

Casitas Municipal Water District
Water Rate Study

Draft Report

March 19, 2017





March 19, 2017

Mr. Steve Wickstrum
General Manager
Casitas Municipal Water District
1055 Ventura Avenue
Oak View, CA 93022

Re: Draft Report – Water Rate Study

Dear Mr. Wickstrum,

Stantec Consulting (formerly Hawksley Consulting) is pleased to present this Draft Report of the Water Rate Study (Study) that we performed for the Casitas Municipal Water District (District). We appreciate the fine assistance provided by you and all of the members of the District staff who participated in the Study.

If you or others at the District have any questions, please do not hesitate to call me at (510) 316-0621 or email me at mark.hildebrand@stantec.com. We appreciate the opportunity to be of service to the District, and look forward to the possibility of doing so again in the near future.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark Hildebrand", is written over a light blue circular watermark.

Mark Hildebrand
Principal Consultant

Enclosure



Executive Summary

This Executive Summary presents an overview of the results of the Water Rate Study (Study) that was conducted for Casitas Municipal Water District (hereafter referred to as the “District”) by Stantec Consulting.

ES. 1 – STUDY OBJECTIVES

The principal objectives or components of the Study are as follows:

- i. Develop a multi-year financial management plan that integrates the District’s capital funding needs;
- ii. Identify future rate adjustments to water rates that will ensure adequate revenues to meet the District’s ongoing financial requirements;
- iii. Determine the cost of providing water service to each identified customer class using industry accepted methodologies; and
- iv. Recommend specific rate structures that equitably recover the cost of service from each customer class and comport with industry practices and legal requirements.

ES. 2 – GENERAL METHODOLOGY

This Study consisted of the following phases:

Perform a Revenue Sufficiency Analysis (RSA) – Develop and populate a multi-year forecasting model for the District that will determine the level of annual rate revenue required to satisfy projected annual operating costs, debt service expenses, and capital cost requirements as well as maintain adequate reserves.

Cost-of-Service Analysis (COSA) – Using the revenue requirements from the revenue sufficiency analysis for Fiscal Year (FY) ending 2018, we performed a detailed cost of service allocation based upon principles outlined by the American Water Works Association (AWWA) and other generally accepted industry practices in order to determine the proper distribution of costs and corresponding revenue requirements between the respective customer classes.

Rate Structure Analysis – The rate structure analysis phase developed specific rates that would recover the identified level of required revenue from each customer class. The recommended rate schedules were designed to ensure that the water rates conform to accepted industry practices and reflect the appropriate distribution of system costs, while achieving the District’s policy objectives, such as fiscal stability, affordability, and conservation, to the greatest extent possible.

ES.3 – REVENUE SUFFICIENCY ANALYSIS

In the RSA, Stantec evaluated the sufficiency of the District’s rate revenues to meet all of its current and projected financial requirements over a 5-year projection period, and determined the level of any rate revenue increases necessary in each year of the projection period to provide sufficient revenues to fund all of its cost requirements. With District staff, we thoroughly discussed the base data and assumptions of the analysis, and reviewed several alternative capital spending scenarios. Through this process, we identified the recommended financial management plan and associated plan of annual rate increases.

The recommended financial management plan and associated rate revenue adjustments are based upon the revenue and expense information, beginning balances, and assumptions as described in the full report. The five-year rate revenue adjustment plan recommended herein is presented in the following table. The FY 2018 revenue increases are achieved within recommended rate structure adjustments identified in the cost of service and rate design phases of the Study.

Recommended Plan of Water Rate Revenue Increases

Implementation Date	Rate Adjustment
July 1, 2017	12.0%
July 1, 2018	12.0%
July 1, 2019	12.0%
July 1, 2020	12.0%
July 1, 2021	12.0%

ES.4 – COST-OF-SERVICE ANALYSIS

The purpose of a COSA is to determine the cost differences in serving each respective customer class so that the revenue requirements of the utility may then be distributed accordingly. The Study employed the “base-extra capacity” cost-of-service method promulgated in AWWA’s Manual M1: Principles of Water Rates, Fees, and Charges (M1) for the water system, whereby costs are first allocated to individual functions or activities then the cost of each function are distributed to appropriate system parameters to calculate unit costs. The unit costs are then used to distribute system costs to each customer class based on their usage characteristics.

The COSA included the following steps:

- ▶ Step 1: Allocate costs to the appropriate activities/functions
- ▶ Step 2: Allocate the costs of each function to specific system parameters and calculate unit costs
- ▶ Step 3: Identify customer classes
- ▶ Step 4: Quantify units of service for each customer class for each defined system parameter
- ▶ Step 5: Distribute costs to customer classes based upon the unit costs for each system parameter and the units of service for each respective class
- ▶ Step 6: Credit non-rate revenue to customer classes

The following table compares the relative distribution of rate revenue among customer classes, comparing current rate revenue to proposed rate revenue based on the results of this Study. The shifting of cost responsibilities between customer classes is modest, and is a normal phenomenon as utility service use patterns change and better data becomes available over time.

FY 2016/17 Revenue and COS Comparison

	Current Rate Revenue		Cost of Service Rate Revenue		Percent Change
	(from FY 2016)		(for FY 2017/18)		
	Dollars	Percent	Dollars	Percent	
Residential	\$1,633,845	19.4%	\$1,909,936	20.2%	0.8%
Business	\$651,760	7.7%	\$630,284	6.7%	-1.1%
Agricultural	\$876,764	10.4%	\$1,066,627	11.3%	0.9%
Ag. Domestic	\$2,065,197	24.5%	\$2,408,832	25.4%	0.9%
Interdepartmental	\$42,027	0.5%	\$41,497	0.4%	-0.1%
Resale	\$3,150,038	37.4%	\$3,409,893	36.0%	-1.4%

ES.5 – RATE STRUCTURE ANALYSIS

Upon completion of the COSA, a rate structure analysis was performed to identify potential rate structure modifications and specific rate schedules that would:

- i. Fairly and equitably recover the cost of providing service and revenue requirements for each customer class;
- ii. Conform to accepted industry practice and legal requirements;
- iii. Provide fiscal stability and recovery of fixed costs of the system;
- iv. Maintain affordability to low volume and average users to the extent possible; and
- v. Promote water conservation.

The District currently has a two-part rate structure, comprising of a fixed Service Charge and a Volumetric (consumption-based) rate. The Service Charge currently recovers 25% of rate revenue, which pays for a portion of the fixed costs of providing water service. Volumetric Rates are designed to recover the remainder of the water system’s fixed costs as well as its variable costs. Agriculture, Business, Interdepartmental, and Resale customers pay a flat volumetric rate (whereby the unit price of water doesn’t change, regardless of the quantity consumed). Residential (and to some degree Ag Domestic) is charged a tiered rate schedule, whereby the unit price incrementally increases as water consumption increases.

Most customer classes have some accounts that received pumped water service and some that received gravity-fed water service. Those customers with pumped service pay an incrementally higher volumetric rate, based on the higher cost of providing that service.

ES.6 – RATE RECOMMENDATIONS

The following tables show the proposed rates for FY 2018. The complete report provides the proposed rates through FY 2022.

Proposed Volumetric Rates, Effective July 1, 2017

	Residential Pumped	Business Pumped	Agriculture Pumped	Ag Domestic Pumped	Inter-departmental Pumped	Resale Pumped
Tier 1	\$0.96	\$1.46	\$1.09	\$0.96	\$1.46	\$1.46
Tier 2	\$1.46			\$1.46		
Tier 3	\$2.36			\$1.09		

	Residential Gravity	Business Gravity	Agriculture Gravity	Ag Domestic Gravity	Inter-departmental Gravity	Resale Gravity
Tier 1	\$0.49	\$0.99	\$0.62	\$0.49	\$0.99	\$0.99
Tier 2	\$0.99			\$0.99		
Tier 3	\$1.89			\$0.62		

Proposed Service Charge, Effective July 1, 2017

	Residential	Business	Agriculture	Ag Domestic	Inter-departmental	Resale
5/8"-3/4"	\$28.75	\$22.97	\$25.97	\$20.87	\$20.54	\$25.27
1"	\$47.91	\$38.28	\$43.28	\$34.78	\$34.24	\$42.12
1-1/2"	\$95.82	\$76.56	\$86.56	\$69.57	\$68.47	\$84.24
2"	\$153.31	\$122.50	\$138.50	\$111.30	\$109.55	\$134.78
2-1/2"	\$255.52	\$204.16	\$230.84	\$185.51	\$182.59	\$224.63
3"	\$335.37	\$267.96	\$302.97	\$243.48	\$239.65	\$294.83
4"	\$603.67	\$482.33	\$545.35	\$438.26	\$431.36	\$530.70
6"	\$1,245.67	\$995.29	\$1,125.33	\$904.35	\$890.12	\$1,095.09
12"	\$7,359.04	\$5,879.89	\$6,648.09	\$5,342.61	\$5,258.53	\$6,469.48
18"						\$12,026.38

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Section 1. INTRODUCTION

Stantec Consulting, has been retained by the Casitas Municipal Water District (District) to conduct a Water Rate Study (Study). This report describes in detail the assumptions, procedures, and results of the Study, including our conclusions and recommendations.

1.1 BACKGROUND

Formed in 1952, the District provides water service to 3,146 customer accounts in a service area that encompass the City of Ojai, Upper Ojai, the Ventura River Valley area, the city of Ventura to Mills Road, and the Rincon and beach area to the ocean and Santa Barbara County line. The District serves its potable water customers with local water from Lake Casitas and limited groundwater. The water is treated at the District's treatment plant before delivery to customers. Annual water deliveries vary considerably from year to year due to its large agricultural customer base, whose demands vary based on weather and rainfall. Total water sales in FY 2013/14 were over 19,000 acre-feet (AF) and two years later the sales were 14,300 AF (a drop of 25%). Water sales have been as high as 25,000 AF in the past.

During this current winter, California (including the District) is receiving its first significant rainfall in 6 years. In 2014, Governor Jerry Brown issued a drought state of emergency declaration in response to record-low water levels in California's rivers and reservoirs as well as an abnormally low snowpack. In 2015, Governor Brown issued an Executive Order calling for statewide mandatory water reductions of up to 25 percent. On May 5, 2015, the State Water Resources Control Board approved regulations, based on an Executive Order issued by Governor Brown, which mandated the District to reduce its urban water consumption by 32 percent.

1.2 OBJECTIVES

The primary objectives of this Study are to:

- i. Develop a multi-year financial management plan that integrates the District's capital funding needs;
- ii. Identify future rate adjustments to water rates that will ensure adequate revenues to meet the District's ongoing financial requirements;
- iii. Determine the cost of providing water service to each identified customer class using industry accepted methodologies; and
- iv. Recommend specific rate structures that equitably recover the cost of service from each customer class and comport with industry practices and legal requirements.

1.3 GENERAL METHODOLOGY

To begin the Study, we first developed a multi-year financial management plan that determined the level of annual rate revenue required to satisfy projected annual operating, debt service (including coverage), and capital cost requirements as well as maintain adequate reserves. This portion of the Study was conducted using the revenue sufficiency and financial planning module of Stantec's proprietary FAMS-XL modeling system. We customized our model to reflect the financial dynamics and most current data available for the District's operations in order to develop a long-term financial management plan, inclusive of projected annual revenue requirements and corresponding annual rate adjustments.

Using the cost of service and net revenue requirements from the revenue sufficiency analysis for Fiscal Year (FY) ending 2018, we then performed a detailed cost-of-service allocation (COSA) analysis based upon principles as outlined by the American Water Works Association (AWWA) and other generally accepted industry practices in order to determine the proper allocation of costs and corresponding revenue requirements between the respective customer classes.

Once all FY 2017/18 costs and revenue requirements were properly allocated to each customer class, we then developed specific rates that would recover the identified level of required revenue from each customer class. The recommended rate schedules presented herein are designed to ensure that the District's water

rates conform to accepted industry practice, legal requirements, and reflect the equitable distribution of system costs, while achieving the District's policy objectives, such as fiscal stability, affordability, and conservation.

1.4 ACRONYMS

AF	acre-feet
AWWA	American Water Works Association
CIP	capital improvement program
COSA	cost of service analysis
DCR	debt coverage ratio
EM	equivalent meter
FAMS-XL	Financial Analysis and Management System model
FY	fiscal year ending June 30
HCF	hundred cubic feet
HCF/D	hundreds of cubic feet per day
RSA	revenue sufficiency analysis

Section 2. REVENUE SUFFICIENCY ANALYSIS

This section presents the financial management plan and corresponding plan of water rate adjustments developed in the revenue sufficiency analysis (RSA) that was conducted as part of the Study. This section presents a description of the source data, assumptions, and policies reflected in the RSA, as well as the results of the RSA. Appendix A includes detailed schedules supporting the financial management plan identified herein.

During the RSA we reviewed alternative multi-year financial management plans and corresponding water rate revenue adjustment plans through several interactive work sessions with District staff. As an outcome to this process, the Study has produced a recommended financial management plan and corresponding plan of annual rate revenue adjustments that will allow the District to meet its respective revenue requirements and financial performance objectives throughout the projection period.

2.1 DATA & ASSUMPTIONS

The District provided historical and budgeted financial information regarding the operation of the utility, including multi-year capital improvement program (CIP) and current debt service obligations and covenants. District staff also assisted in providing other assumptions and policies, such as demands and customer growth, debt coverage requirements, operating reserve targets, earnings on invested funds, and escalation rates for operating costs. The following presents the key source data relied upon in conducting the RSA.

2.1.1 BEGINNING FUND BALANCES

The ending cash balances for FY 2016 was used to establish the beginning FY 2017 balances and are provided in Table 1.

Table 1 – FY 2017 Beginning Cash Balance

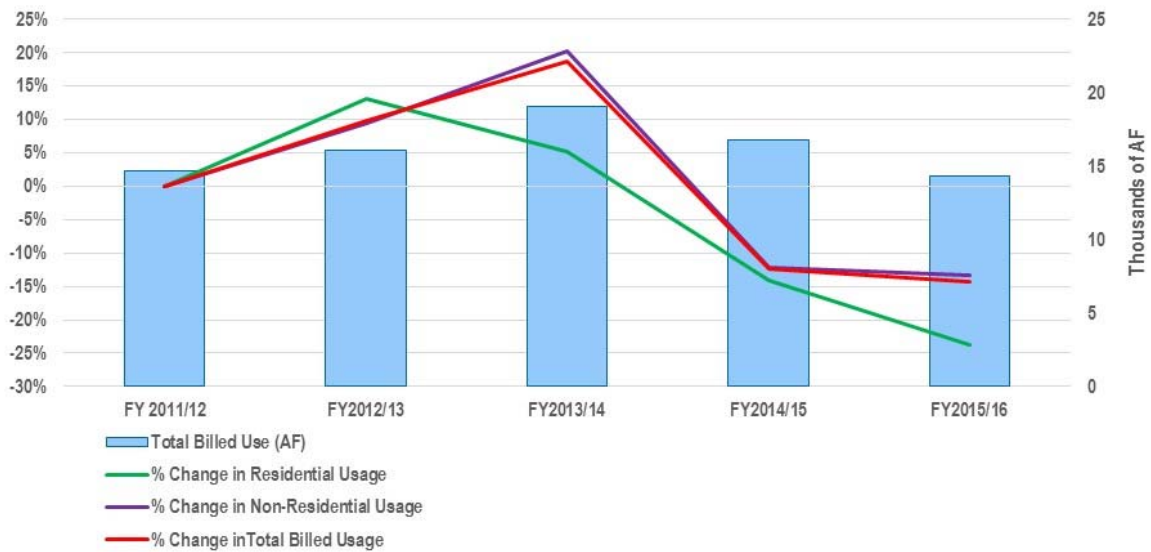
Unrestricted	\$ 22,093,898
Restricted Reserves	
Mira Monte Fund	119,364
CFD Fund	453,405
Capital Facilities Fund	2,065,628
Safe Drinking Water Fund	60,000
Flexible Storage Fund	42,312
TOTAL CONSOLIDATED FUND BALANCE	\$ 24,834,608

2.1.2 CUSTOMER GROWTH & VOLUME FORECAST

Based upon a review of recent capacity charges revenues the RSA assumes that the customer base will continue to grow at a pace of 0.08% per year as it has in the recent past.

Forecasting the future usage of water is challenging for most water utilities, and particularly challenging for utilities that have a large number of agricultural accounts (due to their increased dependence on rainfall). **Figure 1** shows how total water usage can vary by almost 25% over the course of a couple years. While there are signs that the recent drought may be ending, this study assumes that total water usage for the District will remain flat over the course of the five-year study period (equal to FY 2016 usage).

Figure 1 – Historical Total Water Consumption



2.1.3 NON-RATE REVENUES

In addition to water rate revenue, the District received recreation revenue related to the Park and Water Park, interest income, taxes, assessments, grants, capital facility charges (restricted), and other minor revenue from miscellaneous service fees. Projections of all non-rate revenues were largely based on FY 2016 actuals, with the exception of recreation revenue (assumed to increase by 5% over FY 2016 actual in FY 2017, based on approved increases, and 1% thereafter), grant revenue (which was based on historical averages for recreation, and was not relied upon for water) and interest income (which was calculated annually based upon projected average fund balances and assumed interest rates).

It should be noted that the District, as part of their drought management plan, currently collects penalty revenue from customers that exceed their water allocation. The revenues from this the penalty rates is uncertain (pending Board direction to staff) and is held in a designated fund for use on future water supply and conservation projects. For these reasons, this RSA doesn't attempt to project penalty revenue and therefore doesn't penalty revenue in future reserve forecasts.

2.1.4 OPERATING EXPENSES & EXISTING DEBT

The water system’s operating expenses include all operating and maintenance expenses, debt service requirements, and minor capital outlay. Future operating expenses were projected based upon the individual expense categories and the actual expenditures in FY 2016, adjusted per discussions with District staff to reflect known and measurable changes (such as additional staffing requirements), as well as expected inflation (see Section 2.1.5). Current and projected operating costs are identified in **Schedule 1** of Appendix A.

The District’s existing loans include a 1991 CA Department of Water Resources Loan, a loan for the Seismic Safety of Dam project, and the Mira Monte Assessment Bond. The remaining annual debt service expenses for these loans are identified in **Schedule 1**.

2.1.5 COST ESCALATION

Annual cost escalation factors for the various types of operating and maintenance expenses were developed based upon a review of historical trends, our industry experience, and detailed discussions with District staff. The specific escalation factors used for the various categories of expenses are provided in Table 2.

Table 2 – Cost Escalation Factors

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Salaries	3.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
Benefits	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Chemicals	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Power	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Services & Supplies	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Other	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Capital Projects	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

2.1.6 CAPITAL IMPROVEMENT PROGRAM

District staff provided the forecasted spending on the CIP from FY 2017 through FY 2026. As reflected in Table 2, the RSA includes an annual cost escalation factor for capital costs of 3.0% based upon historical increases observed in the Engineering News Record 20-City Construction Cost Index.

In total, the CIP (including inflation) from FY 2017 – FY 2026 is slightly more than \$24.2 million. A detailed list of projects and costs by year are provided in **Schedule 2** of Appendix A.

2.1.7 INTEREST EARNINGS ON INVESTED FUNDS

The RSA reflects interest earnings on invested funds at a rate of 2.0% for the duration of the study period, based on the recent historical performance of the District's investment earnings.

2.1.8 MINIMUM OPERATING RESERVE BALANCE

Reserve balances for utility systems are funds set aside for a specific cash flow requirement, financial need, or debt covenant. These balances are maintained in order to meet short-term cash flow requirements, and at the same time, minimize the risk associated with meeting the financial obligations and continued operational and capital needs under adverse conditions. The level of reserves maintained by a utility is an important component and consideration of developing a multi-year financial plan.

Many utilities, rating agencies, and the investment community as a whole place a significant emphasis on having sufficient reserves available for potentially adverse conditions. The rationale related to the maintenance of adequate reserves is twofold. First, it helps to ensure that a utility will have adequate funds available to meet its financial obligations during unusual periods (i.e. when revenues are unusually low and/or expenditures are unusually high). Second, it provides funds that can be used for emergency repairs or replacements to the system that can occur as a result of natural disasters or unanticipated system failures.

Financial policies should articulate how these balances are established, their use, and how to determine the adequacy of the reserve fund balances. Once reserve targets are established, they should be reviewed annually during the budgeting process to monitor current levels and assure conformance with stated policies and practices. Decisions can be made to maintain, increase, or spend down the

reserve balances, as appropriate, depending upon the impact of such decisions to the upcoming budget period.

The financial management plan presented in this report assumes that the District will maintain the minimum operating reserve balances listed in Table 3.

Table 3 – Reserve Targets

Restricted Reserves	\$2.74M	Includes reserves for safe drinking water fund, flexible storage fund, fund due to Mira Monte, funds due to CFD, and Capital Facilities Charge fund.
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Total Designated Fund Target Reserves = 22.1M

Storm Damage Fund	\$4.48M	For emergency storm events
Variation in Water Sales Fund	\$5.48M	Covers the smoothing of rates in the event of revenue loss or unanticipated costs
Capital Improvement Program	\$5.0M	Stabilizes funding for capital by accumulated “pay as you go” reserves
OPEB Fund	\$4.13M	This liability is expected to increase
Operating Reserve	\$3.0M	In the event of fluctuations in operating costs, equal to about 3 month of operating costs

These levels of reserves are consistent with 1) our industry experience for similar systems, 2) the findings of reserve studies conducted by the AWWA, and 3) a healthy level of reserves for a municipal utility system per the evaluation criteria published by the municipal utility rating agencies (Fitch, Moody’s, and Standard & Poor’s).

This study assumes that the total of \$22.1 M of designated fund target reserves will increase gradually to \$26M by FY2024, per direction by District staff. This planned increase will ensure that the Operating Reserve grows along with escalation in operating costs.

2.1.9 FUTURE BORROWING ASSUMPTIONS

District staff indicated that there is no planned future debt that will be supported by rate revenue. There may be a horizontal boring project that may be supported by a bond issue, however this would be contingent on the approval of property tax assessment to support the debt service

2.1.10 DEBT SERVICE AND COVERAGE

Based on the information the District provided, the District’s existing debt does not contain a covenanted debt service coverage requirement. That being said, Stantec recommends that the District set rates that achieve a coverage level that will enable it to access affordable rates from the debt market should the need arise. Furthermore, per recently published guidance from Fitch Ratings¹, utility systems with *midrange* financial profiles should maintain debt service coverage greater than 1.50 times net revenue. As such, the rates recommended by this report will result in a DCR that is greater than 1.5 over the long term.

2.2 ANALYSIS

All of the above information was entered into Stantec’s proprietary Financial Analysis and Management System (FAMS-XL) interactive modeling system. This module of FAMS-XL produced a ten-year projection of the sufficiency of revenues to meet current and projected financial requirements, and determined the level of rate revenue increases necessary in each year of the projected period.

2.2.1 RECOMMENDED RATE INCREASES

Based upon the data, assumptions, and policies presented herein, the existing water rates will not provide sufficient rate revenue to meet the District’s revenue requirements. Table 4 summarizes the recommended water rate increases identified over the next five years per this RSA.

Table 4: Recommended Water Rate Revenue Increase

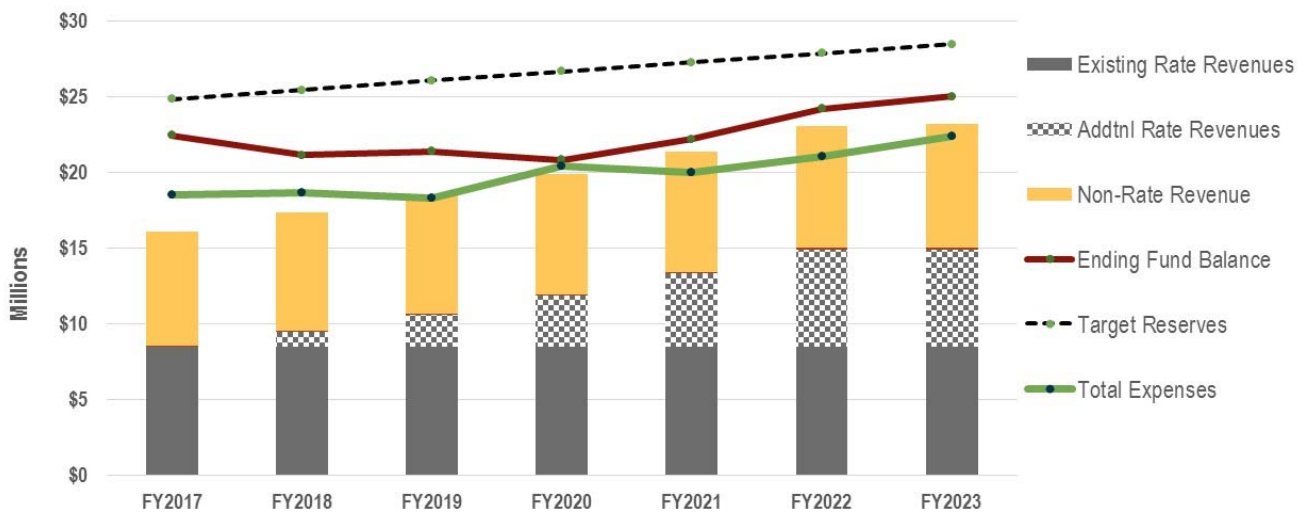
	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Effective Date:	July 1, 2017	July 2, 2018	July 3, 2019	July 3, 2020	July 4, 2021
Rate Revenue Increase:	12.0%	12.0%	12.0%	12.0%	12.0%

¹ As published on July 31, 2013.

Stantec recommends that the District utilize available cash to pay for future capital needs. **Schedule 3** of Appendix A of this report includes a cash flow proforma that summarizes rate revenues, non-rate revenues, operating expenses, existing debt service, capital expenses, cash balances, and debt coverage ratios.

The numbers provided in Schedule 3 are summarized graphically in Figure 2. While target reserves are not being met over the course of the study period, the financial plan prioritizes the stabilization of reserve levels (achieved in FY 2021). The upward trajectory of the reserve balances in FY 2023 will carry “momentum” into the following years and it is anticipated that reserve targets could be met as soon as FY 2025.

Figure 2 – Financial Projection with Recommended Rate Increases



Section 3. COST-OF-SERVICE ALLOCATION

The purpose of a Cost-of-Service Allocation (COSA) is to determine the cost differences in serving each respective customer class so that the revenue requirements of the Utility may then be distributed accordingly. This Study employed well-established industry practices for these types of studies as recognized by the American Water Works Association (AWWA) and other accepted industry practices. The following section presents a detailed description of the COSA methodology and corresponding results.

This Study employed the “base-extra capacity” cost-of-service method promulgated in AWWA’s Manual M1: Principles of Water Rates, Fees, and Charges (M1) for the water system, whereby costs are first allocated to individual functions or activities (such as supply, treatment, distribution, pumping, meters/services, etc.) then the cost of each function is distributed to appropriate system parameters (such as average day demands, max day demands, peak hour demands, customers, etc.) to calculate unit costs. The unit costs are then used to distribute system costs to each customer class based on their system usage profile. After costs are allocated to the various types of customers, specific rates can be developed for each classification of customer.

It should be noted that the scope of this study did not include fire protection charges, nor penalty rates for excessive water usage. Both of those sources of revenue were considered as non-rate revenue for the purpose of this study.

3.1 PROCESS

The COSA was based upon the District’s FY 2018 annualized expenditure and revenue requirements per the RSA, and included the following steps:

- ▶ Step 1: Allocate costs to the appropriate activities/functions
- ▶ Step 2: Allocate the costs of each function to specific system parameters and calculate unit costs
- ▶ Step 3: Identify customer classes

- ▶ Step 4: Quantify units of service for each customer class for each defined system parameter
- ▶ Step 5: Distribute costs to customer classes based upon the unit costs for each system parameter and the units of service for each respective class
- ▶ Step 6: Credit non-rate revenue to customer classes

The following sub-sections give a detailed description of the COSA methodology and high-level results, while **Appendix B** includes detailed schedules of those results.

3.1.1 STEP 1: FUNCTIONAL COST ALLOCATIONS

The operating expenses, debt service, and cash-funded capital requirements within the water system were distributed to specific activities or functional components of service. The functional components of the District's system were identified as:

- ▶ General and Administration
- ▶ Source of Supply
- ▶ Treatment
- ▶ Transmission and Distribution
- ▶ Pumping
- ▶ Customer Services
- ▶ Conservation
- ▶ Recreation

Industry best practices provide a framework for assigning operating and capital expenses to system functions, but because the reality of each utility's cost causation and design can vary, the specific knowledge and insight of District staff was relied upon to functionalize all the line item costs to the respective functional components identified above. A departmental-level summary of cost functionalization is presented in Table 5. The percentages presented in Table 5 were calculated based on classification of costs in the District General Ledger.

The detailed summary of all cost allocations to functional components is presented in **Schedule 4** of Appendix B.

Table 5: Allocation of Cost Categories to Functional Components

	General and Administration	Source of Supply	Treatment	Transmission and Distribution	Pumping	Customer Service	Conservation	Recreation
Administrative Service	80.8%	0.1%	5.2%	4.2%		9.8%		
Board of Directors	100.0%							
Electrical Mechanical	25.0%	2.1%	6.6%	28.2%	38.1%			
Engineering	67.3%	16.8%		2.0%		13.9%		
Fisheries	3.1%	96.9%						
Garage	100.0%	0.0%						
Information Technology	100.0%							
Management	99.7%	0.3%						
Operations - Maintenance	13.2%	86.8%						
Pipeline	25.5%	1.1%	10.1%	62.5%		0.7%		
Public Relations	11.7%						88.3%	
Recreation								100.0%
Retirees	100.0%							
Safety	100.0%							
Utilities Maintenance	16.0%		2.2%	27.0%		54.8%		
Warehouse	100.0%							
Water Quality - Lab	33.6%	47.3%	9.7%	9.4%				
Water Treatment	15.1%	5.5%	65.1%	4.4%		10.0%		
CIP Projects	55.2%	21.8%	1.2%	8.4%	2.0%	11.5%		

3.1.2 STEP 2: DISTRIBUTE FUNCTION COSTS TO SYSTEM PARAMETERS

Next the costs of each functional component are distributed to system parameters based on measurable metrics. For the most part, the system parameters are direct counterparts to the functional components already discussed. For example (and as shown in Table 6), **pumping** costs are allocated to the pumping system parameter, **customer service** costs are allocated to the

customer parameter, and **conservation** costs are allocated to conservation parameter. Similarly, **source of supply** costs are allocated to the system's Base Capacity parameter, which is a measure of the system's average daily usage. **Treatment** costs are split between the Base Capacity and Extra Capacity-Max Day parameter. This split is calculated based on the relative volume of water used during an average day as compared to a maximum day event² (see Table 7), based on the costs being a function of both the actual amount of water used (average day) and the design basis of the treatment plant (max day). **Transmission and Distribution** costs are split between the system's Extra Capacity-Max Day (divide the different between max day and average day by max hour), Extra Capacity-Max Hour (divide the different between max hour and max day by max hour), and total built capacity (divide average day by max hour). See **Table 7** for the volumetric relationship between average day, maximum month, maximum day, and maximum hour³.

Finally, all **Recreation** costs are separated to ensure that the program is supported by recreation fees and tax revenue.

² The study used billing data to directly measure the system's average day and maximum month. System peak day and peak hour events were based on an event on September 28, 2016 when the system delivered 75.21 AF over the course of 24 hours and delivered 4.84 AF over the course of one hour.

³ IBID

Table 6: Mapping Functional Components to System Parameters

Functional Component	System Parameters							
	Base Capacity (Average Day)	Extra Capacity (Max Day)	Extra Capacity (Max Hour)	Meter size (Average Day)	Conservation	Pumping	Customer	Recreation
Source of Supply	100.0%							
Treatment	51.9%	48.1%						
Transmission and Distribution		31.1%	35.3%	33.6%				
Pumping						100.0%		
Customer Service							100.0%	
Conservation					100.0%			
Recreation								100.0%

Missing from the Functional Components listed above is General and Administration, which has been distributed among the other Functional Components using the indirect cost allocation method.

Table 7: Water System Peaking Profile

	Average Day (HCF/day)	Max Month Average Day (HCF/day)	Max Day (Coincident) (HCF/day)	Max Hour (Full Day) (HCF/day)
Water System Demands	17,014	25,693	32,761	50,599

Next the functionalized costs for operating, debt service and capital spending from **Step 1** are allocated to system parameters based on the values shown in Table 6. The results are summarized in **Schedule 5** in Appendix B. For example at the top of Schedule 5, the \$4,052,130 in Supply operating expenses are allocated 100% to the Base Capacity parameter. The total operating expenses allocated to the Base Capacity parameter (\$5,433,493 in this example) are then converted to unit costs by dividing by the relevant system metric as listed at the top of Schedule 5. In the case of the Base Capacity parameter, the relevant system metric is the water system’s average daily water usage (17,014 hundred cubic feet (HCF)) and the resultant unit rate is \$319.35 per HCF.

3.1.3 STEP 3: DETERMINATION OF CUSTOMER CLASSES

A customer class consists of a group of customers, with similar characteristics, who share responsibility for certain costs incurred by the District. Joint costs are shared among all customers in the system proportionately based on their service requirements that drive costs; some specific costs are borne by specific classes based on the characteristics of that group alone. In summary, the Study proposes the following customer classes based upon consideration of the characteristics, service patterns, and existing classifications of the City:

- ▶ Residential
- ▶ Business/Institutional/Industrial ⁴
- ▶ Agricultural
- ▶ Agricultural Domestic (agricultural with domiciles, served by a single meter)
- ▶ Interdepartmental (primarily the District Water Park and Park facilities)
- ▶ Resale

All of these customer classes, with exception of Interdepartmental, have some customers that are served with gravity pressure and some which require pumping to serve.

3.1.4 STEP 4: QUANTIFY UNITS OF SERVICE BY CUSTOMER CLASS

Once functionalized and distributed to parameters, system costs are then allocated among customer classes based on their respective service requirements, as measured by units of service for each respective system parameter (see Table 9). The number of accounts, number of bills, and average day water usage has been directly measured based on customer billing data. The Max Day and Max Hour by customer class has been computed based on total system peaking (see Section 3.1.2) as well as daily and hourly “compression

⁴ While these three customer classes are listed separately in the District’s billing system for State reporting purposes, our analysis found that these customers can be grouped together for purposes of the COSA. This report refers to these three customer classes as simply “Business” in the interest of simplicity.

factors”, based on industry experience and District staff’s understanding of typical customer behavior.

For the daily compression factor, it was assumed that Residential and Resale customers usage approximately the same amount of water regardless of the day of the week, while Business tends to use most of their water over 6 days (due to being closed one day per week), and Agriculture tends to use most of their water over the 5 week days. The Interdepartmental class was assumed to use most of its water over 4 days due to the heavy use during the weekends.

For the hourly compression factor, it was assumed that Agriculture spreads its irrigation over the course of the full 24 hours in a day, Business uses its water over the course of 12 hours, and Residential, Interdepartmental, and Resale focus their usage over the course of 8 hours (based on typical diurnal flow patterns for residential use).

The meter equivalency metric allows us to express all meter sizes in terms of multiples of a 3/4” meter and then calculate the number of “equivalent meters” (EM) by customer class. Equivalent Meters are an industry-standard factor used to represent the proportional demand that a connection places on the system based on the design capacity necessary to serve it. The meter equivalency table adopted by this Study, including sources, is shown in Table 8. Given the wide range of meter sizes, we looked at the specific *types* of meters used for various sizes since the type of meter affects the rate of water flow that a given meter can support.

Table 8: Meter Equivalencies

Meter Size	Meter Type	GPM	Source	Proposed Meter Equivalence
5/8"-3/4"	Displacement	30	(1)	1.0
1"	Displacement	50	(1)	1.7
1 1/2"	Class I Turbine	100	(1)	3.3
2"	Class I Turbine	160	(1)	5.3
2 1/2"	Class I Turbine	267	(1)	8.9
3"	Class I Turbine	350	(1)	11.7
4"	Class I Turbine	630	(1)	21.0
6"	Class I Turbine	1,300	(1)	43.3
12"	Venturi	7,680	(2)	256.0
18"	Magnetic	14,277	(3)	475.9
2" Contract	Class I Turbine	160	(1)	5.3

Sources:

- (1) Table B-1, Appendix B, *AWWA M1 Manual*, 6th Ed.
- (2) Ratio of nominal x-sectional areas, minimal add'l friction losses based on *Civil Engineering Reference Manual*, 4th Ed.
- (3) Manufacturer's Specifications, *Rosemount 8750WA Magnetic Flowmeter for Water and Wastewater Industries*, p. 21

Finally, the Penalty Usage (amount of water that customers use in excess of their allocation) allowed us to allocate the cost of the conservation program among the customer classes. Aside for the allocation of costs among the customer classes, the cost of the conservation program allocated to the Residential class is used again in the development of tier rates (see Section 4.2.2.2).

The units of service utilized for this analysis by customer class are summarized in Table 9.

Table 9: System Units of Service by Customer Class

	Accounts (count)	Bills (count)	Average Day (HCF)	Max Day (HCF/D)	Max Hour (HCF/D)	Equivalent Meters (EM)	Penalty Usage (HCF)
Residential	2,704	32,443	1,360	975	8,483	3,628	72,630
Bus/Inst./Indust.	163	1,952	860	1,237	4,381	639	45,830
not used	0	0	0	0	0	0	0
Agricultural	69	823	2,330	3,937	3,412	580	66,274
Ag. Domestic	176	2,112	5,288	8,751	7,644	1,339	125,652
Interdepartmental	8	96	45	130	635	71	0
Resale	27	324	7,132	6,913	51,030	1,288	223,979
Totals	3,146	37,751	17,014	21,943	75,584	7,545	534,365

3.1.5 STEP 5: ALLOCATE SERVICE COSTS TO CUSTOMER CLASSES

Next each customer class is allocated service costs based on the respective units of service shown in Step 4 and the unit costs calculated in Step 2. Results are shown in Table 10. By way of example, the \$650,662 allocated to Residential for Base Capacity was calculated by multiplying the total unit cost for Base Capacity listed in Schedule 5 (\$478.47 per HCF) by the Base Capacity units of service for Residential customers (1,360 HCF). Note that in Table 10, the cost of pumped use is calculated separately. This cost is subsequently allocated between the Customer Classes based on the amount of pumped water use.

Table 10: Customer Class Cost Allocation

	Total	Residential	Bus/Inst./Indust.	Agricultural	Ag. Domestic	Interdepartmental	Resale	***Pumped Use
Base Capacity (Average Day)	\$5,789,455	\$462,725	\$292,761	\$792,783	\$1,799,223	\$15,311	\$2,426,652	\$0
Extra Capacity (Max Day)	2,311,604	102,688	130,296	414,773	921,934	13,658	728,254	0
Extra Capacity (Max Hour)	868,867	97,512	50,361	39,225	87,870	7,295	586,604	0
Meter Size	828,761	398,492	70,246	63,678	147,072	7,836	141,437	0
Conservation	787,101	106,981	67,506	97,619	185,081	0	329,914	0
Fire Protection	0	0	0	0	0	0	0	0
Pumping	1,997,503	0	0	0	0	0	0	1,997,503
Customers	1,647,235	1,415,639	85,187	35,928	92,155	4,189	14,137	0
Total Cost Allocation	\$18,666,256	\$2,584,037	\$696,357	\$1,444,006	\$3,233,335	\$48,289	\$4,226,998	\$1,997,503

3.1.6 STEP 6: CREDIT NON-RATE REVENUE TO CUSTOMER CLASSES

Non-rate revenue is used to offset the annual cost of service that would otherwise need to be recovered in rates or service charges. Non-rate revenue includes interest income, other operating revenue (such as miscellaneous fees), property taxes, use of reserves, and assessments. Most non-rate revenue is allocated equitably among customer classes using the *same proportions used when allocating costs*, as summarized by Table 10.

The District's property tax revenues are allocated separately from the proportional allocation of non-rate revenue. Based on the policy set by the District Board, these tax revenues are to be used to offset any shortfalls in the Recreation budget, to offset the cost of water treatment for Agricultural customers, and (as proposed by

this study) to offset the cost of the Tier 1 rates to maintain affordability for Residential customers. Any remaining property tax revenue is used to offset the water rates of all customers. These priorities and the amounts allocated for each purpose are presented in Table 11.

Table 11: Allocation of Tax Revenues

Use of Tax Revenue	Amount
Recreation Budget	\$579,501
Offset to Treatment Costs for Agriculture	1,000,000
Offset to Create Affordable Tier 1 Rates for Resi	140,000
Remaining Balance (benefits all customers)	1,034,430
Total:	\$2,753,931

The non-rate revenue is credited to each customer class as shown in below in Table 12 and yields the total rate revenue requirement by customer class.

Table 12: Total Rate Revenue Requirement⁵

	Total	Residential	Bus/Inst./Indust.	Agricultural	Ag. Domestic	Interdepartmental	Resale	**Pumped Use
Total Cost Allocation	\$18,666,256	\$2,584,037	\$696,357	\$1,444,006	\$3,233,335	\$48,289	\$4,226,998	\$1,997,503
Change in Fund Balance	-2,028,609	-428,512	-115,477	-239,460	-536,186	-8,008	-700,966	0
Total Revenue Requirement	16,637,647	2,155,525	580,880	1,204,546	2,697,149	40,281	3,526,033	1,997,503
Non-Rate Revenue	7,170,577	466,636	90,786	496,982	1,123,063	6,296	551,083	0
Rate Revenue Requirement	\$9,467,070	\$1,688,888	\$490,094	\$707,564	\$1,574,085	\$33,985	\$2,974,950	\$1,997,503

3.2 COST-OF-SERVICE RESULTS

Table 13 compares the relative distribution of rate revenue among customer classes, comparing current rate revenue to proposed rate revenue based on the results of this Study. The shifting of cost responsibilities between customer classes is

⁵ Note that the total rate revenue requirement in this table matches the rate revenue requirement for FY 2018 shown in Schedule 3.

modest, and is a normal phenomenon as utility service use patterns change and better data becomes available over time.

Table 13: COS Comparison ⁶

	Current Rate Revenue		Cost of Service Rate Revenue		Percent Change
	(from FY 2016)		(for FY 2017/18)		
	Dollars	Percent	Dollars	Percent	
Residential	\$1,633,845	19.4%	\$1,909,936	20.2%	0.8%
Business	\$651,760	7.7%	\$630,284	6.7%	-1.1%
Agricultural	\$876,764	10.4%	\$1,066,627	11.3%	0.9%
Ag. Domestic	\$2,065,197	24.5%	\$2,408,832	25.4%	0.9%
Interdepartmental	\$42,027	0.5%	\$41,497	0.4%	-0.1%
Resale	\$3,150,038	37.4%	\$3,409,893	36.0%	-1.4%

⁶ FY 2016 Current rate revenue based on billing data. Excludes penalty revenue.

Section 4. RATE STRUCTURE ANALYSIS

Upon completion of the COSA, a rate structure analysis was performed to identify potential rate structure modifications and specific rate schedules for implementation in FY 2018 that would:

- ▶ Fairly and equitably recover the cost of providing service and revenue requirements for each customer class;
- ▶ Conform to accepted industry practice and legal requirements;
- ▶ Provide fiscal stability and recovery of fixed costs of the system;
- ▶ Maintain affordability to low volume and average users to the extent possible; and
- ▶ Promote water conservation.

The following sub-sections present a description of the basis of the recommended rate structure and a specific 5-year rate schedule for implementation starting in FY 2018. The recommended rate schedules are designed such that each customer class pays its own proportionate share of the cost of services provided by the District.

4.1 CURRENT RATES

The District follows a common industry practice with a two-part rate structure that is comprised of a fixed Service Charge and a Volumetric (consumption-based) rate. Generally accepted practice recovers a portion of the costs of the system in a fixed monthly service charge, recognizing that utilities have substantial investments in capacity-related costs and other fixed costs that are incurred year-round to maintain a state of readiness to meet peak demands when they occur. The amount of cost recovery in fixed versus volumetric charges is unique to each utility's balance of fiscal stability, philosophy regarding cost recovery, and level of fixed costs.

The District's current Service Charge is a fixed charge that is the same for all customer classes and is assessed based on meter size. The Service Charge

currently recovers 25% of rate revenue, which is a portion of the fixed costs of providing water service.

Volumetric Rates are designed to recover the remainder of the water system's fixed costs as well as its variable costs. Currently Agriculture, Business, Interdepartmental, and Resale customers pay a flat volumetric rate (whereby the unit price of water doesn't change, regardless of the quantity consumed). Residential is charged a tiered rate schedule, whereby the unit price incrementally increases over the course of 4 tiers. Ag Domestic customers pay the same rates as Residential for the first three tiers, and then the unit price of the fourth tier drops to the flat rate paid by Agriculture customers.

Most customer classes have some accounts that received pumped water service and some that received gravity-fed water service. Those customers with pumped service pay an incrementally higher volumetric rate, based on the higher cost of providing that service.

4.2 PROPOSED RATE STRUCTURE

The approach taken by this Study when balancing the Volumetric Rates and the Service Charge is that the former is intended to generally capture the variable costs of delivering water and the latter is intended to capture the fixed costs of the water infrastructure and customer service. That being said, the cost of delivering water to a customer includes both fixed costs as well as the variable costs of providing water services.

Because the cost of delivering a unit of water is generally the same, regardless of the type of customer, the unit price for the Volumetric Rate is proposed to have generally the same basis, regardless of the customer type (with exception to the fact that some customers have tiered rates and some have flat rates). However, despite having the same underlying basis, the overall cost of providing service to the respective customer classes is not equal, as was demonstrated in Section 3 of this Study. As such, the proposed schedule of Service Charges will be specific to the cost of serving each customer class. As explained in Section 3, the difference in the cost to provide service to customer classes is largely due to difference in peaking characteristics, which represent additional infrastructure capacity which

must be built, operated, and maintained. Because the maintenance, repair, and replacement of infrastructure are fixed costs, it is logical that those cost differences between classes are recovered through the fixed Service Charge.

4.2.1 FLAT RATES

The foundation of all Volumetric Rates are the flat rates paid by Agriculture, Resale, Interdepartmental, and Business. These flat rates are calculated using the following steps:

- ▶ **Step 1:** Identify the total rate revenue requirement (\$9.47 million)
- ▶ **Step 2:** Subtract the amount of rate revenue to be collected through the fixed Service Charge (25% or \$2.4 million)
- ▶ **Step 3:** Subtract costs associated with pumping (\$2.0 million, see Table 10)
- ▶ **Step 4:** Account for the following factors:
 - Agriculture will be exempted for the cost of water treatment by Board policy (value: \$1.0 million which is paid with discretionary tax revenue);
 - \$140 thousand in tax revenue will be used to offset the Residential Tier 1 rate; and
 - \$53 thousand in conservation costs are to be collected through the Residential Tier 3 rate.
- ▶ **Step 5:** Divide the product of the above (\$6.2 million) by total annual volumetric sales (6.2 HCF), which yields a unit rate of \$0.99 per HCF for gravity service.
- ▶ **Step 6:** Applying the \$1 million treatment-cost exemption to Agriculture (paid with discretionary tax revenue) yields a unit rate of \$0.62 per CHF for gravity service
- ▶ **Step 7:** Divide the total costs associated with pumping (\$2.0 million) by total water volumes delivered to pumped service customers (4.4 million HCF) yields a surcharge 0.47 per HCF for all pumped-service customers (total of \$1.09 / HCF for Agriculture and \$1.46 / HCF for all others).

4.2.2 TIERED RATES

The tiered rates for Residential are important because (1) they offer customers the ability to increase the affordability of their water bill by remaining in the less

expense Tier 1 rate, and (2) the higher tiers allow the District to send a conservation signal by having the higher water users pay for the District’s conservation costs.

4.2.2.1 Tier Thresholds

This Study recommends that Residential adopt three tiers rather than the current four tiers for the following reasons:

- ▶ The Tier 1 allowance is ostensibly for indoor water usage (equal to approximately 60 gallons per persons per day⁷, assuming about 4 denizens per account);
- ▶ The Tier 2 allowance is generally for outdoor water usage, which varies greatly in the District’s service area due to the heterogeneous land use;
- ▶ Having a wider Tier 2 threshold will allow more customers to stay within those two tiers, which will confer revenue stability to the District; and
- ▶ A cost basis was readily available for justifying three tiers (see Section 4.2.2.2).

Table 14 summarizes the proposed tier thresholds for Residential.

Table 14. Proposed Residential Tier Thresholds

Tier	Threshold
Tier 1	10 HCF
Tier 2	50 HCF
Tier 3	>50 HCF

4.2.2.2 Residential Tiered Rates

The Residential tiered rates have at their foundation the flat rate that was calculated in Section 4.2.1. These flats rates (one for pumped-service and another for gravity service) are equal to the Residential Tier 2 rate.

- ▶ **Tier 1:** The Tier 1 rate is created with the use of discretionary tax revenue to lower the unit price of water and provide an affordable source of water to all Residential customers. The unit rate is calculated by dividing the tax revenue allocation (\$140 thousand) by the total water usage in Tier 1 (259

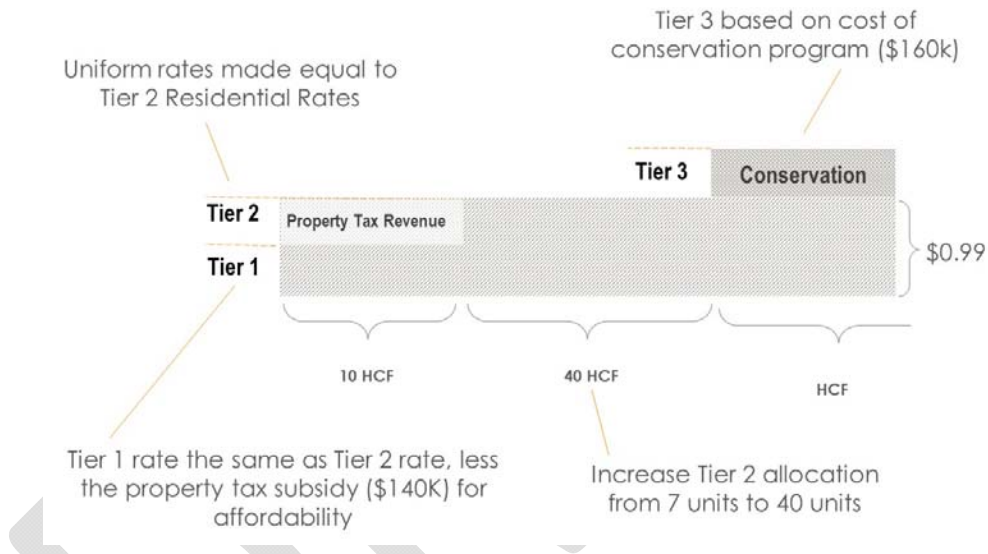
⁷ The State of California’s indoor efficient water usage standard is 55 gallons per person per day

thousand HCF) which yields a \$0.50 reduction in Tier 2 rates (or \$0.49 / HCF for gravity and \$0.96 / HCF for pumped service).

- ▶ **Tier 3:** The Tier 3 unit rate is designed to collect the costs of the District's conservation program (the portion for Residential customers only) from those customers that drive the need for the program. The portion of the Residential customer conservation program (estimated to be \$52 thousand) is divided by the volume of Tier 3 water (77 thousand HCF), which yields a unit rate of \$0.69 / HCF which is added to the Tier 2 rates (or \$1.68 / HCF for gravity and \$2.15 / HCF for pumped service).

The methodology for designing the Residential tiered rates is depicted in Figure 3.

Figure 3. Schematic of Rate Design Cost Recovery



4.2.2.3 Ag-Domestic Tiered Rates

The Ag-Domestic customer class was created by the District as a way of acknowledging that certain agricultural properties also have domiciles and that, for reasons of equity, those residential customers should participate in the tiered rates paid by Residential customers.

The first two tiers for Ag-Domestic are the same as those for Residential, with the exception that in the third tier (any water used over the 50 HCF per month) will be charged the same rate Agriculture.

4.2.3 PROPOSED SERVICE CHARGE

As previously explained, the Volumetric Rates above are based on essentially the same costs (with exception of some District policies to shape the rate structure) and allocated based on total water usage. As such, the cost differential due to peaking behavior (as quantified in the cost-of-service analysis in Section 3) is not reflected in those volumetric rates. Therefore, it is the differences in the Service Charges for each respective customer class that will reflect the difference in the cost of providing service. This is appropriate since the difference in the cost to provide service to customer classes is largely due to differences in their peaking behaviors, which impacts the cost of infrastructure. Since infrastructure costs are largely fixed, it is appropriate that the Service Charge also be fixed.

Service Charges are assessed as a function of meter size, because meter size is an industry-standard factor used to represent the proportional demand that a connection places on the system based on the design capacity necessary to serve it. The meter equivalency schedule used was explained in detail in Section 3.1.4.

The Service Charge schedule by customer class was calculated as follows:

- ▶ **Step 1:** Take the total rate revenue requirement by customer class (e.g. \$1.1 million for Agriculture⁸) and subtract the anticipated volumetric revenue for that customer class (\$893 thousand for Agriculture) to derive the amount that needs to be collected from the Service Charge (\$177.5 thousand).
- ▶ **Step 2:** Divide the amount above by the number of equivalent meters in the customer class (556.75 EM in this example⁹), and by twelve months, to

⁸ This number doesn't appear to match the value in Table 12 simply because the pumping costs are broken out in Table 12.

⁹ Note that the number of equivalent meters per customer class used for setting the rate period is based on FY 2016 billing data, as the best estimate of what the billing units will be in FY 2018. These numbers differ slightly from the units of service used in the COSA, which used the full billing record, annualized to one year, to produce averages.

calculate the Service Charge for a ¾" meter. (\$26.57 per month in this example).

- ▶ **Step 3:** Develop the Service Charge rate schedule using the meter equivalency table and the calculated rate for ¾" meters.

4.3 PROPOSED RATE SCHEDULE

The proposed rate schedule for FY 2018 is presented in Table 15.

The complete schedules of proposed rates from FY 2018 to FY 2022 are presented as **Schedule 6** through **Schedule 10** in Appendix C.

Table 15 –Proposed FY 2018 Rate Schedule

Proposed Volumetric Rates, Effective July 1, 2017

	Residential Pumped	Business Pumped	Agriculture Pumped	Ag Domestic Pumped	Inter-departmental Pumped	Resale Pumped
Tier 1	\$0.96	\$1.46	\$1.09	\$0.96	\$1.46	\$1.46
Tier 2	\$1.46			\$1.46		
Tier 3	\$2.36			\$1.09		

	Residential Gravity	Business Gravity	Agriculture Gravity	Ag Domestic Gravity	Inter-departmental Gravity	Resale Gravity
Tier 1	\$0.49	\$0.99	\$0.62	\$0.49	\$0.99	\$0.99
Tier 2	\$0.99			\$0.99		
Tier 3	\$1.89			\$0.62		

Proposed Service Charge, Effective July 1, 2017

	Residential	Business	Agriculture	Ag Domestic	Inter-departmental	Resale	Current
5/8"-3/4"	\$28.75	\$22.97	\$25.97	\$20.87	\$20.54	\$25.27	\$23.34
1"	\$47.91	\$38.28	\$43.28	\$34.78	\$34.24	\$42.12	\$34.86
1-1/2"	\$95.82	\$76.56	\$86.56	\$69.57	\$68.47	\$84.24	\$63.66
2"	\$153.31	\$122.50	\$138.50	\$111.30	\$109.55	\$134.78	\$98.22
2-1/2"	\$255.52	\$204.16	\$230.84	\$185.51	\$182.59	\$224.63	\$150.05
3"	\$335.37	\$267.96	\$302.97	\$243.48	\$239.65	\$294.83	\$207.65
4"	\$603.67	\$482.33	\$545.35	\$438.26	\$431.36	\$530.70	\$368.92
6"	\$1,245.67	\$995.29	\$1,125.33	\$904.35	\$890.12	\$1,095.09	\$812.42
12"	\$7,359.04	\$5,879.89	\$6,648.09	\$5,342.61	\$5,258.53	\$6,469.48	\$13,741.69
18"						\$12,026.38	\$23,561.61

DISCLAIMER

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Additionally, the purpose of this document is to summarize Stantec's analysis and findings related to this project, and it is not intended to address all aspects that may surround the subject area. Therefore, this document may have limitations, assumptions, or reliances on data that are not readily apparent on the face of it. Moreover, the reader should understand that Stantec was called on to provide judgments on a variety of critical factors which are incapable of precise measurement. As such, the use of this document and its findings by the District should only occur after consultation with Stantec, and any use of this document and findings by any other person is done so entirely at their own risk.

APPENDIX A: RSA SCHEDULES

Schedule 1 Projection of Cash Outflows

Schedule 2 Capital Improvement Program

Schedule 3 Cash Flow Proforma

Schedule 1 - Projection of Cash Outflows

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	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
1 Administration											
2 Salaries	\$ 465,834	482,138	489,370	496,711	504,161	511,724	519,400	527,191	535,099	543,125	551,272
3 Benefits	273,278	285,064	297,002	309,477	322,515	336,142	350,385	365,275	380,841	397,115	414,131
4 Services & Supplies	600,597	619,621	639,275	659,584	680,569	702,256	724,670	747,837	771,784	796,541	822,136
9 Bad Debt	3,702	3,702	3,702	3,702	3,702	3,702	3,702	3,702	3,702	3,702	3,702
10 Subtotal Administration	\$ 442,926	\$ 458,426	\$ 483,567	\$ 509,811	\$ 537,206	\$ 565,801	\$ 595,649	\$ 626,804	\$ 659,322	\$ 693,264	\$ 728,691
11 Board of Directors											
12 Salaries	\$ 58,847	60,906	61,820	62,747	63,688	64,644	65,613	66,597	67,596	68,610	69,639
13 Benefits	130,330	135,573	141,039	146,740	152,685	158,886	165,353	172,100	179,138	186,482	194,144
14 Services & Supplies	7,263	7,481	7,705	7,936	8,174	8,420	8,672	8,932	9,200	9,476	9,761
20 Subtotal Board of Directors	\$ 196,439	\$ 203,959	\$ 210,564	\$ 217,423	\$ 224,548	\$ 231,949	\$ 239,639	\$ 247,630	\$ 255,935	\$ 264,568	\$ 273,544
21 District Maintenance											
22 Salaries	\$ 139,333	144,210	146,373	148,569	150,797	153,059	155,355	157,685	160,051	162,451	164,888
23 Benefits	64,362	67,079	69,917	72,881	75,977	79,212	82,592	86,123	89,813	93,669	97,699
24 Services & Supplies	90,512	93,247	96,065	98,970	101,962	105,046	108,224	111,499	114,873	118,351	121,935
27 Other	183,384	188,885	194,552	200,388	206,400	212,592	218,970	225,539	232,305	239,274	246,452
30 Subtotal District Maintenance	\$ 477,590	\$ 493,421	\$ 506,907	\$ 520,807	\$ 535,136	\$ 549,909	\$ 565,140	\$ 580,846	\$ 597,042	\$ 613,745	\$ 630,974
31 Electrical Mechanical											
32 Salaries	\$ 321,758	333,019	338,015	343,085	348,231	353,455	358,756	364,138	369,600	375,144	380,771
33 Benefits	239,018	248,470	258,321	268,587	279,286	290,439	302,065	314,185	326,822	339,998	353,739
34 Services & Supplies	268,337	277,076	286,119	295,477	305,161	315,186	325,564	336,308	347,433	358,954	370,887
36 Power	1,196,901	1,268,715	1,344,838	1,425,529	1,511,060	1,601,724	1,697,827	1,799,697	1,907,679	2,022,140	2,143,468
40 Subtotal Electrical Mechanical	\$ 2,026,014	\$ 2,127,282	\$ 2,227,293	\$ 2,332,677	\$ 2,443,739	\$ 2,560,804	\$ 2,684,212	\$ 2,814,328	\$ 2,951,534	\$ 3,096,236	\$ 3,248,865
41 Engineering											
42 Salaries	\$ 375,510	388,653	394,483	400,400	406,406	412,502	418,690	424,970	431,345	437,815	444,382
43 Benefits	185,130	193,197	201,633	210,453	219,677	229,323	239,411	249,962	260,998	272,542	284,619
44 Services & Supplies	73,336	75,536	77,802	80,136	82,540	85,017	87,567	90,194	92,900	95,687	98,557
47 Other	192	198	204	210	216	223	229	236	243	251	258
50 Subtotal Engineering	\$ 634,168	\$ 657,584	\$ 674,122	\$ 691,200	\$ 708,840	\$ 727,064	\$ 745,897	\$ 765,363	\$ 785,486	\$ 806,295	\$ 827,816
51 Fisheries											
52 Salaries	\$ 322,194	333,471	338,473	343,550	348,703	353,934	359,243	364,632	370,101	375,653	381,287
53 Benefits	126,881	132,384	138,136	144,151	150,439	157,014	163,889	171,079	178,599	186,463	194,688
54 Services & Supplies	24,838	25,583	26,351	27,141	27,956	28,794	29,658	30,548	31,464	32,408	33,381
60 Subtotal Fisheries	\$ 473,913	\$ 491,438	\$ 502,960	\$ 514,842	\$ 527,098	\$ 539,742	\$ 552,791	\$ 566,259	\$ 580,164	\$ 594,524	\$ 609,356

Schedule 1 - Projection of Cash Outflows

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	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
61 Information Technology											
62 Salaries	\$ 130,513	135,081	137,107	139,164	141,251	143,370	145,521	147,704	149,919	152,168	154,450
63 Benefits	67,895	70,851	73,942	77,174	80,553	84,087	87,783	91,649	95,692	99,921	104,345
64 Services & Supplies	14,487	14,922	15,369	15,831	16,305	16,795	17,298	17,817	18,352	18,903	19,470
67 Other	118	121	125	129	132	136	140	145	149	153	158
70 Subtotal Information Technology	\$ 213,013	\$ 220,975	\$ 226,543	\$ 232,297	\$ 238,242	\$ 244,389	\$ 250,743	\$ 257,315	\$ 264,112	\$ 271,145	\$ 278,423
71 Management											
72 Salaries	\$ 487,471	662,499	672,437	682,524	692,761	703,153	713,700	724,406	735,272	746,301	757,495
73 Benefits	188,621	233,340	241,453	249,904	258,708	267,881	277,441	287,404	297,790	308,618	319,908
74 Services & Supplies	494,515	509,350	524,631	540,370	556,581	573,278	590,477	608,191	626,437	645,230	664,587
77 Other	118	121	125	129	132	136	140	145	149	153	158
80 Subtotal Management	\$ 1,170,724	\$ 1,405,311	\$ 1,438,646	\$ 1,472,926	\$ 1,508,183	\$ 1,544,449	\$ 1,581,758	\$ 1,620,145	\$ 1,659,647	\$ 1,700,302	\$ 1,742,148
81 Pipeline											
82 Salaries	\$ 351,071	363,359	368,809	374,341	379,956	385,656	391,441	397,312	403,272	409,321	415,461
83 Benefits	229,328	239,122	249,356	260,049	271,225	282,904	295,110	307,869	321,206	335,148	349,724
84 Services & Supplies	317,413	326,986	336,850	347,013	357,483	368,272	379,388	390,842	402,644	414,804	427,334
87 Other	118	121	125	129	132	136	140	145	149	153	158
90 Subtotal Pipeline	\$ 897,930	\$ 929,588	\$ 955,139	\$ 981,532	\$ 1,008,797	\$ 1,036,968	\$ 1,066,080	\$ 1,096,168	\$ 1,127,271	\$ 1,159,427	\$ 1,192,677
91 Public Relations											
92 Salaries	\$ 254,988	263,913	267,871	271,889	275,968	280,107	284,309	288,574	292,902	297,296	301,755
93 Benefits	88,776	92,726	96,859	101,183	105,708	110,443	115,399	120,585	126,013	131,695	137,642
94 Services & Supplies	141,751	146,003	150,383	154,895	159,542	164,328	169,258	174,336	179,566	184,953	190,501
97 Other	235	242	250	257	265	273	281	289	298	307	316
100 Subtotal Public Relations	\$ 485,750	\$ 502,884	\$ 515,363	\$ 528,224	\$ 541,482	\$ 555,151	\$ 569,247	\$ 583,784	\$ 598,779	\$ 614,250	\$ 630,214
101 Recreation - Operations											
102 Salaries	\$ 1,044,607	1,081,168	1,097,385	1,113,846	1,130,554	1,147,512	1,164,725	1,182,196	1,199,929	1,217,928	1,236,196
103 Benefits	358,427	373,432	387,919	403,035	418,810	435,275	452,461	470,401	489,132	508,688	529,111
104 Services & Supplies	309,853	322,257	335,219	348,767	362,932	377,744	393,235	409,441	426,397	444,142	462,717
107 Other	502,556	520,145	527,950	535,873	543,915	552,078	560,363	568,772	577,308	585,972	594,766
109 Bad Debt	11,622	11,622	11,622	11,622	11,622	11,622	11,622	11,622	11,622	11,622	11,622
110 Subtotal Recreation - Operations	\$ 2,227,066	\$ 2,308,624	\$ 2,360,096	\$ 2,413,144	\$ 2,467,834	\$ 2,524,231	\$ 2,582,406	\$ 2,642,432	\$ 2,704,387	\$ 2,768,353	\$ 2,834,413
111 Recreation - Maintenance											
112 Salaries	\$ 423,884	438,720	445,301	451,981	458,760	465,642	472,626	479,716	486,911	494,215	501,628
113 Benefits	172,431	179,831	187,565	195,648	204,096	212,926	222,157	231,806	241,895	252,442	263,471
114 Services & Supplies	313,908	323,365	333,108	343,146	353,487	364,142	375,119	386,429	398,082	410,088	422,458
117 Other	227,762	235,734	239,270	242,860	246,504	250,202	253,956	257,766	261,633	265,558	269,543
120 Subtotal Recreation - Maintenance	\$ 1,137,985	\$ 1,177,650	\$ 1,205,244	\$ 1,233,634	\$ 1,262,847	\$ 1,292,911	\$ 1,323,858	\$ 1,355,717	\$ 1,388,521	\$ 1,422,304	\$ 1,457,099

Schedule 1 - Projection of Cash Outflows

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	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
121 Recreation - Public Relations											
122 Salaries	\$ 48,671	50,375	51,131	51,898	52,676	53,466	54,268	55,082	55,908	56,747	57,598
123 Benefits	3,659	3,842	4,034	4,236	4,448	4,670	4,904	5,149	5,407	5,677	5,961
124 Services & Supplies	82,840	85,325	87,885	90,521	93,237	96,034	98,915	101,882	104,939	108,087	111,329
127 Other	21,808	22,571	22,909	23,253	23,602	23,956	24,315	24,680	25,050	25,426	25,807
130 Subtotal Recreation - Public Relations	\$ 156,978	\$ 162,113	\$ 165,959	\$ 169,908	\$ 173,963	\$ 178,126	\$ 182,402	\$ 186,793	\$ 191,304	\$ 195,937	\$ 200,696
131 Recreation - Water Playground											
132 Salaries	\$ 375,428	388,568	394,397	400,313	406,317	412,412	418,598	424,877	431,250	437,719	444,285
133 Benefits	35,004	36,754	38,591	40,521	42,547	44,674	46,908	49,254	51,716	54,302	57,017
134 Services & Supplies	145,008	150,516	156,259	162,247	168,494	175,010	181,809	188,906	196,314	204,048	212,126
135 Chemicals	30,171	31,377	32,632	33,938	35,295	36,707	38,175	39,702	41,290	42,942	44,660
137 Other	174,038	180,129	182,831	185,573	188,357	191,182	194,050	196,961	199,915	202,914	205,958
140 Subtotal	\$ 759,648	\$ 787,345	\$ 804,711	\$ 822,592	\$ 841,010	\$ 859,986	\$ 879,541	\$ 899,700	\$ 920,486	\$ 941,926	\$ 964,045
141 Recreation - Operations / Maint. / PR / Water Pk											
142 Salaries	\$ 1,892,591	1,958,831	1,988,214	2,018,037	2,048,307	2,079,032	2,110,218	2,141,871	2,173,999	2,206,609	2,239,708
143 Benefits	569,521	593,859	618,110	643,440	669,901	697,546	726,429	756,610	788,149	821,110	855,559
144 Services & Supplies	851,609	881,463	912,470	944,682	978,150	1,012,929	1,049,079	1,086,658	1,125,731	1,166,365	1,208,630
145 Chemicals	30,171	31,377	32,632	33,938	35,295	36,707	38,175	39,702	41,290	42,942	44,660
147 Other	926,164	958,578	972,961	987,560	1,002,378	1,017,418	1,032,684	1,048,179	1,063,906	1,079,870	1,096,073
149 Bad Debt	11,622	11,622	11,622	11,622	11,622	11,622	11,622	11,622	11,622	11,622	11,622
150 Subtotal	\$ 4,281,677	\$ 4,435,731	\$ 4,536,009	\$ 4,639,278	\$ 4,745,653	\$ 4,855,254	\$ 4,968,207	\$ 5,084,643	\$ 5,204,698	\$ 5,328,519	\$ 5,456,253
151 Retirees											
153 Benefits	465,818	479,793	494,186	509,011	524,281	540,009	556,209	572,895	590,082	607,784	626,017
160 Subtotal Retirees	\$ 465,818	\$ 479,793	\$ 494,186	\$ 509,011	\$ 524,281	\$ 540,009	\$ 556,209	\$ 572,895	\$ 590,082	\$ 607,784	\$ 626,017
161 Garage											
170 Subtotal Garage	\$ (46,965)	\$ (48,311)	\$ (49,694)	\$ (51,114)	\$ (52,573)	\$ (54,071)	\$ (55,610)	\$ (57,189)	\$ (58,810)	\$ (60,475)	\$ (62,183)
171 Safety											
172 Salaries	\$ 26,275	27,195	27,603	28,017	28,437	28,864	29,297	29,736	30,182	30,635	31,095
174 Services & Supplies	38,322	39,472	40,656	41,876	43,132	44,426	45,759	47,132	48,546	50,002	51,502
180 Subtotal Safety	\$ 64,349	\$ 66,406	\$ 67,985	\$ 69,605	\$ 71,267	\$ 72,972	\$ 74,722	\$ 76,518	\$ 78,360	\$ 80,251	\$ 82,191
181 Safety / Garage											
190 Subtotal Safety / Garage	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
191 Utilities Maintenance											
192 Salaries	\$ 3,215	3,328	3,378	3,428	3,480	3,532	3,585	3,639	3,693	3,749	3,805
200 Subtotal Utilities Maintenance	\$ 3,215	\$ 3,328	\$ 3,378	\$ 3,428	\$ 3,480	\$ 3,532	\$ 3,585	\$ 3,639	\$ 3,693	\$ 3,749	\$ 3,805

Schedule 1 - Projection of Cash Outflows

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	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
201 Water Conservation - PR											
202 Salaries	\$ 254,988	263,913	267,871	271,889	275,968	280,107	284,309	288,574	292,902	297,296	301,755
203 Benefits	88,776	92,726	96,859	101,183	105,708	110,443	115,399	120,585	126,013	131,695	137,642
204 Services & Supplies	141,751	146,003	150,383	154,895	159,542	164,328	169,258	174,336	179,566	184,953	190,501
207 Other	235	242	250	257	265	273	281	289	298	307	316
210 Subtotal Water Conservation - PR	\$ 485,750	\$ 502,884	\$ 515,363	\$ 528,224	\$ 541,482	\$ 555,151	\$ 569,247	\$ 583,784	\$ 598,779	\$ 614,250	\$ 630,214
211 Water Quality - Lab											
212 Salaries	\$ 160,336	165,948	168,437	170,964	173,528	176,131	178,773	181,455	184,177	186,939	189,743
213 Benefits	114,317	119,186	124,274	129,589	135,143	140,947	147,012	153,352	159,978	166,904	174,144
214 Services & Supplies	127,608	131,436	135,379	139,440	143,624	147,932	152,370	156,941	161,650	166,499	171,494
220 Subtotal Water Quality - Lab	\$ 402,261	\$ 416,570	\$ 428,090	\$ 439,993	\$ 452,295	\$ 465,010	\$ 478,156	\$ 491,748	\$ 505,804	\$ 520,343	\$ 535,382
221 Water Treatment											
222 Salaries	\$ 925,292	957,677	972,043	986,623	1,001,423	1,016,444	1,031,691	1,047,166	1,062,873	1,078,816	1,094,999
223 Benefits	455,829	475,402	495,858	517,237	539,582	562,939	587,356	612,881	639,567	667,469	696,644
224 Services & Supplies	267,544	278,846	290,683	303,084	316,078	329,695	343,969	358,935	374,628	391,088	408,354
225 Chemicals	225,785	234,816	244,209	253,977	264,136	274,701	285,689	297,117	309,002	321,362	334,216
227 Other	85,575	88,142	90,786	93,510	96,315	99,205	102,181	105,246	108,404	111,656	115,005
230 Subtotal Water Treatment	\$ 1,960,024	\$ 2,034,883	\$ 2,093,578	\$ 2,154,430	\$ 2,217,533	\$ 2,282,984	\$ 2,350,886	\$ 2,421,345	\$ 2,494,474	\$ 2,570,391	\$ 2,649,218
231 Warehouse											
232 Salaries	\$ 8,519	8,817	8,949	9,084	9,220	9,358	9,498	9,641	9,786	9,932	10,081
233 Benefits	1,620	1,701	1,786	1,876	1,969	2,068	2,171	2,280	2,394	2,514	2,639
234 Services & Supplies	4,614	4,815	5,026	5,247	5,479	5,722	5,978	6,246	6,528	6,824	7,134
240 Subtotal Warehouse	\$ 14,753	\$ 15,333	\$ 15,761	\$ 16,206	\$ 16,668	\$ 17,148	\$ 17,648	\$ 18,167	\$ 18,707	\$ 19,270	\$ 19,855
241 Debt Service Expenses											
242 1991 California DWR Loan (Treatment Plant)	\$ 305,067	305,067	305,067	305,067	305,067	305,067	-	-	-	-	-
243 Casitas Dam Seismic Safety of Dam	\$ 77,228	77,228	77,228	77,228	77,228	77,228	77,228	77,228	77,228	77,228	77,228
244 Mira Monte Special Assessment Bond	\$ 20,875	20,075	20,250	20,375	20,450	19,988	-	-	-	-	-
245 Total: Debt Service Expenses	\$ 403,171	\$ 402,371	\$ 402,546	\$ 402,671	\$ 402,746	\$ 402,283	\$ 77,228	\$ 77,228	\$ 77,228	\$ 77,228	\$ 77,228
248 Capital Project Funding Sources											
251 Projects Paid from Cash	3,929,059	3,369,285	2,573,743	4,235,410	3,346,138	3,925,302	5,020,990	4,784,209	4,414,694	4,514,515	4,682,205
252 Total: Capital Project Funding Sources	\$ 3,929,059	\$ 3,369,285	\$ 2,573,743	\$ 4,235,410	\$ 3,346,138	\$ 3,925,302	\$ 5,020,990	\$ 4,784,209	\$ 4,414,694	\$ 4,514,515	\$ 4,682,205
253 TOTAL CASH OUTFLOWS	\$ 23,263,257	23,604,871	23,358,058	25,588,160	25,287,894	26,477,057	27,880,630	28,300,270	28,611,701	29,418,098	30,319,147

Schedule 2 - Capital Improvement Program

<u>PROJECT</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>
24 Information Technology	-	\$51,500	-	-	-	-	-	-	-	-
33 Garage / Safety	88,200	97,850	457,248	214,174	65,280	82,308	77,613	43,046	44,337	71,763
40 Engineering	2,285,000	1,802,500	1,145,772	1,360,445	517,734	2,875,000	3,922,462	4,249,214	4,053,664	4,175,274
42 Water Quality	21,899	-	-	338,745	-	-	-	-	-	-
52 Electrical Mechanical	643,000	629,021	53,045	131,127	225,102	57,964	59,703	-	-	-
53 Pipeline	57,500	175,100	159,135	163,909	168,826	173,891	179,108	184,481	190,016	195,716
54 Operations/Water Treatment	468,600	323,729	472,101	595,536	444,576	678,175	758,223	172,182	126,677	71,763
55 District Maintenance	-	61,800	-	-	450,204	-	-	-	-	-
62 Recreation - Operations	-	-	-	-	-	-	-	-	-	-
63 Recreation - Maintenance	118,000	-	-	-	-	-	-	-	-	-
65 Recreation - Water Playground	2,500	-	-	-	-	-	-	-	-	-
30 Administration	5,700	21,321	-	-	-	-	-	-	-	-
40 Engineering	-	30,900	79,568	1,409,618	1,451,906	-	-	-	-	-
42 Water Quality	72,260	-	-	-	-	-	-	-	-	-
52 Electrical Mechanical	33,400	-	-	21,855	22,510	57,964	-	-	-	-
63 Recreation - Maintenance	83,000	-	-	-	-	-	-	-	-	-
65 Recreation - Water Playground	50,000	-	-	-	-	-	-	-	-	-
Total CIP Budget (escalated)	\$ 3,929,059	3,302,335	2,573,743	4,235,410	3,346,138	3,925,302	5,020,990	4,784,209	4,414,694	4,514,515

Schedule 3 - Cash Flow Proforma

	Proposed Rate Increase:	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
		0.00%	12.00%	12.00%	12.00%	12.00%	12.00%	0.00%	0.00%	0.00%	0.00%
1	Rate Revenue Subject to Growth & Rate Adjustments										
2	Rate Revenue	\$ 8,449,472	\$ 8,451,106	\$ 9,467,070	\$ 10,605,171	\$ 11,880,092	\$ 13,308,282	\$ 14,908,166	\$ 14,911,059	\$ 14,913,954	\$ 14,916,851
4	Additional Revenue From Growth	1,634	1,635	1,833	2,054	2,302	2,581	2,893	2,895	2,897	2,899
5	Additional Rate Revenue From Rate Increase	-	1,014,329	1,136,268	1,272,867	1,425,887	1,597,304	-	-	-	-
6	Total Rate Revenue	\$ 8,451,106	\$ 9,467,070	\$ 10,605,171	\$ 11,880,092	\$ 13,308,282	\$ 14,908,166	\$ 14,911,059	\$ 14,913,954	\$ 14,916,851	\$ 14,919,750
7	Plus: Non-Rate Revenues										
8	Other Operating Revenue	\$ 72,829	\$ 73,557	\$ 74,293	\$ 75,036	\$ 75,786	\$ 76,544	\$ 77,309	\$ 78,082	\$ 78,863	\$ 79,652
9	Non-Operating Revenue	64,475	65,120	65,771	66,428	67,093	67,764	68,441	69,126	69,817	70,515
10	Interest Income	472,442	421,740	411,237	408,248	416,479	450,044	478,126	492,541	504,141	509,066
11	Capital Facilities Charge	44,550	44,584	44,618	44,653	44,687	44,721	44,756	44,790	44,825	44,859
12	Penalty Revenue	551,182	688,978	688,978	688,978	688,978	688,978	688,978	688,978	688,978	688,978
13	Taxes and Assessments	2,291,629	2,294,931	2,298,452	2,302,196	2,306,164	2,310,358	2,333,462	2,356,796	2,380,364	2,404,168
14	CFD Tax	450,000	459,000	468,180	477,544	487,094	496,836	506,773	516,909	527,247	537,792
15	Recreation Revenue	3,672,600	3,856,230	3,894,792	3,933,740	3,973,077	4,012,808	4,052,936	4,093,466	4,134,400	4,175,744
16	Equals: Total Non-Rate Revenue	\$ 7,619,706	\$ 7,904,139	\$ 7,946,321	\$ 7,996,822	\$ 8,059,358	\$ 8,148,053	\$ 8,250,781	\$ 8,340,687	\$ 8,428,635	\$ 8,510,774
17	Total Revenue	\$ 16,070,812	\$ 17,371,209	\$ 18,551,492	\$ 19,876,914	\$ 21,367,640	\$ 23,056,219	\$ 23,161,840	\$ 23,254,641	\$ 23,345,486	\$ 23,430,524
18	Less: Operating Expenses										
19	Salaries	\$ (5,923,748)	\$ (6,289,046)	\$ (6,383,382)	\$ (6,479,133)	\$ (6,576,320)	\$ (6,674,964)	\$ (6,775,089)	\$ (6,876,715)	\$ (6,979,866)	\$ (7,084,564)
20	Benefits	(3,200,473)	(3,367,485)	(3,501,595)	(3,641,463)	(3,787,347)	(3,939,523)	(4,098,274)	(4,263,901)	(4,436,715)	(4,617,047)
21	Services and Supplies	(3,275,781)	(3,383,526)	(3,495,071)	(3,610,566)	(3,730,163)	(3,854,026)	(3,982,322)	(4,115,227)	(4,252,926)	(4,395,610)
22	Chemicals	(255,955)	(266,193)	(276,841)	(287,915)	(299,431)	(311,409)	(323,865)	(336,819)	(350,292)	(364,304)
23	Power	(1,196,901)	(1,268,715)	(1,344,838)	(1,425,529)	(1,511,060)	(1,601,724)	(1,697,827)	(1,799,697)	(1,907,679)	(2,022,140)
24	Other	(295,417)	(304,310)	(313,344)	(322,648)	(332,229)	(342,095)	(352,257)	(362,722)	(373,499)	(384,598)
25	Bad Debt	(15,325)	(15,325)	(15,325)	(15,325)	(15,325)	(15,325)	(15,325)	(15,325)	(15,325)	(15,325)
26	Equals: Net Income	\$ 1,907,212	\$ 2,476,608	\$ 3,221,095	\$ 4,094,337	\$ 5,115,765	\$ 6,317,153	\$ 5,916,881	\$ 5,484,235	\$ 5,029,184	\$ 4,546,938
27	Existing Debt Service	\$ (403,171)	(402,371)	(402,546)	(402,671)	(402,746)	(402,283)	(77,228)	(77,228)	(77,228)	(77,228)
28	Unrestricted Working Capital Reserve Fund Test										
29	Balance At Beginning Of Fiscal Year	\$ 22,093,898	19,073,149	17,044,539	16,555,749	15,278,376	15,911,593	17,167,462	17,252,391	17,141,421	16,944,881
30	Cash Flow Surplus (Deficit)	\$ 908,310	\$ 1,340,675	\$ 2,084,953	\$ 2,958,036	\$ 3,979,354	\$ 5,181,171	\$ 5,105,920	\$ 4,673,239	\$ 4,218,154	\$ 3,735,873
31	Cash Funded Capital	(3,929,059)	(3,369,285)	(2,573,743)	(4,235,410)	(3,346,138)	(3,925,302)	(5,020,990)	(4,784,209)	(4,414,694)	(4,514,515)
32	Balance At End Of Fiscal Year	\$ 19,073,149	\$ 17,044,539	\$ 16,555,749	\$ 15,278,376	\$ 15,911,593	\$ 17,167,462	\$ 17,252,391	\$ 17,141,421	\$ 16,944,881	\$ 16,166,238
33	Working Capital Reserve Target	22,093,800	22,693,800	23,293,800	23,893,800	24,493,800	25,093,800	25,693,800	26,293,800	26,893,800	27,493,800
34	Excess Working Capital Above Target	\$ (3,020,651)	\$ (5,649,261)	\$ (6,738,051)	\$ (8,615,424)	\$ (8,582,207)	\$ (7,926,338)	\$ (8,441,409)	\$ (9,152,379)	\$ (9,948,919)	\$ (11,327,562)
35	Debt Service Coverage Test										
36	Income Available For Debt Service	\$ 1,309,846	\$ 1,741,411	\$ 2,485,666	\$ 3,358,653	\$ 4,379,798	\$ 5,580,873	\$ 5,180,255	\$ 4,747,572	\$ 4,292,485	\$ 3,810,201
37	Debt Service Coverage Ratio (target = 1.5)	3.25	4.33	6.17	8.34	10.87	13.87	67.08	61.47	55.58	49.34

Appendix B: Cost-of-Service
Schedules

APPENDIX B: COST-OF-SERVICE SCHEDULES

Schedule 4 Allocation of Costs to Functional Components

Schedule 5 Allocation of Costs to System Parameters

Schedule 4 - Allocation of Costs to Functional Components

1 of 16

	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Administrative Service								
Regular Salaries	\$277,608	\$218	\$17,855	\$14,362	\$0	\$33,732	\$0	\$0
Overtime Pay	1,124	1	72	58	0	137	0	0
Vacation Pay	21,099	17	1,357	1,092	0	2,564	0	0
Jury Duty	2,079	2	134	108	0	253	0	0
Sick Pay	7,691	6	495	398	0	935	0	0
Holiday Pay	13,905	11	894	719	0	1,690	0	0
Bank Charges	5,132	4	330	265	0	624	0	0
CalPERS Pension Expense - CLASSIC	17,163	13	1,104	888	0	2,085	0	0
Social Security Expense	18,322	14	1,178	948	0	2,225	0	0
Medicare Expense	4,726	4	304	244	0	574	0	0
Insurance - Group Life	1,496	1	96	77	0	182	0	0
Insurance - Group Health	62,382	49	4,010	3,226	0	7,575	0	0
Insurance - Group Dental	3,610	3	232	187	0	439	0	0
Insurance - Group Vision	552	0	36	29	0	67	0	0
Insurance - Employee Assistance Program	124	0	8	6	0	15	0	0
Costs Applied	17,712	14	1,139	916	0	2,152	0	0
District Equipment	1,754	1	113	91	0	213	0	0
Service & Supplies	14,124	11	908	731	0	1,716	0	0
Utilities	28,699	23	1,846	1,485	0	3,487	0	0
Computer Upgrades - Hardware	3,688	3	237	191	0	448	0	0
Computer Upgrades - Software	28,923	23	1,860	1,496	0	3,514	0	0
Purchased Water	1,128	1	73	58	0	137	0	0
Bad Debt Expense	2,990	2	192	155	0	363	0	0
Outside Contracts	99,667	78	6,410	5,156	0	12,111	0	0
Clothing & Personal Supplies	49	0	3	3	0	6	0	0
Communications - Radio & Telephone	27,684	22	1,781	1,432	0	3,364	0	0
Office Equipment Maintenance	2,538	2	163	131	0	308	0	0
Membership & Dues	603	0	39	31	0	73	0	0
Printing & Binding	1,299	1	84	67	0	158	0	0
Office Supplies	8,879	7	571	459	0	1,079	0	0
Postage Expense	3,841	3	247	199	0	467	0	0
Other Professional Fees	23,857	19	1,534	1,234	0	2,899	0	0
Advertising & Legal Notices	329	0	21	17	0	40	0	0
Private Vehicle Mileage	32	0	2	2	0	4	0	0
Travel Expense	130	0	8	7	0	16	0	0
Education & Training Seminars	106	0	7	5	0	13	0	0
Interest / Penalty Expenses	51,933	41	3,340	2,687	0	6,310	0	0
Credit Card Fees	15,465	12	995	800	0	1,879	0	0
OPFB Expense	66,665	52	4,288	3,449	0	8,100	0	0
Petty Cash Over / Short	41	0	3	2	0	5	0	0
Property Tax Collection Fee	6,974	5	449	361	0	847	0	0
Property Tax Administration Fee	19,684	15	1,266	1,018	0	2,392	0	0
Insurance - Liability Premium	50,723	40	3,262	2,624	0	6,163	0	0
Insurance - Workers Compensation Premium	108,253	85	6,963	5,600	0	13,154	0	0
Insurance - Miscellaneous Premium	134	0	9	7	0	15	0	0
Other Operating Expenses	15,842	12	1,019	820	0	1,925	0	0
CalPERS - Employer Paid for Emp	22,150	17	1,425	1,146	0	2,691	0	0
Subtotals	\$104,591	\$834	\$68,362	\$54,987	\$0	\$129,151	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

2 of 16



	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Board of Directors								
Regular Salaries	\$60,906	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Social Security Expense	3,765	0	0	0	0	0	0	0
Medicare Expense	880	0	0	0	0	0	0	0
Insurance - Group Life	165	0	0	0	0	0	0	0
Insurance - Group Health	60,716	0	0	0	0	0	0	0
Insurance - Group Dental	3,900	0	0	0	0	0	0	0
Insurance - Group Vision	547	0	0	0	0	0	0	0
Service & Supplies	63	0	0	0	0	0	0	0
Private Vehicle Mileage	2,662	0	0	0	0	0	0	0
Travel Expense	1,686	0	0	0	0	0	0	0
Education & Training Seminars	3,070	0	0	0	0	0	0	0
OPEB Expense	65,599	0	0	0	0	0	0	0
Subtotals	\$203,959	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Electrical Mechanical								
Regular Salaries	\$68,592	\$5,674	\$18,196	\$77,372	\$104,630	\$0	\$0	\$0
Overtime Pay	1,698	140	450	1,916	2,590	0	0	0
Standby Pay	1,312	109	348	1,480	2,001	0	0	0
Vacation Pay	5,147	426	1,365	5,805	7,850	0	0	0
Jury Duty	284	23	75	320	433	0	0	0
Sick Pay	2,972	246	789	3,353	4,534	0	0	0
Holiday Pay	3,221	266	854	3,633	4,913	0	0	0
CalPERS Pension Expense - CLASSIC	3,672	304	974	4,142	5,601	0	0	0
Social Security Expense	5,166	427	1,370	5,827	7,880	0	0	0
Medicare Expense	1,208	100	321	1,363	1,843	0	0	0
Insurance - Group Life	281	23	74	316	428	0	0	0
Insurance - Group Health	14,853	1,229	3,940	16,754	22,656	0	0	0
Insurance - Group Dental	877	73	233	989	1,337	0	0	0
Insurance - Group Vision	114	9	30	128	174	0	0	0
Insurance - Employee Assistance Program	26	2	7	29	39	0	0	0
District Equipment	4,125	341	1,094	4,653	6,292	0	0	0
Service & Supplies	32,493	2,688	8,620	36,652	49,564	0	0	0
Utilities	6,084	503	1,614	6,862	9,280	0	0	0
Power Purchased for Pumping	0	0	0	0	1,266,715	0	0	0
Computer Upgrades - Hardware	777	64	206	677	1,186	0	0	0
Outside Contracts	21,889	1,811	5,807	24,691	33,390	0	0	0
Clothing & Personal Supplies	687	57	182	775	1,048	0	0	0
Communications - Radio & Telephone	1,047	87	278	1,181	1,597	0	0	0
Books & Publications	154	13	41	174	235	0	0	0
Postage Expense	33	3	9	38	51	0	0	0
Licenses & Permits	46	4	12	52	71	0	0	0
Advertising & Legal Notices	51	4	14	58	79	0	0	0
Small Tools	605	50	160	682	922	0	0	0
Education & Training Seminars	1,238	102	328	1,396	1,888	0	0	0
Pre-Employment Screening	15	1	4	17	24	0	0	0
OPEB Expense	32,152	2,660	8,529	36,268	49,045	0	0	0
CalPERS - Employer Paid for Emp	4,717	390	1,251	5,320	7,195	0	0	0
Subtotals	\$214,566	\$17,751	\$56,920	\$242,031	\$1,596,013	\$0	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

3 of 16

	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Engineering								
Regular Salaries	\$207,592	\$51,757	\$0	\$6,048	\$0	\$42,954	\$0	\$0
Part Time - Temporary Wages	749	187	0	22	0	155	0	0
Vacation Pay	25,584	6,379	0	745	0	5,294	0	0
Jury Duty	473	118	0	14	0	98	0	0
Sick Pay	12,716	3,170	0	370	0	2,631	0	0
Holiday Pay	14,541	3,625	0	424	0	3,009	0	0
CalPERS Pension Expense - CLASSIC	11,774	2,935	0	343	0	2,436	0	0
Social Security Expense	13,994	3,489	0	408	0	2,896	0	0
Medicare Expense	3,672	915	0	107	0	760	0	0
Insurance - Group Life	1,476	368	0	43	0	305	0	0
Insurance - Group Health	37,800	9,424	0	1,101	0	7,821	0	0
Insurance - Group Dental	2,283	569	0	67	0	472	0	0
Insurance - Group Vision	437	109	0	13	0	90	0	0
Insurance - Employee Assistance Program	98	24	0	3	0	20	0	0
District Equipment	3,110	775	0	91	0	643	0	0
Service & Supplies	3,289	820	0	96	0	680	0	0
Computer Upgrades - Hardware	2,818	702	0	82	0	583	0	0
Computer Upgrades - Software	3,744	933	0	109	0	775	0	0
Outside Contracts	19,779	4,931	0	576	0	4,092	0	0
Clothing & Personal Supplies	116	29	0	3	0	24	0	0
Communications - Radio & Telephone	302	75	0	9	0	63	0	0
Membership & Dues	2,377	593	0	69	0	492	0	0
Printing & Binding	112	28	0	3	0	23	0	0
Books & Publications	534	133	0	16	0	110	0	0
Postage Expense	137	34	0	4	0	28	0	0
Licenses & Permits	11,734	2,925	0	342	0	2,428	0	0
Safety Program	825	206	0	24	0	171	0	0
Private Vehicle Mileage	1,036	258	0	30	0	214	0	0
Education & Training Seminars	849	212	0	25	0	175	0	0
Pre-Employment Screening	95	24	0	3	0	20	0	0
OPEB Expense	41,215	10,276	0	1,201	0	8,528	0	0
Insurance - Miscellaneous Premium	133	33	0	4	0	28	0	0
CalPERS - Employer Paid for Emp	17,318	4,318	0	505	0	3,583	0	0
Subtotals	\$442,708	\$110,375	\$0	\$12,897	\$0	\$91,603	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

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	General & Adm	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Fisheries								
Regular Salaries	\$7,842	\$243,625	\$0	\$0	\$0	\$0	\$0	\$0
Part Time - Temporary Wages	1,015	31,541	0	0	0	0	0	0
Overtime Pay	6	184	0	0	0	0	0	0
Vacation Pay	505	15,678	0	0	0	0	0	0
Sick Pay	668	20,765	0	0	0	0	0	0
Holiday Pay	363	11,278	0	0	0	0	0	0
CalPERS Pension Expense - CLASSIC	357	11,091	0	0	0	0	0	0
Social Security Expense	589	18,293	0	0	0	0	0	0
Medicare Expense	141	4,385	0	0	0	0	0	0
Insurance - Group Life	42	1,311	0	0	0	0	0	0
Insurance - Group Health	1,255	38,993	0	0	0	0	0	0
Insurance - Group Dental	70	2,175	0	0	0	0	0	0
Insurance - Group Vision	13	397	0	0	0	0	0	0
Insurance - Employee Assistance Program	3	89	0	0	0	0	0	0
District Equipment	101	3,135	0	0	0	0	0	0
Service & Supplies	262	8,126	0	0	0	0	0	0
Computer Upgrades - Hardware	2	70	0	0	0	0	0	0
Outside Contracts	14	429	0	0	0	0	0	0
Clothing & Personal Supplies	1	19	0	0	0	0	0	0
Communications - Radio & Telephone	63	1,965	0	0	0	0	0	0
Membership & Dues	6	190	0	0	0	0	0	0
Books & Publications	5	165	0	0	0	0	0	0
Office Supplies	1	30	0	0	0	0	0	0
Travel Expense	235	7,308	0	0	0	0	0	0
Education & Training Seminars	105	3,272	0	0	0	0	0	0
Pre-Employment Screening	2	77	0	0	0	0	0	0
OPES Expense	1,351	41,974	0	0	0	0	0	0
CalPERS - Employer Paid for Emp	466	14,491	0	0	0	0	0	0
Subtotals	\$15,325	\$476,113	\$0	\$0	\$0	\$0	\$0	\$0
Garage								
District Equipment	11,210	0	0	0	0	0	0	0
Service & Supplies	12,346	0	0	0	0	0	0	0
Utilities	2,215	0	0	0	0	0	0	0
Vehicle Costs Direct	103,619	0	0	0	0	0	0	0
Outside Contracts	335	0	0	0	0	0	0	0
Communications - Radio & Telephone	195	0	0	0	0	0	0	0
Education & Training Seminars	606	0	0	0	0	0	0	0
Subtotals	-48,312	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

5 of 16



Information Technology	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Reception
Regular Salaries	\$118,614	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Overtime Pay	1,787	0	0	0	0	0	0	0
Vacation Pay	5,126	0	0	0	0	0	0	0
Jury Duty	738	0	0	0	0	0	0	0
Sick Pay	3,200	0	0	0	0	0	0	0
Holiday Pay	5,415	0	0	0	0	0	0	0
CalPERS Pension Expense - CLASSIC	6,499	0	0	0	0	0	0	0
Social Security Expense	7,739	0	0	0	0	0	0	0
Medicare Expense	1,934	0	0	0	0	0	0	0
Insurance - Group Life	510	0	0	0	0	0	0	0
Insurance - Group Health	21,173	0	0	0	0	0	0	0
Insurance - Group Dental	1,388	0	0	0	0	0	0	0
Insurance - Group Vision	137	0	0	0	0	0	0	0
Insurance - Employee Assistance Program	31	0	0	0	0	0	0	0
District Equipment	496	0	0	0	0	0	0	0
Service & Supplies	634	0	0	0	0	0	0	0
Computer Upgrades - Hardware	2,142	0	0	0	0	0	0	0
Computer Upgrades - Software	520	0	0	0	0	0	0	0
Outside Contracts	10,497	0	0	0	0	0	0	0
Communications - Radio & Telephone	584	0	0	0	0	0	0	0
Small Tools	17	0	0	0	0	0	0	0
Private Vehicle Mileage	18	0	0	0	0	0	0	0
Travel Expense	14	0	0	0	0	0	0	0
OPEB Expense	22,582	0	0	0	0	0	0	0
Insurance - Miscellaneous Premium	121	0	0	0	0	0	0	0
CalPERS - Employer Paid for Emp	8,869	0	0	0	0	0	0	0
Subtotals	\$228,975	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Management								
Regular Salaries	\$306,267	\$995	\$0	\$0	\$0	\$0	\$0	\$0
Vacation Pay	18,187	59	0	0	0	0	0	0
Jury Duty	800	3	0	0	0	0	0	0
Sick Pay	6,200	20	0	0	0	0	0	0
Holiday Pay	13,989	45	0	0	0	0	0	0
CalPERS Pension Expense - CLASSIC	16,770	54	0	0	0	0	0	0
Social Security Expense	15,406	50	0	0	0	0	0	0
Medicare Expense	5,011	16	0	0	0	0	0	0
Insurance - Group Life	1,781	6	0	0	0	0	0	0
Insurance - Group Health	45,357	147	0	0	0	0	0	0
Insurance - Group Dental	2,766	9	0	0	0	0	0	0
Insurance - Group Vision	273	1	0	0	0	0	0	0
Insurance - Employee Assistance Program	61	0	0	0	0	0	0	0
Service & Supplies	11,364	37	0	0	0	0	0	0
Communications - Radio & Telephone	221	1	0	0	0	0	0	0
Membership & Dues	72,471	235	0	0	0	0	0	0
Books & Publications	4,749	15	0	0	0	0	0	0
Postage Expense	255	1	0	0	0	0	0	0
Other Professional Fees	409,092	1,329	0	0	0	0	0	0
Advertising & Legal Notices	65	0	0	0	0	0	0	0
Private Vehicle Mileage	1,427	5	0	0	0	0	0	0
Travel Expense	1,564	5	0	0	0	0	0	0
Education & Training Seminars	2,511	8	0	0	0	0	0	0
OPEB Expense	48,825	159	0	0	0	0	0	0
Insurance - Workers Compensation Premium	3,982	13	0	0	0	0	0	0
Insurance - Miscellaneous Premium	121	0	0	0	0	0	0	0
CalPERS - Employer Paid for Emp	23,026	75	0	0	0	0	0	0
Subtotals	\$1,012,544	\$3,289	\$0	\$0	\$0	\$0	\$0	\$0
Operations - Maintenance								
Regular Salaries	\$13,331	\$87,958	\$0	\$0	\$0	\$0	\$0	\$0
Part Time - Temporary Wages	3,390	22,364	0	0	0	0	0	0
Overtime Pay	40	262	0	0	0	0	0	0
Vacation Pay	930	6,134	0	0	0	0	0	0
Sick Pay	669	4,412	0	0	0	0	0	0
Holiday Pay	621	4,100	0	0	0	0	0	0
CalPERS Pension Expense - CLASSIC	502	3,314	0	0	0	0	0	0
Social Security Expense	1,142	7,537	0	0	0	0	0	0
Medicare Expense	267	1,763	0	0	0	0	0	0
Insurance - Group Life	45	296	0	0	0	0	0	0
Insurance - Group Health	3,125	20,625	0	0	0	0	0	0
Insurance - Group Dental	167	1,100	0	0	0	0	0	0
Insurance - Group Vision	36	237	0	0	0	0	0	0
Insurance - Employee Assistance Program	8	53	0	0	0	0	0	0
District Equipment	3,062	20,202	0	0	0	0	0	0
Service & Supplies	5,053	33,340	0	0	0	0	0	0
Utilities	92	607	0	0	0	0	0	0
State Water Expense	24,861	154,024	0	0	0	0	0	0
Outside Contracts	2,693	17,769	0	0	0	0	0	0
Clothing & Personal Supplies	225	1,484	0	0	0	0	0	0
Communications - Radio & Telephone	12	78	0	0	0	0	0	0
Membership & Dues	6	40	0	0	0	0	0	0
Licenses & Permits	12	80	0	0	0	0	0	0
Small Tools	766	5,052	0	0	0	0	0	0
Education & Training Seminars	116	763	0	0	0	0	0	0
OPEB Expense	3,396	22,409	0	0	0	0	0	0
Insurance - Workers Compensation Premium	236	1,559	0	0	0	0	0	0
CalPERS - Employer Paid for Emp	636	4,199	0	0	0	0	0	0
Subtotals	\$64,943	\$428,478	\$0	\$0	\$0	\$0	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

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Pipeline	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Regular Salaries	\$70,143	\$2,984	\$27,897	\$171,951	\$66	\$2,045	\$0	\$0
Overtime Pay	7,736	329	3,077	18,963	7	226	0	0
Standby Pay	3,079	131	1,224	7,547	3	90	0	0
Vacation Pay	4,980	212	1,981	12,208	5	145	0	0
Sick Pay	3,401	145	1,353	8,337	3	99	0	0
Holiday Pay	3,313	141	1,318	8,123	3	97	0	0
CalPERS Pension Expense - CLASSIC	3,532	150	1,406	8,658	3	103	0	0
Social Security Expense	5,638	240	2,242	13,821	5	164	0	0
Medicare Expense	1,327	56	528	3,253	1	39	0	0
Insurance - Group Life	343	15	136	841	0	10	0	0
Insurance - Group Health	20,573	875	8,182	50,433	19	600	0	0
Insurance - Group Dental	1,293	55	514	3,170	1	38	0	0
Insurance - Group Vision	142	6	57	349	0	4	0	0
Insurance - Employee Assistance Program	32	1	13	79	0	1	0	0
Costs Applied	2,605	111	1,036	6,385	2	76	0	0
District Equipment	10,028	427	3,988	24,582	9	292	0	0
Service & Supplies	42,282	1,799	16,816	103,653	40	1,233	0	0
Utilities	458	19	182	1,123	0	13	0	0
Computer Upgrades - Hardware	669	28	266	1,639	1	19	0	0
Outside Contracts	25,557	1,087	10,165	62,652	24	745	0	0
Clothing & Personal Supplies	733	31	291	1,796	1	21	0	0
Communications - Radio & Telephone	422	18	168	1,034	0	12	0	0
Postage Expense	14	1	6	34	0	0	0	0
Licenses & Permits	116	5	46	284	0	3	0	0
Small Tools	1,599	68	636	3,920	1	47	0	0
Private Vehicle Mileage	104	4	42	256	0	3	0	0
Travel Expense	359	15	143	880	0	10	0	0
Education & Training Seminars	997	42	397	2,444	1	29	0	0
Property Losses for Operations	541	23	215	1,325	1	16	0	0
OPFB Expense	21,959	934	8,733	53,831	21	640	0	0
Insurance - Workers Compensation Premium	39	2	15	95	0	1	0	0
Insurance - Miscellaneous Premium	31	1	12	76	0	1	0	0
CalPERS - Employer Paid for Emp	4,644	198	1,847	11,384	4	135	0	0
Subtotals	\$237,571	\$10,107	\$84,486	\$582,394	\$223	\$6,927	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Public Relations								
Regular Salaries	\$25,438	\$0	\$0	\$0	\$0	\$0	\$191,926	\$0
Part Time - Temporary Wages	1,752	0	0	0	0	0	13,216	0
Overtime Pay	120	0	0	0	0	0	907	0
Vacation Pay	1,509	0	0	0	0	0	11,386	0
Sick Pay	939	0	0	0	0	0	7,067	0
Holiday Pay	1,127	0	0	0	0	0	8,505	0
CalPERS Pension Expense - CLASSIC	1,264	0	0	0	0	0	9,539	0
Social Security Expense	1,681	0	0	0	0	0	12,660	0
Medicare Expense	433	0	0	0	0	0	3,263	0
Insurance - Group Life	146	0	0	0	0	0	1,104	0
Insurance - Group Health	2,673	0	0	0	0	0	20,167	0
Insurance - Group Dental	172	0	0	0	0	0	1,299	0
Insurance - Group Vision	36	0	0	0	0	0	272	0
Insurance - Employee Assistance Program	8	0	0	0	0	0	61	0
District Equipment	369	0	0	0	0	0	2,711	0
Service & Supplies	1,177	0	0	0	0	0	8,880	0
Computer Upgrades - Hardware	255	0	0	0	0	0	1,926	0
Computer Upgrades - Software	67	0	0	0	0	0	653	0
Outside Contracts	10,510	0	0	0	0	0	79,294	0
Communications - Radio & Telephone	77	0	0	0	0	0	584	0
Membership & Dues	1,146	0	0	0	0	0	8,646	0
Printing & Binding	799	0	0	0	0	0	6,029	0
Office Supplies	5	0	0	0	0	0	39	0
Postage Expense	1,371	0	0	0	0	0	10,342	0
Advertising & Legal Notices	603	0	0	0	0	0	4,552	0
Safety Program	202	0	0	0	0	0	1,521	0
Private Vehicle Mileage	17	0	0	0	0	0	131	0
Travel Expense	82	0	0	0	0	0	618	0
Education & Training Seminars	150	0	0	0	0	0	1,131	0
Pre-Employment Screening	17	0	0	0	0	0	125	0
OPFB Expense	2,946	0	0	0	0	0	22,226	0
Insurance - Workers Compensation Premium	230	0	0	0	0	0	1,732	0
Insurance - Miscellaneous Premium	28	0	0	0	0	0	214	0
CalPERS - Employer Paid for Emp	1,721	0	0	0	0	0	12,984	0
Subtotals	\$58,853	\$0	\$0	\$0	\$0	\$0	\$444,031	\$0

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Recreation - Maintenance								
Regular Salaries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$222,786
Part Time - Temporary Wages	0	0	0	0	0	0	0	170,240
Overtime Pay	0	0	0	0	0	0	0	7,246
Vacation Pay	0	0	0	0	0	0	0	14,326
Jury Duty	0	0	0	0	0	0	0	209
Sick Pay	0	0	0	0	0	0	0	10,426
Holiday Pay	0	0	0	0	0	0	0	10,415
Seasonal Pay	0	0	0	0	0	0	0	3,071
CalPERS Pension Expense - CLASSIC	0	0	0	0	0	0	0	10,134
Social Security Expense	0	0	0	0	0	0	0	26,496
Medicare Expense	0	0	0	0	0	0	0	6,197
Insurance - Group Life	0	0	0	0	0	0	0	610
Insurance - Group Health	0	0	0	0	0	0	0	58,263
Insurance - Group Dental	0	0	0	0	0	0	0	3,321
Insurance - Group Vision	0	0	0	0	0	0	0	659
Insurance - Employee Assistance Program	0	0	0	0	0	0	0	123
Insurance - Unemployment	0	0	0	0	0	0	0	253
District Equipment	0	0	0	0	0	0	0	53,043
Service & Supplies	0	0	0	0	0	0	0	98,507
Utilities	0	0	0	0	0	0	0	1,404
Purchased Water	0	0	0	0	0	0	0	44,321
Outside Contracts	0	0	0	0	0	0	0	101,441
Clothing & Personal Supplies	0	0	0	0	0	0	0	2,391
Communications - Radio & Telephone	0	0	0	0	0	0	0	336
Membership & Dues	0	0	0	0	0	0	0	46
Office Supplies	0	0	0	0	0	0	0	197
Licenses & Permits	0	0	0	0	0	0	0	286
Small Tools	0	0	0	0	0	0	0	8,174
Travel Expense	0	0	0	0	0	0	0	1,121
Education & Training Seminars	0	0	0	0	0	0	0	5,918
Pre-Employment Screening	0	0	0	0	0	0	0	271
OPEB Expense	0	0	0	0	0	0	0	62,892
Insurance - Workers Compensation Premium	0	0	0	0	0	0	0	5,910
Insurance - Miscellaneous Premium	0	0	0	0	0	0	0	44
Administration Overhead	0	0	0	0	0	0	0	235,689
CalPERS - Employer Paid for Emp	0	0	0	0	0	0	0	14,116
Subtotals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,177,650

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Recreation - Operations								
Regular Salaries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$510,227
Part Time - Temporary Wages	0	0	0	0	0	0	0	208,534
Overtime Pay	0	0	0	0	0	0	0	5,175
Shift Pay	0	0	0	0	0	0	0	14,239
Standby Pay	0	0	0	0	0	0	0	6,311
Vacation Pay	0	0	0	0	0	0	0	11,751
Jury Duty	0	0	0	0	0	0	0	1,387
Sick Pay	0	0	0	0	0	0	0	21,876
Holiday Pay	0	0	0	0	0	0	0	21,591
Seasonal Pay	0	0	0	0	0	0	0	37,575
Bank Charges	0	0	0	0	0	0	0	15
CalPERS Pension Expense - CLASSIC	0	0	0	0	0	0	0	20,986
Social Security Expense	0	0	0	0	0	0	0	61,104
Medicare Expense	0	0	0	0	0	0	0	14,579
Insurance - Group Life	0	0	0	0	0	0	0	3,050
Insurance - Group Health	0	0	0	0	0	0	0	98,894
Insurance - Group Dental	0	0	0	0	0	0	0	6,185
Insurance - Group Vision	0	0	0	0	0	0	0	1,230
Insurance - Employee Assistance Program	0	0	0	0	0	0	0	277
District Equipment	0	0	0	0	0	0	0	63,184
Service & Supplies	0	0	0	0	0	0	0	33,571
Utilities	0	0	0	0	0	0	0	109,612
Computer Upgrades - Hardware	0	0	0	0	0	0	0	2,602
Bad Debt Expense	0	0	0	0	0	0	0	11,622
Fish Purchase	0	0	0	0	0	0	0	30,898
Outside Contracts	0	0	0	0	0	0	0	22,407
Clothing & Personal Supplies	0	0	0	0	0	0	0	3,427
Communications - Radio & Telephone	0	0	0	0	0	0	0	11,341
Membership & Dues	0	0	0	0	0	0	0	963
Printing & Binding	0	0	0	0	0	0	0	2,576
Office Supplies	0	0	0	0	0	0	0	1,223
Postage Expense	0	0	0	0	0	0	0	35
Other Professional Fees	0	0	0	0	0	0	0	21,675
Licenses & Permits	0	0	0	0	0	0	0	4,023
Advertising & Legal Notices	0	0	0	0	0	0	0	749
Small Tools	0	0	0	0	0	0	0	89
Public Information Program	0	0	0	0	0	0	0	980
Safety Program	0	0	0	0	0	0	0	576
Private Vehicle Mileage	0	0	0	0	0	0	0	55
Travel Expense	0	0	0	0	0	0	0	609
Education & Training Seminars	0	0	0	0	0	0	0	869
Pre-Employment Screening	0	0	0	0	0	0	0	984
Credit Card Fees	0	0	0	0	0	0	0	9,608
OPEB Expense	0	0	0	0	0	0	0	106,279
Insurance - Miscellaneous Premium	0	0	0	0	0	0	0	121
Other Operating Expenses	0	0	0	0	0	0	0	111
Administration Overhead	0	0	0	0	0	0	0	519,897
CalPERS - Employer Paid for Emp	0	0	0	0	0	0	0	22,644
Subtotals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,987,041

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Recreation - Public Relations								
Part Time - Temporary Wages	0	0	0	0	0	0	0	45,035
Seasonal Pay	0	0	0	0	0	0	0	5,340
Social Security Expense	0	0	0	0	0	0	0	3,114
Medicare Expense	0	0	0	0	0	0	0	728
Service & Supplies	0	0	0	0	0	0	0	10,785
Computer Upgrades - Hardware	0	0	0	0	0	0	0	4,066
Outside Contracts	0	0	0	0	0	0	0	5,496
Clothing & Personal Supplies	0	0	0	0	0	0	0	460
Membership & Dues	0	0	0	0	0	0	0	309
Printing & Binding	0	0	0	0	0	0	0	5,134
Office Supplies	0	0	0	0	0	0	0	604
Postage Expense	0	0	0	0	0	0	0	2,206
Advertising & Legal Notices	0	0	0	0	0	0	0	330
Public Information Program	0	0	0	0	0	0	0	4,673
Credit Card Fees	0	0	0	0	0	0	0	51,261
Administration Overhead	0	0	0	0	0	0	0	22,571
Subtotals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$162,113

Schedule 4 - Allocation of Costs to Functional Components

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Recreation - Water Playground

	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Regular Salaries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$66,774
Part Time - Temporary Wages	0	0	0	0	0	0	0	100,463
Overtime Pay	0	0	0	0	0	0	0	437
Vacation Pay	0	0	0	0	0	0	0	5,304
Jury Duty	0	0	0	0	0	0	0	285
Sick Pay	0	0	0	0	0	0	0	4,102
Holiday Pay	0	0	0	0	0	0	0	3,422
Seasonal Pay	0	0	0	0	0	0	0	207,760
CalPERS Pension Expense - CLASSIC	0	0	0	0	0	0	0	3,795
Social Security Expense	0	0	0	0	0	0	0	23,805
Medicare Expense	0	0	0	0	0	0	0	5,567
District Equipment	0	0	0	0	0	0	0	21
Service & Supplies	0	0	0	0	0	0	0	46,850
Utilities	0	0	0	0	0	0	0	40,904
Chlorine	0	0	0	0	0	0	0	27,040
Chemicals - Water Playground	0	0	0	0	0	0	0	4,338
Computer Upgrades - Hardware	0	0	0	0	0	0	0	357
Outside Contracts	0	0	0	0	0	0	0	9,542
Clothing & Personal Supplies	0	0	0	0	0	0	0	6,507
Communications - Radio & Telephone	0	0	0	0	0	0	0	989
Membership & Dues	0	0	0	0	0	0	0	407
Office Supplies	0	0	0	0	0	0	0	1,470
Other Professional Fees	0	0	0	0	0	0	0	14,781
Licenses & Permits	0	0	0	0	0	0	0	1,154
Advertising & Legal Notices	0	0	0	0	0	0	0	3,507
Small Tools	0	0	0	0	0	0	0	221
Public Information Program	0	0	0	0	0	0	0	1,512
Safety Program	0	0	0	0	0	0	0	1,040
Education & Training Seminars	0	0	0	0	0	0	0	2,770
Pre-Employment Screening	0	0	0	0	0	0	0	4,866
Credit Card Fees	0	0	0	0	0	0	0	13,610
Administration Overhead	0	0	0	0	0	0	0	180,129
CalPERS - Employer Paid for Emp	0	0	0	0	0	0	0	5,331
Subtotals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$787,345

Retirees

OPEB Expense	479,807	0	0	0	0	0	0	0
Subtotals	\$479,793	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Safety								
Regular Salaries	\$26,651	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Holiday Pay	344	0	0	0	0	0	0	0
Social Security Expense	1,490	0	0	0	0	0	0	0
Medicare Expense	348	0	0	0	0	0	0	0
District Equipment	52	0	0	0	0	0	0	0
Service & Supplies	8,206	0	0	0	0	0	0	0
Outside Contracts	18,827	0	0	0	0	0	0	0
Books & Publications	407	0	0	0	0	0	0	0
Other Professional Fees	1,377	0	0	0	0	0	0	0
Licenses & Permits	8,956	0	0	0	0	0	0	0
Education & Training Seminars	1,540	0	0	0	0	0	0	0
Pre-Employment Screening	108	0	0	0	0	0	0	0
Subtotals	\$96,406	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Utilities Maintenance								
Vacation Pay	532	0	74	899	0	1,823	0	0
Subtotals	\$532	\$0	\$74	\$899	\$0	\$1,823	\$0	\$0
Warehouse								
Regular Salaries	\$7,635	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Overtime Pay	44	0	0	0	0	0	0	0
Vacation Pay	468	0	0	0	0	0	0	0
Sick Pay	318	0	0	0	0	0	0	0
Holiday Pay	352	0	0	0	0	0	0	0
CalPERS Pension Expense - CLASSIC	430	0	0	0	0	0	0	0
Social Security Expense	545	0	0	0	0	0	0	0
Medicare Expense	128	0	0	0	0	0	0	0
Service & Supplies	2,600	0	0	0	0	0	0	0
Utilities	2,215	0	0	0	0	0	0	0
CalPERS - Employer Paid for Emp	598	0	0	0	0	0	0	0
Subtotals	\$15,162	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Water Quality - Lab								
Regular Salaries	\$44,736	\$62,930	\$12,858	\$12,574	\$0	\$0	\$0	\$0
Part Time - Temporary Wages	368	518	106	103	0	0	0	0
Overtime Pay	572	804	164	161	0	0	0	0
Vacation Pay	4,450	6,260	1,279	1,251	0	0	0	0
Sick Pay	3,374	4,746	970	948	0	0	0	0
Holiday Pay	2,278	3,204	655	640	0	0	0	0
CalPERS Pension Expense - CLASSIC	2,687	3,780	772	755	0	0	0	0
Social Security Expense	3,359	4,725	965	944	0	0	0	0
Medicare Expense	786	1,105	226	221	0	0	0	0
Insurance - Group Life	347	488	100	98	0	0	0	0
Insurance - Group Health	13,565	19,081	3,899	3,813	0	0	0	0
Insurance - Group Dental	852	1,199	245	240	0	0	0	0
Insurance - Group Vision	92	129	26	26	0	0	0	0
Insurance - Employee Assistance Program	21	29	6	6	0	0	0	0
District Equipment	1,984	2,791	570	558	0	0	0	0
Service & Supplies	5,962	8,372	1,711	1,673	0	0	0	0
Computer Upgrades - Hardware	49	68	14	14	0	0	0	0
Outside Contracts	30,030	42,242	8,631	8,440	0	0	0	0
Clothing & Personal Supplies	42	59	12	12	0	0	0	0
Communications - Radio & Telephone	13	18	4	4	0	0	0	0
Membership & Dues	43	61	12	12	0	0	0	0
Postage Expense	184	259	53	52	0	0	0	0
Licenses & Permits	4,806	6,761	1,381	1,351	0	0	0	0
Advertising & Legal Notices	27	39	8	8	0	0	0	0
Private Vehicle Mileage	33	47	10	9	0	0	0	0
Travel Expense	543	764	156	153	0	0	0	0
Education & Training Seminars	472	664	136	133	0	0	0	0
OPEB Expense	14,559	20,620	4,213	4,120	0	0	0	0
CalPERS - Employer Paid for Emp	3,693	5,195	1,061	1,038	0	0	0	0
Subtotals	\$140,017	\$196,958	\$40,243	\$39,353	\$0	\$0	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
Water Treatment								
Regular Salaries	\$124,337	\$45,066	\$536,084	\$36,147	\$143	\$82,291	\$0	\$0
Overtime Pay	6,780	2,457	29,231	1,971	8	4,487	0	0
Shift Pay	143	52	615	41	0	94	0	0
Standby Pay	2,903	1,052	12,515	844	3	1,921	0	0
Vacation Pay	5,833	2,114	25,149	1,696	7	3,861	0	0
Jury Duty	113	41	487	33	0	75	0	0
Holiday Pay	5,184	1,879	22,349	1,507	6	3,431	0	0
CalPERS Pension Expense - CLASSIC	5,310	1,925	22,895	1,544	6	3,514	0	0
Social Security Expense	8,882	3,219	38,294	2,582	10	5,878	0	0
Medicare Expense	2,176	789	9,384	633	3	1,440	0	0
Insurance - Group Life	473	172	2,041	138	1	313	0	0
Insurance - Group Health	23,514	8,622	101,380	6,836	27	15,962	0	0
Insurance - Group Dental	1,401	508	6,039	407	2	927	0	0
Insurance - Group Vision	184	67	793	53	0	122	0	0
Insurance - Employee Assistance Program	41	15	178	12	0	27	0	0
District Equipment	5,060	1,834	21,817	1,471	6	3,349	0	0
Service & Supplies	13,149	4,766	56,692	3,823	15	8,702	0	0
Utilities	17,462	6,329	75,289	5,077	20	11,557	0	0
Chlorine	13,603	4,930	58,650	3,955	16	9,003	0	0
Polymer	4,692	1,700	20,228	1,364	5	3,105	0	0
Femic	2,153	780	9,282	625	2	1,425	0	0
Ammonia	5,253	1,904	22,649	1,527	6	3,477	0	0
Caustics	9,729	3,526	41,947	2,828	11	6,439	0	0
Computer Upgrades - Hardware	356	129	1,537	104	0	236	0	0
Open Account	13,263	4,807	57,182	3,856	15	8,778	0	0
Outside Contracts	2,046	742	8,823	595	2	1,354	0	0
Clothing & Personal Supplies	439	159	1,892	128	1	291	0	0
Communications - Radio & Telephone	702	255	3,028	204	1	465	0	0
Postage Expense	17	6	72	5	0	11	0	0
Licenses & Permits	263	95	1,134	76	0	174	0	0
Advertising & Legal Notices	31	11	134	9	0	21	0	0
Small Tools	808	293	3,483	235	1	535	0	0
Private Vehicle Mileage	326	118	1,404	95	0	216	0	0
Travel Expense	412	149	1,776	120	0	273	0	0
Education & Training Seminars	903	327	3,891	262	1	597	0	0
OPEB Expense	25,005	9,063	107,811	7,270	29	16,549	0	0
Insurance - Workers Compensation Premium	99	36	426	29	0	65	0	0
Insurance - Miscellaneous Premium	37	13	158	11	0	24	0	0
CalPERS - Employer Paid for Emp	6,955	2,488	29,598	1,996	8	4,543	0	0
Subtotals	\$307,028	\$111,281	\$1,323,760	\$89,259	\$354	\$203,202	\$0	\$0

Schedule 4 - Allocation of Costs to Functional Components

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	General & Admin	Source of Supply	Treatment	Transmission & Distribution	Pumping	Customer Service	Conservation	Recreation
FTE Module								
Administration	\$65,834	\$52	\$4,234	\$3,406	\$0	\$7,999	\$0	\$0
Management	314,911	1,023	0	0	0	0	0	0
Recreation - Operations / Maint. / PR / Water Pl.	0	0	0	0	0	0	0	252,747
Administration	15,325	12	966	793	0	1,862	0	0
Management	73,306	238	0	0	0	0	0	0
Recreation - Operations / Maint. / PR / Water Pl.	0	0	0	0	0	0	0	58,836
Subtotals	\$469,376	\$1,325	\$5,220	\$4,199	\$0	\$9,862	\$0	\$311,583
Existing Debt Service								
1991 California DWR Loan (Treatment Plant)	\$0	\$0	\$305,067	\$0	\$0	\$0	\$0	\$0
Casitas Dam Seismic Safety of Dam	0	77,228	0	0	0	0	0	0
Mira Monte Special Assessment Bond Principal	0	0	0	16,000	0	0	0	0
Mira Monte Special Assessment Bond Interest	0	0	0	4,075	0	0	0	0
Subtotals	\$0	\$77,228	\$305,067	\$20,075	\$0	\$0	\$0	\$0
Capital Projects								
Projects designated to be Cash Funded	1,858,953	734,611	41,226	281,591	66,159	386,744	0	0
Subtotals	\$1,858,953	\$734,611	\$41,226	\$281,591	\$66,159	\$386,744	\$0	\$0
Grand Total	\$5,864,620	\$2,160,327	\$1,935,144	\$1,326,360	\$1,662,749	\$829,295	\$444,031	\$4,435,731

Schedule 5 - Allocation of Costs to System Parameters

	System Parameter								
	Base Capacity (Average Day)	Extra Capacity (Max Day)	Extra Capacity (Max Hour)	Meter Size (per meter equivalent)	Conservation	Pumping	Customers	Recreation	
	(per HCF)	(per HCF/D)	(per HCF/D)		(per HCF)	(per HCF)	(per account)	(no units)	
Total System Metrics:	17,014	21,943	75,584	7,545	534,365	4,367,623	3,146		
Operating Expenses									
	Total Costs								
Source of Supply	\$2,404,545	\$2,404,545	\$0	\$0	\$0	\$0	\$0	\$0	
Treatment	2,816,436	1,462,697	1,353,740	0	0	0	0	0	
Trans & Dist	1,816,399	0	565,282	640,337	610,780	0	0	0	
Pumping	1,849,913	0	0	0	0	1,849,913	0	0	
Customer Service	784,477	0	0	0	0	0	784,477	0	
Conservation	787,101	0	0	0	787,101	0	0	0	
Recreation	4,435,731	0	0	0	0	0	0	4,435,731	
Total Costs	\$14,894,601	\$3,867,241	\$1,919,022	\$640,337	\$610,780	\$787,101	\$1,849,913	\$784,477	\$4,435,731
<i>% Allocation</i>		26.0%	12.9%	4.3%	4.1%	5.3%	12.4%	5.3%	29.8%
Unit Cost of Service									
		\$227.29	\$87.46	\$8.47	\$80.96 (per meter equivalent)	\$1.47	\$0.42	\$249.36	\$4,435,731
		(per HCF)	(per HCF/D)	(per HCF/D)		(per HCF)	(per HCF)	(per account)	(no units)
Source of Supply	\$141.32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment	\$65.97	\$61.69	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Trans & Dist	\$0	\$25.76	\$8.47	\$80.96	\$0	\$0	\$0	\$0	\$0
Pumping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Customer Service	\$0	\$0	\$0	\$0	\$0	\$0	\$249.36	\$0	\$0
Conservation	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$0	\$0
Recreation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,435,731
Debt Service									
Source of Supply	\$77,228	\$77,228	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment	305,067	158,435	146,633	0	0	0	0	0	0
Trans & Dist	20,075	0	6,248	7,077	6,750	0	0	0	0
Total Costs	\$402,371	\$235,663	\$152,880	\$7,077	\$6,750	\$0	\$0	\$0	\$0
<i>% Distribution</i>		58.6%	38.0%	1.8%	1.7%	0.0%	0.0%	0.0%	0.0%
Unit Cost of Service									
		\$13.85	\$6.97	\$0.09	\$0.89 (per meter equivalent)	\$0	\$0	\$0	\$0
		(per HCF)	(per HCF/D)	(per HCF/D)		(per HCF)	(per HCF)	(per account)	(no units)
Source of Supply	\$4.54	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment	\$9.31	\$6.68	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Trans & Dist	\$0	\$0.28	\$0.09	\$0.89	\$0	\$0	\$0	\$0	\$0
Cash Funded Capital									
Source of Supply	\$1,638,788	\$1,638,788	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment	91,968	47,763	44,205	0	0	0	0	0	0
Trans & Dist	628,180	0	195,496	221,453	211,231	0	0	0	0
Pumping	147,589	0	0	0	0	147,589	0	0	0
Customer Service	862,759	0	0	0	0	0	862,759	0	0
Total Costs	\$3,369,285	\$1,686,551	\$239,702	\$221,453	\$211,231	\$0	\$147,589	\$862,759	\$0
<i>% Distribution</i>		50.1%	7.1%	6.6%	6.3%	0.0%	4.4%	25.6%	0.0%
Unit Cost of Service									
		\$99.12	\$10.92	\$2.93	\$28.00 (per meter equivalent)	\$0	\$0.03	\$274.25	\$0
(Unit of measure)		(per HCF)	(per HCF/D)	(per HCF/D)		(per HCF)	(per HCF)	(per account)	(no units)
Source of Supply	\$96.32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment	\$2.81	\$2.01	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Trans & Dist	\$0	\$8.91	\$2.93	\$28.00	\$0	\$0	\$0	\$0	\$0
Pumping	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Customer Service	\$0	\$0	\$0	\$0	\$0	\$0	\$274.25	\$0	\$0
Summary Totals									
	Total Costs								
Operating	\$14,894,601	\$227.29	\$87.46	\$8.47	\$80.96	\$1.47	\$0.42	\$249.36	\$4,435,731
Debt Service	402,371	\$13.85	\$6.97	\$0.09	\$0.89	\$0	\$0	\$0	\$0
Rate Funded Capital	3,369,285	\$99.12	\$10.92	\$2.93	\$28.00	\$0	\$0.03	\$274.25	\$0
Total	\$18,666,256	\$340.27	\$105.35	\$11.50	\$109.85	\$1.47	\$0.46	\$523.61	\$4,435,731

APPENDIX C: PROPOSED RATES

- Schedule 6 Proposed Rate Schedule for FY 2018
- Schedule 7 Proposed Rate Schedule for FY 2019
- Schedule 8 Proposed Rate Schedule for FY 2020
- Schedule 9 Proposed Rate Schedule for FY 2021
- Schedule 10 Proposed Rate Schedule for FY 2022

Schedule 6

Proposed Volumetric Rates, Effective July 1, 2017

	Residential Pumped	Business Pumped	Agriculture Pumped	Ag Domestic Pumped	Inter-departmental Pumped	Resale Pumped
Tier 1	\$0.96	\$1.46	\$1.09	\$0.96	\$1.46	\$1.46
Tier 2	\$1.46			\$1.46		
Tier 3	\$2.36			\$1.09		

	Residential Gravity	Business Gravity	Agriculture Gravity	Ag Domestic Gravity	Inter-departmental Gravity	Resale Gravity
Tier 1	\$0.49	\$0.99	\$0.62	\$0.49	\$0.99	\$0.99
Tier 2	\$0.99			\$0.99		
Tier 3	\$1.89			\$0.62		

Proposed Service Charge, Effective July 1, 2017

	Residential	Business	Agriculture	Ag Domestic	Inter-departmental	Resale
5/8"-3/4"	\$28.75	\$22.97	\$25.97	\$20.87	\$20.54	\$25.27
1"	\$47.91	\$38.28	\$43.28	\$34.78	\$34.24	\$42.12
1-1/2"	\$95.82	\$76.56	\$86.56	\$69.57	\$68.47	\$84.24
2"	\$153.31	\$122.50	\$138.50	\$111.30	\$109.55	\$134.78
2-1/2"	\$255.52	\$204.16	\$230.84	\$185.51	\$182.59	\$224.63
3"	\$335.37	\$267.96	\$302.97	\$243.48	\$239.65	\$294.83
4"	\$603.67	\$482.33	\$545.35	\$438.26	\$431.36	\$530.70
6"	\$1,245.67	\$995.29	\$1,125.33	\$904.35	\$890.12	\$1,095.09
12"	\$7,359.04	\$5,879.89	\$6,648.09	\$5,342.61	\$5,258.53	\$6,469.48
18"						\$12,026.38

Schedule 7

Proposed Volumetric Rates, Effective July 1, 2018

	Residential Pumped	Business Pumped	Agriculture Pumped	Ag Domestic Pumped	Inter-departmental Pumped	Resale Pumped
Tier 1	\$1.08	\$1.64	\$1.22	\$1.08	\$1.64	\$1.64
Tier 2	\$1.64			\$1.64		
Tier 3	\$2.64			\$1.22		

	Residential Gravity	Business Gravity	Agriculture Gravity	Ag Domestic Gravity	Inter-departmental Gravity	Resale Gravity
Tier 1	\$0.55	\$1.11	\$0.69	\$0.55	\$1.11	\$1.11
Tier 2	\$1.11			\$1.11		
Tier 3	\$2.12			\$0.69		

Proposed Service Charge, Effective July 1, 2018

	Residential	Business	Agriculture	Ag Domestic	Inter-departmental	Resale
5/8"-3/4"	\$32.20	\$25.73	\$29.09	\$23.37	\$23.00	\$28.30
1"	\$53.66	\$42.87	\$48.47	\$38.95	\$38.35	\$47.17
1-1/2"	\$107.32	\$85.75	\$96.95	\$77.92	\$76.69	\$94.35
2"	\$171.71	\$137.20	\$155.12	\$124.66	\$122.70	\$150.95
2-1/2"	\$286.18	\$228.66	\$258.54	\$207.77	\$204.50	\$251.59
3"	\$375.61	\$300.12	\$339.33	\$272.70	\$268.41	\$330.21
4"	\$676.11	\$540.21	\$610.79	\$490.85	\$483.12	\$594.38
6"	\$1,395.15	\$1,114.72	\$1,260.37	\$1,012.87	\$996.93	\$1,226.50
12"	\$8,242.12	\$6,585.48	\$7,445.86	\$5,983.72	\$5,889.55	\$7,245.82
18"						\$13,469.55

Schedule 7

Proposed Volumetric Rates, Effective July 1, 2019

	Residential Pumped	Business Pumped	Agriculture Pumped	Ag Domestic Pumped	Inter-departmental Pumped	Resale Pumped
Tier 1	\$1.21	\$1.84	\$1.37	\$1.21	\$1.84	\$1.84
Tier 2	\$1.84			\$1.84		
Tier 3	\$2.96			\$1.37		

	Residential Gravity	Business Gravity	Agriculture Gravity	Ag Domestic Gravity	Inter-departmental Gravity	Resale Gravity
Tier 1	\$0.62	\$1.24	\$0.77	\$0.62	\$1.24	\$1.24
Tier 2	\$1.24			\$1.24		
Tier 3	\$2.37			\$0.77		

Proposed Service Charge, Effective July 1, 2019

	Residential	Business	Agriculture	Ag Domestic	Inter-departmental	Resale
5/8"-3/4"	\$36.06	\$28.82	\$32.58	\$26.17	\$25.76	\$31.70
1"	\$60.10	\$48.01	\$54.29	\$43.62	\$42.95	\$52.83
1-1/2"	\$120.20	\$96.04	\$108.58	\$87.27	\$85.89	\$105.67
2"	\$192.32	\$153.66	\$173.73	\$139.62	\$137.42	\$169.06
2-1/2"	\$320.52	\$256.10	\$289.56	\$232.70	\$229.04	\$281.78
3"	\$420.68	\$336.13	\$380.05	\$305.42	\$300.62	\$369.84
4"	\$757.24	\$605.04	\$684.08	\$549.75	\$541.09	\$665.71
6"	\$1,562.57	\$1,248.49	\$1,411.61	\$1,134.41	\$1,116.56	\$1,373.68
12"	\$9,231.17	\$7,375.74	\$8,339.36	\$6,701.77	\$6,596.30	\$8,115.32
18"						\$15,085.90

Schedule 9

Proposed Volumetric Rates, Effective July 1, 2020

	Residential Pumped	Business Pumped	Agriculture Pumped	Ag Domestic Pumped	Inter-departmental Pumped	Resale Pumped
Tier 1	\$1.36	\$2.06	\$1.53	\$1.36	\$2.06	\$2.06
Tier 2	\$2.06			\$2.06		
Tier 3	\$3.32			\$1.53		

	Residential Gravity	Business Gravity	Agriculture Gravity	Ag Domestic Gravity	Inter-departmental Gravity	Resale Gravity
Tier 1	\$0.69	\$1.39	\$0.86	\$0.69	\$1.39	\$1.39
Tier 2	\$1.39			\$1.39		
Tier 3	\$2.65			\$0.86		

Proposed Service Charge, Effective July 1, 2020

	Residential	Business	Agriculture	Ag Domestic	Inter-departmental	Resale
5/8"-3/4"	\$40.39	\$32.28	\$36.49	\$29.31	\$28.85	\$35.50
1"	\$67.31	\$53.77	\$60.80	\$48.85	\$48.10	\$59.17
1-1/2"	\$134.62	\$107.56	\$121.61	\$97.74	\$96.20	\$118.35
2"	\$215.40	\$172.10	\$194.58	\$156.37	\$153.91	\$189.35
2-1/2"	\$358.98	\$286.83	\$324.31	\$260.62	\$256.52	\$315.59
3"	\$471.16	\$376.47	\$425.66	\$342.07	\$336.69	\$414.22
4"	\$848.11	\$677.64	\$766.17	\$615.72	\$606.02	\$745.60
6"	\$1,750.08	\$1,398.31	\$1,581.00	\$1,270.54	\$1,250.55	\$1,538.52
12"	\$10,338.91	\$8,260.83	\$9,340.08	\$7,505.98	\$7,387.86	\$9,089.16
18"						\$16,896.21

Schedule 10

Proposed Volumetric Rates, Effective July 1, 2021

	Residential Pumped	Business Pumped	Agriculture Pumped	Ag Domestic Pumped	Inter-departmental Pumped	Resale Pumped
Tier 1	\$1.52	\$2.31	\$1.71	\$1.52	\$2.31	\$2.31
Tier 2	\$2.31			\$2.31		
Tier 3	\$3.72			\$1.71		

	Residential Gravity	Business Gravity	Agriculture Gravity	Ag Domestic Gravity	Inter-departmental Gravity	Resale Gravity
Tier 1	\$0.77	\$1.56	\$0.96	\$0.77	\$1.56	\$1.56
Tier 2	\$1.56			\$1.56		
Tier 3	\$2.97			\$0.96		

Proposed Service Charge, Effective July 1, 2021

	Residential	Business	Agriculture	Ag Domestic	Inter-departmental	Resale
5/8"-3/4"	\$45.24	\$36.15	\$40.87	\$32.83	\$32.31	\$39.76
1"	\$75.39	\$60.22	\$68.10	\$54.71	\$53.87	\$66.27
1-1/2"	\$150.77	\$120.47	\$136.20	\$109.47	\$107.74	\$132.55
2"	\$241.25	\$192.75	\$217.93	\$175.13	\$172.38	\$212.07
2-1/2"	\$402.06	\$321.25	\$363.23	\$291.89	\$287.30	\$353.46
3"	\$527.70	\$421.65	\$476.74	\$383.12	\$377.09	\$463.93
4"	\$949.88	\$758.96	\$858.11	\$689.61	\$678.74	\$835.07
6"	\$1,960.09	\$1,566.11	\$1,770.72	\$1,423.00	\$1,400.62	\$1,723.14
12"	\$11,579.58	\$9,252.13	\$10,460.89	\$8,406.70	\$8,274.40	\$10,179.86
18"						\$18,923.76