prepared Testimony of Robert McVicker and Mark Insko, p. 125; Attachment SM01-Orcutt Riveted Tank Inspection Report, DIVE/CORR, Inc., July 25, 2011.

²²⁴ GSWC Response to ORA Data Request SN2-002, Q. 6.

1 height by three feet,²²⁵ reinforce the reservoir walls, upgrade the electrical service/meter main at
2 this site, and remove a hydropneumatic tank.

3 The reservoir is a 0.3 MG partially buried concrete reservoir. ORA reviewed the July 2011
4 inspection report provided by GSWC. The report indicates the following: (1) the exterior roof
5 has several areas that are considered dangerously weak under the weight of the inspector (220
6 lbs.), (2) the interior roof is good in appearances but suspected of having several weak areas, and
7 (3) there are cracks in the south wall of the tank.²²⁶ The final report recommendation was to
8 “Re-inspect in 1-2 years.”²²⁷

9 GSWC is proposing, in addition to replacing the roof, to raise the wall height by three feet to
10 provide an additional 81,000 gallons of storage.²²⁸ GSWC explains that this is less expensive
11 than constructing a new equivalent tank on another parcel of land, which GSWC will first need
12 to acquire.²²⁹ The 2009 Orcutt System Water Master Plan identifies a storage deficiency under
13 the then existing and projected demand.²³⁰ Although GSWC has adjusted its criteria for
14 calculating storage since the 2009 Orcutt System Water Master Plan, it found that there is still a
15 2.2 MG storage deficiency in the system.²³¹ GSWC explains:

16 The expanded capacity of Mira Flores #1 reservoir, while not addressing the overall
17 system storage deficiency, will provide needed storage capacity for GSWC’s customers
18 in the Orcutt System at a lesser cost than the equivalent volume of storage located
19 elsewhere.²³²

20 Even if GSWC were to expand the capacity of the reservoir by 81,000 gallons, there would still
21 be over 2.1 MG of storage deficiency in the system, according to GSWC’s own calculations.

²²⁵ GSWC Response to ORA Data Request DG-014, Q. 1b.

²²⁶ GSWC Prepared Testimony of Robert McVicker and Mark Insko, page 127; Attachment SM02-Mira Flores #1 Tank Inspection Report, DIVE/CORR, Inc., July 6, 2011, p. 5.

²²⁷ Ibid.

²²⁸ GSWC Response to ORA Data Request DG-014, Q. 1b.

²²⁹ GSWC Response of ORA Data Request DG-014, Q. 1b.

²³⁰ 2009 Orcutt System Water Master Plan, September 2009, Tables 5-7, 5-11 and 5-15, and Section 5.6.

²³¹ GSWC Response of ORA Data Request DG-014, Q.1a.

²³² Ibid.

1 This proposed wall raising would result in a small addition (3.8%) to the storage capacity
2 deficiency and does not justify the costs involved.

3 ORA visited the site on October 9, 2014 and noted the hydropneumatic tank, which is no longer
4 in use, and the meter main, which GSWC explained was a safety hazard because the “insulation
5 on the electrical service is stripped.”²³³ Therefore, ORA supports the removal of the
6 hydropneumatic tank and the replacement of the meter main and recommends that Commission
7 approval of these two work items, with an estimated total cost of \$13,400.

8 ORA however recommends that the Commission reject the proposed work on the tank, and that
9 GSWC continue to re-inspect the reservoir as recommended in the tank inspection report.

10 Moreover, any project proposal to add storage capacity to the system, if indeed still needed,
11 should be considered on a more comprehensive basis and not piece meal as proposed by GSWC.
12 Furthermore, requests to add storage facilities should be presented with a detailed cost-benefit
13 and alternative analysis, including the total costs (design and construction) of the alternative
14 projects considered. GSWC has failed to do either in this project proposal.

15 **8. CSA-Wide Installation of Residual Analyzers (\$402,900)**

16 GSWC requests \$402,900 in 2016 for installation of 19 chlorine residual analyzers, tied into the
17 SCADA system, and electrical modifications at the sites in the Lake Marie, Orcutt and Nipomo
18 systems as follows:

- 19 1. Mira Flores #1 well
- 20 2. Mira Flores #2 well
- 21 3. Mira Flores #5 well
- 22 4. Mira Flores #6 well
- 23 5. Mira Flores #4 well
- 24 6. Mira Flores #7 well
- 25 7. Crescent well
- 26 8. Kenneth well

²³³ Prepared Testimony of Robert McVicker and Mark Insko, p. 127.

- 1 9. Oak well
- 2 10. Woodmere well #1
- 3 11. Woodmere well #2
- 4 12. Olive Hill well #1
- 5 13. Lake Marie Plant
- 6 14. La Serena Plant
- 7 15. Casa Real Plant
- 8 16. Eucalyptus Plant
- 9 17. Osage Plant
- 10 18. Alta Mesa Plant
- 11 19. Orcutt Plant

12 GSWC explains that continuous chlorine analyzers help maintain chlorine residual at optimal
13 levels. ORA agrees with the need for this project. However, because of the number of
14 installations involved, ORA recommends that GSWC implement the project over two years with
15 design costs in 2016 and construction costs in 2017.

16 GSWC's estimate includes a unit cost of \$5,000 per chlorine residual analyzer. However,
17 ORA's research indicates analyzer units are available for \$3,000 per unit or less.²³⁴ Therefore,
18 ORA recommends that the Commission approve this project but with a unit cost of \$3,000 per
19 analyzer (before adders) and a two-year implementation timeline as discussed above (see **Table**
20 **2-E** - Capital Budget Summary). ORA does not adjust for any other unit costs and quantities
21 proposed in GSWC's project request.

22 **9. Tanglewood - Pinewood Plant: Add Reservoir and Boosters (\$1.2 million)**

23 GSWC requests \$1,171,200 in 2016 to construct the following at the Pinewood plant (formerly
24 known as Tanglewood #2):

- 25 1. 0.22 MG tank
- 26 2. Two Booster pumps

²³⁴ Online search results included products from various manufacturers of chlorine residual analyzers
<http://www.hach.com/cl17-free-chlorine-analyzer/product?id=7640295880>.

- 1 3. MCC
- 2 4. Meter Main upgrade
- 3 5. SCADA
- 4 6. Back-up generator
- 5 7. VFD

6 The design budget of \$382,700 for this project was approved in the 2011 GRC.²³⁵ The
7 Tanglewood system currently has no storage capacity and operates as a closed pressure zone.²³⁶

8 In its request, GSWC explains that “For the previous 13 years, GSWC supplied the Tanglewood
9 System using its allotment of State Water purchased through a turnout with the Central Coast
10 Water Authority.”²³⁷ GSWC further describes that the zone is being returned to a groundwater
11 only system because according to GSWC, the capacity is now needed in the Orcutt System “for
12 new customers that have contributed money towards capacity in the Central Coast Branch of the
13 State Water Project.”²³⁸ GSWC also claims that the tank and booster project will help meet
14 Maximum Day Demand (MDD) and fire flow demands in the Tanglewood system. In response
15 to ORA’s inquiry, GSWC explains:

16 In the case of the Tanglewood System, a 1986 County of Santa Barbara Fire Department
17 letter was also rediscovered (see attached), increasing the fire requirement in the storage
18 calculation to 1,500 gpm from the 750 gpm used in the 2009 Master Plan.²³⁹

19 In GSWC 2010 Region I GRC, the Commission approved the purchase of an ion-exchange unit
20 to allow the Tanglewood Well #1 to be put back in service, along with the construction of the
21 Tanglewood Well #3.

22 These two wells have a combined 836 gpm capacity.²⁴⁰ The following table shows that the
23 Tanglewood system’s MDD and PHD (Peak Hour Demand) have been decreasing in the past

²³⁵ D.13-05-011, GSWC 2011 GRC.

²³⁶ Prepared Testimony of Robert McVicker and Mark Insko, p. 131.

²³⁷ Ibid.

²³⁸ Ibid.

²³⁹ GSWC Response to ORA Data Request DG-024, Q.2b.

1 five years from 220 gpm to 186 gpm, and from 330 gpm to 279 gpm, respectively.²⁴¹ This is a
2 15.5% decrease, as shown in **Table 2-F** below.

3 **Table 2-F: Tanglewood System Demands, 2009-2013 (gpm)**

Year	MDD	% of 2009	PHD	% of 2009
2009	220	100%	330	100%
2010	202	92%	303	92%
2011	204	93%	306	93%
2012	185	84%	278	84%
2013	186	85%	279	85%

4 From its October 9, 2014 field visit and discussion with GSWC’s local superintendent, ORA
5 learned that the owner of the adjacent property to GSWC’s proposed tank location site has
6 objected to the proposed tank’s height and the impact on his property value. In response to
7 ORA’s inquiry, GSWC provided the letters from realtors to the property owner explaining the
8 impact.²⁴² The dates of the letters are not shown. In the letters, the realtors estimate the loss in
9 property value to be between \$40,000 and \$55,000. GSWC explains that the property owner had
10 stated that she would be willing to sign a waiver holding GSWC harmless for any claims of
11 equity loss if an offer is made to settle for the loss of equity and market value.²⁴³
12 Instead of entertaining the option of paying the neighbor \$40,000 to \$55,000 and building on the
13 site already owned by GSWC, GSWC decided to explore three alternative sites for the tank in
14 close proximity to the Pinewood site. The three sites include a site located on a school property,

²⁴⁰ GSWC Response to ORA Data Request SN2-001, Q.1.

²⁴¹ Ibid.

²⁴² GSWC Response to ORA Data Request DG-016, Q. 9.

²⁴³ Ibid.

1 a vacant piece of land owned by “a trust of farmers,”²⁴⁴ and a site located on the Tanglewood
2 Ministry Center property.²⁴⁵

3 Both the Tanglewood Ministry Center site and the school site will require acquisition of an
4 easement.²⁴⁶ The Tanglewood Ministry Center will also require a two-year tiger salamander
5 environmental impact study.²⁴⁷ If GSWC decides to proceed with one of these three alternative
6 sites, land purchase and additional site costs would be required prior to construction. These costs
7 are at this time still unknown, but would likely lead to a higher total project costs.

8 GSWC has been authorized design costs in the amount of \$382,700 since the 2011 GRC, and
9 without design and specific site information in hand is now asking the Commission for another
10 \$1.2 million for the construction of this relatively small 0.2 MG tank. GSWC allowed the design
11 project to stall by not entertaining the neighbor’s offer and instead looked to alternatives that
12 ultimately would increase the total cost of the tank. This is not a responsible use of ratepayers’
13 funds. GSWC further exercised imprudence by requesting a construction budget in this GRC
14 without knowledge of where the tank will ultimately be built. GSWC’s actions with respect of
15 this project have done nothing to earn the Commission’s confidence that the company can
16 proceed and spend ratepayer funds prudently.

17 Moreover, as explained earlier, customer demand has dropped steadily since the tank was first
18 contemplated. Customer demand is now at a level that puts the system’s need for additional
19 storage capacity in question. When asked to provide support for the storage need, GSWC
20 produced a nearly 30-year old document from the local fire department.²⁴⁸ GSWC’s own 2009
21 Water Master Plan did not even rely on this document.

22 All of the above discussed actions and inactions by GSWC showed a lack of accountability and
23 prudence in managing this water system including the already authorized funds for this project.

²⁴⁴ GSWC Response to ORA Data Request DG-015 Q. 10.

²⁴⁵ Ibid.

²⁴⁶ GSWC Response to ORA Data Request DG-016, Q. 8.

²⁴⁷ GSWC Response to ORA Data Request DG-016, Q. 8.

²⁴⁸ GSWC Response to ORA Data Request DG-019, Q. 2b.

1 Any additional investment in supply and storage infrastructure should be based on prudent
2 management of existing resources and reflective of updated system demands. ORA recommends
3 that the Commission reject GSWC’s request for this project – both for the design and
4 construction phases – and require GSWC in its next GRC to provide a complete assessment of
5 updated demands, supply and storage deficiencies, if any, all possible alternative solutions, and
6 its respective estimated costs.

7 **10. Nipomo - Alta Mesa Plant: Demolish Vista Well #4; Replace MCC, Pump Base,**
8 **Hydropneumatic Tank, Disinfection Building & Vault Lid; Add VFD at Well #2**
9 **(\$455,400)**

10 GSWC requests \$57,400 in 2016 and \$398,000 in 2017 for the following at the Alta Mesa Plant:

- 11 1. design, permit, and demolish the Vista Well #4;
- 12 2. replace the MCC at the Alta Mesa Booster Station;
- 13 3. replace the hydropneumatic tank at the Alta Mesa Booster Station;
- 14 4. replace the vault lid at Alta Mesa Booster Station,
- 15 5. replace the pump base at Alta Mesa Well #2,
- 16 6. install a VFD at Alta Mesa Well #2, and
- 17 7. replace the disinfection facility.

18 GSWC took the Vista Well #4 out of service beginning in at least 2005 because it was producing
19 large amounts of gravel that was damaging pumps and had reduced production to below 60
20 gpm.²⁴⁹ Abandoned wells are required to be destroyed by California Code of Regulations, Title
21 22, Division 4, Chapter 16, Article 3, Section 64560.5 Well Destruction. Therefore, ORA
22 recommends the Commission authorize the well demolition portion of this project.

23 ORA reviewed the 2009 Nipomo System Water Master Plan that described the pump base at
24 Alta Mesa well #2 as in poor condition, as well as the MCC and vault lid at the Alta Mesa plant.

²⁴⁹ Prepared Testimony of Robert McVicker and Mark Insko, p. 136.

1 In response to ORA’s inquiry, GSWC explained that the Allen Bradley MCC panel was installed
2 in 1987 and is rusting. According to GSWC, a temporary roof was constructed to keep the panel
3 interior dry, but the panel is obsolete and replacement parts are difficult or impossible to find.
4 Electrical preventive maintenance is performed annually.²⁵⁰ GSWC also stated that:

5 Alta Mesa Well #2 pumps into the Main Zone (Alta Mesa Boosters A&B act as an in-line
6 booster station to re-boost the water through the hydropneumatic tank to the Alta Mesa
7 Zone). Currently the Well #2 pump cycles On/Off frequently, based on system pressure
8 and time; less On/Off cycling – and the associated wear-and-tear and energy cost savings
9 – is anticipated with the addition of a VFD to Well #2.²⁵¹

10 Based on its site inspection on October 9, 2014, ORA agrees that the pump base, MCC, and vault
11 lid are in poor condition and require replacement. Therefore, ORA recommends the
12 Commission approve the replacement of these three items.

13 During the same site inspection, ORA asked if GSWC has considered installing a VFD instead of
14 replacing the existing hydropneumatic tank with another for the booster pump. GSWC agreed
15 that that is a viable option and the local staff expressed preference for a VFD. Thus, ORA asked
16 GSWC to provide a revised proposal reflecting a VFD installation for the booster pump, in place
17 of installing a hydropneumatic tank replacement. ORA asked but did not receive an alternative
18 proposal. Therefore, ORA recommends deferring the hydropneumatic tank replacement until the
19 next GRC, at which time ORA expects GSWC to provide a detailed cost estimate for a VFD
20 installation.

21 GSWC explains that the installation of a VFD at Well #2 would decrease the amount of on and
22 off cycling of the well pump and contribute to energy cost savings. ORA agrees with this and
23 recommends the Commission approve this VFD installation.

24 ORA recommends approving the disinfection building replacement but at a smaller scope and
25 corresponding lower cost – \$40,000 instead of the requested \$60,000. ORA addresses the need
26 for the replacement in the next section, and the scope and cost issues in its ORA’s Common
27 Plant Issues testimony on Disinfection Buildings.

²⁵⁰ GSWC Response to ORA Data Request DG-015.

²⁵¹ GSWC Response to ORA Data Request DG-012, Q. 1d.

1 In summary, ORA recommends the Commission approve this project request *except* for the
2 replacement of the hydropneumatic tank for the Alta Mesa Booster Station. ORA also
3 recommends adjustment to the scope and estimated cost for the disinfection building
4 replacement.

5 **11. CSA-wide Replacement of Disinfection Buildings & Booster Building**
6 **(\$322,200)**

7 GSWC is requesting budgets to replace four disinfection buildings and one booster building in
8 the Santa Maria CSA.

9 Alta Mesa Plant, Disinfection Building (\$60,000)

10 GSWC requests approximately \$60,000 to replace the disinfection building at the Alta Mesa
11 Plant.²⁵² In response to ORA’s inquiry, GSWC provided the following justification: “Building
12 [is] in extremely poor condition. Dry rot on the roof and side panel.”²⁵³ ORA visited the site on
13 October 9, 2014 and observed that GSWC had put up temporary walls on the inside of the
14 building to address the dry rot condition. ORA agrees that the building is in poor condition and
15 needs replacement.

16 However, the proposed new building is excessive in scope and cost. Therefore, ORA adjusts the
17 cost from GSWC’s request of \$60,000 to \$40,000. ORA’s Common Plant Issues testimony on
18 Disinfection Buildings provides the basis for this cost adjustment.

19 Eucalyptus Plant, Disinfection Building (\$74,800)

20 GSWC requests \$9,400 in 2016 and \$65,400 in 2017 for design, permit and construction costs of
21 a new concrete masonry unit (CMU) building to replace the existing disinfection building made
22 of pre-fabricated plastic at the Eucalyptus Plant. In response to ORA’s inquiry, GSWC stated:
23 “The poly doors are warped creating a security issue. The building is of poor quality, but

²⁵² This is part of the \$455,400 requested for plant improvements in 2017 at the Alta Mesa Plant.

²⁵³ E-mail from Nanci Tran of GSWC to Daphne Goldberg of ORA (September 17, 2014, 10:53 AM PT) (on file with author).

1 visually look[s] decent. The walls and roof are thin.”²⁵⁴ The photo provided by GSWC shows
2 that the doors do not close fully. GSWC also explained that the existing building “is insufficient
3 for long-term liquid chlorine (sodium hypochlorite) storage at the site.”²⁵⁵ ORA agrees that the
4 building is in poor condition and needs replacement.

5 However, the proposed new building is excessive in scope and cost. Therefore, ORA adjusts the
6 total cost from GSWC’s request of \$74,800 to \$40,000. ORA’s Common Plant Issues testimony
7 on Disinfection Buildings provides the basis for this cost adjustment.

8 [Osage Plant, Disinfection Building \(\\$78,900\)](#)

9 GSWC requests \$9,900 in 2016 and \$69,000 in 2017 for design, permit, and construction of a
10 new concrete masonry unit (CMU) building at the Osage Plant to replace the existing wooden
11 structure with a concrete block building. However, in response to ORA’s inquiry, GSWC
12 provided the following notes from its CSA staff: “**The building is in good condition.** Recent
13 roof, interior panel and paint maintenance performed. **Not sure why this building is on the**
14 **list.**”²⁵⁶ [Emphasis added.] This is an undisputable example of GSWC loading its capital budget
15 projects with unnecessary projects – one that even its own local superintendent cannot find
16 reasons to support the replacement. ORA recommends total rejection of this project.

17 [La Serena Plant, Disinfection Building \(\\$108,500\)](#)²⁵⁷

18 GSWC requests \$13,650 in 2016 and \$94,850 in 2017 for the design, permit, and construction of
19 a CMU to replace the existing disinfection building at the La Serena Plant. GSWC describes this
20 disinfection building (and the booster building, see below) as follows: “The interior of the

²⁵⁴ E-mail from Nanci Tran of GSWC to Daphne Goldberg of ORA (September 17, 2014, 10:53 AM PT) (on file with author), The email from GSWC to ORA includes comments from the Santa Maria Superintendent, who explained the condition of the building.

²⁵⁵ Prepared Testimony of Robert McVicker and Mark Insko, p. 138.

²⁵⁶ E-mail from Nanci Tran of GSWC to Daphne Goldberg of ORA (September 17, 2014, 10:53 AM PT) (on file with author).

²⁵⁷ The La Serena Plant Disinfection Building replacement is part of a larger project. GSWC’s project request also includes replacement of the Booster Building at the La Serena Plant.

1 structures are experiencing severe dry-rot...” In response to ORA’s inquiry, GSWC provided
2 the following building description by its local staff:

3 Recent roof and interior paneling and paint. Looks good, but it is extremely small and
4 hard to work in. Operators manually fill the Sodium Hypochlorite crock and work on the
5 chemical feed pumps inside the building. It’s difficult to perform this work in tight
6 quarters.²⁵⁸

7 Due to the condition of the building, ORA recommends the Commission approve this
8 replacement. However, the proposed new building is excessive in scope and cost. Therefore,
9 ORA adjusts the cost from GSWC’ request of \$108,500 to \$40,000. ORA’s Common Plant
10 Issues testimony on Disinfection Buildings provides the basis for this cost adjustment.

11 **12. Lake Marie – Replacement Pipeline on Arrowhead Drive, east of Crystal to end**
12 **(\$114,800)**

13 GSWC requests \$10,100 in 2016 and \$104,700 in 2017 to replace this steel pipeline. The
14 company’s justification cites hydraulic deficiencies, age, and condition of the existing pipeline.
15 This pipeline consists of 200 feet of 3” steel and is 54 years old.

16 Regarding leaks –Since the pipeline didn’t have any leaks in 2009-2013, it does not appear to be
17 deteriorating prematurely.²⁵⁹

18 Regarding hydraulic deficiency – GSWC’s Pipeline Prioritization Results in the Pipeline
19 Management Program Report indicates that these pipelines do not have hydraulic deficiency.²⁶⁰

20 Therefore, ORA recommends the Commission reject this project.

21 **13. Orcutt – New Pipeline on Bradley Road, Stubblefield to Clark (\$1,487,300)**

22 GSWC requests \$1,487,300 in 2017 to add 4,100 feet of 16” asbestos cement pipeline. GSWC
23 explains that the new pipeline would run parallel to the existing pipeline, which GSWC
24 described as a 50-year old 10” and 12” pipeline and would act as a redundant transmission main.

²⁵⁸ E-mail from Nanci Tran of GSWC to Daphne Goldberg of ORA (September 17, 2014, 10:53 AM PT) (on file with author).

²⁵⁹ GSWC’s Pipeline Management Program Report, Table 4.8 and Appendix D.

²⁶⁰ GSWC’s Pipeline Management Program Report, Attachment E 251 of 257.

1 GSWC cites hydraulic deficiencies as the main justification for this new pipeline. ORA asked
2 GSWC to provide evidence supporting the cited hydraulic deficiency. GSWC responded as
3 follows, with no additional supporting details:

4 Bradley Road is the main north-south connection from the Orcutt Hill Zone (which
5 contains the majority of the Orcutt System’s water supply capacity and reservoir storage
6 volume) to the lower pressure zones. The hydraulic deficiency addressed by this project
7 is the existing ‘transmission bottleneck’ between the zones; the hydraulic criticality of
8 this project was determined based on field knowledge/engineering and the use of the
9 Orcutt System hydraulic model.²⁶¹

10 Essentially, GSWC would like the Commission to approve the project based on its expert
11 opinion that the project is needed. It is the utility’s burden to justify its request with detailed and
12 verifiable information. Mere assertions of need based on a utility’s own claimed expertise falls
13 short of meeting that burden. Moreover, ORA notes that there has been no customer complaints
14 that this project is intended to address.²⁶² Therefore, ORA recommends that the Commission
15 reject this project request.

16 **14. Tanglewood - Willowood Rd. Area Main Replacements (\$163,400)**

17 GSWC requests \$163,400 in 2017 to replace three pipeline segments. GSWC’s justification
18 cites hydraulic deficiencies, age, and condition of the existing pipelines on the following:

- 19 1. Willowood Rd. (Sandalwood Rd. to Well #1)
- 20 2. Briarwood Dr. (Willowood Rd. to Driftwood Dr.)
- 21 3. Satinwood Rd. (Sandalwood Rd. to north of Tanglewood Rd.)

22 According to GSWC, these pipelines consist of 2” plastic and 6” and 8” steel and are all fifty-
23 five years old. GSWC proposes replacing these pipelines with 4,200 feet of 8” ductile iron pipe.
24 GSWC states that these pipelines have had three leaks in the past five years at the following
25 locations:²⁶³

²⁶¹ GSWC Response to ORA Data Request DG-017, Q. 2b.

²⁶² Ibid, Q. 2d.

²⁶³ GSWC Response to ORA Data Request DK4-001, Attachment 1b.

- 1 1. 3370 Satinwood Drive
- 2 2. 3843 Olivewood (and Sandalwood)
- 3 3. 3328 Satinwood

4 GSWC also indicates that there are no hydraulic deficiency concerns with these pipelines. ORA
5 noticed that one or more of the segments that GSWC proposed did not have any leaks and asked
6 GSWC for more information about the specific segments of this project, including design and
7 construction cost, and length of each segment. However, GSWC chose not to provide the
8 requested information, explaining that the “Preliminary Cost Estimate (PCE) was created for the
9 overall grouped project.”²⁶⁴ It is prudent and essential to determine the replacement needs and
10 corresponding costs for the individual segments; such analysis is necessary to determine the cost
11 effectiveness of replacing all three pipelines at the same time. While it may be GSWC’s
12 prerogative to not provide the individual cost estimates **or even the segments’ length data**, it
13 has effectively prevented ORA from completing the essential analysis to develop its
14 recommendation to the Commission. Therefore, ORA cannot recommend that the Commission
15 approve this grouped project. Additionally, ORA recommends that the Commission (1) remind
16 GSWC that it is the utility’s burden to justify the cost effectiveness of each and every pipeline
17 replacement, and (2) require GSWC in future requests to clearly explain the basis for grouping
18 grouped pipeline replacement project such as this, and to provide segment-specific information
19 such as cost, length, and leak history.

20 **15. Tanglewood - Driftwood Drive Area Main Replacements (\$166,500)**

21 GSWC requests \$166,500 in 2017 to replace four pipeline segments, totaling 4,500 feet.
22 GSWC’s justification cites hydraulic deficiencies, age and condition of the existing pipelines.
23 The four pipeline segments are:

- 24 1. Driftwood Dr. (Briarwood Dr. to Sandalwood Dr.)
- 25 2. Greenwood Rd. (Driftwood Dr. to Willowood Rd.)
- 26 3. Tanglewood Dr. (West of Driftwood Dr. to Willowood Rd.)

²⁶⁴ GSWC Response to ORA Data Request DG-023 Q. 1C.

1 4. Lockwood Ln.

2 The pipelines are 4”, 6” and 8” steel and 55 years old,. GSWC proposes to replace the pipelines
3 with 4,500 feet of 8” ductile iron pipe. GSWC indicates that these pipelines have had a total of
4 five leaks in the past five years at the following locations:²⁶⁵

- 5 1. 2066 Greenwood Road
- 6 2. 3426 Lockwood Lane
- 7 3. 3394 Driftwood
- 8 4. 3456 Lockwood (and Greenwood)
- 9 5. 3386 Driftwood

10 Similar to the Willowood Road Area Main Replacement project, ORA asked GSWC for
11 additional information on the project including individual segment lengths and replacement
12 costs; again, GSWC explained that “Preliminary Cost Estimate (PCE) was created for the overall
13 grouped project.”²⁶⁶ Therefore, for the same reason, ORA cannot recommend that the
14 Commission approve this project as proposed.

15 **16. Orcutt - Urban Water Management Plan (\$65,000)**

16 GSWC requests \$65,000 to update its Urban Water Management Plan (UWMP) for the Orcutt
17 water system. ORA does not oppose this request but recommends that the estimated cost be
18 shifted from the 2015 to the 2016 capital budget. ORA’s Common Plant Issues testimony on
19 UWMP provides the basis for the adjusted timeline.

20 **17. Replace Vehicle #2178**

21 GSWC requests \$49,700 for the replacement of Vehicle #2178 (heavy-duty truck) in 2016. For
22 reasons identified in ORA’s testimony on vehicle replacement, ORA removes Vehicle #2178
23 from this GRC’s capital budgets.

²⁶⁵ GSWC Response to ORA Data Request DK4-001, Attachment 1b.

²⁶⁶ GSWC Response to ORA Data Request DG-023, Q. 2C.

1 **18. Additional Adjustments to Requested Capital Expenditures – Santa Maria CSA**

2 This section addresses projects included as “CWIP to be closed” for 2014 and 2015 in GSWC’s
3 Table 4-M, Utility Plant. These “CWIP to be closed” amounts in Table 4-M are made up of
4 capital expenditures from projects listed in GSWC’s “CWIP” workpapers. In its application,
5 GSWC did not provide a detailed project description or cost details for these projects. While
6 GSWC labeled these projects as CWIP or Construction Work In Progress, it is not an accurate
7 description for many of these projects. As ORA discovered, some projects have not started (and
8 therefore cannot be considered “CWIP”), are no longer needed, have been cancelled by GSWC,
9 or have significantly changed in scope and schedule. ORA makes the following adjustments to
10 reflect its findings.

11 ***a) Tanglewood – Pinewood Plant, Design for Reservoir and Boosters (\$346,935 in***
12 ***2015)***

13 As discussed above, ORA recommends that the Commission reject GSWC’s request for
14 construction of the reservoir and boosters at the Pinewood plant. Correspondingly, ORA
15 recommends that the Commission remove the project design cost from the CWIP list and require
16 GSWC in its next GRC to provide a complete assessment of updated demands, supply and
17 storage deficiencies, if any, all possible alternative solutions and their respective estimated costs.

18 ***b) Tanglewood – Spare pumps/motors for Tanglewood #3 (\$40,000 in 2014) and***
19 ***Foxcanyon #5 (\$40,000 in 2014)***

20 GSWC requests \$80,000 to purchase spare pumps/motors. It is highly unusual for water utilities
21 to stock expensive spare equipment. Moreover, the Tanglewood #1 motor pump was already
22 listed as a 2014 CWIP item and Tanglewood #3 is a brand new well. There is simply no need to
23 invest ratepayers’ funds in these spares. Therefore, ORA recommends that the Commission
24 disallow these two plant items.

1 **F. OJAI CSA**

2 **Table 2-G** below presents a summary of capital budgets for the Region 1 Ojai CSA.

3 **Table 2-G: Capital Budget Summary – Ojai CSA**

Ojai CSA	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
Fairview Plant, Boosters, T-main, etc.	\$ -	\$ -	\$ 1,746,100	\$ 1,666,700	\$ -	\$ -
Mutual Plant, Install Fencing	\$ -	\$ -	\$ 90,700	\$ 21,700	\$ -	\$ -
Running Ridge Plant, Abandon tanks	\$ -	\$ -	\$ 29,000	\$ 27,700	\$ 201,200	\$ 192,000
Main Zone, Realign pressure zone	\$ -	\$ -	\$ 255,200	\$ -	\$ 737,800	\$ -
Heidelberger Booster, Retaining wall	\$ -	\$ -	\$ 14,900	\$ 14,200	\$ 34,300	\$ 32,800
Signal Tank, Seismic evaluation	\$ -	\$ -	\$ -	\$ -	\$ 41,300	\$ 34,300
Total Water Supply	\$ -	\$ -	\$ 2,135,900	\$ 1,716,100	\$ 1,014,600	\$ 192,000
Misc Street Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Street Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Del Norte, Palomar to s/o Fairview	\$ -	\$ -	\$ 137,500	\$ 131,300	\$ -	\$ -
Ojai Ave., Bristol to Gridley	\$ -	\$ -	\$ 48,300	\$ -	\$ 1,743,800	\$ -
Verano Dr. & Rancho Dr.	\$ -	\$ -	\$ 10,400	\$ 9,900	\$ 277,600	\$ 265,000
Grand Ave., Ellison to Los Alamos	\$ -	\$ -	\$ -	\$ -	\$ 58,100	\$ 38,900
Cuyuma & El Paso, Sierra to Bristol	\$ -	\$ -	\$ -	\$ -	\$ 107,900	\$ 72,100
Total Distribution Improvements	\$ -	\$ -	\$ 196,200	\$ 141,200	\$ 2,187,400	\$ 303,900
Total Water Quality	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UWMP - Ojai	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Total Miscellaneous	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Contingency Budget	\$ 58,020	\$ -	\$ 52,200	\$ -	\$ 53,230	\$ -
Total Contingency Budget	\$ 58,020	\$ -	\$ 52,200	\$ -	\$ 53,230	\$ -
New Business Funded by GSWC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total New Business	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meters	\$ 48,100	\$ 48,100	\$ 25,000	\$ 25,000	\$ 21,800	\$ 21,800
Services	\$ 179,700	\$ 179,700	\$ 184,600	\$ 184,600	\$ 189,600	\$ 189,600
Minor Main Replacements	\$ 169,200	\$ 169,200	\$ 173,800	\$ 173,800	\$ 178,500	\$ 178,500
Minor Pumping Plant Equip.	\$ 67,700	\$ 67,700	\$ 69,500	\$ 69,500	\$ 71,400	\$ 71,400
Minor Purification Equip.	\$ 39,800	\$ 39,800	\$ 40,900	\$ 40,900	\$ 42,000	\$ 42,000
Office Furniture and Equip.	\$ 16,800	\$ 16,800	\$ 17,300	\$ 17,300	\$ 17,800	\$ 17,800
Transportation Equipment	\$ 48,300	\$ -	\$ -	\$ -	\$ -	\$ -
Misc. Tools and Safety Equip.	\$ 10,600	\$ 10,600	\$ 10,900	\$ 10,900	\$ 11,200	\$ 11,200
Total Blanket Budget	\$ 580,200	\$ 531,900	\$ 522,000	\$ 522,000	\$ 532,300	\$ 532,300
TOTAL CAPITAL BUDGET	\$ 703,220	\$ 531,900	\$ 2,906,300	\$ 2,444,300	\$ 3,787,530	\$ 1,028,200
3-YEAR TOTAL:					\$ 7,397,050	\$ 4,004,400
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:					\$ 3,392,650	
3-YEAR TOTAL DIFFERENCE, (GSWC-ORA)/(GSWC):					46%	

4

5 **1. Realign Main Pressure Zone (\$993,000, Phase 1 only)**

6 GSWC requests \$255,200 in 2016 and \$737,800 in 2017 for realigning a portion of the Main

7 Zone pressure zone south of the Fairview Plant to solve the pressure deficiencies in the area.

1 There are only 17 customer connections affected by this project.²⁶⁷ GSWC proposes doing this
2 by constructing the following:²⁶⁸

- 3 1. Install 3,800 feet of 12-inch transmission main along Foothill Road from El Toro Road
4 and Fairview Road to the Fairview Reservoir.
- 5 2. Reconfigure piping through the Fairview Plant; connect 12-inch main from Del Norte
6 Road to the low-pressure main north of the Fairview Plant; GSWC explains that this will
7 be the new Running Ridge Regulator Zone.
- 8 3. Install four PRV stations at Rancho Drive, Del Norte/El Toro, Palomar/El Toro and El
9 Camino/El Toro.

10 The requested budget is only Phase 1 of a larger two-phase project. GSWC indicates that Phase
11 2, approximately \$757,720, will be requested in the next GRC for a total cost of \$1,495,520.²⁶⁹
12 GSWC did not specify what is involved in Phase 2 or associated cost details. Lack of
13 uncertainty on the total project cost is a major concern, because even at current estimates, it will
14 cost a total of \$1.5 million on a project that affects only 17 customers. GSWC explained that
15 “[n]o formal pressure- related customer complaints are associated with the requested project.”²⁷⁰
16 Roughly, it would cost Ojai’s general ratepayers an additional \$300,000 in rates per year (or
17 more than \$100 per customer per year) for a project that may not be needed.

18 GSWC asserts that the improvements listed above are necessary for extending the higher
19 pressure “Running Ridge [Regulator] Zone” into the low pressure area in the Main Zone, and the
20 pressures in this portion of the Main Pressure Zone are dependent upon the operations of the San
21 Antonio Booster station located on the east side of the Main Pressure Zone. GWSC asserts that
22 when the San Antonio Booster station is running, the Main Zone’s pressures comply with GO
23 103-A minimum pressure requirement; however, when the pumps are off, pressures are out of

²⁶⁷ GSWC Response to ORA Data Request DG-025, Q.1.

²⁶⁸ Prepared Testimony of Robert McVicker and Mark Insko, p. 109.

²⁶⁹ GSWC Response to ORA Data Request DG-009, Q. 4.

²⁷⁰ GSWC Response to ORA Data Request, DG-002, Ojai- Main Zone, Realign Pressure Zone, Q.b.

1 compliance with GO 103-A.²⁷¹ During ORA’s field visit on October 10, 2014, GSWC also
2 explained that the pressure fluctuates more during the summer months as the San Antonio
3 boosters cycle on and off to meet demand. GSWC asserts that the pressure deficiencies also
4 occur because of the following:

5 Since the elevation of the Fairview Reservoir is not sufficiently higher than the affected
6 customer connections, and the elevation of the reservoir cannot be adjusted (it would
7 need to be at least 92.4 ft. higher than the highest customer connection in order to
8 maintain 40 psi at that location), GSWC’s proposal is that the zone break instead be
9 lowered, expanding the higher pressure zone above the tank (see GSWC Testimony for
10 Fairview Plant, Booster, T-main, etc.) to include a portion of the area in the Main Zone,
11 south of the Fairview Reservoir.²⁷²

12 ORA asked GSWC to explain how the pressure deficiency was determined. GSWC responded
13 that it determined the deficiency based on operations and field staff interaction with customers
14 and hydraulic modeling analysis. However, GSWC did not provide any documentation to
15 support these assertions. GSWC should not expect the Commission to approve projects based on
16 general assertions with no documentation for support.

17 Moreover, as already mentioned earlier in this chapter and discussed in detail in the common
18 plant chapter, ORA is recommending that the Commission reconsider the minimum pressure
19 requirements in GO 103-A. Changes to those requirements would fundamentally affect the need
20 for this project – i.e., this project would likely not be needed.

21 As shown above, there are many reasons why this project should not be allowed. ORA
22 recommends the Commission reject this project.

23 **2. Mutual Plant – Install Fencing (\$90,700)**

24 GSWC requests \$90,700 in 2016 to install a security fence as identified in the Ojai Vulnerability
25 Assessment.²⁷³ The site does not currently have perimeter fencing. Fencing is needed at a
26 minimum to control access to operational facilities; therefore, ORA recommends the

²⁷¹ Ibid, p. 109.

²⁷² GSWC Response to ORA Data Request DG-010, Q. 1a.

²⁷³ GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 107, Attachment OJ02-Ojai System Vulnerability Assessment, April 1, 2004, pp. 45-46.

1 Commission approve this project. However, GSWC’s estimated \$90/foot²⁷⁴ cost of the fence is
2 too high. In response to ORA’s inquiry, GSWC provided a five-year history of recently
3 completed fence installation projects.²⁷⁵ Specifically, at the San Antonio Plant in Ojai, a
4 contractor bid \$35,584 for a 1,600-foot chain link fence project.²⁷⁶ ORA uses this cost data to
5 arrive at its \$23/foot unit cost estimate ($\$35,584/1,600 \text{ feet} = \$22.24/\text{foot}$). Thus, ORA
6 recommends that the Commission approve the project but at the much lower cost of \$21,700 (as
7 shown in **Table 2-G** above.)

8 **3. Replace Pipeline on Ojai Avenue – Bristol to Gridley (\$1.8 million, part of**
9 **\$2.7M project)**

10 GSWC requests \$48,300 in 2016 and \$1,743,800 in 2017 for this pipeline replacement, which
11 includes obtaining the Caltrans permit and beginning construction. The design budget of
12 \$35,000 was authorized in the 2011 GSWC GRC.²⁷⁷ GSWC explains that construction will be
13 spread over two years and additional funding will be required in 2018²⁷⁸ with a total estimated
14 project cost of \$2,718,440.²⁷⁹ The existing pipeline consists of 6” and 8” cast iron pipe and is 76
15 years old. The pipeline has had 16 leaks in the past five years²⁸⁰ and a rupture in July 2014 badly
16 damaged the historic Ojai Playhouse.

17 GSWC is proposing replacement with 7,100 feet of 12” and 800 feet of 8” ductile iron pipe. As
18 noted above, the Commission authorized GSWC with funding for the design portion in the last
19 GRC. According to GSWC’s response to ORA’s inquiry, as late as February 2015 or two years
20 after receiving funding authorization, the design of the pipeline is still in progress and GSWC
21 cannot provide the progress status of the design project or when final design will be

²⁷⁴ GSWC Response to ORA Data Request DG-003, Q. 2c.

²⁷⁵ GSWC Response to ORA Data Request DG-003.

²⁷⁶ GSWC Response to ORA Data Request DG-003, Q. 2c, Nu-Line Fence Co. bid 9/27/2013.

²⁷⁷ D.13-05-011, GSWC 2011 GRC.

²⁷⁸ GSWC Ratebase GRC Workpapers, 2015-17 Budget Project List R1 – 06.26.14.

²⁷⁹ GSWC’s Region 1 Workpapers, Volume 2 of 2, Sheet 45.

²⁸⁰ GSWC Response to ORA Data Request DK4-001, Attachment 1b.

1 completed.²⁸¹ ORA recommends that the Commission reject this project. For a large-scale
2 project such as this, GSWC should complete its design first (with funds already provided in the
3 last GRC), so it can develop and submit for review in the next GRC a comprehensive
4 construction cost estimate and schedule based on completed design. GSWC would preferably
5 also provide actual bid information.

6 **4. Urban Water Management Plan (\$65,000)**

7 GSWC requests \$65,000 to update its UWMP for the Ojai CSA. ORA does not oppose this
8 request but recommends that the estimated cost be shifted from the 2015 to the 2016 capital
9 budget. ORA’s Common Plant Issues testimony on UWMP provides the basis for the adjusted
10 timeline.

11 **5. Replace Vehicle #1208**

12 GSWC requests \$48,300 for the replacement of Vehicle #1208 (heavy-duty truck) in 2015. For
13 reasons identified in ORA’s testimony on vehicle replacement, ORA removes Vehicle #1208
14 from this GRC’s capital budgets.

15 **6. Additional Adjustments to Requested Capital Expenditures – Ojai CSA**

16 This section addresses projects included as “CWIP to be closed” for 2014 and 2015 in GSWC’s
17 Table 4-M, Utility Plant. These “CWIP to be closed” amounts in Table 4-M are made up of
18 capital expenditures from projects listed in GSWC’s “CWIP” workpapers. In its application,
19 GSWC did not provide detailed project descriptions or cost details for these projects. While
20 GSWC labelled these projects as CWIP or Construction Work In Progress, it is not an accurate
21 description for many of these projects. As ORA discovered, some projects have not started (and
22 therefore cannot be considered “CWIP”), are no longer needed, have been cancelled by GSWC,
23 or have significantly changed in scope and schedule. ORA makes the following adjustments to
24 reflect its findings.

²⁸¹ February 10, 2015 phone conversation between Mark Insko of GSWC and Daphne Goldberg of ORA..

1 [Valley View Plant, Land Acquisition \(\\$154,612 in 2014\), Valley View, Relocate Booster Station](#)
2 [\(\\$277,477 in 2014\), Fairview Plant, Site Improvements \(\\$101,064 in 2014\)](#)

3 This discussion addresses all three related projects listed above (Valley View Plant, Land
4 Acquisition, Valley View, Relocate Booster Station and Fairview Plant, Site Improvements).
5 ORA recommends removal of the \$533,153 total associated with the three above listed projects
6 from the CWIP list because they have been replaced by the new project requested in this GRC
7 (Fairview Plant – Site Improvement project).

8 In this GRC, ORA recommends that the Commission approve the Fairview Plant – Site
9 Improvements project. GSWC requests \$1,746,100 in 2016 for the construction of
10 improvements already designed for the Fairview Plant.²⁸² The improvements are necessitated by
11 the abandonment of the Running Ridge Tanks, which are at the end of their useful life and
12 inaccessible by vehicle.²⁸³ The Fairview Plant connects the upper pressure zones to the Main
13 Zone in the Ojai system.

14 In the 2011 GRC, the Commission approved \$96,300 for the design of the site improvements at
15 the Fairview Plant.²⁸⁴ In the same GRC, the Commission approved two other separate but
16 related projects: (1) \$265,500 for the design of the Valley View Plant relocation and upgrade;
17 (2) \$243,100 to acquire land, design/permit a replacement for the Valley View Booster
18 Station.²⁸⁵ However, GSWC was not able to secure land at the necessary elevation as originally
19 planned.^{286,287} Therefore, the plan for Valley View Booster Station was abandoned and replaced
20 with a new alternative to achieve the same results.²⁸⁸

²⁸² The Commission already approved design funding for these improvements in the 2011 GSWC GRC.

²⁸³ GSWC Response to Data Request DG-010, Q. 1c.

²⁸⁴ D.13-05-011, GSWC 2011 GRC.

²⁸⁵ Ibid.

²⁸⁶ GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 105, and GSWC Response to ORA Data Request DG-010, January 17, 2014, Valley View Plant Relocation Memo.

²⁸⁷ Ibid.

²⁸⁸ Ibid.

1 **G. SIMI VALLEY CSA**

2 **Table 2-H** below presents a summary of capital budgets for the Region 1 Simi Valley CSA.

3 **Table 2-H: Capital Budget Summary – Simi Valley CSA**

Simi Valley CSA	2015		2016		2017	
	GSWC	ORA	GSWC	ORA	GSWC	ORA
Alamo Plant, Slope Stabilization	\$ 203,200	\$ 193,900	\$ -	\$ -	\$ -	\$ -
Appleton Plant, Raze Site	\$ -	\$ -	\$ 65,600	\$ 62,600	\$ -	\$ -
Lautenschlager Plant, Recoat Res #2	\$ -	\$ -	\$ -	\$ -	\$ 303,600	\$ 250,300
Total Water Supply	\$ 203,200	\$ 193,900	\$ 65,600	\$ 62,600	\$ 303,600	\$ 250,300
Misc Street Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Street Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
East L.A. Ave., Sycamore to Sequoia	\$ 851,600	\$ -	\$ 874,600	\$ -	\$ -	\$ -
Cochran St., Jay to Sycamore	\$ -	\$ -	\$ 109,400	\$ -	\$ 948,900	\$ -
Galena Ave., Sebring to Lindale	\$ -	\$ -	\$ -	\$ -	\$ 57,200	\$ -
Total Distribution Improvements	\$ 851,600	\$ -	\$ 984,000	\$ -	\$ 1,006,100	\$ -
Total Water Quality	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
UWMP - Simi Valley	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Total Miscellaneous	\$ 65,000	\$ -	\$ -	\$ 65,000	\$ -	\$ -
Contingency Budget	\$ 60,210	\$ -	\$ 16,680	\$ -	\$ 15,230	\$ -
Total Contingency Budget	\$ 60,210	\$ -	\$ 16,680	\$ -	\$ 15,230	\$ -
New Business Funded by GSWC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total New Business	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Meters	\$ 451,600	\$ 451,600	\$ 62,700	\$ 62,700	\$ 45,400	\$ 45,400
Services	\$ 35,100	\$ 35,100	\$ 35,200	\$ 35,200	\$ 36,100	\$ 36,100
Minor Main Replacements	\$ 7,000	\$ 7,000	\$ 7,200	\$ 7,200	\$ 7,400	\$ 7,400
Minor Pumping Plant Equip.	\$ 50,000	\$ 50,000	\$ 51,400	\$ 51,400	\$ 52,800	\$ 52,800
Minor Purification Equip.	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 500
Office Furniture and Equip.	\$ 5,900	\$ 5,900	\$ 6,000	\$ 6,000	\$ 6,200	\$ 6,200
Transportation Equipment	\$ 48,300	\$ 48,300	\$ -	\$ -	\$ -	\$ -
Misc. Tools and Safety Equip.	\$ 3,700	\$ 3,700	\$ 3,800	\$ 3,800	\$ 3,900	\$ 3,900
Total Blanket Budget	\$ 602,100	\$ 602,100	\$ 166,800	\$ 166,800	\$ 152,300	\$ 152,300
TOTAL CAPITAL BUDGET	\$ 1,782,110	\$ 796,000	\$ 1,233,080	\$ 294,400	\$ 1,477,230	\$ 402,600
3-YEAR TOTAL:					\$ 4,492,420	\$ 1,493,000
3-YEAR TOTAL ADJUSTMENT, GSWC > ORA:					\$ 2,999,420	
3-YEAR TOTAL DIFFERENCE, (GSWC-ORA)/(GSWC):					67%	

5 **1. Lautenschlager Plant, Recoat Tank #2**

6 GSWC requests \$303,600 in 2017 to recoat the interior of Lautenschlager Tank #2 and to add a
7 second manway. The Lautenschlager Tank #2 is a 0.5 MG steel tank. GSWC provided photos
8 of the tank interior,²⁸⁹ and the South Tank Inspection Report dated November 23, 2009, which

²⁸⁹ GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 153, Attachment SV02 – Lautenschlager Reservoir 2 pictures, GSWC Operations, February 2014.

1 states that the “tank will require re-coating within an estimated five years.”²⁹⁰ Based on its
2 review, ORA agrees that the recoating is necessary. GSWC also requests installation of a second
3 manway to improve access to the tank and ensure operational safety.²⁹¹ However, the South
4 Tank Inspection Report shows that the tank already has two manways (#23 and #25).²⁹² It is
5 unclear why GSWC needs a “second” manway. Therefore, ORA recommends that the
6 Commission approve the recoating project but not the addition of the second manway. ORA’s
7 cost estimate (in **Table 2-H** above) reflects this adjustment.

8 **2. Replace Two Pipelines Associated with the Nile Plant Upgrade Project (\$2.8**
9 **million)**

10 GSWC explains that both of these pipeline replacement requests are needed to “improve the
11 hydraulics of the system (specifically discharge from the Niles Plant).”²⁹³ In 2008, the
12 Commission authorized funds for a study, upgrades, and improvements that would improve the
13 plant’s efficiency and groundwater production.²⁹⁴ ORA reviewed the CWIP list submitted in this
14 GRC and noticed that the Niles Plant Upgrade project has been on the list since November 2009,
15 with 2014 as a new expected completion year.

16 In its review of GSWC’s requested pipeline replacements, ORA asked GSWC for an update on
17 the Niles Plant Upgrade project. GSWC provided the following update:

18 This project was previously bid in 2013, and the bids came in significantly over budget.
19 Since the projected savings in operational costs are substantial, GSWC decided to modify
20 the design and transfer funding to complete the project. Value engineering was
21 performed to reduce construction costs and the project went out to bid again in February
22 2014. However, these bids expired before the internal approval of necessary funding
23 substitutions. The funding substitutions were just approved in late-October and the

²⁹⁰ Ibid. Attachment SV03 – Lautenschlager South Tank Inspection Report, DIVE/CORR, Inc., November 23, 2009.

²⁹¹ GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 154.

²⁹² GSWC Prepared Testimony of Robert McVicker and Mark Insko, p. 153, Attachment SV03 – Lautenschlager South Tank Inspection Report, DIVE/CORR, Inc., page 2, November 23, 2009.

²⁹³ GSWC’s Region 1 Workpapers, Volume 2 of 2, Sheet 36.

²⁹⁴ D.08-01-043, p. 65.

1 project will be re-bid in November, with bids due in December. Construction is
2 estimated to begin in January 2015 and be complete in mid-2015.²⁹⁵

3 GSWC explains that these pipeline projects will solve hydraulic deficiencies in the area by
4 improving discharge from the Niles Plant. However, when ORA asked about the specific
5 hydraulic deficiency, GSWC only responded generally that “the criticality of the project was
6 determined based on field knowledge/engineering and use of the Simi Valley system Hydraulic
7 model.”²⁹⁶ As presented earlier in this chapter (for pipeline projects in Los Osos and Santa
8 Maria), this is the standard response by GSWC when ORA requested additional information to
9 support the company’s hydraulic deficiency claims. GSWC seems to think such general
10 statement qualify as adequate justification and support for its requests. ORA disagrees and
11 provides its recommendations below.

12 ***a) East L.A. Avenue, Sycamore to Sequoia (\$1.7 million)***

13 GSWC requests \$851,600 in 2015 and \$874,600 in 2016 to replace this 4,000-foot segment
14 which is 8” asbestos cement (AC) pipe and 47 years old. GSWC proposes replacing the existing
15 pipe with a 12” ductile iron pipe.

16 Regarding leaks and age – According to GSWC’s Pipeline Management Program Report, AC
17 pipes can last as long as 85 years in the Simi Valley system.²⁹⁷ Since the pipelines only had one
18 leak at 2726 East Los Angeles Avenue²⁹⁸ in 2009-2013, it does not appear to be deteriorating
19 prematurely.

20 Regarding hydraulic deficiency – GSWC’s refusal to provide detailed justification to support its
21 hydraulic deficiency claims also does not support approval of its request. ORA recommends that
22 the Commission reject this project.

²⁹⁵ GSWC Response to ORA Data Request DG-017, Q. 3a.

²⁹⁶ GSWC Response to ORA Data Request DG-017, Q. 3d.

²⁹⁷ GSWC’s Pipeline Management Program Report, p. 8-69.

²⁹⁸ GSWC Response to ORA Data Request DK4-001, Attachment 1b.

1 ***b) Cochran Street, Jay to Sycamore (\$1.1 million)***

2 GSWC requests \$109,400 in 2016 and \$948,900 in 2017 to replace this 1,700-foot segment that
3 consists of 6”, 8”, and 10” AC pipe and is 54 years old. GSWC proposes replacing the existing
4 pipe with a 12” ductile iron pipe.

5 Regarding leaks and age – According to GSWC’s Pipeline Management Program Report, AC
6 pipes can last as long as 85 years in the Simi Valley system.²⁹⁹ Since the pipeline has not had any
7 leaks from 2009-2013, it does not appear to be deteriorating prematurely.

8 For reasons similar to those presented in the preceding section, ORA recommends that the
9 Commission reject this project.

10 **3. Replace Galena Ave., Sebring to Lindale (\$57,000)**

11 GSWC requests \$57,200 in 2017 to design the replacement of this 1,600-foot segment that
12 consists of 6”AC pipe and is 50 years old.

13 Regarding leaks and age – According to GSWC’s Pipeline Management Program Report, AC
14 pipes can last as long as 85 years in the Simi Valley system.³⁰⁰ Since the pipeline has not had any
15 leaks from 2009-2013, it does not appear to be deteriorating prematurely.

16 Regarding hydraulic deficiency – GSWC’s Pipeline Prioritization Results in the Pipeline
17 Management Program Report indicates that this pipeline does not have hydraulic deficiency.³⁰¹

18 Therefore, ORA recommends that the Commission reject this project.

19 **4. Urban Water Management Plan (\$65,000)**

20 GSWC requests \$65,000 to update its UWMP for the Simi Valley CSA. ORA does not oppose
21 this request but recommends that the estimated cost be shifted from the 2015 to the 2016 capital
22 budget. ORA’s Common Plant Issues testimony on UWMP provides the basis for the adjusted
23 timeline.

²⁹⁹ GSWC’s Pipeline Management Program Report, p. 8-69.

³⁰⁰ GSWC’s Pipeline Management Program Report, p. 8-69.

³⁰¹ GSWC’s Pipeline Management Program Report, Attachment E 252 of 257.

1 **H. CONCLUSION**

2 ORA recommends that the Commission adopt ORA’s recommended adjustments presented
3 above since they are consistent with the Commission’s Water Action Plan principles for water
4 utilities providing safe, high quality water, reliable water supplies, and efficient use of water at
5 reasonable rates.

6 [END OF REPORT]