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# Goleta Water District

## Water Rates and Cost of Service Study

Final Report / June 11, 2015





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June 11, 2015

Mr. David Matson  
Assistant General Manager  
Goleta Water District  
4699 Hollister Avenue  
Goleta CA 93110

**Subject: Water Rates and Cost of Service Study Report**

Dear Mr. Matson,

Raftelis Financial Consultants, Inc. (RFC) is pleased to present this report on the water rates and cost of service and study (Study) to Goleta Water District (District). We are confident that the results based on the financial plan and cost of service analysis, when implemented, will result in fair and equitable water rates to the District's customers.

The Study involved a comprehensive review of the District's financial plan, user classifications and rate structures. An important feature of this Study was the design of revenue neutral drought surcharges in times of supply shortage and mandatory demand reduction.

The proposed financial plan and resulting recommended rates, as well as, customer impacts and drought surcharges are presented in Section 1 of the report.

It was a pleasure working with you and we wish to express our thanks to Mr. Jon Wunderlich, Mr. Bill Hansen, and other staff members of the District for the support and cooperation extended throughout the Study. We would also like to acknowledge the participation of, and input provided by, the District's Administration Committee. If you have any questions, please call us at (626) 583-1894.

Sincerely,

***RAFTELIS FINANCIAL CONSULTANTS, INC.***

**Sudhir Pardiwala**  
Executive Vice President

**Kevin Kostiuk**  
Consultant



# TABLE OF CONTENTS

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<b>1</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
1.1	BACKGROUND .....	1
1.2	FINANCIAL PLAN.....	1
1.3	PROPOSED WATER RATES.....	5
1.4	CUSTOMER IMPACTS .....	7
1.5	DROUGHT SURCHARGES .....	8
<b>2</b>	<b>INTRODUCTION.....</b>	<b>10</b>
<b>3</b>	<b>INPUTS, ASSUMPTIONS AND INFLATIONARY FACTORS.....</b>	<b>12</b>
3.1	ACCOUNT DATA AND CURRENT RATES .....	12
3.2	INFLATIONARY FACTORS .....	14
<b>4</b>	<b>FINANCIAL PLAN .....</b>	<b>15</b>
4.1	FINANCIAL PLAN.....	15
4.2	REVENUE REQUIREMENTS.....	15
4.3	OPERATION AND MAINTENANCE EXPENSES.....	15
4.4	REVENUES FROM CURRENT RATES .....	16
4.5	CAPITAL IMPROVEMENT PLAN .....	16
4.6	DEBT SERVICE REQUIREMENTS.....	18
4.7	WATER RESERVES .....	19
4.8	PROPOSED FINANCIAL PLAN AND REVENUE ADJUSTMENTS.....	20
<b>5</b>	<b>COST OF SERVICE ANALYSIS.....</b>	<b>24</b>
5.1	COST BASED RATE SETTING METHODOLOGY .....	24
5.2	LEGAL FRAMEWORK AND RATE METHODOLOGY .....	25
5.3	COST OF SERVICE ANALYSIS .....	26
<b>6</b>	<b>RATE DESIGN AND CUSTOMER IMPACTS .....</b>	<b>38</b>
6.1	PROPOSED RATE STRUCTURE .....	38
6.2	MONTHLY FIXED SERVICE CHARGES .....	40
6.3	COMMODITY RATES .....	42
6.4	FIRE LINE SERVICE CHARGES .....	45
6.5	PROPOSED WATER RATES.....	46
6.6	BILL IMPACTS.....	47

6.7 RATE SURVEY .....	49
<b>7 DROUGHT SURCHARGES.....</b>	<b>50</b>
7.1 BACKGROUND .....	50
7.2 ASSUMPTIONS .....	50
7.3 DROUGHT SURCHARGE DESIGN .....	52

## LIST OF TABLES

---

Table 1-1: Proposed Revenue Adjustments.....	2
Table 1-2: District Reserves .....	4
Table 1-3: Current and Proposed Tiers, SFR .....	5
Table 1-4: Proposed Commodity Rates FY 2016-2020 .....	6
Table 1-5: Proposed Fixed Charges FY 2016-2020 .....	7
Table 1-6: SFR Customer Impacts .....	7
Table 1-7: Roseville Model Proposed Drought Surcharges .....	8
Table 1-8: Marginal Cost Model Proposed Drought Surcharges .....	9
Table 3-1: Current Water Meter Count .....	13
Table 3-2: Current Monthly Fixed Charge .....	13
Table 3-3: Current Commodity Rates .....	13
Table 3-4: Inflation Factors and Assumptions .....	14
Table 3-5: Account Growth and Water Demand Assumptions .....	14
Table 4-1: Projected O&M Expenses .....	15
Table 4-2: Projected Rate Revenue from Current Rates.....	16
Table 4-3: Capital Improvement Projects .....	17
Table 4-4: Existing Debt Service.....	18
Table 4-5: Reserves Flow of Funds .....	20
Table 4-6: Proposed Revenue Adjustment Schedule .....	20
Table 4-7: Proposed Financial Plan Pro-Forma .....	23
Table 5-1: Cost of Service Revenue Requirements .....	28
Table 5-2: System Peaking Factors .....	30
Table 5-3: Calculation of Allocation Factors .....	31
Table 5-4: Functional Categories and Cost Components .....	32
Table 5-5: Determination of Total Annual Units, by Rate Class.....	33
Table 5-6: Development of Unit Costs.....	34
Table 5-7: Unit Costs of Service.....	35
Table 5-8: Customer Class Cost of Service.....	35
Table 6-1: Equivalent Meter Ratios .....	41
Table 6-2: Proposed Fixed Charges .....	42
Table 6-3: Residential Water Use, by Tier .....	43
Table 6-4: Proposed SFR Commodity Rate Development.....	44
Table 6-5: Proposed Commodity Rate Calculation.....	45
Table 6-6: Proposed Fire Line Charges .....	45
Table 6-7: Proposed Water Rate Schedule.....	46
Table 6-8: SFR Bill Impacts .....	47
Table 6-9: Urban Bill Impacts .....	48
Table 6-10: Urban Agriculture Bill Impacts .....	48
Table 6-10: GWC Bill Impacts.....	48
Table 7-1: System-Wide Reduction Targets.....	51
Table 7-2: Drought Specific Expenditures .....	51

<b>Table 7-3: Baseline Consumption, FY 2016.....</b>	<b>52</b>
<b>Table 7-4: Proposed FY 2016 Commodity Rates .....</b>	<b>53</b>
<b>Table 7-5: Drought Surcharge Calculation (% Increase), Stage II.....</b>	<b>54</b>
<b>Table 7-6: Drought Surcharge Calculation (\$ Increase), Stage II.....</b>	<b>55</b>
<b>Table 7-7: Proposed Drought Surcharges, by Stage.....</b>	<b>56</b>

## **LIST OF FIGURES**

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<b>Figure 1-1: Operating Financial Plan FY 2015-2020.....</b>	<b>3</b>
<b>Figure 1-3: CIP Expenditures FY 2015-2020 .....</b>	<b>4</b>
<b>Figure 4-1: Planned Capital Improvement Projects .....</b>	<b>16</b>
<b>Figure 4-2: Ending Reserve Balances .....</b>	<b>19</b>
<b>Figure 4-3: Proposed Revenue Adjustments .....</b>	<b>21</b>
<b>Figure 4-4: Proposed Revenue Adjustments .....</b>	<b>22</b>
<b>Figure 5-1: Proposed Revenue Adjustments .....</b>	<b>36</b>
<b>Figure 6-1: Comparison of Neighboring Agencies – Total Monthly Water Bill .....</b>	<b>49</b>

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# 1 EXECUTIVE SUMMARY

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## 1.1 Background

In 2014, Goleta Water District (District or GWD) contracted with Raftelis Financial Consultants (RFC) to conduct a Cost of Service and Rate Study (Study), and, to develop a long term financial plan including water rates for the next five years.

The District provides water services to a population of approximately 87,000. Potable water is delivered to over 16,000 connections within the District's service area. State Project Water (SWP) and entitlement water from Cachuma Lake is treated at the Corona del Mar Water Treatment Plant (CDMWTP) and distributed through 270 miles of distribution pipeline over 45 square miles. The District services approximately 162 agricultural accounts which constitutes 30% of District-wide water use. The 24 accounts on the Goleta West Conduit (GWC) receive minimally treated water from Cachuma Lake via a gravity fed conduit. GWC accounts have access only to Cachuma Lake and therefore their supply is interruptible. The 138 Urban Agriculture accounts receive treated water from Cachuma Lake but do not benefit from potability of supply; nor does the class currently receive access to State Water or local groundwater. These details are discussed in depth in subsequent sections.

This report documents the resultant findings, analyses, and proposed changes in District revenues and rate structure that were developed with input from, and approved by, District staff and the Board of Directors.

The major objectives of the study include the following:

1. Develop a long-range financial plan for the District that ensures financial stability and revenue sufficiency, provides adequate funding for capital expenditures, reserves funding and debt coverage, and offers rate stability
2. Determine water rates that are consistent with cost of service principles, encourage conservation and irrigation efficiency, and are fair and equitable to all customers
3. Develop drought surcharges to be adopted in times of supply shortage that are fair and equitable to District customers and that recover revenue to ensure financial stability

This executive summary provides an overview of the study and includes findings and recommendations for the District's water rates.

## 1.2 Financial Plan

The District is operating in an environment where operational costs continue to increase and the reinvestment of funds to its infrastructure is required. This is not a situation that is unique to the District, as many agencies throughout the state are faced with the need to update capital infrastructure



## Goleta Water District

### Water Rates and Cost of Service Study Report

that is necessary to continue providing reliable water services, adhere to new regulations and mandates, and meet service demands while water supplies are strained in the face of current statewide drought.

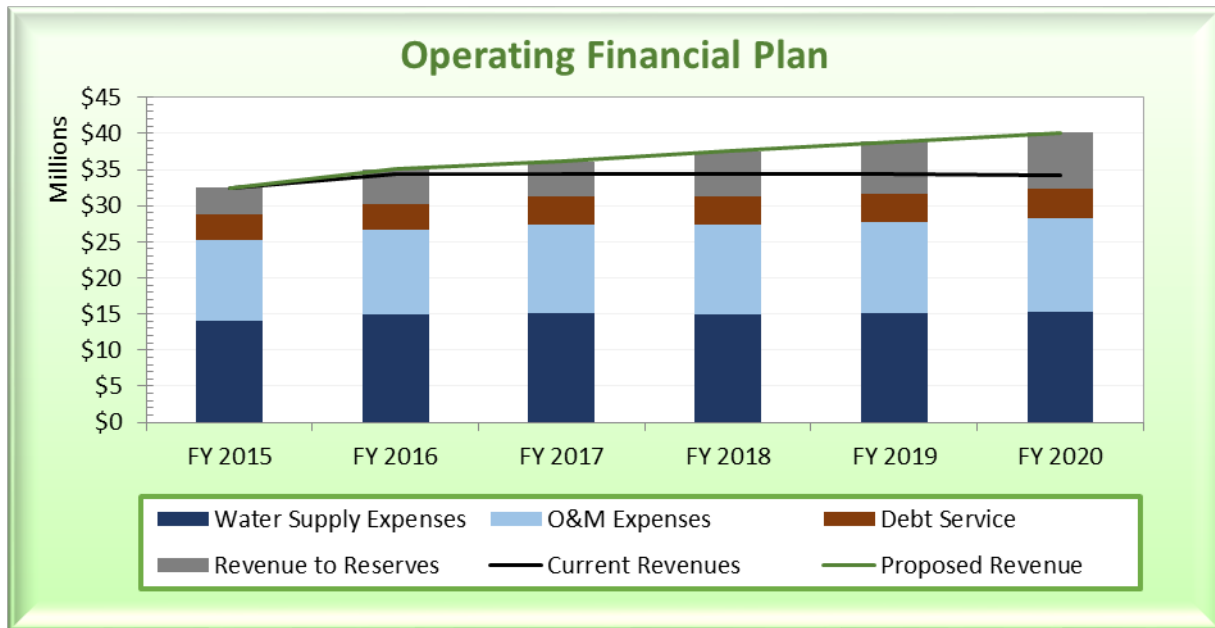
Currently, the District has a uniform commodity rate structure for all customer classes. Rates include both a fixed (meter) and variable (commodity) component. The fixed component varies by meter size, and by consumption for 5/8" and 3/4" *Urban* class accounts based on a 12-month rolling average consumption. The variable, or volumetric, component is a uniform rate billed per hundred cubic feet (hcf) of water used, with a lower rate for customers that use only four (4) hcf of water. Residential customers- both single family residences (SFR) and multi-family residences (MFR)-, commercial customers, institutional customers and most irrigation customers are grouped in to the Urban class. A sub-class of irrigation customers, referred to as Recreation Irrigation, receive a rate that is different than the Urban rate that is paid by Landscape Irrigation. Agricultural customers- both Urban Agriculture and Goleta West Conduit (GWC) accounts- and recycled water accounts pay class specific uniform commodity rates.

Based on the District's fiscal year (FY) 2015 budget, RFC projected the revenues and expenditures over the next ten years using growth and inflation assumptions consistent with the District's planning documents. Table 1-1 shows the proposed revenue adjustments for the planning period, represented by the blue bars. The analysis demonstrates that small increases will be necessary to cover operating and capital expenditures while maintaining healthy reserves over the planning period. Capital projects will be funded from rates and reserves. The proposed revenue adjustments will allow the District to meet its debt service coverage over the planning period. The debt coverage ratio increases steadily to FY 2020 due to the compounding effect of revenue adjustments and year-over-year decreases in state water supply costs, via Central Coast Water Authority (CCWA).

**Table 1-1: Proposed Revenue Adjustments**

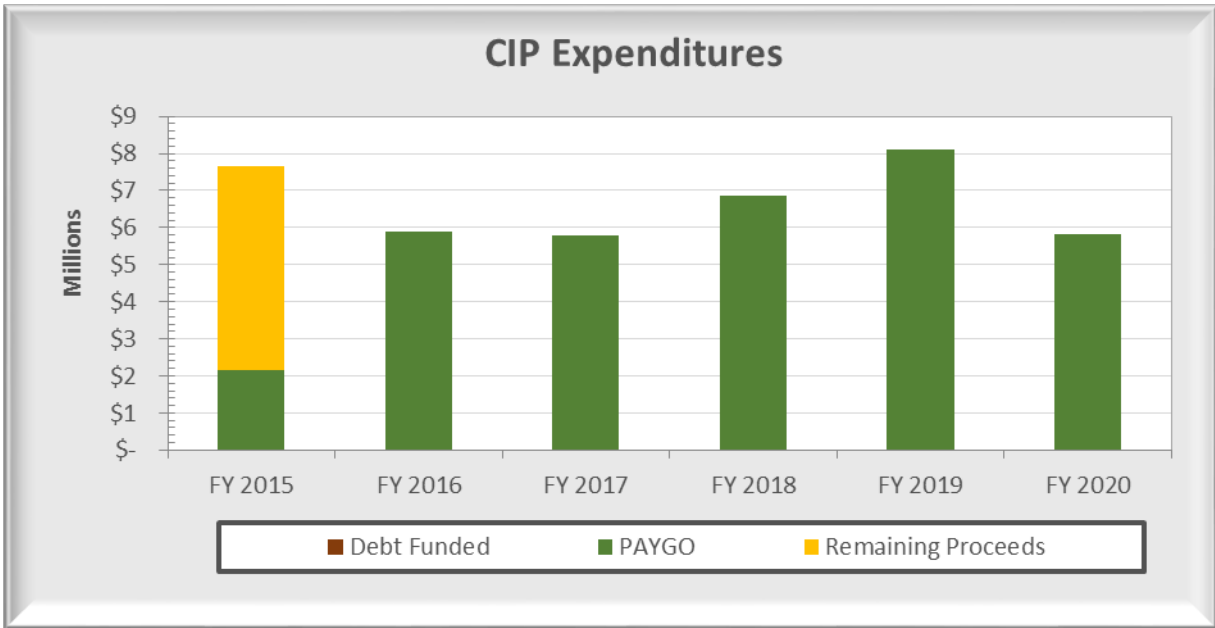
Revenue Adjustment	Fiscal Year
2%	2016
3%	2017
4%	2018
4%	2019
4%	2020

Figure 1-1 shows the operating financial plan of the District with the revenue adjustments proposed in Table 1-1. The light blue bars represent current budgeted or projected operations and maintenance (O&M) expenses, while the dark blue bars represent water supply specific expenses. Annual debt service payments are represented by the burnt orange bars. The grey bars represent the net income which funds the reserves (used for capital funding) consistent with the District's reserve policy. If rates remain at current levels, projected revenue will follow the dark blue line. The revenues with the proposed revenue adjustments over the next ten years are demonstrated by the green line.



**Figure 1-1: Operating Financial Plan FY 2015-2020**

Figure 1-2 shows the District’s budgeted capital improvement program (CIP) over the next six years (includes the current fiscal year). The financial plan projects that all capital costs will be funded on a pay-as-you-go basis using rate revenue instead of capital reserves or new debt. Funding the capital costs through rates is especially prudent because the District’s capital costs are fairly uniform over the planning period. Major capital expenditures during the study period include well improvements related to groundwater production, as well as, repair and replacement (R&R) projects at CDMWTP. As it is anticipated rates and reserves will provide the necessary cash to fund planned capital projects, this approach will save on interest costs and result in modest rate increases. Note that remaining proceeds from a recent debt issuance fund the majority of current fiscal year CIP.



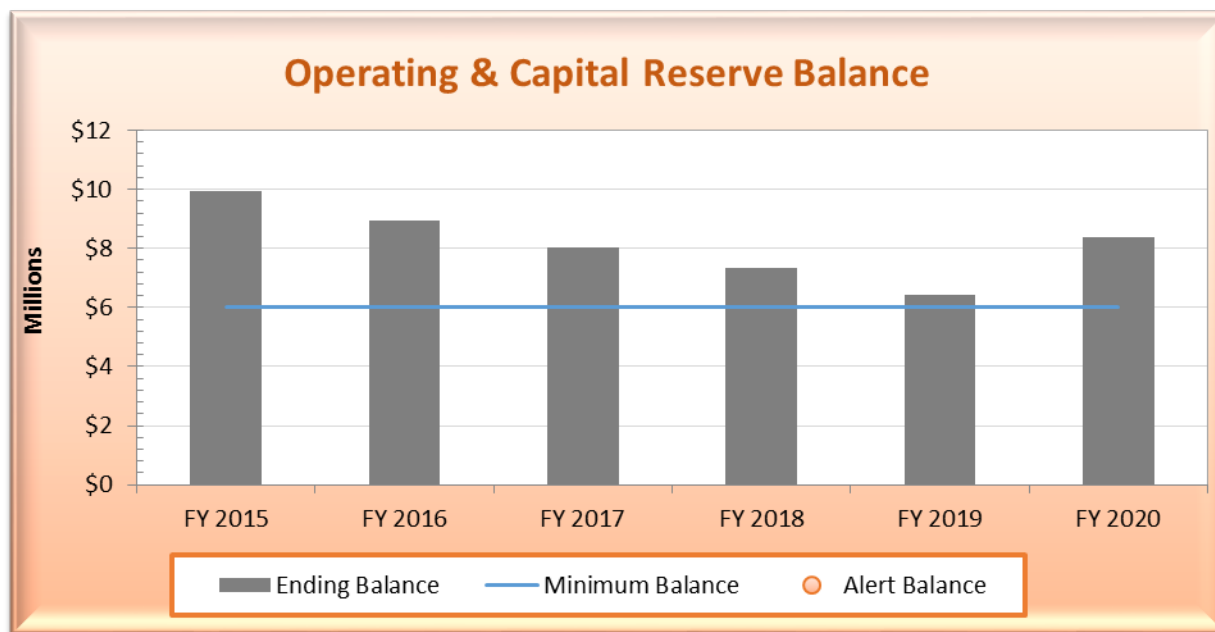
**Figure 1-2: CIP Expenditures FY 2015-2020**

The District currently maintains two reserves with a total target of \$6 million. First, an O&M reserve equal to 30 days of expenses for cashflow; second, a capital reserve equal to the difference (remainder) of \$6 million less the O&M reserve (currently \$1.9 million), to be used to fund unexpected capital expenses. The proposed revenue adjustments allow the District to meet its reserve policy target of \$6 million in all years of the study period.

**Table 1-2: District Reserves**

Reserve	Reserve Target (FY 2015)
O&M Reserve	\$2.17 million
Capital Reserve	\$3.83 million
<b>Total District Reserves</b>	<b>\$6 million</b>

The projection of reserves for the next five years is shown in Figure 1-3. The grey bars represent ending balances and blue line represents the target balance of \$6 million. Alert balance shows the reserve balance if below target.



**Figure 1-3: Projection of Reserves**

### 1.3 Proposed Water Rates

Based on the District’s objectives, RFC proposes that the District adopt an inclining tier structure for SFR customers and retain uniform commodity rates for all other customer classes. Our analysis shows that the annual average for SFR customers is 13.5 hcf of water per month, with the average increasing to just over 16 hcf in summer months. Given the state target for indoor use, and average household density, 6 hcf was designated as Tier 1 to provide for basic health and sanitation needs. 16 hcf was designated as the breakpoint for Tier 2 water to provide for average summer use. All use greater than 16 hcf is Tier 3. The proposed tiers will provide sufficient water for SFR customers, provide for minimum water needs at a more affordable rate, and produce increased incentive for conservation.

**Table 1-3: Current and Proposed Tiers, SFR<sup>1</sup>**

Tier	Use	Current Rate	Proposed Rate
Tier 1	0-4 hcf	\$5.04	\$4.52
Tier 1	5-6 hcf	\$5.27	\$4.52
Tier 2	7-16 hcf	\$5.27	\$5.57
Tier 3	17+ hcf	\$5.27	\$6.12

RFC proposes that MFR, irrigation, commercial and institutional customers constitute the new Urban rate class due to similar characteristics of serving the class. The Urban class will pay the same uniform commodity rate. Under this proposal, Urban customers will see their commodity rate decrease by \$0.02 per hcf from \$5.27 to \$5.25 per hcf.

<sup>1</sup> The current rate for use of 0-4 hcf per month (Urban Conservation) is not a tier but rather a uniform price within the class. For use greater than 4 hcf, all units are billed at the \$5.27/hcf uniform rate.

**Goleta Water District**  
Water Rates and Cost of Service Study Report

The agriculture class consists of 162 accounts on the GWC and Urban Agriculture customers. The difference between the two classes include water source access, interruptibility and operational expenses. Both agriculture classes pay a uniform commodity rate. Proposed rates are discussed in detail in Section 6.

The District provides recycled water service to institutional and irrigation accounts. RFC proposes to keep the same uniform structure for recycled customers, with modest increases in the recycled rate.

The proposed water rates for FY 2016 through FY 2020 are shown in Table 1-4 below.

Currently the District charges a fixed meter charge based on meter size and 12-month rolling average usage for those in the Urban class with 5/8" and 3/4" meters. Users qualify for lower meter charges for rolling averages falling in the 0-4 hcf and 5-8 hcf range. RFC proposes that the fixed meter charge tiers align with the revised SFR commodity tiers of 0-6 hcf, 7-16 hcf and greater than 16 hcf. Additionally, RFC proposes the fixed meter charge be based on the current month consumption, rather than a twelve month rolling average. Proposed fixed charges are detailed in Table 1-5. Proposed rates will become effective July 1st of each year, beginning July 1, 2015.

**Table 1-4: Proposed Commodity Rates FY 2016-2020**

Customer Class	Rate Class/ Tier	Current Rate	July 2015	July 2016	July 2017	July 2018	July 2019
SFR*	Tier 1	\$5.27	\$4.52	\$4.66	\$4.85	\$5.05	\$5.26
SFR*	Tier 2	\$5.27	\$5.57	\$5.74	\$5.97	\$6.21	\$6.46
SFR*	Tier 3	\$5.27	\$6.12	\$6.31	\$6.57	\$6.84	\$7.12
<b>Urban</b>							
Multi-Family Residential*	Urban	\$5.27	\$5.25	\$5.41	\$5.63	\$5.86	\$6.10
Commercial*	Urban	\$5.27	\$5.25	\$5.41	\$5.63	\$5.86	\$6.10
Institutional*	Urban	\$5.27	\$5.25	\$5.41	\$5.63	\$5.86	\$6.10
Landscape Irrigation*	Urban	\$5.27	\$5.25	\$5.41	\$5.63	\$5.86	\$6.10
<b>Agriculture</b>							
Urban Agriculture		\$1.42	\$1.80	\$1.86	\$1.94	\$2.02	\$2.11
GWC	GWC	\$1.30	\$1.35	\$1.40	\$1.46	\$1.52	\$1.59
<b>Recycled</b>							
Recycled	Recycled	\$3.05	\$3.26	\$3.36	\$3.50	\$3.64	\$3.79

\*The current Urban class pays a lower rate for a 12-month rolling average of 4 hcf or less

**Table 1-5: Proposed Fixed Charges FY 2016-2020**

Tier	Meter Size	Current Rate	July 2015	July 2016	July 2017	July 2018	July 2019
<b>Tier 1</b>	5/8"   3/4"	\$13.08	\$14.14	\$14.57	\$15.16	\$15.77	\$16.41
<b>Tier 2</b>	5/8"   3/4"	\$26.16	\$29.20	\$30.08	\$31.29	\$32.55	\$33.86
<b>Tier 3</b>	5/8"   3/4"	\$39.24	\$44.40	\$45.74	\$47.57	\$49.48	\$51.46
	1"	\$65.42	\$68.16	\$70.21	\$73.02	\$75.95	\$78.99
	1.5"	\$130.81	\$127.57	\$131.40	\$136.66	\$142.13	\$147.82
	2"	\$209.33	\$198.85	\$204.82	\$213.02	\$221.55	\$230.42
	3"	\$392.48	\$424.58	\$437.32	\$454.82	\$473.02	\$491.95
	4"	\$654.14	\$757.23	\$779.95	\$811.15	\$843.60	\$877.35
	6"	\$1,308.26	\$1,672.04	\$1,722.21	\$1,791.10	\$1,862.75	\$1,937.26
	8"	\$2,093.24	\$2,860.09	\$2,945.90	\$3,063.74	\$3,186.29	\$3,313.75
	10"	\$4,972.22	\$4,523.38	\$4,659.09	\$4,845.46	\$5,039.28	\$5,240.86

## 1.4 Customer Impacts

Bill impacts for SFR customers with a 5/8" or 3/4" meter at various usage levels are shown below in Table 1-6. Users that stay within Tiers 1 and 2 will see savings due to the lower fixed meter charges for those tiers. Note the large savings for users at 6, 12 and 16 hcf due to the fact that these customers will now be included in either the lowest or second lowest fixed meter charge. The District's average SFR customer that uses 13.5 hcf per month will save approximately \$12 on the monthly bill. Users above 16 hcf, that represent 22% of the annual bills, will see a significant change in their monthly bills as more of their consumption is charged at the Tier 3 rate, along with the higher Tier 3 fixed meter charge.

**Table 1-6: SFR Customer Impacts**

Usage (hcf/month)	Existing Bill	Proposed Bill	Difference (\$)
<b>4</b>	\$33.24	\$32.22	(\$1.02)
<b>6</b>	\$57.78	\$41.26	(\$16.52)
<b>8</b>	\$68.32	\$67.46	(\$0.86)
<b>12</b>	\$102.48	\$89.74	(\$12.74)
<b>16</b>	\$123.56	\$112.02	(\$11.54)
<b>20</b>	\$144.64	\$151.70	\$7.06
<b>24</b>	\$165.72	\$176.18	\$10.46
<b>32</b>	\$207.88	\$225.14	\$17.26
<b>40</b>	\$250.04	\$274.10	\$24.06

## 1.5 Drought surcharges

RFC developed two drought surcharge options for consideration by the District. The first option develops drought surcharges based on a percentage of the base rate (known as the ‘Roseville’ model). The percentage is calculated to achieve revenue requirements in consideration of lower water commodity sales and drought-specific costs at each drought stage. The drought surcharge in the second option is a uniform cost per unit of water regardless of the base rate (known as the ‘Marginal Cost’ model). The surcharge is calculated to achieve the same overall revenue requirements as the Roseville model. The Roseville model drought surcharges presented in Table 1-7 are derived from proposed FY 2016 commodity rates. Marginal Cost model drought surcharges are presented in Table 1-8 and are derived in the same manner. The District selected the Marginal Cost model.

**Table 1-7: Roseville Model Proposed Drought Surcharges**

Class	Commodity Rate & Drought Surcharge					
	Base Rate	[-----Drought Surcharge-----]				
		Stage I	Stage II	Stage III	Stage IV	Stage V
<b>SFR</b>						
Tier 1	\$4.52	\$0.00	\$1.72	\$2.81	\$4.25	\$6.20
Tier 2	\$5.57	\$0.00	\$2.12	\$3.46	\$5.24	\$7.64
Tier 3	\$6.12	\$0.00	\$2.33	\$3.80	\$5.76	\$8.39
<b>Urban</b>						
MFR	\$5.25	\$0.00	\$2.00	\$3.26	\$4.94	\$7.20
Commercial	\$5.25	\$0.00	\$2.00	\$3.26	\$4.94	\$7.20
Institutional	\$5.25	\$0.00	\$2.00	\$3.26	\$4.94	\$7.20
Landscape Irrigation	\$5.25	\$0.00	\$2.00	\$3.26	\$4.94	\$7.20
<b>Agriculture</b>						
Urban Agriculture	\$1.80	\$0.00	\$0.69	\$1.12	\$1.70	\$2.47
Goleta West Conduit	\$1.35	\$0.00	\$0.52	\$0.84	\$1.27	\$1.85

**Goleta Water District**

Water Rates and Cost of Service Study Report

**Table 1-8: Marginal Cost Model Proposed Drought Surcharges**

<b>Commodity Rate &amp; Drought Surcharge</b>						
Class	Base Rate	[-----Drought Surcharge-----]				
		Stage I	Stage II	Stage III	Stage IV	Stage V
<b>SFR</b>						
Tier 1	\$4.52	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
Tier 2	\$5.57	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
Tier 3	\$6.12	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Urban</b>						
MFR	\$5.25	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
Commercial	\$5.25	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
Institutional	\$5.25	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
Landscape Irrigation	\$5.25	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Agriculture</b>						
Urban Agriculture	\$1.80	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
Goleta West Conduit	\$1.35	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73



## 2 INTRODUCTION

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The District engaged RFC to develop a financial plan and conduct a cost of service and rate study. This report documents the resultant findings, analyses, and proposed changes that were developed with input from, and approved by, District staff.

The District provides water services to a population of approximately 87,000. Excluding fire lines, potable water is delivered to over 16,300 connections within the District's service area. State Project Water (SWP) and entitlement water from Cachuma Lake is treated at the Corona del Mar Water Treatment Plant (CDMWTP) and distributed through 270 miles of distribution pipeline over 45 square miles.

The District last conducted a rate study in 2011. Since that time the District's rates have increased by 42% over the four years. Increases in water supply costs, and challenges with the intensifying state-wide drought require a review of the costs of providing service and addressing the drought impacts. Water infrastructure is capital intensive and the District has planned \$32.5 million in capital expenditures over the next five years in order to keep up with infrastructure R&R needs. Additionally, the District needs adequate funds to ensure financial stability, meet debt covenants, stay liquid in case of an emergency event, and reduce rate shocks in times of revenue variability. Lastly, the District must comply with Proposition 218 and other regulatory requirements all while promoting water conservation and recovering the costs of providing service equitably from its customers. The District's conservation programs are implemented to minimize the use of potable water supplies, meet the requirements of the California Urban Water Conservation Council (CUWCC) Best Management Practices (BMPs), and achieve compliance with SBX7-7's 20 percent per capita water use reduction requirements by 2020.

As a part of the study, RFC interacted regularly with District staff to review objectives, verify assumptions, evaluate usage characteristics of various customer classes, design tiers and rate structures for different classes, and develop options for surcharges in times of shortage. The District's objective was to develop a water rate structure that:

- Ensures affordability for low use customers consistent with cost of service
- Promotes water conservation
- Provides revenue stability
- Ensures customers pay their proportionate share of costs
- Is based on cost of service principles, as required by Proposition 218
- Aligns with long term policy goals of the Board, the community, and the State

Requirements of Proposition 218 are described in Section 5.

RFC assessed the District's existing water accounts and rates to confirm actual revenues and project revenues over the planning period (FY 2016- FY 2020). In addition, the District's revenue requirements,

**Goleta Water District****Water Rates and Cost of Service Study Report**

including O&M expenses, capital expenditures, and debt service associated with existing bonds, were evaluated and projected over the planning period. RFC, in conjunction with District staff, developed the financial plan, determining the level of revenue adjustments necessary for the District to meet its financial goals and objectives over the planning period. Next, RFC conducted the cost of service (COS) analysis to determine the revenue required per customer class. Next, with extensive input from District staff, RFC designed rate structures and developed a rate schedule that meets the District's goals of equitably distributing costs across customer classes and providing incentives for conservation. Lastly, RFC designed a drought surcharge to act as a revenue recovery mechanism in times of shortage.

RFC has developed a user friendly model with features that allow for scenario analyses which the District may use for future financial planning. The financial plan dashboard allows the District to better plan future capital improvements and revenue adjustments as well as review the corresponding impacts on customers.

The completed study and model is an essential element in the District's inventory of strategic planning tools to provide efficient and affordable service in a manner that ensures reliable service and revenue stability. The study, in concert with the District's other planning documents and processes, will integrate operational and capital planning into a coordinated program for the determination of cost effective water charges, fairly and equitably, to all current and future customers.

## 3 INPUTS, ASSUMPTIONS AND INFLATIONARY FACTORS

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The planning period for the Cost of Service and Rate Study uses Fiscal Year 2014-15 as the base year and projects through FY 2023-24; however, the proposed rates herein are for the next five (5) years per the District, as the District periodically reviews rates and takes a measured approach with rate adjustments<sup>2</sup>. Certain cost escalation assumptions and inputs were incorporated into the study to adequately model future O&M and capital costs. These assumptions were based on discussion with and/or direction from District management and staff.

Other assumptions include growth rates for customer accounts, annual water consumption, reduced water demand to meet District conservation goals, inflation factors, and miscellaneous assumptions. These assumptions are presented within the tables of this section. The District's customer base is predominately residential with close to 90% of all accounts; however, agricultural users currently account for 30% of District water use while representing only 1% of accounts. Due to the drought, the District's estimate of water sales volume is down nearly 17% in FY 2014-15.

### 3.1 Account Data and Current Rates

Table 3-1 identifies the total number of accounts by meter size using the most recent actual counts available for FY 2014. These counts include meters that receive reclaimed water. There are an additional 362 fire service lines mostly of 5/8" and 3/4". Monthly fixed charges and existing commodity rates are found in Table 3-2 and Table 3-3 respectively. The District maintains uniform commodity rates, by class, and a tiered rate structure for fixed meter charges by meter size and consumption (for 5/8" and 3/4" meters within the Urban rate class). Tiered meter charges are based on ultra-low flow, low flow and regular which are defined as a 12-month rolling average use of 0-4 hcf, 5-8 hcf, and greater than 8 hcf, respectively. Commodity rates are tiered in that urban customers using less than 4 hcf per month are charged at a lower rate (Urban Conservation) than the remaining customers<sup>3</sup>.

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<sup>2</sup> Tables in this report show a five year period, starting with FY 2016 through FY 2020.

<sup>3</sup> Note that the existing Urban Conservation rate of \$5.04/hcf is not a tier, but rather a uniform rate within the class. If usage is greater than 4 hcf/month all usage is then billed at the current Urban rate of \$5.27/hcf.

**Table 3-1: Current Water Meter Count (Excluding Fire Lines)**

Meter Size	Count
5/8"	277
3/4"	13,272
1"	1,670
1.5"	465
2"	585
3"	31
4"	20
6"	28
8"	4
10"	2
<b>Total Water Accounts</b>	<b>16,340</b>

**Table 3-2: Current Monthly Fixed Charge**

Tier	Meter Size	FY 2014-15 Rates
<b>Ultra-Low Flow</b>	5/8"   3/4"	\$13.08
<b>Low-Flow</b>	5/8"   3/4"	\$26.16
<b>Regular</b>	5/8"   3/4"	\$39.24
	1"	\$65.42
	1.5"	\$130.81
	2"	\$209.33
	3"	\$392.48
	4"	\$654.14
	6"	\$1,308.26
	8"	\$2,093.24
	10"	\$4,972.22

**Table 3-3: Current Commodity Rates**

Rate Class	Current Rate
<b>Urban Conservation</b>	\$5.04
<b>Urban</b>	\$5.27
<b>Recreation Irrigation</b>	\$3.81
<b>Recycled</b>	\$3.05
<b>Urban Agriculture</b>	\$1.42
<b>GWC</b>	\$1.30

### 3.2 Inflationary factors

Inflation assumptions were determined with input from District staff, as well as industry indices and trends. A general inflation rate of 3% is based on historical Consumer Price Index (CPI). Salary increases of 2% are based in part on the Social Security Administration’s 10-year average national wage index. The benefits rate of 3% was arrived with the input of District staff. Supplies and materials are also associated with CPI and the rate is thus assumed at the same rate as general inflation. Capital costs are assumed at 3% based on direction from the District<sup>4</sup>. Interest Reserve rates are based on conservative estimates in a low interest financial environment. The remaining inflation factors were determined with input from District staff.

**Table 3-4: Inflation Factors and Assumptions**

KEY FACTORS	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019
<b>General</b>		3%	3%	3%	3%
<b>Salaries</b>		2%	2%	2%	2%
<b>Benefits</b>		3%	3%	3%	3%
<b>Water Supply</b>		3%	3%	3%	3%
<b>Energy</b>		4%	4%	4%	4%
<b>Capital</b>		3%	3%	3%	3%
<b>Other Operating Revenues</b>		2%	2%	2%	2%
<b>Interest on Reserves</b>	0.5%	0%	1%	1%	1%

Account growth rates and water demand factors used in the study projections are shown below in Table 3-5. Account growth was estimated using annual projected new connections based on approved projects. Water demand factor is based on year-over-year consumption with 100% representing the same level of use as the previous year. For example, the FY 2015 factor of 83% translates to a 17% reduction in water use relative to FY 2014. Because District customers are historically low volume users, reductions in FY 2016 and beyond are modest at 2% or 1% annual decreases year-over-year. Usage growth is the combination of account growth and water demand factor. The District anticipates no growth in recycled water use due to distribution system constraints.

**Table 3-5: Account Growth and Water Demand Assumptions**

KEY FACTORS	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019
<b>Account Growth</b>	0.47%	0.50%	0.89%	0.29%	0%
<b>Water Demand Factor</b>	83%	98%	99%	99%	99%
<b>Usage Growth*</b>	83.4%	98.5%	99.9%	99.3%	99%
<b>Recycled Water Growth</b>	0%	0%	0%	0%	0%

<sup>4</sup> Engineering News Records (ENR) Construction Cost Indices (CCI) 10-year average ranges from 3-4%

## 4 FINANCIAL PLAN

### 4.1 Financial Plan

This section of the report provides a discussion on the process of developing a financial plan. To develop the financial plan it is necessary to collect and organize customer accounts and usage data, project revenues at the current rates, compile O&M and capital expenditures, develop a capital improvement financing plan, and consider debt service and reserve requirements. Generally, the resulting revenue adjustments are developed to provide small and steady revenue increases reflecting the impacts of inflation and water service characteristics that will ensure financial stability.

### 4.2 Revenue Requirements

A review of a utility's revenue requirements is a key step in the financial planning process. For sound financial operation of the District's water system, the revenues generated must be sufficient to meet the revenue requirements, or cash obligations, of the system. Revenue requirements include water purchases and production costs including treatment, O&M expenses, and CIP expenditures; as well as, principal and interest payments on existing debt, and other obligations. The review involves analyses of annual operating revenues under current rates, O&M expenses, capital expenditures, transfers between funds and reserve requirements. This section of the report provides a discussion on projected revenues, O&M and capital expenditures, the capital improvement financing plan, debt service requirements, and overall revenue requirements over the 5-year period.

### 4.3 Operation and Maintenance Expenses

O&M expenditures include the cost of operating and maintaining water supply, treatment, storage, and distribution facilities. O&M expenses also include the costs of providing technical services such as laboratory services and other administrative costs of the water system such as meter reading and billing. These costs are a normal obligation of the system and are met from operating revenues as they are incurred. The comprehensive forecasted annual O&M expenditures for the study are based upon the District's FY 2014 actual values and presented in Table 4-1. Inflation factors discussed in the previous section are applied to escalate the District's expenses. The developed model provides flexibility to use different inflation factors for different types of expenses.

**Table 4-1: Projected O&M Expenses**

	FY 2016 <i>Projected</i>	FY 2017 <i>Projected</i>	FY 2018 <i>Projected</i>	FY 2019 <i>Projected</i>	FY 2020 <i>Projected</i>
Water Supply and Conservation	\$14,916,759	\$15,082,861	\$14,999,358	\$15,053,627	\$15,278,474
Operations	\$7,901,977	\$8,401,102	\$8,336,265	\$8,526,919	\$8,760,045
Engineering	\$386,443	\$392,156	\$397,923	\$403,743	\$409,616
Administration	\$4,115,151	\$4,224,737	\$4,337,333	\$4,453,024	\$4,571,898
<b>Total O&amp;M</b>	<b>\$27,320,330</b>	<b>\$28,100,856</b>	<b>\$28,070,880</b>	<b>\$28,437,313</b>	<b>\$29,020,033</b>

#### 4.4 Revenues from Current Rates

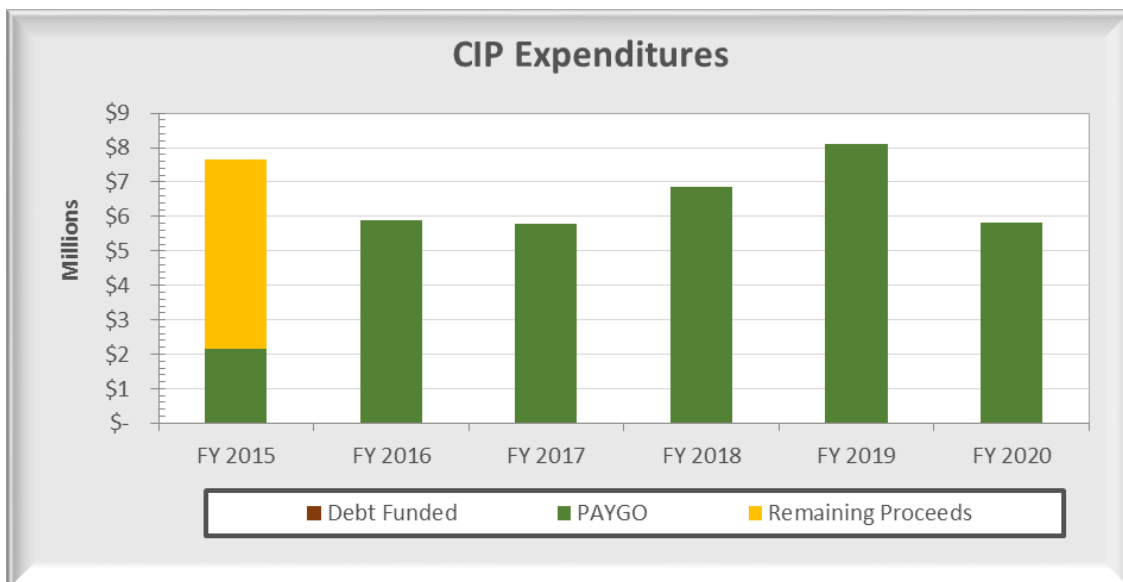
The current water rate structure consists of two components: a monthly fixed charge, (which varies by meter size and water consumption for meters less than 1”), and a volumetric charge based upon consumption. The projected water revenues from current rates are shown in Table 4-2.

**Table 4-2: Projected Rate Revenue from Current Rates**

	FY 2016 Projected	FY 2017 Projected	FY 2018 Projected	FY 2019 Projected	FY 2020 Projected
Commodity Charges	\$23,719,809	\$23,692,485	\$23,528,851	\$23,300,954	\$23,075,337
Service Charges	\$9,516,021	\$9,600,713	\$9,628,555	\$9,628,555	\$9,628,555
<b>Total Rate Revenue</b>	<b>\$33,235,829</b>	<b>\$33,293,198</b>	<b>\$33,157,406</b>	<b>\$32,929,510</b>	<b>\$32,703,892</b>

#### 4.5 Capital Improvement Plan

The District has developed a long-term capital improvement plan (CIP) to address current and future system needs. Figure 4-1 shows the 5-year CIP for the District is approximately \$32.5 million. CIP needs will be funded through proposed rates on a pay-as-you-go (PAYGO) basis. Projected CIP expenditures are driven by well improvements related to groundwater production, as well as, repair and replacement (R&R) projects at CDMWTP. Funding capital costs through rates is advisable because the District’s capital costs are fairly uniform over the planning period which allows the District to forego interest payments associated with debt financing. Note CIP totals in Figure 4-1 are the sum of individual projects inflated by the District at 3% per year. A full list of individual projects can be found in Table 4-3. Additionally, the majority of current year capital expenditures are covered by proceeds remaining from a previous debt issue, seen in yellow in Figure 4-1.



**Figure 4-1: Planned Capital Improvement Projects**

**Goleta Water District**  
**Water Rates and Cost of Service Study Report**

**Table 4-3: Capital Improvement Projects**

Project Description	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
	Projected	Projected	Projected	Projected	Projected
CDMWTP Sand Replacement in SDBs #2	\$281,075	\$0	\$0	\$0	\$0
CDMWTP SDB 3 Construction	\$0	\$100,000	\$829,250	\$0	\$0
CDMWTP Access Road Improvements	\$0	\$0	\$0	\$0	\$400,830
CDMWTP Chemical Tanks Safety Platform	\$230,000	\$0	\$0	\$0	\$0
Existing Well Treatment & Facilities Upgrades	\$576,000	\$530,000	\$419,000	\$160,000	\$0
Rehabilitation of Berkeley Well	\$1,042,132	\$0	\$0	\$0	\$0
Rehabilitation of Shirrell Well	\$500,728	\$0	\$0	\$0	\$0
Rehabilitation of Oak Grove #2 Well	\$500,728	\$0	\$0	\$0	\$0
Rehabilitation of Santa Barbara Corp Well	\$500,728	\$0	\$0	\$0	\$0
University Well Iron and Manganese Treatment	\$0	\$0	\$0	\$0	\$840,501
Goleta Sanitary RW Pump Replacement	\$63,890	\$0	\$0	\$0	\$0
Hollister Booster Station Pump Replacements	\$35,524	\$35,524	\$0	\$0	\$0
RW Booster Station Process and Control Upgrades	\$0	\$72,000	\$0	\$0	\$0
Hollister Booster Station Electrical Upgrades	\$0	\$0	\$0	\$410,000	\$0
Barger Reservoir Improvements	\$0	\$0	\$325,025	\$0	\$0
Ellwood Reservoir Improvements	\$0	\$0	\$0	\$156,326	\$0
Patterson Emergency Pump Replacement	\$68,048	\$0	\$0	\$0	\$0
Edison Emergency Pump Replacement	\$52,448	\$0	\$0	\$0	\$0
Van Horne Emergency Pump Installation	\$0	\$110,000	\$0	\$0	\$0
Pump & Motor Replacements	\$39,230	\$39,230	\$39,230	\$39,230	\$39,230
Electrical Replacements	\$64,998	\$64,998	\$64,998	\$64,998	\$64,998
SCADA Replacements & Upgrades	\$49,100	\$49,100	\$49,100	\$49,100	\$49,100
Water Treatment Equipment Replacements	\$30,622	\$30,622	\$30,622	\$30,622	\$30,622
Emergency Main Replacements	\$202,410	\$202,410	\$202,410	\$202,410	\$202,410
City, County, Caltrans Relocation Required Projects	\$320,080	\$320,080	\$320,080	\$320,080	\$320,080
Polybutylene Service Replacements	\$80,150	\$80,150	\$80,150	\$80,150	\$80,150
Copper Service Line Replacements	\$64,116	\$64,116	\$64,116	\$64,116	\$64,116
Valve & Hydrant Replacements	\$391,996	\$391,996	\$391,996	\$391,996	\$391,996
PRV Replacements	\$39,766	\$10,350	\$10,350	\$10,350	\$10,350
Regulatory Fleet Replacements	\$0	\$0	\$150,000	\$150,000	\$80,000
Regulatory Equipment Replacements	\$38,453	\$94,052	\$120,000	\$104,000	\$60,000
Stormwater Headquarters Master Plan	\$108,300	\$216,700	\$99,400	\$315,700	\$161,900
CDMWTP Overflow Basin Construction	\$0	\$0	\$0	\$0	\$449,656
CDMWTP Low Flow Process Improvements	\$262,200	\$0	\$0	\$0	\$0
New Well - Airport Area	\$0	\$2,324,260	\$0	\$0	\$0
New Well Transmission Main Area	\$0	\$0	\$1,025,000	\$3,012,300	\$0
Additional Injection Wells	\$0	\$0	\$0	\$0	\$1,108,600
New Monitoring Wells	\$0	\$0	\$0	\$0	\$805,600
Reservoir Hatch Replacements	\$0	\$27,096	\$0	\$0	\$0
Future Tank Repairs	\$0	\$0	\$0	\$0	\$312,652
Upsizing of Mains	\$85,780	\$85,780	\$85,780	\$85,780	\$85,780
Cathodic Protection Upgrades	\$99,540	\$99,540	\$99,540	\$99,540	\$99,540
Fleet Replacements	\$85,500	\$85,500	\$95,000	\$70,500	\$92,000
Equipment Replacements	\$10,000	\$23,000	\$94,000	\$5,600	\$15,500
Well Water Reuse Project	\$0	\$500,000	\$0	\$0	\$0
Rain Barrel Project	\$0	\$150,000	\$0	\$0	\$0
Small Meter Replacement	\$0	\$0	\$2,200,000	\$2,200,000	\$0
Information Technology Upgrades	\$72,960	\$72,960	\$72,960	\$72,960	\$72,960
<b>TOTAL CAPITAL PROJECTS</b>	<b>\$5,896,501</b>	<b>\$5,779,464</b>	<b>\$6,868,007</b>	<b>\$8,095,758</b>	<b>\$5,838,571</b>



## 4.6 Debt Service Requirements

Debt service requirements consist of principal and interest payments on existing debt. The District currently has debt service obligations associated with the outstanding 2010 Water Certificates of Participation (COPs) (41.2A), the 2014 COPs (41.3A) and Cachuma Operations and Maintenance Board (COMB) debt service. These obligations are set to be paid off in FY 2036, FY 2025 and FY 2022, respectively. Debt service payments increase significantly beginning in the current fiscal year. In FY 2015 interest only payments begin on the 2010 COPs while principal and interest payments begin on the 2014 COPs. COMB repayments begin in FY 2017. The COMB debt service is related to the District's share (63%) of total COMB debt which is \$3.2 million in principal. The District's share of principal is \$2.016 million. Table 4-4 shows the existing debt service, with payments ranging from \$3.56 million to \$3.99 million annually.

**Table 4-4: Existing Debt Service**

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
<b>Existing Debt Service</b>					
<b>COMB Repayment</b>					
Principal	\$ -	\$ 279,693	\$ 384,717	\$ 398,551	\$ 412,821
Interest	\$ -	\$ 51,256	\$ 56,549	\$ 42,714	\$ 28,444
	\$ -	\$ 330,949	\$ 441,265	\$ 441,265	\$ 441,265
<b>2010 COPs (41.2A)</b>					
Principal	\$ -	\$ -	\$ -	\$ -	\$ -
Interest	\$ 1,649,738	\$ 1,649,738	\$ 1,649,738	\$ 1,649,738	\$ 1,649,738
	\$ 1,649,738	\$ 1,649,738	\$ 1,649,738	\$ 1,649,738	\$ 1,649,738
<b>2014 COPs (41.3A)</b>					
Principal	\$ 1,065,000	\$ 1,105,000	\$ 1,150,000	\$ 1,200,000	\$ 1,260,000
Interest	\$ 840,425	\$ 802,350	\$ 757,250	\$ 704,250	\$ 642,750
	\$ 1,905,425	\$ 1,907,350	\$ 1,907,250	\$ 1,904,250	\$ 1,902,750
<b>Total Debt Service</b>	<b>\$ 3,555,163</b>	<b>\$ 3,888,037</b>	<b>\$ 3,998,253</b>	<b>\$ 3,995,253</b>	<b>\$ 3,993,753</b>

To ensure that it meets the covenants of the issued debt, the District must meet minimum coverage requirements on its outstanding bond issues. The required debt coverage is 125%, which means that the District's adjusted net system revenues shall amount to at least 125% of the annual debt service. The system revenues include rate revenues, other operating and non-operating revenues from miscellaneous charges, contracts and conveyance, as well as interest on reserves. Annual debt service includes annual principal and interest payments on outstanding debt. With the proposed revenue adjustments, the District exceeds the coverage requirement during each year of the study's planning period.

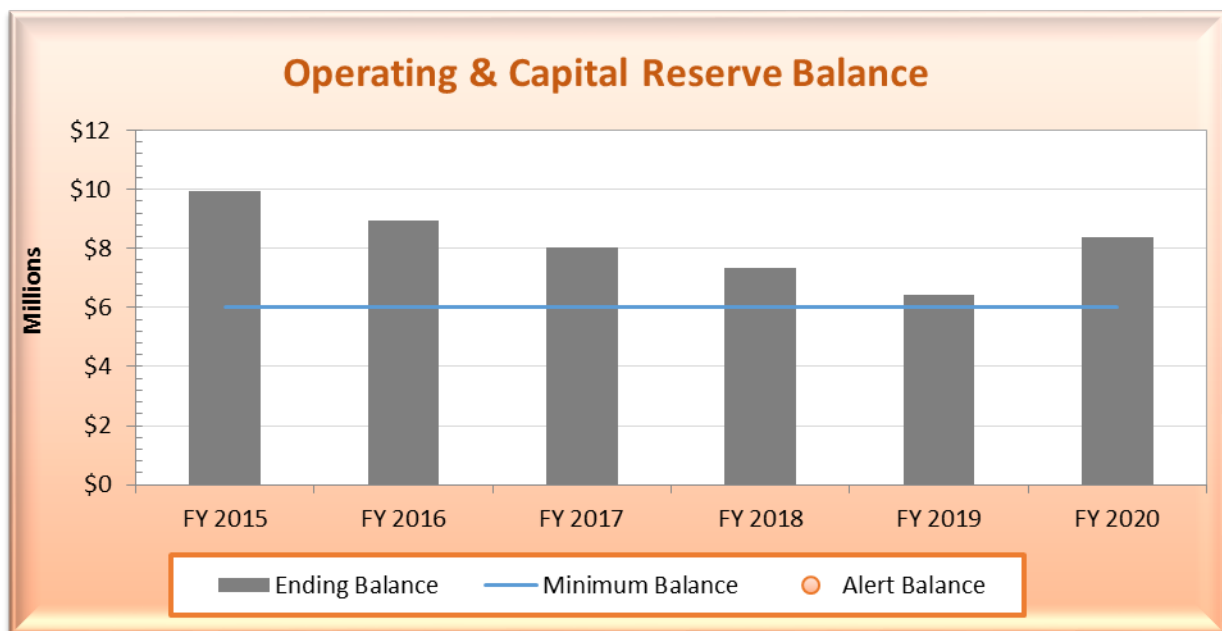
## 4.7 Water Reserves

Prudent fiscal management requires that the District maintain reserve balances to meet working capital requirements, meet unexpected increases in costs, and provide for emergencies. The District’s current reserves policy is to maintain two reserves which comprise funds dedicated to O&M and capital R&R, prioritized in that order. Currently, the District’s reserves are fully funded and are above the target of \$6 million.

**O&M Reserve** – The target balance for the O&M reserve is 30 days (or one month) of annual O&M expenses. In the current fiscal year the target is approximately \$2.17 million.

**Capital Reserve** – The capital reserve is used to fund ongoing capital expenditures. The reserve target is equal to the \$6 million total reserves policy, less O&M reserves. In the current fiscal year the target is approximately \$3.83 million.

The estimated FY 2015 total ending reserve balance is approximately \$9.9 million. The reserve balance and the District’s reserves targets are shown in Figure 4-2. Reserve levels (grey bars) are projected to meet the District’s targets (blue line) in the five-year forecast horizon. Table 4-5 shows the flow of funds, sources, and uses of reserves over the Study period.



**Figure 4-2: Ending Reserve Balances**

**Table 4-5: Reserves Flow of Funds**

	FY 2015 Budgeted	FY 2016 Projected	FY 2017 Projected	FY 2018 Projected	FY 2019 Projected	FY 2020 Projected
<b>Operating Reserve (O&amp;M)</b>						
Beginning Balance	\$2,171,300	\$2,171,300	\$2,215,069	\$2,280,113	\$2,277,615	\$2,308,151
Net Revenues	\$3,567,042	\$4,891,169	\$4,906,061	\$6,168,848	\$7,166,154	\$7,799,786
Transfer to Capital R&R Reserve	(\$3,567,042)	(\$4,847,400)	(\$4,841,017)	(\$6,171,346)	(\$7,135,618)	(\$7,751,226)
Transfer to Rate Stabilization Reserve	\$0	\$0	\$0	\$0	\$0	\$0
Transfer to Emergency Capital	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$2,171,300</b>	<b>\$2,215,069</b>	<b>\$2,280,113</b>	<b>\$2,277,615</b>	<b>\$2,308,151</b>	<b>\$2,356,711</b>
<i>Operating Reserve (O&amp;M) Target</i>	<i>\$2,171,300</i>	<i>\$2,215,069</i>	<i>\$2,280,113</i>	<i>\$2,277,615</i>	<i>\$2,308,151</i>	<i>\$2,356,711</i>
<b>Capital R&amp;R Reserve</b>						
Beginning Balance	\$6,359,809	\$7,758,851	\$6,709,750	\$5,771,302	\$5,074,641	\$4,114,501
Transfer from O&M	\$3,567,042	\$4,847,400	\$4,841,017	\$6,171,346	\$7,135,618	\$7,751,226
Debt Proceeds	\$0	\$0	\$0	\$0	\$0	\$0
SRF Proceeds	\$0	\$0	\$0	\$0	\$0	\$0
Capital Expenditures	(\$2,168,000)	(\$5,896,501)	(\$5,779,464)	(\$6,868,007)	(\$8,095,758)	(\$5,838,571)
CIP Funded with Existing Proceeds	(\$5,500,000)					
Transfer to Rate Stabilization	\$0	\$0	\$0	\$0	\$0	\$0
<b>Ending Balance</b>	<b>\$7,758,851</b>	<b>\$6,709,750</b>	<b>\$5,771,302</b>	<b>\$5,074,641</b>	<b>\$4,114,501</b>	<b>\$6,027,156</b>
<i>Capital R&amp;R Reserve Target</i>	<i>\$3,828,700</i>	<i>\$3,784,931</i>	<i>\$3,719,887</i>	<i>\$3,722,385</i>	<i>\$3,691,849</i>	<i>\$3,643,289</i>

## 4.8 Proposed Financial Plan and Revenue Adjustments

To ensure that the District will have adequate revenues to fund operating expenses, capital expenditures, and comply with its bond covenants, RFC recommends the following revenue adjustments for the next five years. The first revenue adjustment would occur on July 1, 2015 with subsequent annual adjustments occurring every July 1. The proposed revenue adjustments will enable the District to complete the planned capital projects for the study period while maintaining reserves at target. The proposed adjustments also allow the District to maintain compliance with its bond covenant of 125% coverage through the planning horizon.

It should be noted that revenue adjustments are not the same as rate increases. The increases shown in Table 4-6 below denote the amount of additional revenues necessary for the District's operations; the actual increases to rates vary depending on the results of the cost of service analysis.

**Table 4-6: Proposed Revenue Adjustment Schedule**

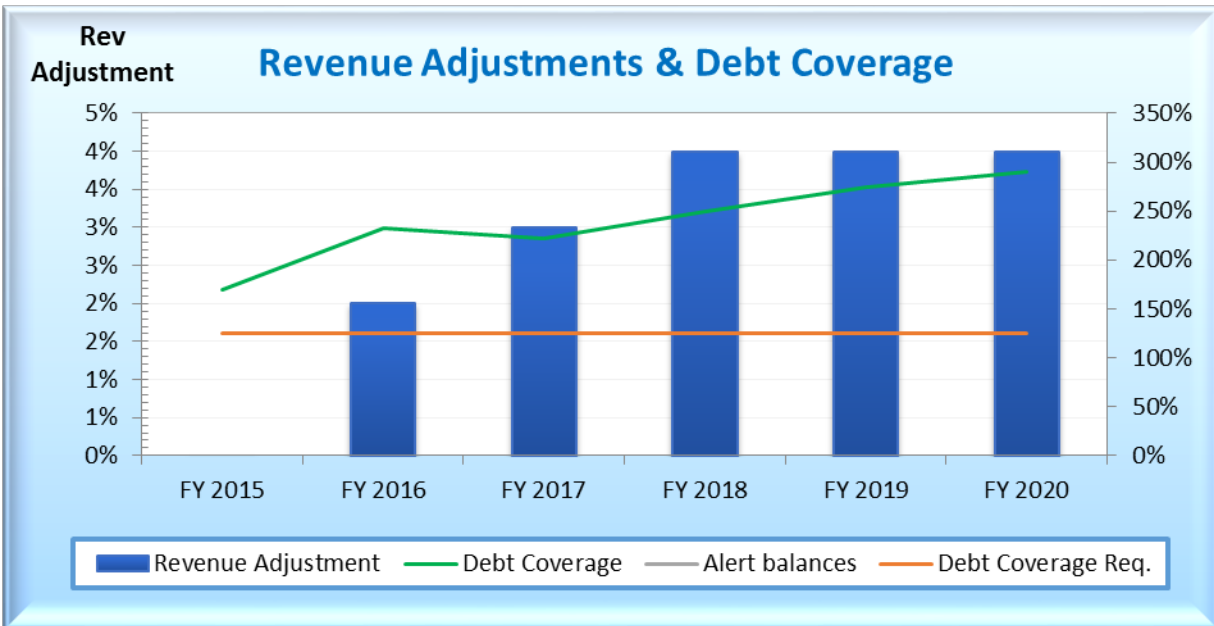
Revenue Adjustment	Fiscal Year
2%	2016
3%	2017
4%	2018
4%	2019
4%	2020

Figure 4-3 shows the proposed revenue adjustment and debt coverage levels through the forecast period. The proposed revenue adjustments will generate sufficient revenues to maintain a debt coverage ratio above the required 125% requirement. The debt coverage ratio increases in FY 2016 as

## Goleta Water District

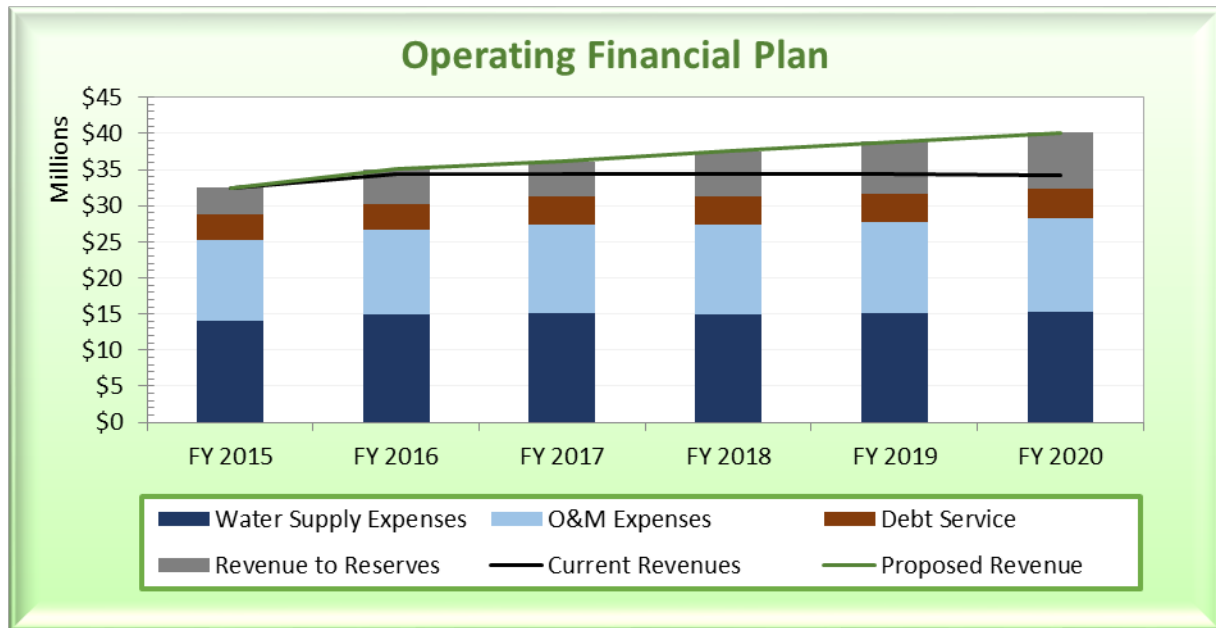
### Water Rates and Cost of Service Study Report

total revenue increases, then dips slightly in FY 2017 as COMB debt repayment begins before gradually increasing through to FY 2020. An increase in the coverage ratio is associated with the compounding effect of revenue adjustments and year-over-year decreases in state water supply costs as the District's fixed portion of costs paid to CCWA declines. The net revenue requirements including the revenue increases will be spread on all users in proportion to the cost of providing service as discussed in Section 5. As a result all users will not necessarily see a 2% increase in FY 2016.



**Figure 4-3: Proposed Revenue Adjustments**

Figure 4-4 shows the proposed operating financial plan, and compares expected revenues under current rates to revenues with the proposed revenue adjustments indicated in Table 4-6/figure 4-3. The proposed revenue adjustments will generate sufficient revenues for the District to successfully meet its ongoing operating costs and to fund its annual debt service. Funds not used to meet O&M expenses or annual debt service are used to fund reserves, primarily for capital expenses. The proposed financial plan allows the funding of capital projects and/or reserves each year with the revenue adjustments shown in Table 4-6.



**Figure 4-4: Proposed Revenue Adjustments**

A summarized pro forma of the proposed revenue requirements is shown in Table 4-7. The proposed revenue requirements account for the District’s annual financial needs while maintaining reserves at target, achieving positive net revenues through the study period and compliance with debt covenants.

**Goleta Water District**  
**Water Rates and Cost of Service Study Report**

**Table 4-7: Proposed Financial Plan Pro-Forma**

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
<b>Revenues</b>						
Revenue from Existing Rates	\$30,436,322	\$33,235,829	\$33,293,198	\$33,157,406	\$32,929,510	\$32,703,892
Revenue Adjustments	\$0	\$664,717	\$1,684,636	\$3,071,172	\$4,489,246	\$5,944,983
<b>Subtotal Revenue from Rates</b>	<b>\$30,436,322</b>	<b>\$33,900,546</b>	<b>\$34,977,834</b>	<b>\$36,228,578</b>	<b>\$37,418,756</b>	<b>\$38,648,875</b>
Other Operating Revenues	\$887,597	\$905,349	\$923,456	\$941,925	\$960,764	\$979,979
Non-Operating Revenues	\$1,079,142	\$183,000	\$183,000	\$183,000	\$183,000	\$183,000
Interest Revenue	\$41,667	\$38,262	\$71,160	\$144,974	\$296,697	\$262,214
<b>TOTAL REVENUE</b>	<b>\$31,365,586</b>	<b>\$34,844,157</b>	<b>\$35,972,450</b>	<b>\$37,315,476</b>	<b>\$38,676,216</b>	<b>\$39,891,068</b>
<b>O&amp;M Expenses</b>						
Water Supply and Conservation	\$12,245,792	\$13,109,031	\$13,228,765	\$13,097,661	\$13,103,060	\$13,277,736
Water Supply (Other)	\$1,762,561	\$1,807,728	\$1,854,096	\$1,901,697	\$1,950,566	\$2,000,738
Operations	\$7,657,973	\$7,901,977	\$8,401,102	\$8,336,265	\$8,526,919	\$8,760,045
Engineering	\$380,784	\$386,443	\$392,156	\$397,923	\$403,743	\$409,616
Administration	\$4,008,493	\$4,115,151	\$4,224,737	\$4,337,333	\$4,453,024	\$4,571,898
Adjustment for Drought Stage	(\$739,504)	(\$739,504)	(\$739,504)	(\$739,504)	(\$739,504)	(\$739,504)
<b>TOTAL O&amp;M EXPENSES</b>	<b>\$25,316,099</b>	<b>\$26,580,826</b>	<b>\$27,361,352</b>	<b>\$27,331,376</b>	<b>\$27,697,809</b>	<b>\$28,280,529</b>
Net Revenue	\$6,049,487	\$8,263,331	\$8,611,097	\$9,984,101	\$10,978,407	\$11,610,539
<b>Debt Service</b>						
COMB Repayment Schedule	\$0	\$0	\$330,949	\$441,265	\$441,265	\$441,265
41.2A (2010)	\$1,649,738	\$1,649,738	\$1,649,738	\$1,649,738	\$1,649,738	\$1,649,738
41.3A (2014)	\$1,911,850	\$1,905,425	\$1,907,350	\$1,907,250	\$1,904,250	\$1,902,750
Proposed Debt Service	\$0	\$0	\$0	\$0	\$0	\$0
<b>TOTAL DEBT SERVICE</b>	<b>\$3,561,588</b>	<b>\$3,555,163</b>	<b>\$3,888,037</b>	<b>\$3,998,253</b>	<b>\$3,995,253</b>	<b>\$3,993,753</b>
Net Cash to Fund Reserves	\$3,567,042	\$4,891,169	\$4,906,061	\$6,168,848	\$7,166,154	\$7,799,786
<b>Capital Expenditures (by Funding Source)</b>						
Annual CIP	\$7,668,000	\$5,896,501	\$5,779,464	\$6,868,007	\$8,095,758	\$5,838,571
Debt Funded CIP	\$0	\$0	\$0	\$0	\$0	\$0
PayGo Funded CIP	\$2,168,000	\$5,896,501	\$5,779,464	\$6,868,007	\$8,095,758	\$5,838,571
<b>Cash Reserve Balances</b>						
Beginning Balance	\$8,531,109	\$9,930,151	\$8,924,819	\$8,051,415	\$7,352,256	\$6,422,652
Ending Balance	\$9,930,151	\$8,924,819	\$8,051,415	\$7,352,256	\$6,422,652	\$8,383,867
Δ in Reserves	\$1,399,042	(\$1,005,332)	(\$873,404)	(\$699,160)	(\$929,604)	\$1,961,215
Net Rev (for Debt Calculation)	\$6,049,487	\$8,263,331	\$8,611,097	\$9,984,101	\$10,978,407	\$11,610,539
Debt Service	\$3,561,588	\$3,555,163	\$3,888,037	\$3,998,253	\$3,995,253	\$3,993,753
Projected Debt Coverage	170%	232%	221%	250%	275%	291%
Target (Min) Debt Coverage	125%	125%	125%	125%	125%	125%

## 5 COST OF SERVICE ANALYSIS

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### 5.1 Cost Based Rate Setting Methodology

As stated in the American Water Works Association (AWWA) Manual M1, the AWWA's Rates and Charges Subcommittee agrees with Proposition 218 that "the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers." To develop utility rates that comply with Proposition 218 and industry standards while meeting other emerging goals and objectives of the District, there are four major steps:

**DETERMINATION OF REVENUE REQUIREMENT** The rate-making process starts with the determination of future revenue requirements to sufficiently fund the District's O&M and capital R&R projects, and to ensure preservation of the District's financial integrity. The basic revenue requirements of a utility include O&M expenses, debt service payments, contributions to specified reserves, and the cost of capital expenditures that are not debt financed.

**COST OF SERVICE ANALYSIS** The annual costs of providing water services, determined in the financial plan development, should be allocated among the customers commensurate with their service requirements. In this step, costs are identified and allocated to functional cost components and proportionally distributed to respective customer classes according to the industry standards provided in the Manual M1 published by AWWA.

**RATE DESIGN and CALCULATIONS** Rates do more than simply recover costs. Within the legal framework and industry standards, properly designed rates should support and optimize a blend of various utility objectives, such as conservation, affordability for essential needs and revenue stability, among other objectives. Rates should work as a public information tool in communicating these objectives to customers.

**RATE ADOPTION** In the last step of the rate-making process, to comply with Proposition 218 requirements, the results of the analyses are documented in a Study Report to help inform the public about the proposed changes, the rationale and justifications behind the changes, and their anticipated financial impacts in lay terms. At a public hearing at least 45 days after sending out the public notices, the agency shall consider all written protests against the proposed rates. If there is no majority protest, the agency can officially adopt the new rates with Board approval.

The agency's revenue requirements are, by definition, the cost of providing service. This cost is then used as the basis to develop unit costs for the water components and to allocate costs to the various customer classes in proportion to the water services rendered. The concept of proportionality requires that cost allocations should consider both the average quantity of water consumed (base) and the peak rate at which it is consumed (peaking). Use of peaking is consistent with cost of providing service

because the water system is designed to handle peak demands, and the additional costs associated with design, construction and maintenance of facilities specified to meet these peak demands need to be allocated to those imposing such costs on the utility so that the costs can be recovered appropriately.

## 5.2 Legal Framework and Rate Methodology

Proposition 218 (California Constitution, Article XIII D) states that:

1. A property-related charge (such as water rates) imposed by a public agency on a parcel shall not exceed the funds required to provide the property related service.
2. Revenues derived by the charge shall not be used for any other purpose other than that for which the charge was imposed.
3. The amount of the charge imposed upon any parcel shall not exceed the proportional cost of service attributable to the parcel.
4. No charge may be imposed for a service unless that service is actually used or immediately available to the owner of property.
5. A written notice of the proposed charge shall be mailed to the record owner of each parcel at least 45 days prior to the public hearing, when the agency considers all written protests against the charge.

As stated in the Manual M1, the costs of water rates and charges should be recovered from classes of customers in proportion to the cost of serving those customers. Proposition 218 ensures that water rates cannot be “arbitrary and capricious”, meaning that the rate-setting methodology must be sound and that there must be a nexus between costs and the rates charged. RFC follows these principles in setting rates.

In conjunction with Proposition 218, Article X, Section 2 of the California Constitution<sup>5</sup> institutes the need to preserve the State’s water supplies and to discourage the wasteful or unreasonable use of water by encouraging conservation. In addition, Section 106 of the Water Code declares that the highest priority use of water is for domestic purposes, with irrigation secondary. In connection with meeting the objectives of Article X, Water Code Sections 370 (AB2882) and 375, a water purveyor is authorized to utilize its water rate design to incentivize the efficient use of water. Although incentives to conserve water could be provided by implementing a higher rate for water as consumption increases, a nexus between rates and cost incurred to provide water at those rates must be developed to achieve compliance with Proposition 218.

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<sup>5</sup> Article X, section 2 of the California Constitution (enacted in 1976) provides as follows:

*“It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.”*



## Goleta Water District

### Water Rates and Cost of Service Study Report

**Tiered Rates** - “Inclining” Block-Rate Structures (which are synonymous with “Increasing Block-Rate Structures”), when properly designed and differentiated by customer class as this Rate Study does, allows a water district to send consistent price incentives for conservation to customers. Due to heightened interest in water conservation, inclining block-rates have been increasingly favored, especially in relatively water-scarce regions such as Southern California. As such, the District has determined that inclining block tiered rates for SFR customers are the most appropriate rate structure to implement moving forward.

A tiered rate structure was upheld in *Brydon v. East Bay Mun. Utility Dist.* California Court of Appeal, Fourth District (1995) (Brydon). In *Brydon*, a pre-Proposition 218 decision, the Appellate Court rejected the challenge that the tiered rate structure constituted a “special tax” in violation of Proposition 13. The recent case of *City of Palmdale v. Palmdale Water District* (2011) 198 Cal.App.4th 926 explained that compliance with both Proposition 218 and Article X, section 2 can be achieved through tiered rates, provided there is record support for the tiered rates; that is, conservation costs and similar expenses are properly allocated across tiers to establish the rate imposed.

**Proportionality** - The recent Appellate case of *Griffith v. Pajaro Valley Water Management Agency* (2013) 220 Cal.App.4th 556 (*Pajaro*) has provided much guidance on several important Proposition 218 issues, including the issue of proportionality. In *Pajaro*, the Appellate Court held in part as follows:

The question of proportionality is not measured on an individual basis. Rather, it is measured collectively, considering all rate payers. Given that Proposition 218 prescribes no particular method for apportioning a fee or charge other than the amount shall not exceed the proportional cost of the service attributable to the parcel, [the] method of grouping similar users together for the same augmentation rate and charging the users according to usage is a reasonable way to apportion the cost of service.<sup>6</sup>

Given the opinion in *Pajaro*, utilities may develop rates by grouping customers and meet the requirements of Proposition 218, as opposed to the strict interpretation which would require cost proportionality to each parcel receiving service. This was another major clarification of Proposition 218 since cost proportionality to individual parcels is impracticable.

### 5.3 Cost of Service Analysis

The total cost of water service is analyzed by system function in order to equitably distribute costs in relation to how they are incurred, which then allows each cost component to be recovered through the most appropriate revenue recovery.

In this study, water rates are calculated for FY 2016, and accordingly FY 2016 is defined as the Test Year. Test Year revenue requirements are used in the cost allocation process. Subsequent years’ revenue adjustments are incremental and the rates for future years are based on the revenue adjustments

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<sup>6</sup> *Pajaro*, 220 Cal.App.4th at p. 601 (quotation omitted).

## **Goleta Water District**

### **Water Rates and Cost of Service Study Report**

shown in Table 4-6 and calculated across-the-board. The District should review the cost of service analysis at least every five years to ensure that the rates are consistent with the costs of providing service.

The annual revenue requirements, or costs of service, to be recovered from commodity charges are O&M expenses and capital costs, including debt service. Total FY 2016 cost of service to be recovered from the District's water customers is shown in Table 5-1 and estimated at approximately \$33.9 million. \$25.6 million of this total is for operating costs and the remaining \$8.26 million is for existing debt service payments and rate/reserve funded capital projects. Planned capital expenditures in FY 2016 are approximately \$5.9 million, as shown in Figure 4-1 and Table 4-3. The net revenue in FY 2016 is projected to be \$4.9 million (Cash Balance in Table 5-1 and annual cash balance in Table 4-7). This amount is essentially used to pay for the \$5.9 million capital program in FY 2016. Since the District does not expect to issue additional debt to fund its capital program, the capital program will be funded through rates and reserves over the study period. It should be noted that Table 5-1 shows the revenue requirement from rates and does not show the full \$5.9 million of capital expenditures because it is funded by cash and reserves.

The cost of service analysis is based upon the premise that the utility must generate annual revenues adequate to meet the estimated annual revenue requirements. As part of the cost of service analysis, revenues from sources other than water rates and charges (e.g. revenues from miscellaneous services) are deducted from the appropriate cost elements. Additional deductions are made to reflect interest income and other non-operating income during FY 2016. Adjustments are also made to account for cash balances to ensure adequate collection of revenue and to determine annual revenues needed from rates.

**Table 5-1: Cost of Service Revenue Requirements**

Revenue Requirements	FY 2016		
	Operating	Capital	Total
Water Supply and Conservation	\$14,916,759		\$14,916,759
Operations	\$7,901,977		\$7,901,977
Engineering	\$386,443		\$386,443
Administration	\$4,115,151		\$4,115,151
COMB Repayment Schedule		\$0	\$0
COP 41.2A (2010)		\$1,649,738	\$1,649,738
COP 41.3A (2014)		\$1,905,425	\$1,905,425
Proposed Debt Service		\$0	\$0
<b>Total Revenue Requirements</b>	<b>\$27,320,330</b>	<b>\$3,555,163</b>	<b>\$30,875,492</b>
<b>Less Revenue Offsets</b>			
Conveyance Revenue	\$134,192		\$134,192
Miscellaneous Fees & Charges	\$771,157		\$771,157
Reserve Interest Revenue		\$38,262	\$38,262
<b>Total Revenue Offsets</b>	<b>\$905,349</b>	<b>\$38,262</b>	<b>\$943,611</b>
<b>Less Adjustments</b>			
Cash Balance		(\$4,891,169)	(\$4,891,169)
New Water Supply Charges		\$183,000	\$183,000
Drought Stage	\$739,504		\$739,504
<b>Total Adjustments</b>	<b>\$739,504</b>	<b>(\$4,708,169)</b>	<b>(\$3,968,665)</b>
<b>Revenue to be Recovered from Rates</b>	<b>\$25,675,477</b>	<b>\$8,225,069</b>	<b>\$33,900,546</b>

To allocate the cost of service among the different customer classes, costs first need to be allocated to the appropriate water cost components. The following section describes the allocation of the operating and capital costs of service to the appropriate parameters of the water system.

**Functional Costs Components** - The total cost of water service is analyzed by system function in order to equitably distribute costs in relation to how they are incurred which then allows each cost component to be recovered through the most appropriate revenue recovery (i.e. fixed versus variable). For this analysis, water costs of service are assigned under the Base-Extra Capacity method ascribed to the following functional cost components: Base, Max Day, Max Hour, Fire Protection, Meters, Customer/Customer Service, Conservation, and General. Additional cost components are identified for

## **Goleta Water District**

### **Water Rates and Cost of Service Study Report**

the District's separate systems for recycled water and agricultural accounts that are part of the Goleta West Conduit or within the Urban Agriculture class. This method is consistent with the American Water Works Association M1 Manual, and is widely used in the water industry to design rates for retail customers.

**Base Costs** are those operating and capital costs of the water system associated with serving customers at a constant, or average, rate of use. Supply costs are typically considered to be based on average usage. Note that in this analysis Cachuma Lake supply is spread among base, GWC and Urban Agriculture as both GWC and Urban Agriculture are treated as separate systems within the cost of service.

**Extra Capacity Costs** or peaking costs represent those costs incurred to meet customer peak demands for water in excess of average day usage. Total extra capacity costs are subdivided into costs associated with maximum day and maximum hour demands. The maximum day demand is the maximum amount of water used in a single day in a year. The maximum hour (Max Hour) demand is the maximum usage in an hour on the maximum usage day (Max Day). Different facilities are designed to meet different peaking characteristics. For example, transmission lines or reservoirs are designed to meet Max Day requirements. Both have to be designed larger than they would be if the same amount of water were being used at a constant rate throughout the year. The cost associated with constructing a larger line or reservoir is based on the "overdesign" and is proportioned on the Max Day factor. For example, if the Max Day factor is 2.0, then the line has to be designed twice as large as required to meet just the average usage conditions. In this case half of the cost would be allocated to Base (or average) and the other half allocated to Max Day. The calculation of the Max Hour and Max Day demands is explained below.

**Customer Service Related Costs** include customer related costs. Customer costs include such costs as meter reading, billing, collecting, and accounting.

**Meter Costs** or meter service costs include maintenance and capital costs associated with meters and a portion of the capacity related costs. These costs are assigned based on meter size or equivalent meter capacity.

**Conservation Costs** are costs related to conservation programs and allocated to all classes, and are primarily targeted to the upper tiers in the SFR class.

The allocation of costs of service into these principal components provides the means for determining the costs to the various customer classes on the basis of their respective base, extra capacity and customer requirements for service.

### **Allocation to Functional Cost Components**

The water system is comprised of various facilities that are designed and operated to fulfill a given function. In order to provide adequate service to its customers at all times, the utility must be capable

## Goleta Water District

### Water Rates and Cost of Service Study Report

of not only providing the total water demand, but also supplying water to meet peak or maximum water use needs. Functional cost components are determined by designating various expenses to their specific purpose.

#### Determination of Allocation Percentages

To determine how costs should be allocated to average and peak (Max Day and Max Hour) demands, the allocation percentages are derived from actual historical data and assigned to each cost component. Customer service related costs are allocated 100 percent to the customer service component. Costs related to meter maintenance are allocated to meter service component. These two components, plus a portion of max day/max hour peaking costs are included in the fixed monthly service charges, and discussed in detail in Section 6.

To calculate volume related cost allocation, system peaking factors are determined. Peaking factors are based on District production records and usage characteristics. The Base or Average Daily Demand (ADD) is the average of the annual usage expressed as the usage per day. The Base demand, or ADD, is assigned a value of 1.0. The District's Max Day demand is approximated using the weighted average of production for the potable system and GWC, relative to ADD, and therefore is assigned a value of 1.66<sup>7</sup>. The maximum hourly (Max Hour) usage is approximated using an industry accepted multiplier of 2.00, which assigns a value of 3.32 (Max Day x 2.00). Table 5-2 below shows the system-wide peaking factors based on District data.

**Table 5-2: System Peaking Factors**

	Peaking Factor
Base	1.00
Max Day	1.66
Max Hour	3.32

Next, the relative proportion of costs assigned to Base, Max Day and Max Hour are used to calculate cost components. Cost components related solely to providing average day demand, such as supply sources, are allocated 100% to Base. Cost components that are designed to meet Max Day peaks, such as reservoirs and transmission facilities, are allocated both Base and Max Day factors. Since facilities such as reservoirs and distribution systems are also designed to handle fire flow, an allocation is also provided for fire flow. The Max Day factor of the District's system is 1.66, which means that Max Day facilities are designed to provide 166% of the average day capacity. In other words, 66 out of 166, or 40% (66/166) represents the portion required to meet Max Day requirements. Therefore, the Max Day facilities are designed 40% larger than required to meet average usage conditions, in turn to meet Max Day requirements.

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<sup>7</sup> The individual max day peaking factors are 1.59 for the potable system and 2.20 for GWC.

**Goleta Water District**

Water Rates and Cost of Service Study Report

$$\begin{aligned} \text{Base:} & \quad 60\% = (1.00/1.66) \times 100 \\ \text{Max Day:} & \quad 40\% = (1.66-1.00) / 1.66 \times 100 \end{aligned}$$

Cost components designed for Max Hour peaks, such as distribution system facilities, are allocated similarly. The Max Hour factor is 3.32, so Max Day facilities are designed to provide 332% of the average day capacity. Out of this 332, 100 represents the ADD, 66 represents the Max Day requirement and the remainder – 166 – represents the Max Hour requirement. This means that the Max Hour capacity represents 166 out of 332, or 50%, the Max Day represents 66 out of 332, or 20%, and the remaining 100 out of 332, or 30%, represents the base capacity of the facilities designed for Max Hour. The allocation of Max Hour facilities is shown below:

$$\begin{aligned} \text{Base:} & \quad 30\% = (1.00/3.32) \times 100 \\ \text{Max Day:} & \quad 20\% = (1.66-1.00)/ 3.32 \times 100 \\ \text{Max Hour:} & \quad 50\% = (3.32-1.66)/ 3.32 \times 100 \end{aligned}$$

The results of the allocation are presented in Table 5-3 below. These percentages are then applied to the operating and capital improvement costs amongst Base, Max Day, and Max Hour parameters for cost of service calculations, which is explained in detail in the following sub-sections.

**Table 5-3: Calculation of Allocation Factors**

	Factors	Base	Max Day	Max Hour
<b>Base</b>	1.00	100%		
<b>Max Day</b>	1.66	60%	40%	
<b>Max Hour<sup>8</sup></b>	3.32	30%	20%	50%
<b>Max Day Multiplier<sup>9</sup></b>	2.00			

**Allocation of Operating Expenses**

Table 5-4 provides a matrix of District cost functions to cost components, using FY 2016 as the baseline to account for how costs are incurred. Appendix A illustrates how O&M expenses are allocated to cost components after being functionalized. Functions were determined in part with District staff to accurately assign costs to various components.

Unlike general “supply” which is allocated 100% to Base, Cachuma Supply is divided between Base, GWC and Urban Agriculture based upon the relative demand share of each of the systems for that source. Cachuma water is the sole source for GWC, which is delivered with minimal treatment via a gravity fed conduit. Urban Agriculture receives Cachuma water via the potable system but does not benefit from potability so they are assigned Cachuma supply but not costs related to treatment based on District policy; that is, the class is not charged for services it does not require. All costs associated with State

<sup>8</sup> Max Hour is calculated as Max Day x Max Day Multiplier

<sup>9</sup> Industry practice to approximate value based on system and customer characteristics

## Goleta Water District

### Water Rates and Cost of Service Study Report

Water (via CCWA) are included in Base and therefore excluded from GWC and Urban Agriculture. Urban Agriculture receives a share of the groundwater from wells and therefore allocated some of the “Wells” function -related to groundwater production- proportional to their share of baseline demand, or 21%. Operations allocations for the Recycled water system and GWC were identified by District staff in dollar terms as each have individual cost centers within Operations. Conversely, Urban Agriculture is part of the potable system and has no such defined operations cost center. Operations allocation to Urban Agriculture is then based upon their pro rata share of total O&M expenses, or 4.9%.

Storage (reservoir) costs are allocated to base, max day and fire; distribution system costs are allocated to base, max day, max hour and fire; transmission costs are allocated to base and max day; billing and customer service costs are allocated to customer. Conservation costs are allocated to the conservation component. Administration and general expenses are related to total system operations and cannot be specifically allocated to individual functions such as storage or distribution, etc. These expenses are therefore allocated in the same proportion as all other operating expenses. The resulting allocation of operation and maintenance expense serves as the basis for allocating the FY 2016 cost of service revenue requirements, shown in Table 5-1, to the base, extra capacity and customer costs functions.

**Table 5-4: Functional Categories and Cost Components<sup>10</sup>**

Functional Category	Base	Max Day	Max Hour	Recycled		Meters	Customer	Conservation	GWC	Urban Ag	General	Total
				Water	Protection							
Supply	100%											100%
Cachuma Supply	61%								17%	23%		100%
Reservoir	53%	32%			15%							100%
Wells	40%	40%								21%		100%
Transmission	60%	40%										100%
Treatment	60%	40%										100%
Distribution	26%	17%	43%		15%							100%
Meters						100%						100%
Hydrants					100%							100%
Customer							100%					100%
Customer+Meter						60%	40%					100%
Recycled Water				100%								100%
Conservation								100%				100%
Customer+General							25%				75%	100%
Base+Conserv+General	20%							40%			40%	100%
Conservation+General								70%			30%	100%
Operations	19.0%	12.6%	31.6%	1.1%	10.0%	15.0%	5.0%		0.8%	4.9%		100%
Engineering	20%	13%	33%	10%	15%	10%						100%
General											100%	100%

### Allocation of Capital Costs

Capital costs include capital improvements financed from annual revenues, debt service and other sources. Capital costs related to specific facilities will vary significantly from year to year. Allocating these costs based on the functions of these specific facilities would cause the rates to the different customer classes to change from year to year. A reasonable method of assigning capital costs to functional components widely practiced in the industry is to allocate such costs on the basis of net plant investment. This method recognizes that over a period of time these allocations will provide costs to be passed on to customers equitably.

<sup>10</sup> Values in matrix are rounded to nearest whole percentage for display purposes

Net plant investment is represented by the total replacement cost of utility facilities less accumulated depreciation (Net Plant Investment or Net Assets = Replacement Cost – Replacement Cost Depreciation). The estimated fiscal year net plant investment in water facilities consists of net plant in service as of June 30, 2014, the latest assets data available.

Costs are allocated based on the design criteria of each facility. For example, treatment facilities are allocated to Max Day since these facilities are designed to handle the maximum day demand. The investment in general plant, i.e. general investments not classified as any particular function such as storage, treatment, distribution, etc., is allocated to each cost component on the basis of all other investments. The resulting allocation of net investment serves as the basis for allocating the capital costs shown in Table 5-1.

**Unit Cost of Service**

In order to allocate costs of service to the different customer classes, unit costs of service need to be developed for each cost component. The unit costs of service are developed by dividing the total annual costs allocated to each parameter by the total annual service units of the respective component. The volume related cost components are based on volumetric units of one hundred cubic feet or hcf (748 gallons). Customer service related cost components are based on number of accounts and meter related costs are based on equivalent meters. Table 5-5 shows the determination of the total annual units by customer class. The extra capacity units are determined based on the peaking factors of the water system, shown in Table 5-2. The Max Day Demand is the Max Day Factor times the Daily Usage and the Max Day Requirement is the Max Day Demand less the Daily Usage. The Max Hour Demand is calculated similarly and the Max Hour Requirement is the Max Hour Demand less the Max Day Demand. The Max Day Factor and Max Hour Factor presented in Table 5.5 are rate-class specific; whereas the factors presented in Table 5-2 are for the whole system.

**Table 5-5: Determination of Total Annual Units, by Rate Class**

Customer Class	Annual Usage (hcf)	Daily Usage (hcf)	Max Day Factor	Max Day Demand	Max Day Req. (hcf)	Max Hour Factor	Max Hour Demand	Max Hour Req. (hcf)
SFR	1,899,328	5,204	1.75	9,106	3,903	3.50	18,213	9,106
Urban Ag.	1,025,549	2,810	1.75	4,917	2,107	3.50	9,834	4,917
GWC	671,089	1,839	1.80	3,316	1,477	3.61	6,632	3,316
Recycled	421,678	1,155	2.00	2,315	1,160	4.01	4,630	2,315
Urban	2,057,677	5,637	1.72	9,696	4,059	3.44	19,392	9,696
<b>Total</b>	<b>6,075,320</b>	<b>16,645</b>			<b>7,688</b>			<b>18,529</b>

Table 5-6 shows the units of service and the development of the FY 2016 unit costs for each of the cost components. To ensure that the costs are appropriately shared between fixed and variable components, a portion of the extra capacity related costs (peaking) are allocated to meters to recognize that meter size influences the capacity needs of the water system. The allocated costs are divided by



## Goleta Water District

### Water Rates and Cost of Service Study Report

the total number of units (in their respective units of measure) for each component to determine the unit cost of each component as shown in Table 5-6.

For example, the unit cost for base is determined by dividing the total costs allocated to base by the number of water units sold, in hcf. Similarly, annual customer (customer service costs) are divided by the number of monthly bills for the year. The cost of service can also be interpreted as the revenue requirement for each component.

**Table 5-6: Development of Unit Costs**

Cost of Service	Base	Max Day	Max Hour	Recycled			Customer
				Water	Fire Protection	Meters	
Operating Expenses	\$12,878,246	\$1,222,579	\$1,996,948	\$769,039	\$642,624	\$1,091,546	\$1,486,646
Capital Expenses	\$1,948,720	\$1,346,733	\$1,171,644	\$396,121	\$562,977	\$317,009	\$0
Revenue Offsets	(\$134,192)	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Cost of Service</b>	<b>\$14,692,774</b>	<b>\$2,569,313</b>	<b>\$3,168,592</b>	<b>\$1,165,160</b>	<b>\$1,205,600</b>	<b>\$1,408,556</b>	<b>\$1,486,646</b>
Allocation of General Cost	\$2,637,121	\$461,151	\$568,712	\$209,128	\$216,386	\$252,813	\$266,829
Allocation of Public Fire Protection					(\$1,412,698)	\$1,412,698	
<b>Allocated Cost of Service</b>	<b>\$17,329,894</b>	<b>\$3,030,464</b>	<b>\$3,737,304</b>	<b>\$1,374,288</b>	<b>\$9,288</b>	<b>\$3,074,067</b>	<b>\$1,753,475</b>
Adjustment from COS Component	\$283,790	(\$1,969,801)	(\$2,429,248)	(\$283,790)	\$0	\$4,399,049	\$0
<b>Adjusted Cost of Service</b>	<b>\$17,613,685</b>	<b>\$1,060,662</b>	<b>\$1,308,057</b>	<b>\$1,090,497</b>	<b>\$9,288</b>	<b>\$7,473,117</b>	<b>\$1,753,475</b>
Unit of Measure	<b>hcf</b>	<b>hcf/day</b>	<b>hcf/day</b>	<b>hcf</b>	<b>Equivalent Fire Meters</b>	<b>Equivalent Meters</b>	<b>Number of Bills</b>
Unit of Service	3,957,005	7,688	18,529	421,678	327	47,575	200,429
Unit Cost	\$4.45	\$137.96	\$70.59	\$2.59	\$2.37	\$13.09	\$8.75

Cost of Service	Conservation	GWC	Urban Ag	General	Revenue	
					Offsets	Total
Operating Expenses	\$1,061,572	\$642,223	\$1,239,392	\$3,550,011	\$0	\$26,580,826
Capital Expenses	\$0	\$0	\$134,453	\$2,385,674	\$0	\$8,263,331
Revenue Offsets	\$0	\$0	\$0	(\$771,157)	(\$38,262)	(\$943,611)
<b>Total Cost of Service</b>	<b>\$1,061,572</b>	<b>\$642,223</b>	<b>\$1,373,844</b>	<b>\$5,164,528</b>	<b>(\$38,262)</b>	<b>\$33,900,546</b>
Allocation of General Cost	\$190,535	\$115,269	\$246,583	(\$5,164,528)		\$0
Allocation of Public Fire Protection						\$0
<b>Allocated Cost of Service</b>	<b>\$1,252,108</b>	<b>\$757,492</b>	<b>\$1,620,428</b>	<b>\$0</b>	<b>(\$38,262)</b>	<b>\$33,900,546</b>
Adjustment from COS Component	\$0	\$0	\$0		\$0	\$0
<b>Adjusted Cost of Service</b>	<b>\$1,252,108</b>	<b>\$757,492</b>	<b>\$1,620,428</b>	<b>\$0</b>	<b>(\$38,262)</b>	<b>\$33,900,546</b>
Unit of Measure	<b>hcf</b>				<b>hcf</b>	
Unit of Service	5,653,642	671,089	1,025,549		5,653,642	
Unit Cost	\$0.22	\$1.13	\$1.58		(\$0.01)	

Table 5-7 summarizes the unit costs shown in Table 5-6 for simplicity.

**Table 5-7: Unit Costs of Service**

Cost Component	Annual Revenue Requirement	Units of Service	Unit of Measure	Unit Cost
<b>Base</b>	\$17,613,685	3,957,005	Hcf	\$4.45
<b>Max Day</b>	\$1,060,662	7,688	hcf/day	\$137.96
<b>Max Hour</b>	\$1,308,057	18,529	hcf/day	\$70.59
<b>Recycled Water</b>	\$1,090,497	421,678	hcf	\$2.59
<b>Fire Protection (Private)</b>	\$9,288	327	Equivalent fire lines	\$2.37
<b>Meters</b>	\$7,473,117	47,575	Equivalent meters	\$13.09
<b>Customer</b>	\$1,753,475	200,429	Annual bills	\$8.75
<b>Conservation</b>	\$1,252,108	5,653,642	hcf	\$0.22
<b>GWC</b>	\$757,492	671,089	hcf	\$1.13
<b>Urban Agriculture</b>	\$1,620,428	1,025,549	hcf	\$1.58

**Allocation of Costs to Customer Classes**

Lastly, costs are allocated to customer classes using the unit costs developed in Table 5-6/5-7 and the respective number of units for each customer class shown in Table 5-5 to determine a total cost of service, by class. Respective allocations for FY 2016 are below in Table 5-8

**Table 5-8: Customer Class Cost of Service<sup>11</sup>**  
 (In thousands)

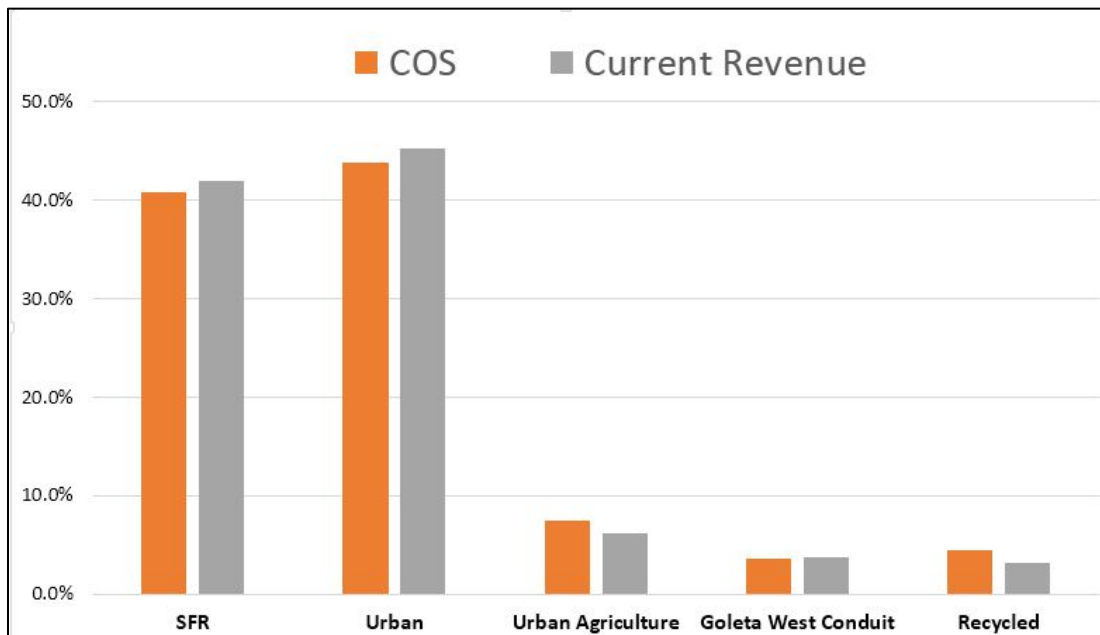
Customer Class	Base	Max Day	Max Hour	Recycled	Fire Protection	Meters
<b>SFR</b>	\$8,454	\$538	\$643			
<b>MFR</b>	\$3,595	\$160	\$238			
<b>Commercial</b>	\$3,522	\$228	\$270			
<b>Institutional</b>	\$1,148	\$60	\$81			
<b>Landscape Irr.</b>	\$895	\$74	\$77			
<b>Urban Agriculture</b>			\$665			
<b>GWC</b>						
<b>Recycled</b>				\$1,090		
<b>Meters</b>						\$7,473
<b>Fire Lines</b>					\$9	
<b>Total</b>	\$17,614	\$1,061	\$1,308	\$1,090	\$9	\$7,473

<sup>11</sup> Values in thousands of dollars

**Table 5-8 (Continued)**

Customer Class	Customer	Conservation	GWC	Urban Ag	Revenue Offsets	Total Cost of Service
<b>SFR</b>		\$421			(\$13)	\$10,043
<b>MFR</b>		\$179			(\$5)	\$4,166
<b>Commercial</b>		\$175			(\$5)	\$4,190
<b>Institutional</b>		\$57			(\$2)	\$1,344
<b>Landscape Irr.</b>		\$45			(\$1)	\$1,089
<b>Urban Agriculture</b>		\$227		\$1,620	(\$7)	\$1,841
<b>GWC</b>		\$149	\$757		(\$5)	\$902
<b>Recycled</b>						\$1,090
<b>Meters</b>	\$1,754					\$9,227
<b>Fire Lines</b>						\$9
<b>Total</b>	\$1,754	\$1,252	\$757	\$1,620	(\$38)	\$33,901

SFR as a class is responsible for approximately 41% of the total cost of service recovered by variable revenue. The combined Urban class, consisting of MFR, commercial, institutional and landscape irrigation, is responsible for another 44%. The remaining 15% is associated with the two agricultural classes and Recycled water. Figure 5-1 graphically displays the cost of service based responsibilities for each customer class relative to current revenue collection, in percentage terms.



**Figure 5-1: Proposed Revenue Adjustments**

## **Goleta Water District**

### **Water Rates and Cost of Service Study Report**

Once the customer class cost responsibility is determined based on cost of service, the next step is to design customer rate structures to recover the revenues required from each customer class, which is discussed in the next section. The rate design analysis illustrates how revenues are collected within each class and how they compare to costs.

The most appropriate way to recover costs (either fixed or variable) is based on multiple criteria (e.g. how costs are incurred, policy objectives, conservation/efficiency considerations, revenue stability). For example, the District aims to ensure that users with low demands, who impose fewer costs on the system because of lower peaking requirements, alternate water source costs, etc., are charged proportionately. Additionally, the District needs to promote conservation and maintain revenue stability.

Monthly fixed charges recover all or a portion of costs associated with customer service, meters (capacity), max day and max hour (peaking), and fire protection. Commodity rates recover all or a portion of costs associated with base (water supply), max day and max hour, recycled water, and conservation. Proposed commodity rates and fixed charges are discussed in the subsequent section.

## **6 RATE DESIGN AND CUSTOMER IMPACTS**

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The revenue requirements and cost of service analysis described in the preceding section of this report allocate costs equitably amongst the different customer classes. Rate design is the process of developing rate schedules for each customer class that meet District objectives and recover the annual cost of service determined for each customer class equitably from the customers in that class. This section of the report discusses the current water rate structure and develops a schedule of water rates and the impact of the proposed rates on various customer classes.

### **6.1 Proposed Rate Structure**

Rate structures should be designed to ensure that customers pay their proportionate share of costs. In addition, rate structures should be easy to understand, simple to administer, meet the District's objectives, and comply with regulatory requirements. District policy has been to provide affordable water for basic health and sanitation needs, encourage water conservation, and support low cost water for agricultural classes. A review of the current rate structure provides insights into the equitability of the current methodology and any changes that should be considered.

#### **Proposed Changes and Restructuring**

The District wants to ensure that the rate structure reflects usage characteristics, charges customers and customer classes equitably, provides for basic needs at an affordable rate and provides incentives for water conservation to all customer classes. This means that the current uniform class rates need to be reviewed. Several factors need to be balanced in the rate design process, including efficient use of resources, conservation to meet regulatory requirements, and revenue stability to mitigate some of the risks associated with high dependence on variable water sales revenues. The District's conservation programs are operated to promote efficient use of potable water supplies, meet the requirements of the California Urban Water Conservation Council (CUWCC) Best Management Practices (BMPs), achieve compliance with SBX7-7 20 X 2020 per capita water use reduction requirements, and further harden the system against recurring drought.

RFC proposes that the District adopt an inclining block rate structure for SFR customers with three tiers. The tiers will consist of the following allotments: Tier one (1) will provide up to 6 units of water (0-6 hcf), Tier two (2) will provide up to 10 units of water from 7-16 hcf, and Tier three (3) will be all units of water greater than 16 hcf. This level of usage provides adequate allowance to meet the basic health and sanitation requirements of residential customers and provide for average historical use of the class within the first two tiers.

## **Goleta Water District**

### **Water Rates and Cost of Service Study Report**

The first tier of 6 hcf is determined by the State's target of 55 gallons per capita per day (gpcd) and the household density of owner occupied homes in the service area as of the 2010 census<sup>12</sup>. This allotment amounts to the indoor requirements of an average family in Goleta. Tier 2 is designed to provide enough water to meet historical average summer use. The District's average monthly use is roughly 13.5 hcf per month with summer use of 16.5 hcf. Summer use is defined as consumption in July, August, and September. The allowance of 10 units in tier 2 provides adequate water to meet outdoor irrigation and other discretionary use for SFR customers. Though individual household and parcel characteristics vary, all use greater than 16 hcf is Tier 3 use, which may be considered excessive or wasteful for the average single-family residence. All use in the third tier is considered discretionary and rates are designed to incentivize conservation.

RFC recommends the District retain a uniform rate for Urban customers. The Urban rate class will consist of four customer classes- MFR, commercial, institutional, and landscape irrigation. These classes share similar use patterns and peaking characteristics, however within any of these classes usage can vary significantly from customer to customer and therefore these classes are considered to be non-homogenous and more suited for a uniform rate structure as opposed to a typical tiered rate structure.

Currently the District has two irrigation classes- landscape and recreation. RFC recommends that the classes be considered as one as there is no difference between the two outside of the current rate differential. The cost of providing service is the same for both and as such they should have the same rate. Combining the two classes has the added benefits of simplifying the rate schedule for communicating to customers, as well as, increasing ease of administration.

RFC proposes that agricultural customers retain two separate classes because they are in fact separate systems. GWC is upstream of the potable distribution system, receives water from a sole supply (Cachuma Lake), has minimal operational and capital costs related to delivery of water, and is subject to interruptible supply in times of extreme shortage or emergency situations at Cachuma Lake. Urban Agriculture on the other hand will benefit from uninterruptible supply with access to District groundwater going forward. Additionally, as part of the potable distribution system the class shares in all capital and operational requirements in the same manner as other potable classes (including groundwater production). In summary, the rate differential between GWC and Urban Agriculture is a combination of operational costs as part of the potable system, capital costs related to ground water access and materially more general cost allocation relative to GWC.

The determination of the proposed rates and charges is presented in the following subsections.

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<sup>12</sup> Owner occupied density estimated at 2.78 people per household. 2.78 multiplied by 55 gpcd over 30 days is approximately 6 hcf.

## **6.2 Monthly Fixed Service Charges**

A service charge is a cost recovery mechanism that is generally included in the rate structure to recover some of the fixed costs including customer related costs, meter costs, and a portion of the capacity related cost to provide a stable source of revenue independent of water consumption.

Currently the District has a tiered fixed charge based in part on water consumption and in part on meter size. The tiered charge only applies to meters less than 1" and only for those in the existing Urban rate class (SFR/MFR/Commercial/Institutional/Landscape Irrigation). The tiers are based on consumption levels of 0-4 hcf, 5-8 hcf, and greater than 8 hcf. Those eligible for tiered pricing have their charge calculated on a 12-month rolling average of use. For meters 1" and larger the fixed charge is based on meter size only, regardless of consumption.

### **Fixed Charge Calculation**

After discussion with District staff it was agreed to keep tiered fixed charges in recognition of the fact that these customers do not impose the same level of demand on the system as larger users and therefore should not be asked to bear all the costs associated with peak demands. That said, RFC proposes that the method in which the fixed charge is calculated should change. These changes will simplify the billing process, be easier to understand than the current calculation, align with SFR commodity tiers, and promote efficient use throughout the year. RFC recommends that the fixed charge use same-month consumption rather than a 12-month rolling average. Moving to same-month use will allow more customers to achieve lower total bills through the year as summer use will no longer affect the fixed charge calculation. Additionally the fixed charge tiers will match the SFR commodity rate tiers for ease of understanding (0-6 hcf, 7-16 hcf, 17+ hcf).

The fixed charge consists of three components: customer costs, meter costs and peaking costs. Customer related costs are fixed expenditures that relate to operational support activities including meter reading, accounting, billing, customer service, and administrative and technical support. The customer related costs are essentially common to all customers and are reasonably uniform across different customer classes and meter sizes. Capacity related costs consist of meter maintenance, capital costs and public fire service costs and are related to the hydraulic capacity of the meters. Since facilities are designed to meet peaking requirements a portion of the peaking costs are allocated to the volumetric rates and a portion to the fixed charge, based on the hydraulic capacity of the meter required to serve each tier and the peaking characteristics of the tiers.

Increasing the fixed charge tends to reduce the variable rates and incentive for conservation. However, with tiered fixed charges, dependent in part on consumption, conservation signaling flows through both fixed and variable revenue recovery. While the proposed fixed charge provides a mechanism for recovering a portion of the fixed costs, tiering introduces some volatility in revenue recovery by creating a link to water sales. The fixed charge design will allow the District to recover approximately 27% of total rate revenue. This rate design seeks an appropriate balance between pricing objectives and the CUWCC BMP 1.4 guideline that fixed revenue should not exceed 30% of the total rate revenue. RFC's rate design

## Goleta Water District

### Water Rates and Cost of Service Study Report

with 27% percent of total rate revenues collected from fixed charges is consistent with the District's historical fixed revenue recovery percentage.

#### Equivalent Meters

A water system is designed to meet peak demands. A customer's peak demand is generally proportional to the size of the meter and, more specifically, its hydraulic capacity. To allocate peaking and capacity related costs appropriately, the concept of "equivalent meters" is utilized. Equivalent meters are calculated by comparing the capacity of all meters in the system to a base meter, generally, the smallest meter in the system, or a meter size with the most meters in the system. Because the District is utilizing a tiered fixed charge, a 1/2" meter was selected as the base meter as customers falling within the first tier could be serviced with a 1/2" meter given their use and peaking characteristics. The capacity ratio is calculated using the meter capacities in gallons per minute (gpm), a measure of flow, provided in the AWWA M22 Manual. By using equivalent meters instead of a simple meter count, the analysis reflects the fact that larger meters impose larger system demands, are more expensive to install, maintain, and replace than smaller meters, and use a greater capacity in the system.

Equivalent meters are used in calculating meter service costs and peaking costs. The equivalent meter ratios used for this study are shown in Table 6-1 below.

**Table 6-1: Equivalent Meter Ratios**

Meter Size	Maximum Capacity (gpm)	Meter Capacity Ratio
1/2"	15	1.00
5/8"	20	1.33
3/4"	30	2.00
1"	50	3.33
1.5"	100	6.67
2"	160	10.67
3"	350	23.33
4"	630	42.00
6"	1400	93.33
8"	2400	160.00
10"	3800	253.33

The Meter cost, determined in the previous section, is multiplied by the meter capacity ratios shown in Table 6-1 to calculate the Meter component. Through the cost of service analysis, the base meter cost (1/2" equivalency) is determined to be \$5.39 per equivalent meter. Therefore the cost for the tier 1 fixed charge (or 1/2" meter) is \$5.39 while tier 3 (and/or 3/4" meter) is \$10.78, twice as much as the 1/2".

The Peaking cost, determined in the previous section, is calculated based on meter capacity ratios shown in Table 6-1 and peaking characteristics of SFR tiers. Tier 1 (or 1/2" meter) is assigned 0% peaking allocation, Tier 2 (or 5/8" meter) 80% allocation, and Tier 3 (or 3/4" meter) 100% allocation. The peaking



## Goleta Water District

### Water Rates and Cost of Service Study Report

cost per equivalent meter (1/2" equivalency) is determined to be \$12.43. Therefore the peaking cost for Tier 1 (a 1/2" meter) is:  $\$12.43 \times 1.00 \times 0\% = \$0.00$

The peaking cost for Tier 3 (or 3/4" meter) is:  $\$12.43 \times 2.00 \times 100\% = \$24.87^{13}$ .

For meters larger than 3/4" -which are not subject to tiering- the peaking component is calculated as 100% of peaking allocation, multiplied by the meter capacity ratio in Table 6-1. The meter cost and peaking cost is then added to the customer cost to compute the total proposed fixed charge shown in the column titled "Proposed Charge" in Table 6-2.

**Table 6-2: Proposed Fixed Charges**

Tier	Meter Size	Meter Capacity Ratio	Meter Component	Customer Component	Peaking Component	Proposed Charge	Current Charge	Difference
<b>T1</b>	5/8"   3/4"	1.00	\$5.39	\$8.75	\$0.00	<b>\$14.14</b>	\$13.08	8%
<b>T2</b>	5/8"   3/4"	1.33	\$7.19	\$8.75	\$13.26	<b>\$29.20</b>	\$26.16	12%
<b>T3</b>	5/8"   3/4"	2.00	\$10.78	\$8.75	\$24.87	<b>\$44.40</b>	\$39.24	13%
	1"	3.33	\$17.97	\$8.75	\$41.44	<b>\$68.16</b>	\$65.42	4%
	1.5"	6.67	\$35.94	\$8.75	\$82.88	<b>\$127.57</b>	\$130.81	-2%
	2"	10.67	\$57.50	\$8.75	\$132.60	<b>\$198.85</b>	\$209.33	-5%
	3"	23.33	\$125.77	\$8.75	\$290.06	<b>\$424.58</b>	\$392.48	8%
	4"	42.00	\$226.38	\$8.75	\$522.10	<b>\$757.23</b>	\$654.14	16%
	6"	93.33	\$503.07	\$8.75	\$1,160.22	<b>\$1,672.04</b>	\$1,308.26	28%
	8"	160.00	\$862.40	\$8.75	\$1,988.94	<b>\$2,860.09</b>	\$2,093.24	37%
	10"	253.33	\$1,365.47	\$8.75	\$3,149.16	<b>\$4,523.38</b>	\$4,972.22	-9%

## 6.3 Commodity Rates

The commodity rate is the rate developed for each customer class which will recover the District's variable volume related costs. The annual estimated FY 2016 revenue requirements, less annual service charge revenues, are the revenues that need to be recovered through commodity rates.

Cost of service based commodity rates are developed for each customer class based on the principle of maintaining inter-class and intra-class revenue neutrality and equity. This means that each customer class only pays its assigned share of costs of service (Refer to Table 5-8 for revenues required from each customer class) and that each member of each class would only pay its fair share of customer class costs. Since a portion of the revenues required from each customer class is to be recovered through uniform monthly service charges, commodity rates are designed to recover only that portion of

<sup>13</sup> Rounded up to the nearest penny

## Goleta Water District

### Water Rates and Cost of Service Study Report

revenues that is not recovered through the service charge. The water commodity rate for each customer class is computed based on the customer class' annual usage revenues required and the estimated annual volume of water usage. The customer classes can be sorted into groups with similar peaking characteristics and a uniform water commodity rate is calculated for each class of customers.

#### ***Proposed Changes***

As discussed in the previous subsection, RFC proposes that the SFR class be re-structured from a uniform commodity rate, to a three tier inclining block rate structure to promote efficiency and water conservation, increase revenue stability and better reflect the cost of providing service within the class. Based on our water usage analysis, shown in Table 6-3 below, the proposed changes will provide an appropriate allocation of water to SFR for discretionary and nondiscretionary needs. Approximately 73% of the total SFR usage and 77% of total SFR bills will fall within the proposed Tiers 1 and 2, respectively.

**Table 6-3: Residential Water Use, by Tier**

Tier	SFR Block	% Usage	% Bills
Tier 1	0-6 hcf	40%	32%
Tier 2	7-16 hcf	33%	46%
Tier 3	17+ hcf	27%	22%

Also discussed in the previous subsection, RFC proposes that the Urban rate class include recreation irrigation (no longer distinguished from landscape irrigation), with the current Urban class constituents of MFR, commercial, institutional and landscape irrigation. In the proposed rate structure, Urban customers pay a uniform rate based on cost of service. The customer classes that constitute the Urban class are not ideally suited for tiered rates because of their non-homogenous usage characteristics.

Agricultural rates are based upon their specific system characteristics, access to supply, interruptibility in the case of GWC and potability in the case of Urban Agriculture. Although Urban Agriculture makes use of the potable system, agricultural customers do not need, and receive no benefit from, potable supplies; the District upgraded the preexisting agricultural system to carry potable water rather than building a separate system for potable customers, and those who need potable water properly bear the cost of that service. Recycled water rates are based on the cost of treating and distributing water via the recycled water distribution system. As the recycled system, GWC, and Urban Agriculture is treated as separate from the potable water distribution system, their costs are allocated specifically to these classes.

**Development and Calculation of Commodity Rates**

Table 6-4 shows the development of the tiered rate for SFR customers. The Base cost represents the costs to deliver water at the average rate, and is applied to all tiers equally. The Max Day and Max Hour costs represent the peaking costs of the system, and it is applied to each tier based on estimated peaking characteristics of each tier. Tier 1 is assumed to have the lowest peaking cost because it provides for indoor water usage with minimal peaking. Tier 2 has a higher peaking cost because it covers outdoor usage (irrigation). Tier 3 has the highest peaking cost because it is excessive outdoor usage. Miscellaneous revenues, such as interest revenue, are used as offsets to reduce the Tier 1 rate, since it provides essential water for health and sanitation purposes. Conversely, outdoor water usage is considered discretionary. Conservation costs are applied only to Tiers 2 and 3, where water use is considered discretionary, inefficient and/or excessive, to recover costs of the District’s conservation programs. Additionally, conservation costs on the higher tiers act as a price signal for water conservation, consistent with District and State of California policy objectives.

**Table 6-4: Proposed SFR Commodity Rate Development**

Commodity Rate						
SFR	Base	Max Day	Max Hour	Offsets	Conservation	Total Rate (\$/hcf)
<b>Tier 1</b>	\$4.45	\$0.00	\$0.08	(\$0.02)	\$0.00	\$4.52
<b>Tier 2</b>	\$4.45	\$0.39	\$0.42	\$0.00	\$0.30	\$5.57
<b>Tier 3</b>	\$4.45	\$0.58	\$0.63	\$0.00	\$0.46	\$6.12

In addition to proposed SFR rates, Table 6-5 shows the proposed uniform rates for all other classes including Urban, agricultural classes and Recycled. For these uniform rate classes the unit rate is calculated by dividing the class’ revenue requirement- as determined in the cost of service analysis- by class usage in hcf. Table 6-5 also shows the difference in the proposed rate- from the current rate- in both dollar and percentage terms.

Note for the calculation of Recycled water rates, capital costs were apportioned 50% to the class and 50% to potable customers. This allocation of capital recognizes that the recycled system is new relative to the potable system overall, and therefore, has minimal capital R&R requirements in the coming years; and the recycled system provides a benefit to the potable classes by offsetting a portion of water demand.

**Table 6-5: Proposed Commodity Rate Calculation**

Customer Class	hcf	Usage, hcf	Proposed Rate	Revenue Required	Current Rate	Difference (\$)	Difference (%)
<b>SFR</b>							
<b>Tier 1</b>	6	764,402	<b>\$4.52</b>		\$5.27	(\$0.75)	(14%)
<b>Tier 2</b>	16	632,974	<b>\$5.57</b>		\$5.27	\$0.30	6%
<b>Tier 3</b>	>16	501,952	<b>\$6.12</b>		\$5.27	\$0.85	16%
		1,899,328		\$10,044,925			
<b>Urban</b>		2,057,677	<b>\$5.25</b>	\$10,790,061	\$5.27	(\$0.02)	0%
<b>Urban Ag.</b>		1,025,549	<b>\$1.80</b>	\$1,841,608	\$1.42	\$0.38	27%
<b>GWC</b>		671,089	<b>\$1.35</b>	\$901,747	\$1.30	\$0.05	4%
<b>Recycled</b>		169,250	<b>\$3.26</b>		\$3.05	\$0.21	7%

## 6.4 Fire Line Service Charges

Fire service charges are assessed to private fire protection lines. The water system is designed to handle fire flows and fire protection is offered as a service to all customers. However, fire service is also provided to private fire service connections. The costs associated with providing fire service were determined in the previous section and are shared between public and private fire connections based on the capacity of the hydrants and the private fire service connections. Based on the cost of service analysis discussed above, a portion of the total costs, equal to the proportional capacity of private fire services, compared to total fire service capacity, are allocated to private fire protection.

The proposed monthly charges are shown in Table 6-6 below. Private fire lines consist of two cost components: customer costs and capacity costs. The customer cost is the same as the fixed charges calculated and described in depth in Section 6.2. All size lines are assessed the customer cost of \$8.75 monthly. The capacity cost is determined by the fire line demand factor, similar to the meter capacity ratios in Section 6.2. As 96% of the District’s fire lines are 1” or less, for the sake of simplicity, it was decided that the demand factor for the smallest fire line was appropriate to be used for all sizes in order to have a uniform charge, irrespective of size.

**Table 6-6: Proposed Fire Line Charges**

Size	Meter Capacity Component	Customer Component	Proposed Charges	Current Charges	Difference (\$)	Difference (%)
<b>5/8"</b>	\$0.69	\$8.75	<b>\$9.44</b>	\$8.00	\$1.44	18%
<b>3/4"</b>	\$0.69	\$8.75	<b>\$9.44</b>	\$8.00	\$1.44	18%
<b>1"</b>	\$0.69	\$8.75	<b>\$9.44</b>	\$8.00	\$1.44	18%
<b>1 1/2"</b>	\$0.69	\$8.75	<b>\$9.44</b>	\$8.00	\$1.44	18%
<b>2"</b>	\$0.69	\$8.75	<b>\$9.44</b>	\$8.00	\$1.44	18%
<b>3"</b>	\$0.69	\$8.75	<b>\$9.44</b>	\$8.00	\$1.44	18%

## 6.5 Proposed Water Rates

The proposed water rates for FY 2016 through FY 2020, reflecting the previously recommended annual revenue adjustments of 2% in FY 2016, 3% in FY 2017, and 4% in FYs 2018-20, are shown in Table 6-7 below. Proposed rates will become effective July 1st of each year, starting July 1, 2015. The rates for FY 2016 are based on the cost of service analysis. Subsequent years' rates are across-the-board increases based on the proposed annual revenue adjustment and designed to meet the revenue requirements for each of those years.

**Table 6-7: Proposed Water Rate Schedule**

	Effective Date				
	July 1, 2015	July 1, 2016	July 1, 2017	July 1, 2018	July 1, 2019
<b>Fixed/Meter Charge</b>					
<b>Meter Size</b>					
<b>Tier 1 (5/8"   3/4")</b>	\$14.14	\$14.57	\$15.16	\$15.77	\$16.41
<b>Tier 2 (5/8"   3/4")</b>	\$29.20	\$30.08	\$31.29	\$32.55	\$33.86
<b>Tier 3 (5/8"   3/4")</b>	\$44.40	\$45.74	\$47.57	\$49.48	\$51.46
<b>1"</b>	\$68.16	\$70.21	\$73.02	\$75.95	\$78.99
<b>1.5"</b>	\$127.57	\$131.40	\$136.66	\$142.13	\$147.82
<b>2"</b>	\$198.85	\$204.82	\$213.02	\$221.55	\$230.42
<b>3"</b>	\$424.58	\$437.32	\$454.82	\$473.02	\$491.95
<b>4"</b>	\$757.23	\$779.95	\$811.15	\$843.60	\$877.35
<b>6"</b>	\$1,672.04	\$1,722.21	\$1,791.10	\$1,862.75	\$1,937.26
<b>8"</b>	\$2,860.09	\$2,945.90	\$3,063.74	\$3,186.29	\$3,313.75
<b>10"</b>	\$4,523.38	\$4,659.09	\$4,845.46	\$5,039.28	\$5,240.86
<b>Fire Line Charge</b>					
<b>Meter Size</b>					
<b>5/8"</b>	\$9.44	\$9.72	\$10.11	\$10.51	\$10.93
<b>3/4"</b>	\$9.44	\$9.72	\$10.11	\$10.51	\$10.93
<b>1"</b>	\$9.44	\$9.72	\$10.11	\$10.51	\$10.93
<b>1.5"</b>	\$9.44	\$9.72	\$10.11	\$10.51	\$10.93
<b>2"</b>	\$9.44	\$9.72	\$10.11	\$10.51	\$10.93
<b>3"</b>	\$9.44	\$9.72	\$10.11	\$10.51	\$10.93
<b>Commodity Rates</b>					
<b>SFR</b>					
<b>Tier 1</b>	\$4.52	\$4.66	\$4.85	\$5.05	\$5.26
<b>Tier 2</b>	\$5.57	\$5.74	\$5.97	\$6.21	\$6.46
<b>Tier 3</b>	\$6.12	\$6.31	\$6.57	\$6.84	\$7.12
<b>Urban</b>	\$5.25	\$5.41	\$5.63	\$5.86	\$6.10
<b>Urban Agriculture</b>	\$1.80	\$1.86	\$1.94	\$2.02	\$2.11
<b>GWC</b>	\$1.35	\$1.40	\$1.46	\$1.52	\$1.59
<b>Recycled Water</b>	\$3.26	\$3.36	\$3.50	\$3.64	\$3.79

## 6.6 Bill Impacts

RFC performed an analysis to evaluate the impact of the proposed rate structure on customers with various water usage levels. The impacts of these changes among and within customer classes are discussed below.

For SFR customers, who account for approximately 80% of the District’s customer base, the bill impacts at various usage levels are shown below in Table 6-8. As discussed earlier in this section, the proposed tiered SFR rates would lower the commodity rate on the first 6 hcf for all users by \$0.75, while the 10 units in the second tier would be charged \$0.30 more than the current uniform rate of \$5.27<sup>14</sup>. Additionally, the revision of the tiered fixed charge to align with the commodity tiers benefits all users less than 17 hcf. This means that given the restructuring of rates, and the revenue adjustment of 2%, high and very high users would see larger bill increases due to both more of their use being priced at tier 3 (\$6.12/hcf) and paying the Tier 3 fixed charge (\$44.39/month). Bill increases from current billing begin at 17 hcf and increase both in absolute and percentage terms as consumption increases.

Average users, those within three to four units of the mean, will see the greatest reduction in their bills due to the savings on the fixed charge (fall in to tier 2) and the benefit of receiving their first 6 units of water at the tier 1 commodity rate. Only those users at 1 and 2 hcf monthly see an increase in absolute dollar terms, albeit negligible, due to the increase in the fixed charge being greater than the decrease in the commodity rate. Note that there are anomalies at 5-6 and 7-8 units per month due to the restructuring of the tiered fixed charge. Those at 5 or 6 hcf that are currently in the second tier of the fixed charge will now be in the first tier; those at 7 or 8 hcf will remain in tier 2 of the fixed charge, however that charge will increase by \$3.04.

**Table 6-8: SFR Bill Impacts**

Monthly Usage Level (hcf)	Existing Bill	Proposed Bill	Difference (\$)	Difference (%)	Cumulative % of Annual Bills
4	\$33.24	<b>\$32.22</b>	(\$1.02)	-3%	19%
6	\$57.78	<b>\$41.26</b>	(\$16.52)	-29%	32%
8	\$68.32	<b>\$67.46</b>	(\$0.86)	-1%	45%
12	\$102.48	<b>\$89.74</b>	(\$12.74)	-12%	65%
16	\$123.56	<b>\$112.02</b>	(\$11.54)	-9%	78%
20	\$144.64	<b>\$151.70</b>	\$7.06	5%	85%
24	\$165.72	<b>\$176.18</b>	\$10.46	6%	90%
32	\$207.88	<b>\$225.14</b>	\$17.26	8%	95%

<sup>14</sup> The proposed commodity rates effective for July 1, 2015 include the 2% revenue adjustment proposed in Section 4 of this report.

**Goleta Water District**

Water Rates and Cost of Service Study Report

Table 6-9 shows the impacts to Urban customers at different levels of usage, assuming a 1” meter. Tables 6-10 and 6-11 illustrate impacts to Urban Agriculture and GWC customers, respectively, assuming a 2” meter.

**Table 6-9: Urban Bill Impacts**

Monthly Usage Level (hcf)	Existing Bill	Proposed Bill	Difference (\$)	Diff (%)
5	\$91.77	<b>\$94.41</b>	\$2.64	3%
15	\$144.47	<b>\$146.91</b>	\$2.44	2%
25	\$197.17	<b>\$199.41</b>	\$2.24	1%
50	\$328.92	<b>\$330.66</b>	\$1.74	1%
250	\$1,382.92	<b>\$1,380.66</b>	(\$2.26)	0%
1000	\$5,335.42	<b>\$5,318.16</b>	(\$17.26)	0%
5000	\$26,415.42	<b>\$26,318.16</b>	(\$97.26)	0%

**Table 6-10: Urban Agriculture Bill Impacts**

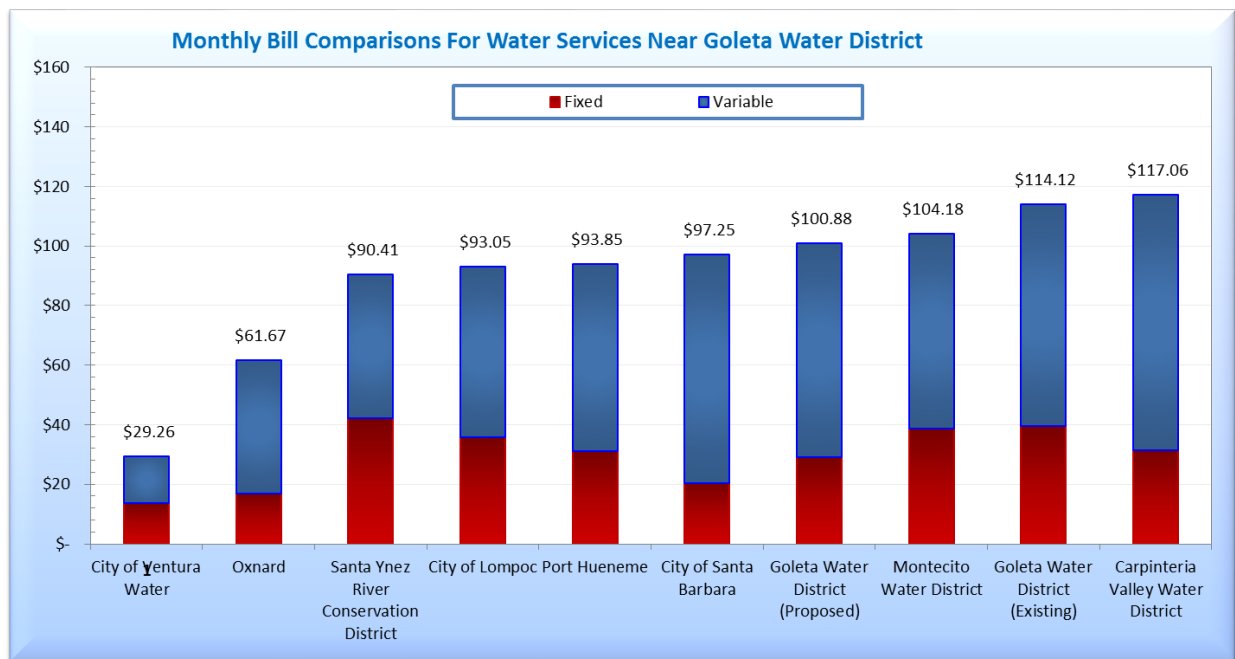
Monthly Usage Level (hcf)	Existing Bill	Proposed Bill	Difference (\$)	Diff (%)
50	\$280.33	<b>\$288.85</b>	\$8.52	3%
500	\$919.33	<b>\$1,098.85</b>	\$179.52	20%
1000	\$1,629.33	<b>\$1,998.85</b>	\$369.52	23%
2500	\$3,759.33	<b>\$4,698.85</b>	\$939.52	25%
5000	\$7,309.33	<b>\$9,198.85</b>	\$1,889.52	26%
7500	\$10,859.33	<b>\$13,698.85</b>	\$2,839.52	26%
10000	\$14,409.33	<b>\$18,198.85</b>	\$3,789.52	26%

**Table 6-11: GWC Bill Impacts**

Monthly Usage Level (hcf)	Existing Bill	Proposed Bill	Difference (\$)	Diff (%)
50	\$274.33	<b>\$266.35</b>	(\$7.98)	-3%
500	\$859.33	<b>\$873.85</b>	\$14.52	2%
1000	\$1,509.33	<b>\$1,548.85</b>	\$39.52	3%
2500	\$3,459.33	<b>\$3,573.85</b>	\$114.52	3%
5000	\$6,709.33	<b>\$6,948.85</b>	\$239.52	4%
7500	\$9,959.33	<b>\$10,323.85</b>	\$364.52	4%
10000	\$13,209.33	<b>\$13,698.85</b>	\$489.52	4%

## 6.7 Rate Survey

Figure 6-1 below indicates a comparison of the typical District SFR customer bills to neighboring utilities. The comparison is based upon annual average SFR use of approximately 14 hcf and the equivalent fixed/service charge. Such comparisons can provide insights into a utility’s pricing policies related to service. Care should be taken, however, in drawing conclusions from such a comparison as some factors including geographic location, demand, customer constituency, level of treatment, level of grant funding, age of system, sources of water costs, and rate-setting methodology, which all affect the cost of providing services. The following table and figures show the comparison between the District’s current and proposed rates with those of neighboring water service providers. The rates shown are base, or non-drought rates, and include no surcharges for revenue recovery in times of drought.



**Figure 6-1: Comparison of Neighboring Agencies – Total Monthly Water Bill<sup>15</sup>**

<sup>15</sup> Bill comparison reports current bills using existing rates only. Excludes proposed and adopted rates to be effective by July 1, 2015.



## 7 DROUGHT SURCHARGES

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### 7.1 Background

On March 11, 2014 the District declared a Stage I drought shortage. With intensification of the state-wide drought, and reduced Cachuma Lake supply and State Water Project deliveries, the District declared Stage II on September 9, 2014. Due to the ongoing drought, water supply constraints and mandatory demand reduction measures, the District asked RFC to develop drought surcharges to aid in demand reduction efforts, while maintaining revenue stability during times of reduced water sales. Drought surcharges are consistent with Executive Order B-29-15, issued by Governor Brown April 1, 2015 and ordering the State Water Resources Control Board to impose water use restrictions to achieve a 25% reduction in statewide potable urban water use. Specifically, Paragraph 8 of the Executive Order states:

*“The Water Board shall direct urban water suppliers to develop rate structures and other pricing mechanisms, including but not limited to surcharges, fees, and penalties, to maximize water conservation consistent with statewide water restrictions...”*

This section documents the key assumptions involved in the development of the drought surcharges, an overview of the drought surcharge calculations and a summary of proposed drought surcharges, by class, at each of the five stages of drought, and for each of the next five years of proposed rates.

During the course of the engagement, RFC developed several drought surcharge options for times of shortage and presented them to District staff and the Administration Committee. The Committee agreed to have the District Board decide between two different revenue neutral options. The first option is for an “across-the-board” percentage increase surcharge based upon each class and tier’s base commodity rate (non-drought commodity rate). The second option is an “across-the-board” dollar increase applied to all units of water in each class and tier equally, irrespective of the non-drought/base commodity rate.

### 7.2 Assumptions

The drought surcharges presented in this section use as its base the proposed FY 2016-FY 2020 commodity rates presented in Section 6.5. The surcharge modifies the commodity rate to achieve conservation as required in the Drought Preparedness and Water Shortage Contingency Plan (Drought Management Plan). Each stage of shortage within the Drought Management Plan targets a specific system-wide demand reduction, with reductions ranging from 15% to greater than 50% of base use. Table 7-1 outlines the reductions at each stage which are then used in the calculation of drought

## Goleta Water District

### Water Rates and Cost of Service Study Report

surcharges later in this section. Rates for Stage I- which target 15% *voluntary* reduction- are excluded from this analysis. Drought surcharges will only be adopted for stages II-V.

**Table 7-1: System-Wide Reduction Targets**

Stage	Reduction Target (%)
I	15%
II	25%
III	35%
IV	45%
V	>50%

### Revenue Requirements

The baseline for the rate calculations are the revenue requirements projected for FY 2016. From this baseline, drought specific expenditures are included to recover any additional water shortage and conservation related costs. As the majority of water supply costs are fixed, and any savings from reduced Cachuma Lake and State Water deliveries are offset by increased groundwater production, no savings are identified associated with reduced water sales.

Drought specific costs are anticipated to begin in Stage I and are associated with increased conservation program costs- these costs increase markedly in each stage of drought. Additional drought specific costs associated with emergency pumping operations at Cachuma Lake begin in Stage III. Of note, additional drought related costs in FY 2016 are materially different than future years due to a one time state grant related to emergency pumping costs at Cachuma Lake. Drought specific costs for FY 2016 are presented in Table 7-2.

**Table 7-2: Drought Specific Expenditures**

Activity	Drought Stage				
	Stage I	Stage II	Stage III	Stage IV	Stage V
Leak Survey	\$0	\$75,000	\$75,000	\$150,000	\$150,000
Response to Leaks	\$0	\$187,500	\$187,500	\$375,000	\$375,000
Conservation Personnel	\$0	\$88,000	\$198,000	\$264,000	\$308,000
Public Outreach	\$146,000	\$239,004	\$262,904	\$289,195	\$318,114
Conservation Program Rebates	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
COMB Emergency Pumping <sup>16</sup>	\$0	\$0	\$399,000	\$351,000	\$302,000
<b>Total Costs</b>	<b>\$296,000</b>	<b>\$739,504</b>	<b>\$1,272,404</b>	<b>\$1,579,195</b>	<b>\$1,603,114</b>

### Consumption

Table 7-3 below indicates the forecasted water use for FY 2016. The consumption levels indicated below correspond with a typical, non-water shortage year for the District. Consequently, these usage levels by customer class serve as a baseline for the consumption assumptions used in each water shortage stage.

<sup>16</sup> Emergency pumping costs in FY 2016 are \$270,000 less at each stage due to a one-time state grant

## Goleta Water District

### Water Rates and Cost of Service Study Report

In Stage II, for example, an overall mandatory reduction of 25% is required. Table 7-3 estimates Stage II usage with a 25% reduction. The forecasted usage for each of the remaining drought stages is determined using the same logic. Note, the across-the-board percentage increase model assumes the same level of reduced demand from all classes and tiers as illustrated in the “Stage II Usage (hcf)” column in Table 7-3.

**Table 7-3: Baseline Consumption, FY 2016**

Customer Class	Monthly Tier	Base Usage (hcf)	Stage II Usage (hcf)
<b>SFR</b>			
Tier 1	6	764,402	567,568
Tier 2	16	632,974	469,983
Tier 3	>16	501,952	372,699
<b>SFR Total</b>		<b>1,899,328</b>	<b>1,410,251</b>
<b>Urban</b>			
MFR		807,609	599,650
Commercial		791,161	587,437
Institutional		257,826	191,436
Landscape Irrigation		201,080	149,302
<b>Urban Total</b>		<b>2,057,677</b>	<b>1,527,825</b>
<b>Agriculture</b>			
Urban Agriculture		1,025,549	761,470
GWC		671,089	498,283
<b>Total</b>		<b>5,653,642</b>	<b>4,197,830</b>

### 7.3 Drought Surcharge Design

As mentioned earlier, the basis for the drought surcharge design are the projected revenue requirements and customer units (water sales) for FY 2016. Table 7-4 below indicates the existing FY 2016 rates.

As indicated, the proposed rate structure for SFR is an inclining block structure whose unit rates increase as customer consumption crosses certain thresholds; all other rate classes have uniform commodity rates. For SFR tiers, consumption is billed from 0 to 6 hcf at \$4.52/hcf, 7 to 16 hcf at \$5.57/hcf, and consumption greater than 16 hcf at \$6.12/hcf.

**Table 7-4: Proposed FY 2016 Commodity Rates**

<b>Customer Class</b>	<b>Monthly Tier</b>	<b>Base Rates (\$/hcf)</b>
<b>SFR</b>		
Tier 1	<b>6</b>	<b>\$4.52</b>
Tier 2	<b>16</b>	<b>\$5.57</b>
Tier 3	<b>&gt;16</b>	<b>\$6.12</b>
<b>Urban</b>		
MFR		<b>\$5.25</b>
Commercial		<b>\$5.25</b>
Institutional		<b>\$5.25</b>
Landscape Irrigation		<b>\$5.25</b>
<b>Agriculture</b>		
Urban Agriculture		<b>\$1.80</b>
GWC		<b>\$1.35</b>

**Drought Surcharge Calculations and Proposed Rates**

The proposed rates are based on the 5 drought stages. Consumption reduction is considered mandatory in Stages II through V, with increasing reduction with each stage to reflect the severity of the water shortage and achieve the desired reduction in consumption. As discussed above, the District was presented with a variety of options to address the need for conservation via the District’s rate structure. The two options presented to the District are revenue neutral and establish a surcharge for each drought stage that recovers the base FY 2016 revenue requirement and additional drought specific costs.

Table 7-5 and Table 7-6 below details the calculation of the surcharge for Stage II at uniform percentage increase and uniform dollar increase. The same calculation is used for Stages III-V but excluded here for brevity.

**Table 7-5: Drought Surcharge Calculation (% Increase), Stage II**

Stage II					
FY 2016	25%				
Customer Class	Monthly Tier	Base Rates (\$/hcf)	Estimated Usage	Rate Increase	Drought Surcharge (\$)
				<b>38%</b>	
<b>SFR</b>					
Tier 1	6	\$4.52	573,302	38%	\$1.72
Tier 2	16	\$5.57	474,731	38%	\$2.12
Tier 3	>16	\$6.12	376,464	38%	\$2.33
<b>SFR Total</b>			<b>1,424,496</b>		
<b>Urban</b>					
MFR		\$5.25	605,707	38%	\$2.00
Commercial		\$5.25	593,371	38%	\$2.00
Institutional		\$5.25	193,370	38%	\$2.00
Landscape Irrigation		\$5.25	150,810	38%	\$2.00
<b>Urban Total</b>			<b>1,543,258</b>		
<b>Agriculture</b>					
Urban Agriculture		\$1.80	769,162	38%	\$0.69
GWC		\$1.35	503,317	38%	\$0.52

The above calculations involve the following steps: first we define the baseline (non-water shortage) consumption as 5.65 million hcf; second, we apply, across-the-board, the percentage reductions in consumption required to achieve the overall 25%. The 25% is applied to all classes equally to determine the estimated water sales after reduction, in this case 4.24 million hcf. Third, we determine the increase, from base rate, to meet the Stage II adjusted revenue requirement<sup>17</sup>, in this case 38%. The surcharge is then determined to be 38% of the base commodity rate. For example, the SFR tier 3 surcharge is 38% of \$6.12, or \$2.33 as shown in Table 7-5.

In the percentage increase model above, the surcharge is proportional to the base rate of the customer class, and for SFR, the tier. In this respect, the surcharge is a different value for each class, which may be less easily understood than a uniform dollar surcharge. However, this model increases the spread between the SFR tiers at each drought stage, which further incentivizes conservation in Tier 3 and in to Tier 2. Additionally, since the percentage increase is determined by the base rate, this model maintains more affordable agricultural water relative to the uniform dollar surcharge. This may be problematic in

<sup>17</sup> The revenue requirement at each stage includes the original, or base, requirement plus drought specific expenditures. This determines the total revenue-neutral requirement.

**Goleta Water District**

Water Rates and Cost of Service Study Report

the higher stages where required reductions are higher, leading to a larger percentage of total system demand being agricultural water, and making conservation targets more difficult to achieve.

An alternative to the fixed percentage increase is a uniform dollar increase as shown below.

**Table 7-6: Drought Surcharge Calculation (\$ Increase), Stage II**

Uniform Surcharge Model		
FY 2016		25%
<b>Baseline Requirements</b>		<b>Stage II Requirements</b>
Commodity Revenue Requirement		\$23,574,169
Drought Specific Expenditures		\$ 739,504
Total Revenue Requirement		\$24,313,673
Baseline Units Sold (hcf)		4,240,232
Average Rate		\$5.74
Drought Surcharge		\$1.57
Customer Class	Base Usage	Drought Surcharge (\$/hcf)
<b>SFR</b>		
<b>Tier 1</b>	764,402	\$1.57
<b>Tier 2</b>	632,974	\$1.57
<b>Tier 3</b>	501,952	\$1.57
<b>Urban</b>		
MFR	807,609	\$1.57
Commercial	791,161	\$1.57
Institutional	257,826	\$1.57
Landscape Irrigation	201,080	\$1.57
<b>Agriculture</b>		
Urban Agriculture	1,025,549	\$1.57
GWC	671,089	\$1.57

The above calculations involve the following steps: first we define the baseline (non-water shortage) consumption as 5.65 million hcf; second, we apply, across-the-board, the percentage reductions in consumption required to achieve the overall 25%. The 25% is applied equally to determine the estimated water sales after reduction, in this case 4.24 million hcf. Third, we determine the Stage II

**Goleta Water District**

Water Rates and Cost of Service Study Report

adjusted revenue requirement<sup>18</sup>. Fourth, the stage adjusted revenue requirement is divided by the reduced water sales to determine an average, or marginal, unit cost of water. The surcharge is then applied uniformly, irrespective of class. That is to say, all users pay the same per unit drought surcharge.

The uniform dollar surcharge is based on the marginal increase in the average unit cost of water. Relative to the uniform percentage surcharge, this model is easily understood as all users, irrespective of tier or class pays the same amount. This surcharge is based on equity where all units of water are treated the same. A uniform dollar surcharge provides much stronger incentive for agricultural customers to conserve since the percentage increase (relative to the base rate) is much higher than the percentage increase in the other model. However, the uniform dollar surcharge provides less incentive to reduce consumption in the Urban class, and in particular the SFR class- while the uniform percentage increase maintains the integrity of the inclining tiers, the uniform dollar surcharge muddles the tiers to where in the highest stages there is little difference between Tier 1 and Tier 3.

The District adopted the Marginal Cost or uniform dollar surcharge.

The calculation is performed identically for Stages III-V to produce the drought surcharge schedules in Table 7-7.

**Table 7-7: Proposed Drought Surcharges, by Stage**

Commodity Rate & Drought Surcharge: Uniform Percentage Increase						
Class	Base Rate	[-----Drought Surcharge-----]				
		Stage I	Stage II	Stage III	Stage IV	Stage V
<b>SFR</b>						
<b>Tier 1</b>	\$4.52	\$0.00	\$1.72	\$2.81	\$4.25	\$6.20
<b>Tier 2</b>	\$5.57	\$0.00	\$2.12	\$3.46	\$5.24	\$7.64
<b>Tier 3</b>	\$6.12	\$0.00	\$2.33	\$3.80	\$5.76	\$8.39
<b>Urban</b>						
<b>MFR</b>	\$5.25	\$0.00	\$2.00	\$3.26	\$4.94	\$7.20
<b>Commercial</b>	\$5.25	\$0.00	\$2.00	\$3.26	\$4.94	\$7.20
<b>Institutional</b>	\$5.25	\$0.00	\$2.00	\$3.26	\$4.94	\$7.20
<b>Landscape Irrigation</b>	\$5.25	\$0.00	\$2.00	\$3.26	\$4.94	\$7.20
<b>Agriculture</b>						
<b>Urban Agriculture</b>	\$1.80	\$0.00	\$0.69	\$1.12	\$1.70	\$2.47
<b>Goleta West Conduit</b>	\$1.35	\$0.00	\$0.52	\$0.84	\$1.27	\$1.85

<sup>18</sup>The revenue requirement at each stage includes the original, or base, requirement plus drought specific expenditures. This determines the revenue-neutral total requirement.

**Goleta Water District**  
 Water Rates and Cost of Service Study Report

<b>Commodity Rate &amp; Drought Surcharge: Uniform Dollar Increase</b>						
<b>Class</b>	<b>Base Rate</b>	<b>[-----Drought Surcharge-----]</b>				
		Stage I	Stage II	Stage III	Stage IV	Stage V
<b>SFR</b>						
<b>Tier 1</b>	\$4.52	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Tier 2</b>	\$5.57	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Tier 3</b>	\$6.12	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Urban</b>						
<b>MFR</b>	\$5.25	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Commercial</b>	\$5.25	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Institutional</b>	\$5.25	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Landscape Irrigation</b>	\$5.25	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Agriculture</b>						
<b>Urban Agriculture</b>	\$1.80	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73
<b>Goleta West Conduit</b>	\$1.35	\$0.00	\$1.57	\$2.60	\$3.92	\$5.73



# Goleta Water District

## Water Rates and Cost of Service Study Report

Description	Base	Max Day	Max Hour	Recycled Water	Fire Protection	Meters	Customer	Conservation	GWC	Urban Ag	General	Total
<b>Water Supply &amp; Conservation</b>												
Telemetry	\$423	\$0	\$0	\$0	\$0	\$0	\$0	\$845	\$0	\$0	\$845	\$2,114
O & M purchases	\$143	\$0	\$0	\$0	\$0	\$0	\$0	\$287	\$0	\$0	\$287	\$717
Office Services & Supplies	\$2,926	\$0	\$0	\$0	\$0	\$0	\$0	\$5,851	\$0	\$0	\$5,851	\$14,628
Purchased water	\$0	\$0	\$0	\$662,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$662,084
CCWA O & M Expenses	\$8,849,288	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,849,288
Cachuma water entitlement	\$558,107	\$0	\$0	\$0	\$0	\$0	\$0	\$152,211	\$212,173	\$0	\$0	\$922,491
Cachuma O & M Assessments	\$1,122,407	\$0	\$0	\$0	\$0	\$0	\$0	\$306,111	\$426,700	\$0	\$0	\$1,855,218
Cachuma Consv & Release Brd	\$496,070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135,292	\$188,589	\$0	\$819,950
Conservation Activities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$474,776	\$0	\$0	\$0	\$474,776
Contract services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$178,602	\$178,602
Computer systems maintenance	\$7,290	\$0	\$0	\$0	\$0	\$0	\$0	\$14,579	\$0	\$0	\$14,579	\$36,449
Postage & Shipping	\$20	\$0	\$0	\$0	\$0	\$0	\$0	\$40	\$0	\$0	\$40	\$99
Travel & Hospitality Expenses	\$535	\$0	\$0	\$0	\$0	\$0	\$0	\$1,070	\$0	\$0	\$1,070	\$2,674
formation & Community Relations Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$164,557	\$0	\$0	\$70,525	\$235,082
Continuing education, training	\$854	\$0	\$0	\$0	\$0	\$0	\$0	\$1,709	\$0	\$0	\$1,709	\$4,272
Audit and accounting	\$643	\$0	\$0	\$0	\$0	\$0	\$0	\$1,285	\$0	\$0	\$1,285	\$3,214
Casualty & Liability Expenses	\$3,120	\$0	\$0	\$0	\$0	\$0	\$0	\$6,239	\$0	\$0	\$6,239	\$15,598
Memberships/Publications	\$801	\$0	\$0	\$0	\$0	\$0	\$0	\$1,601	\$0	\$0	\$1,601	\$4,004
Miscellaneous source of supply exp	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Payroll	\$145,309	\$0	\$0	\$0	\$0	\$0	\$0	\$290,618	\$0	\$0	\$290,618	\$726,546
Overtime paid	\$631	\$0	\$0	\$0	\$0	\$0	\$0	\$1,261	\$0	\$0	\$1,261	\$3,153
Vacation time accrued	\$8,984	\$0	\$0	\$0	\$0	\$0	\$0	\$17,969	\$0	\$0	\$17,969	\$44,921
Sick leave accrued	\$1,983	\$0	\$0	\$0	\$0	\$0	\$0	\$3,967	\$0	\$0	\$3,967	\$9,917
Compensatory time accrued	\$318	\$0	\$0	\$0	\$0	\$0	\$0	\$637	\$0	\$0	\$637	\$1,592
Other P.T.O.	\$64	\$0	\$0	\$0	\$0	\$0	\$0	\$128	\$0	\$0	\$128	\$319
Holiday paid time off	\$12,883	\$0	\$0	\$0	\$0	\$0	\$0	\$25,766	\$0	\$0	\$25,766	\$64,414
Payroll taxes	\$11,342	\$0	\$0	\$0	\$0	\$0	\$0	\$22,683	\$0	\$0	\$22,683	\$56,708
Workers' Comp Insurance	\$1,427	\$0	\$0	\$0	\$0	\$0	\$0	\$2,853	\$0	\$0	\$2,853	\$7,133
Medical insurance	\$16,874	\$0	\$0	\$0	\$0	\$0	\$0	\$33,748	\$0	\$0	\$33,748	\$84,369
Retirement, Life & Disability Insurance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other employees' benefits	\$1,409	\$0	\$0	\$0	\$0	\$0	\$0	\$2,818	\$0	\$0	\$2,818	\$7,045
Allocated to C.I.P.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$170,618)	(\$170,618)
Allocated from other depts.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Chemicals & filtering materias	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water quality testing, complia	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Purchased power	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vehicle fuels and maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contracted services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Small tools & work equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Buildings & grounds maint	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project purchases	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Standby/on-call paid-Cross	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated to other depts.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Payroll burden	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project equipment costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Operations</b>												
Telemetry	\$11,294	\$7,454	\$18,748	\$653	\$5,933	\$8,899	\$2,966	\$0	\$475	\$2,907	\$0	\$59,328
O & M purchases	\$69,100	\$45,606	\$114,706	\$3,993	\$36,299	\$54,449	\$18,150	\$0	\$2,904	\$17,787	\$0	\$362,993
Purchased power	\$149,326	\$149,326	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$79,388	\$0	\$378,040
Contracted services	\$142,587	\$94,107	\$236,694	\$8,239	\$74,903	\$112,355	\$37,452	\$0	\$5,992	\$36,702	\$0	\$749,030
Office Services & Supplies	\$5,221	\$3,446	\$8,667	\$302	\$2,743	\$4,114	\$1,371	\$0	\$219	\$1,344	\$0	\$27,427
Misc. O & M expenses	\$1,831	\$1,208	\$3,039	\$106	\$962	\$1,443	\$481	\$0	\$77	\$471	\$0	\$9,618
Purchased water	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Chemicals & filtering materias	\$229,538	\$151,495	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$381,033
Vehicle fuels and maintenance	\$26,363	\$17,400	\$43,763	\$1,523	\$13,849	\$20,774	\$6,925	\$0	\$1,108	\$6,786	\$0	\$138,491
Tax & freight on inventory	\$5,294	\$3,494	\$8,788	\$306	\$2,781	\$4,172	\$1,391	\$0	\$222	\$1,363	\$0	\$27,810
Inventory adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Scrap Account	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capitalized Equipment Charges	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Professional Fees	\$1,044	\$689	\$1,733	\$0	\$612	\$0	\$0	\$0	\$0	\$0	\$0	\$4,079
Contract revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract costs-Customer Projects	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Uniforms & Laundry	\$5,602	\$3,697	\$9,300	\$324	\$2,943	\$4,414	\$1,471	\$0	\$235	\$1,442	\$0	\$29,429
Small tools & work equipment	\$9,369	\$6,184	\$15,553	\$541	\$4,922	\$7,383	\$2,461	\$0	\$394	\$2,412	\$0	\$49,218
Equipment expenses	\$7,285	\$4,808	\$12,094	\$421	\$3,827	\$5,741	\$1,914	\$0	\$306	\$1,875	\$0	\$38,271
Contract services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Computer systems maintenance	\$18,394	\$12,140	\$30,534	\$1,063	\$9,663	\$14,494	\$4,831	\$0	\$773	\$4,735	\$0	\$96,625
Postage & Shipping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$927
Buildings & grounds maint	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$114,596	\$114,596
Water quality testing, complia	\$142,575	\$94,099	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$236,674
Continuing education, training	\$8,117	\$5,357	\$13,474	\$0	\$4,756	\$0	\$0	\$0	\$0	\$0	\$0	\$31,703
Audit and accounting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Casualty & Liability Expenses	\$27,914	\$18,423	\$46,337	\$0	\$16,354	\$0	\$0	\$0	\$0	\$0	\$0	\$109,028
Miscellaneous G & A Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Memberships/Publications	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
H R; recruiting & retention	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$927	\$927
Security expenses	\$41,879	\$27,640	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$69,519
Payroll	\$526,254	\$347,328	\$873,582	\$30,409	\$276,450	\$414,675	\$138,225	\$0	\$22,116	\$135,460	\$0	\$2,764,500
Overtime paid	\$14,274	\$9,421	\$23,694	\$825	\$7,498	\$11,247	\$3,749	\$0	\$600	\$3,674	\$0	\$74,981
Double time paid	\$862	\$569	\$1,430	\$50	\$453	\$679	\$226	\$0	\$36	\$222	\$0	\$4,526
Premium paid	\$23,445	\$15,474	\$38,919	\$1,355	\$12,316	\$18,474	\$6,158	\$0	\$985	\$6,035	\$0	\$123,160
Standby/on-call paid	\$26,166	\$17,269	\$43,435	\$1,512	\$13,745	\$20,618	\$6,873	\$0	\$1,100	\$6,735	\$0	\$137,452
Vacation time accrued	\$39,886	\$26,325	\$66,211	\$2,305	\$20,953	\$31,429	\$10,476	\$0	\$1,676	\$10,267	\$0	\$209,530
Sick leave accrued	\$27,592	\$18,211	\$45,803	\$1,594	\$14,495	\$21,742	\$7,247	\$0	\$1,160	\$7,102	\$0	\$144,948
Compensatory time accrued	\$3,969	\$2,620	\$6,589	\$229	\$2,085	\$3,128	\$1,043	\$0	\$167	\$1,022	\$0	\$20,852
Other P.T.O.	\$3,530	\$2,330	\$5,861	\$204	\$1,855	\$2,782	\$927	\$0	\$148	\$909	\$0	\$18,546
Holiday paid time off	\$26,037	\$17,185	\$43,222	\$1,505	\$13,678	\$20,517	\$6,839	\$0	\$1,094	\$6,702	\$0	\$136,778
Payroll taxes	\$45,643	\$30,125	\$75,768	\$2,637	\$23,977	\$35,966	\$11,989	\$0	\$1,918	\$11,749	\$0	\$239,772

Appendix A (continued)

# Goleta Water District

## Water Rates and Cost of Service Study Report

Workers' Comp Insurance	\$23,397	\$15,442	\$38,839	\$1,352	\$12,291	\$18,436	\$6,145	\$0	\$983	\$6,022	\$0	\$122,907
Medical insurance	\$87,057	\$57,458	\$144,515	\$5,031	\$45,733	\$68,599	\$22,866	\$0	\$3,659	\$22,409	\$0	\$457,326
Retirement, Life & Disability Insurance	\$201,847	\$133,219	\$335,066	\$11,664	\$106,033	\$159,050	\$53,017	\$0	\$8,483	\$51,956	\$0	\$1,060,335
Other employees' benefits	\$1,341	\$885	\$2,226	\$77	\$705	\$1,057	\$352	\$0	\$56	\$345	\$0	\$7,045
Contract labor	\$471	\$311	\$781	\$27	\$247	\$371	\$124	\$0	\$20	\$121	\$0	\$2,472
Allocated to C.I.P.	(\$248,321)	(\$163,892)	(\$412,213)	\$0	(\$145,487)	\$0	\$0	\$0	\$0	\$0	\$0	(\$969,914)
Allocated from other depts.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project purchases	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated to other depts.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
formation & Community Relations Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Payroll burden	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Closings cost adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project equipment costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Uncollectible accounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Engineering</b>												
Telemetry	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Office Services & Supplies	\$1,769	\$1,167	\$2,936	\$904	\$1,355	\$904	\$0	\$0	\$0	\$0	\$0	\$9,305
Small tools & work equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract services	\$3,581	\$2,364	\$5,945	\$1,829	\$2,744	\$1,829	\$0	\$0	\$0	\$0	\$0	\$18,293
Computer systems maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Travel & Hospitality Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Continuing education, training	\$302	\$200	\$502	\$155	\$232	\$155	\$0	\$0	\$0	\$0	\$0	\$1,545
Audit and accounting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Casualty & Liability Expenses	\$2,497	\$1,648	\$4,146	\$1,276	\$1,913	\$1,276	\$0	\$0	\$0	\$0	\$0	\$12,756
Miscellaneous G & A Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Payroll	\$101,363	\$66,900	\$168,262	\$51,773	\$77,660	\$51,773	\$0	\$0	\$0	\$0	\$0	\$517,731
Overtime paid	\$164	\$108	\$272	\$84	\$126	\$84	\$0	\$0	\$0	\$0	\$0	\$838
Double time paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vacation time accrued	\$8,020	\$5,293	\$13,313	\$4,096	\$6,145	\$4,096	\$0	\$0	\$0	\$0	\$0	\$40,964
Sick leave accrued	\$5,439	\$3,590	\$9,029	\$2,778	\$4,167	\$2,778	\$0	\$0	\$0	\$0	\$0	\$27,782
Compensatory time accrued	\$468	\$309	\$777	\$239	\$359	\$239	\$0	\$0	\$0	\$0	\$0	\$2,392
Holiday paid time off	\$5,043	\$3,329	\$8,372	\$2,576	\$3,864	\$2,576	\$0	\$0	\$0	\$0	\$0	\$25,759
Payroll taxes	\$8,550	\$5,643	\$14,194	\$4,367	\$6,551	\$4,367	\$0	\$0	\$0	\$0	\$0	\$43,672
Workers' Comp Insurance	\$1,219	\$804	\$2,023	\$622	\$934	\$622	\$0	\$0	\$0	\$0	\$0	\$6,224
Medical insurance	\$11,392	\$7,518	\$18,910	\$5,818	\$8,728	\$5,818	\$0	\$0	\$0	\$0	\$0	\$58,185
Retirement, Life & Disability Insurance	\$35,802	\$23,629	\$59,431	\$18,286	\$27,430	\$18,286	\$0	\$0	\$0	\$0	\$0	\$182,864
Allocated to C.I.P.	(\$109,951)	(\$72,568)	(\$182,519)	(\$56,160)	(\$84,240)	(\$56,160)	\$0	\$0	\$0	\$0	\$0	(\$561,597)
Allocated from other depts.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project purchases	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated to other depts.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Payroll burden	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Closings cost adjustment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project other costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Administration</b>												
Telemetry	\$0	\$0	\$0	\$0	\$0	\$11,158	\$0	\$0	\$0	\$33,474	\$0	\$44,632
Contracted services	\$0	\$0	\$0	\$0	\$0	\$1,653	\$0	\$0	\$0	\$4,959	\$0	\$6,613
Office Services & Supplies	\$0	\$0	\$0	\$0	\$0	\$9,312	\$0	\$0	\$0	\$27,936	\$0	\$37,248
Bank fees and charges	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,538	\$0	\$48,538
Cash Short (Over)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Directors' fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$85,086	\$0	\$85,086
Directors' Reimbursements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,832	\$0	\$3,832
Contract services	\$0	\$0	\$0	\$0	\$0	\$526,058	\$0	\$0	\$0	\$0	\$0	\$526,058
Computer systems maintenance	\$0	\$0	\$0	\$0	\$0	\$17,922	\$0	\$0	\$0	\$53,766	\$0	\$71,688
Postage & Shipping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,064	\$0	\$20,064
Buildings & grounds maint	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Travel & Hospitality Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,924	\$0	\$8,924
formation & Community Relations Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52,526	\$0	\$52,526
Continuing education, training	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,865	\$0	\$10,865
Legal fees and expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$298,704	\$0	\$298,704
Audit and accounting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36,561	\$0	\$36,561
Casualty & Liability Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,588	\$0	\$49,588
Miscellaneous G & A Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Memberships/Publications	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,525	\$0	\$45,525
H R; recruiting & retention	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,296	\$0	\$10,296
Payroll	\$0	\$0	\$0	\$0	\$0	\$341,868	\$0	\$0	\$0	\$1,025,604	\$0	\$1,367,472
Overtime paid	\$0	\$0	\$0	\$0	\$0	\$4,847	\$0	\$0	\$0	\$14,540	\$0	\$19,387
Double time paid	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Vacation time accrued	\$0	\$0	\$0	\$0	\$0	\$18,815	\$0	\$0	\$0	\$56,445	\$0	\$75,260
Sick leave accrued	\$0	\$0	\$0	\$0	\$0	\$17,271	\$0	\$0	\$0	\$51,813	\$0	\$69,084
Compensatory time accrued	\$0	\$0	\$0	\$0	\$0	\$612	\$0	\$0	\$0	\$1,835	\$0	\$2,446
Other P.T.O.	\$0	\$0	\$0	\$0	\$0	\$1,394	\$0	\$0	\$0	\$4,183	\$0	\$5,577
Holiday paid time off	\$0	\$0	\$0	\$0	\$0	\$15,497	\$0	\$0	\$0	\$46,491	\$0	\$61,988
Payroll taxes	\$0	\$0	\$0	\$0	\$0	\$25,350	\$0	\$0	\$0	\$76,051	\$0	\$101,401
Workers' Comp Insurance	\$0	\$0	\$0	\$0	\$0	\$3,419	\$0	\$0	\$0	\$10,257	\$0	\$13,676
Medical insurance	\$0	\$0	\$0	\$0	\$0	\$37,917	\$0	\$0	\$0	\$113,752	\$0	\$151,670
Retirement, Life & Disability Insurance	\$0	\$0	\$0	\$0	\$0	\$111,807	\$0	\$0	\$0	\$335,422	\$0	\$447,229
Other employees' benefits	\$0	\$0	\$0	\$0	\$0	\$5,284	\$0	\$0	\$0	\$15,852	\$0	\$21,136
Post-empl retirement benefits	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$417,131	\$0	\$417,131
Contract labor	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,944	\$0	\$4,944
Allocated from other depts.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Purchased power	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated to other depts.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Allocated to W.J.P.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Uncollectible accounts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPEB--Unfunded Accrual	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Capital Outlay</b>												
Inspection and Evaluation of Storage Tanks	\$18,948	\$11,590	\$0	\$0	\$5,389	\$0	\$0	\$0	\$0	\$0	\$0	\$35,927
sion Main Inspection and Evaluation Project	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total O&amp;M Allocated</b>	<b>\$13,044,638</b>	<b>\$1,238,376</b>	<b>\$2,022,749</b>	<b>\$778,975</b>	<b>\$650,927</b>	<b>\$1,105,650</b>	<b>\$1,505,854</b>	<b>\$1,075,288</b>	<b>\$650,521</b>	<b>\$1,255,405</b>	<b>\$3,595,878</b>	<b>\$26,924,260</b>
% O&M Allocated	48%	5%	8%	2.89%	2%	4%	6%	4%	2.4%	4.7%	13%	100%
Base		Max Day	Max Hour	Recycled Water	Fire Protection	Meters	Customer	Conservation	GWC	Urban Ag	General	Total