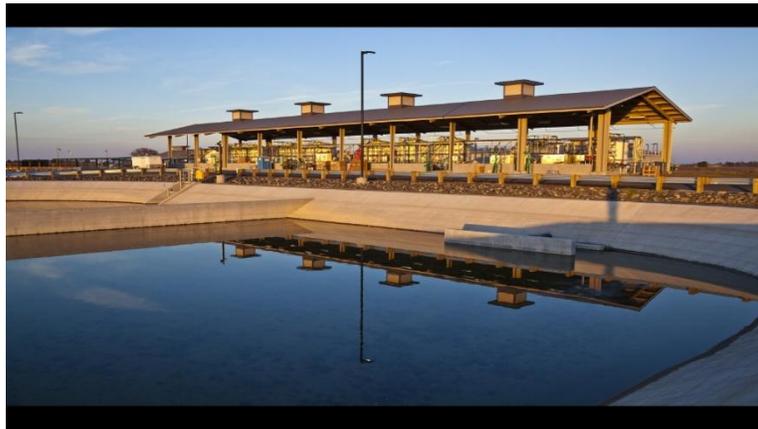


Final Report



City of Stockton
Municipal Utilities Department
2021 Water Rate Study
June 2021





June 2, 2021

Mr. John Abrew
Director Municipal Utilities Department
City of Stockton
2500 Navy Drive
Stockton, California 95206

Subject: Water Rate Study Final Report

Dear Mr. Abrew:

HDR Engineering, Inc. (HDR) is pleased to present to the City of Stockton, Municipal Utilities Department (Department) the final report for the water rate study. The Department's water rate study was developed using water industry standard methodologies and approaches. The analyses conducted for the Department includes a revenue requirement, cost of service, and rate design analysis. The findings and conclusions from these analyses were used to develop proposed water rates that are equitable and proportional to the Department's customers and sufficient to fund the operating and capital needs of the water utility. This report outlines the overall approach used to achieve these objectives, along with our findings, conclusions, and recommendations.

The Department owns and operates a water supply, treatment, transmission, and distribution system. The Department utilizes ground water and surface water as well as purchasing water to supplement other supplies. The costs associated with developing and purchasing water supplies, plus the costs of distributing water to customers has been developed based on Department provided information and included within the development of the proposed water rates. HDR's study provides the basis for developing and implementing water rates which are cost-based, equitable, and defensible for the Department's customers.

We appreciate the assistance provided by the Department's management team in the development of this study. More importantly, HDR appreciates the opportunity to provide these technical and professional services to the Department.

Sincerely yours,
HDR Engineering, Inc.

A handwritten signature in black ink, appearing to read 'Shawn Koorn'.

Shawn Koorn
Associate Vice President

Table of Contents

Executive Summary

Introduction	1
Overview of the Rate Study Process	1
Key Water Rate Study Results.....	2
Summary of the Water Revenue Requirement Analysis.....	2
Summary of the Water Cost of Service Analysis.....	5
Summary of the Present and Proposed Water Rate Designs.....	7
Summary of the Proposed Drought Recovery Charges.....	9
Water Rate Study Recommendations	11
Rate Adoption	12
Summary of the Water Rate Study.....	12

1 Introduction and Overview

1.1 Introduction.....	13
1.2 Goals and Objectives.....	13
1.3 Overview of the Rate Study Process.....	14
1.4 Organization of the Study	14
1.5 Summary.....	15

2 Overview of the Water Rate Setting Principles

2.1 Introduction.....	16
2.2 Generally Accepted Rate Setting Principles	16
2.3 Determining the Revenue Requirement.....	16
2.4 Analyzing Cost of Service.....	17
2.5 Designing Water Rates.....	18
2.6 Economic Theory and Rate Setting.....	18
2.7 Summary.....	19

3 Development of the Revenue Requirement Analysis

3.1 Introduction.....	20
3.2 Determining the Revenue Requirement.....	20
3.3 Establishing a Time Frame and Approach.....	20
3.4 Projecting Rate and Other Miscellaneous Revenues.....	21
3.5 Projecting Operation and Maintenance Expenses	23
3.6 Projecting Capital Funding Needs and Transfer Payments.....	24
3.7 Projection of Debt Service.....	26
3.8 Reserve Funding.....	26
3.9 Summary of the Revenue Requirement.....	26



3.10	Reserve Levels.....	27
3.11	Debt Service Coverage Ratios.....	28
3.12	Consultant’s Conclusions.....	29
4	Development of the Cost of Service Analysis	
4.1	Introduction.....	30
4.2	Objectives of a Cost of Service Study.....	30
4.3	Determining the Customer Classes of Service.....	31
4.4	General Cost of Service Procedures.....	31
4.5	Functionalization and Allocation of Plant in Service	34
4.6	Functionalization and Allocation of Operating Expenses	36
4.7	Major Assumptions of the Cost of Service Study	37
4.8	Development of Cost-Based Water Rates.....	37
4.9	Development of the Unit Costs for Rate Designs	40
4.10	Summary Results of the Cost of Service Analysis	46
4.11	Consultant’s Conclusions and Recommendations.....	47
4.12	Summary of the Cost of Service Analysis.....	47
5	Development of the Rate Designs	
5.1	Introduction	48
5.2	Rate Design Criteria and Considerations.....	48
5.3	Overview of the Proposed Rate Structures	49
5.4	Summary of the Present and Proposed Water Rates	49
5.5	Summary of the Proposed Rate Revenues	53
5.6	Development of Drought Recovery Charges	54
5.7	Water Rate Study Recommendations	59
5.8	Rate Adoption	59
5.9	Summary of the Water Rate Study	59
6	Water Technical Appendix	
7	Drought Recovery Charges Technical Appendix	
8	Approved Ordinance Appendix	
9	Proposition 218 Notice Appendix	

ACKNOWLEDGMENTS The development of this Water Rate Study would not have been possible without the focused involvement and assistance of City staff. In particular, the following staff provided comprehensive information, significant input and important insights throughout development of this Water Rate Study:

John Abrew – Director of Municipal Utilities Department
Deedee Antypas – Deputy Director Wastewater
Imelda Arroyo – Senior Budget Analyst
Lori Asuncion – Assistant City Attorney
Gemma Biscocho – Senior Civil Engineer, Engineering Division
Juan Chavez – Engineering Services Manager, Engineering Division,
Eric Houston – Chief Plant Operator, Water Treatment Plant
Stephen Kenning Assistant Director of Municipal Utilities Department
Lutfi Kharuf – Partner, Best Best & Krieger Attorneys At Law
Erica Ledesma – Program Manager III, MUD Finance
Mel Lytle – Assistant Director of Municipal Utilities Department
Mitchell Maidrand – Deputy Director of Municipal Utilities Department, Water Resources Division
Vanessa Piccinini – Program Manager III, Outreach
Larey Smith – Senior Systems Analyst
Kimberly Trammel – Budget Officer
Rudy Quinones – Water Systems Supervisor, Water Field Office
Travis Small – Plant Operations Supervisor, Water Treatment Plant
Danny Trejo – Program Manager III, Water Resources Division
Nancy Xiong – MUD Finance Officer

I would further like to thank the HDR project team for their efforts in the development of the City's Water Rate Study:

Josiah Close – HDR Task Lead
Thomas Gould – HDR Quality Control

Executive Summary

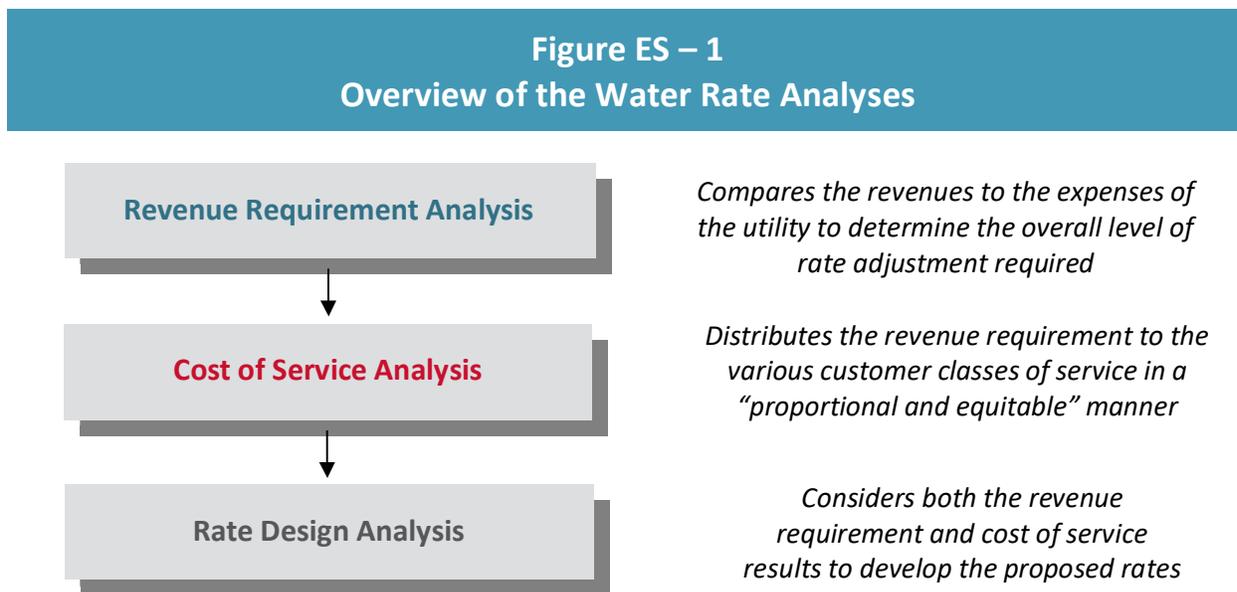
Introduction

HDR was retained by the City of Stockton Municipal Utilities Department (Department) to conduct a water rate study. The objective of the rate study was to review the Department's Water Utility operating and capital costs to develop proposed water rates which are equitable and proportional. This study determined the adequacy of the existing water rates and provides the framework and cost basis for any proposed future adjustments. The Department has historically developed water rate studies to establish their water rates and this study is a continuation of that past practice.

The Department owns and operates a water transmission and distribution system as well as production and treatment from ground and surface water sources. The Department also purchases water to supplement local ground water and surface water resources. The costs associated with providing water supply, plus the costs of distributing water to customers served by the system has been developed based on Department provided information and included within the development of the proposed water rates.

Overview of the Rate Study Process

A water rate study uses three interrelated analyses to address the adequacy and equity of a utility's rates. These three analyses are a revenue requirement analysis, a cost of service analysis, and a rate design analysis. These three analyses are illustrated below in Figure ES - 1.



The above framework for reviewing and evaluating the Department's water rates was utilized in the development of this study.

Key Water Rate Study Results

The water rate study technical analysis was developed based on the operating and capital costs necessary to provide water service to the Department’s customers. The water rate study resulted in the following key findings, conclusions, and recommendations:

- A revenue requirement analysis was developed for the projected period of FY 2021 through FY 2030.
- The Department’s FY 2021 budget was used as the starting point of the analysis.
- Operation and maintenance expenses are projected to increase at inflationary levels with no assumed changes to levels of service or anticipated extraordinary expenses.
- The cost of purchased water from Stockton East Water District (SEWD) and Woodbridge Irrigation District (WID) is projected to continue to increase annually.
- Customer consumption levels have been based on a multi-year average in order to mitigate impacts due to a number of factors including weather and COVID-19.
- The water system outstanding long-term debt issuances were recently refinanced resulting in lower annual debt service payments.
- The proposed annual water rate (revenue) adjustments are 0.0% in FY 2022, 3.5% in FY 2023 and FY 2024, and 4.0% in FY 2025 and FY 2026.
- A cost of service analysis was developed to review the equity of the existing rates and proportionally distribute the revenue requirement between the Department’s various customer classes (e.g., rate schedules).
- The results of the cost of service analysis provided average unit costs (i.e., cost-based rates) which were used to establish the final proposed rates.
- The study has developed proposed rates for the FY 2022 – FY 2026 period, by customer class of service (rate schedules).
- Drought recovery charges have been developed for implementation by the City Council during times of drought or emergency water shortage events to encourage needed reductions in use while maintaining sufficient revenues to fully recover the costs of water service.

Summary of the Water Revenue Requirement Analysis

A revenue requirement analysis is the first analytical step in the development of the water rate study. This analysis determines the adequacy of the level of current water rate revenues. From this analysis, a determination can be made as to the overall level of water rate revenue adjustments needed to provide adequate and prudent funding for both operating and capital needs.

For this study, the revenue requirement was developed for a projected period (FY 2021 – FY 2030) with the Proposition 218 rate setting period identified as FY 2022 through FY 2026. Reviewing a multi-year time frame is recommended to better anticipate future financial requirements and allow the Department to begin planning for these impacts sooner, thereby minimizing short-term rate impacts and overall long-term rates. For the revenue requirement analysis, a “cash basis” approach was utilized. The “cash basis” approach is the most commonly

used methodology by municipal utilities to set their revenue requirement and it includes an analysis of O&M expenses, taxes or transfer payments, annual debt service payments, and capital projects funded from rates. The primary financial inputs in the development of the revenue requirement analysis were the Department’s FY 2021 budget, FY 2018 through FY 2020 billed customer and consumption data, and the Department’s current water system capital improvement plan which has been supplemented with information from the Water Master Plan being completed concurrently.

Once the operating and maintenance (O&M) expenses have been projected over the period, the next step is to develop the capital improvement plan (CIP) and a funding plan. The proper and adequate funding of capital projects is important to help minimize rates over time and maintain the Department’s existing water infrastructure. A general financial guideline states that, at a minimum, a utility should fund an amount equal to or greater than annual depreciation expense through rates. This level of funding is not sufficient to fund all capital projects, but rather, is intended to provide a consistent annual funding source for maintaining and replacing the Department’s existing infrastructure. Using annual depreciation expense as a financial guideline, in FY 2019, the Department’s annual depreciation expense was approximately \$8.1 million. Within the Department’s proposed financial plan, the Department is projected to annually fund \$8.7 million to \$11.0 million per year from rates. This is an average of \$9.9 million per year from FY 2021 through FY 2030. It is assumed that in addition to the rate funded capital improvements the Department will need to utilize other funding sources (i.e., operating, capital and connection fee reserves), in order to fully fund the CIP. No new long-term debt has been assumed within this capital improvement funding plan. Provided below in Table ES - 1 is a summary of the capital improvement funding plan, including the assumed funding sources, over the five-year rate setting period.

Table ES – 1						
Summary of the Annual Rate Funded Capital (\$000)						
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Total Capital Projects	\$11,803	\$12,235	\$27,952	\$11,484	\$15,466	\$12,299
<i>Less: Other Funding</i>	2,803	3,560	19,002	2,234	6,216	2,799
Total Rate Funded Capital	\$9,000	\$8,675	\$8,950	\$9,250	\$9,250	\$9,500

As can be seen, the difference between annual capital improvement needs and rate funded capital is being funded through available reserves. The Department’s capital plan reflects the capital projects needed to maintain the existing system and repair or replace deteriorating infrastructure as well as projects related to growth or redundancy. A more detailed discussion of the development of the capital improvement funding plan is provided in Section 3. The detailed capital improvement plan can be found on Exhibit 4 of the Technical Appendix.

The revenue requirement analysis for the Department’s customers was developed to determine the rate projections based on the specific costs of the Department’s water utility. Provided

below, in Table ES – 2, is a summary of the revenue requirement analysis (financial plan) developed for the water utility as part of the Study. A more detailed analysis of the revenue requirements can be found in Section 3 of this report as well as in the Technical Appendix in Exhibit 3.

Table ES - 2						
Summary of the Revenue Requirement Analysis (\$000)						
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenues						
Rate Revenues	\$51,146	\$51,402	\$51,659	\$51,917	\$52,177	\$52,438
Misc. Revenues	<u>6,973</u>	<u>7,753</u>	<u>7,664</u>	<u>7,546</u>	<u>7,506</u>	<u>7,459</u>
Total Revenues	\$58,119	\$59,155	\$59,323	\$59,463	\$59,683	\$59,897
Expenses						
O & M	\$19,012	\$19,590	\$20,224	\$21,225	\$22,011	\$22,733
Purchased Water	16,011	17,051	18,160	19,340	20,597	21,936
Net Debt Service	13,785	13,793	13,801	13,522	13,528	13,189
Rate Funded Capital	9,000	8,675	8,950	9,250	9,250	9,500
Reserve Funding	<u>310</u>	<u>46</u>	<u>(5)</u>	<u>(175)</u>	<u>249</u>	<u>858</u>
Total Expenses	\$58,119	\$59,155	\$61,131	\$63,161	\$65,635	\$68,215
Bal./ (Def.) of Funds	\$0	\$0	(\$1,808)	(\$3,698)	(\$5,952)	(\$8,319)
<i>Bal. as a % of Rate Rev.</i>	0.0%	0.0%	3.5%	7.1%	11.4%	15.9%
Proposed Rate Adj.	0.0%	0.0%	3.5%	3.5%	4.0%	4.0%
Add'l Rev. from Rate Adj.	\$0	\$0	\$1,808	\$3,698	\$5,952	\$8,319
Total Bal./ (Def.) of Funds	(0)	0	0	(0)	0	(0)

As can be seen, the revenue requirement analysis has summed O&M, rate funded capital, net debt service, and reserve funding. It is important to note that the Department recently refunded several long-term debt issuances which greatly benefitted the Department’s water utility and helps to minimize projected rate revenue impacts in the future years.

The total revenue requirement (i.e., expenses) are then compared to the total revenues of the water utility. Total revenues are comprised of rate revenues - at present rate levels - and other miscellaneous revenues. From this comparison, a balance (+) or deficiency (-) of funds in each year can be determined. This balance or deficiency of funds is then compared to the rate revenues to determine the percentage level of rate revenue adjustment necessary to meet the revenue requirement as developed in each year of the review period. It is important to note, the “Bal. / (Def.) of Funds” row is cumulative. Any adjustments in the initial years will reduce the deficiency in the later years. Over this project period, the total deficiency of rates in FY 2026 is 15.9%. To meet the overall revenue needs of the five-year rate period, annual proposed rate adjustments. The proposed annual rate adjustments are 0.0% in FY 2022, 3.5% in FY 2023 and FY 2024, and 4.0% for FY 2025 through FY 2026.

The above proposed annual rate adjustments, on a cumulative basis, meet the overall need for a 15.9% rate revenue adjustment over the period reviewed. Based on the revenue requirement analysis developed, HDR has concluded that the Department will need to adjust the level of water rate revenues as noted above to fund their projected operating and capital needs and maintain cost-based rates. HDR has reached this conclusion for the following reasons:

- Rate adjustments are necessary to fully fund the Department’s projected operating costs and fund the proposed capital improvement plan.
 - The CIP includes projects from the Water Master Plan being completed concurrently.
- The proposed rate revenue adjustments maintain the Department’s financial health and integrity by providing consistent, long-term, and sustainable funding levels.
- Prior to the implementation of the fifth (FY 2026), and final proposed rate adjustment, the Department should complete a rate study for the projection of future water rates.

In reaching this conclusion, HDR would recommend that the Department adopt the proposed rate adjustments from FY 2022 to FY 2026 to provide sufficient funding for the projected operating and capital needs of the water utility. A detailed discussion of the development of the revenue requirement analysis can be found in Section 3. Technical exhibits of the revenue requirement analysis have been included within the Technical Appendix in Exhibits 1 - 7.

Summary of the Water Cost of Service Analysis

A cost of service analysis determines the equitable and proportional distribution of the revenue requirement to the various customer classes of service (single family, multi-family, non-residential, and irrigation). The objective of the cost of service analysis is different from determining the revenue requirement analysis. Whereas a revenue requirement analysis determines the utility’s overall financial needs, the cost of service analysis determines a fair and equitable manner to collect the revenue requirement from each customer class of service. The cost of service analysis developed as a part of this study utilized generally accepted cost of service principles and methodologies as defined by the American Water Works Association (AWWA).

In summary form, the cost of service analysis began by functionalizing the Department’s revenue requirement. The functionalized revenue requirement was then allocated into the various cost components (e.g., commodity-related, capacity-related, customer-related, fire protection-related, etc.). The individual allocation totals were then distributed to the water customer classes of service (e.g., rate schedules) based on equitable and proportional distribution factors. The distributed expenses for each customer class were then aggregated to determine each customer class’s overall revenue responsibility. Table ES - 3 provides the summary of the cost of service analysis for the FY 2023 test year.

Table ES - 3
Summary of the Cost of Service Analysis (\$000)

Class of Service	Present Revenues (FY 2023)	Allocated Costs	\$ Difference	% Difference
Single Family	\$34,447	\$35,051	(\$604)	1.8%
Multi-Family	5,132	5,542	(410)	8.0%
Non-Residential	7,410	8,019	(609)	8.2%
Irrigation	<u>4,670</u>	<u>4,855</u>	<u>(186)</u>	4.0%
Total	\$51,659	\$53,467	(\$1,808)	3.5%

The cost of service study allocates the proportional share of the revenue requirement to each customer class based on their respective demands on the system and the facilities required to provide service. The results of the analysis indicate that slight cost differences exist between the various customer classes of service. It is important to understand that a cost of service analysis is based upon a review of a specific point in time and costs and customer usage changes over time, impacting the results.

The Department’s cost of service analysis and resulting proposed water rates have been developed to meet the legal requirements of California constitution article XIII D, section 6 (Article XIII D). A major component of Article XIII D is the development of rates which reflect the cost of providing service and proportionally distribute costs among the various customer classes of service. A key outcome of the cost of service analysis are the cost-based average unit costs (e.g., \$ / customer or \$ / CCF). Average unit costs provide the cost basis for the development of the Department’s proposed water rates. Provided below in Table ES - 4 is a summary of the unit costs derived in the cost of service analysis that were used to develop the Department’s proposed water rate designs by customer class (e.g., rate schedule).

Table ES – 4
Summary of the Average Unit Costs

	Single Family	Multi-Family	Non-Residential	Irrigation
Fixed - \$ / mtr/month	\$35.30	\$35.30	\$35.30	\$35.30
Variable	<i>\$ / CCF</i>			
Tier 1 (0 - 15 CCF)	\$2.49	N/A	N/A	N/A
Tier 2 (> 15 CCF)	2.96	N/A	N/A	N/A
Winter	N/A	\$2.39	\$2.38	\$2.49
Summer	N/A	2.59	2.76	2.90

1 CCF = 100 cubic feet mtr = meter
Winter: Oct – Apr; Summer: May – Sept

Section 4 of this report provides a detailed discussion of the cost of service analysis conducted for the Department’s water utility and the development of the average unit costs provided in Table ES – 4, above. The Technical Appendix contains additional details associated with the cost of service analysis calculation and can be found in Exhibits 8 - 19.

Summary of the Present and Proposed Water Rate Designs

The final step of the rate study process is the design of the Department’s proposed water rates to collect the required level of revenue, based on the results of the revenue requirement and cost of service analyses. The revenue requirement analysis provided a set of recommendations related to the level of annual rate revenue adjustments, or the level of total rate revenues necessary to provide sufficient funding. The cost of service analysis provided the basis for how those costs are proportionally and equitably charged and collected from each of the customer classes of service (e.g., rate schedules).

As discussed above, the Department’s proposed water rates have been developed with the intent of meeting the legal requirements of California constitution article XIII D, section 6 (Article XIII D), adopted as a part of Proposition 218. While Article XIII D requires the development of cost-based rates, it does not prescribe a specific approach or methodology to assure meeting this legal requirement. At the same time, HDR would point out that there is no single methodology for equitably assigning costs to the various customer groups. Consequently, HDR has developed this report, along with the Department’s proposed water rates, based on the principles and methodologies contained in the AWWA M1 manual, while also tailoring the methodology to be reflective of the Department’s specific and unique system and customer characteristics. HDR is of the opinion this approach meets the requirements of Article XIII D and recent legal decisions to provide an administrative record of the steps taken to establish the Department’s water rates. HDR reaches this conclusion based upon the following:

“While Article XIII D requires the development of cost-based rates, it does not prescribe a specific approach or methodology to assure meeting this legal requirement.”

- **The revenue derived from water rates does not exceed the funds required to provide the property related service (i.e. water service).** The proposed rates are designed to collect the overall revenue requirement of the Department’s water utility.
- **The revenues derived from water rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the Department’s water rates are used exclusively to operate and maintain the Department’s water system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** Section 4 of this study, the cost of service analysis, focuses almost exclusively on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service (single family, multi-family, etc.) that reflect the varying consumption patterns and system requirements of each

customer class of service. The grouping of customers and rates into these classes of service creates the equity and proportionality required under Article XIII D by having differing rates by customer classes of service which reflect both the level of revenue to be collected by the utility, but also the manner in which these costs are incurred and equitably assigned to customer classes of service based upon their proportional impacts and burdens on Department's the water system and water resources.

Given the requirements to develop rates based on cost of service principles, the average unit costs in Table ES - 4 were used to design the proposed water rates for the Department's customer classes of service.

The Department currently has established customer classes of service that were previously developed in prior rate studies. The present single family rate structure includes a fixed monthly meter charge which varies by meter size and a two-tier increasing block consumption charge. The block sizes are based on the typical customer consumption patterns and provide 15 hundred cubic feet (CCF) per month (billing period) in the first tier, which was established and based upon a review of the Department's single family consumption data. This level of consumption provides ample consumption in the winter period, or when outside watering needs are minimal. All consumption over the first tier (i.e., > 15 CCF) is charged at a higher rate which reflects the increased costs associated with providing the additional capacity needed during peak use capacity periods. As part of this study, the block sizes (e.g., amount of consumption in each block) and single family consumption characteristics were reviewed. Based on current single family customer characteristics, the block sizes reflect current consumption patterns and have been maintained.

Multi-Family, Non-Residential, and Irrigation customer groups utilize the same rate structure, however, the rates charged vary by customer class. These customer classes have the same fixed monthly meter charge which varies by meter size. Unlike the single family rate schedule which uses pricing tiers, the consumption charge for non-single family residential customers is based upon seasonal period. The seasonal periods are defined as summer (May through September) and winter (October through April). In this seasonal rate structure, the consumption charge for the summer period is the highest cost period, reflective of the higher cost associated with meeting peak use time periods. For example, peak demand levels are greatest in the summer months due to the sizing of the system to meet peak demand needs. The purpose of the cost of service and rate design is to develop a rate that reflects the proportional share of these costs, allowing with economic principles, that those customers that drive the peak will have rates that reflects those higher costs. The consumption charges for each non-residential class of service varies and is based upon the results of the average unit costs shown in Table ES - 4. Provided below in Table ES - 5 is a summary of the present and proposed water rates for the five-year rate setting period. The proposed rates are effective at the start of each fiscal year, or July 1st.

Table ES - 5
Summary of the Proposed Water Rates

	Present Rate	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Fixed Charge	\$/Acct/Mo					
1" & less	\$33.90	\$33.90	\$35.30	\$36.54	\$37.82	\$39.33
1 1/2"	67.80	67.80	70.60	73.08	75.64	78.66
2"	108.48	108.48	112.96	116.93	121.02	125.86
3"	203.40	203.40	211.80	219.24	226.92	235.98
4"	339.00	339.00	353.00	365.40	378.20	393.30
6"	678.00	678.00	706.00	730.80	756.40	786.60
8"	1,084.80	1,084.80	1,129.60	1,169.28	1,210.24	1,258.56
10"	1,559.40	1,559.40	1,623.80	1,680.84	1,739.72	1,809.18
12"	2,288.25	2,288.25	2,382.75	2,466.45	2,552.85	2,654.78
Consumption Charge	\$/CCF					
<i>Single Family</i>						
0 - 15 CCF	\$2.47	\$2.47	\$2.49	\$2.58	\$2.67	\$2.78
15 + CCF	2.95	2.95	2.96	3.08	3.19	3.32
<i>Multi-Family</i>						
Winter (Oct - Apr)	\$2.11	\$2.11	\$2.39	\$2.47	\$2.56	\$2.66
Summer (May - Sept)	2.30	2.30	2.59	2.68	2.77	2.88
<i>Non-Residential</i>						
Winter (Oct - Apr)	\$2.11	\$2.11	\$2.38	\$2.46	\$2.55	\$2.65
Summer (May - Sept)	2.46	2.46	2.76	2.85	2.96	3.07
<i>Irrigation</i>						
Winter (Oct - Apr)	\$2.20	\$2.20	\$2.49	\$2.58	\$2.67	\$2.78
Summer (May - Sept)	2.79	2.79	2.90	3.00	3.11	3.24

As can be seen, the proposed rates maintain the current rate structure and only the level of the rates, both the fixed monthly meter charges and consumption charges, have been adjusted based on the results of the revenue requirement analysis (overall system revenue needs) and cost of service analysis (proportional allocation/average unit costs).

Section 5 of this report provides a detailed discussion of the current and proposed water rates along with a component by component summary of the proposed water rates for FY 2022 – FY 2026.

Summary of the Proposed Drought Recovery Charges

As part of the water rate study, the Department requested that HDR update the Department’s drought recovery charges which were previously called drought surcharges. These charges are intended and designed to encourage reductions in use during periods of declared drought, water

shortage, or other impacts to water supply, while at the same time maintaining the Department’s revenues. These charges are an important tool that allows the Department to maintain adequate revenues when consumption declines due to voluntary or mandatory conservation resulting from a number of outside factors impacting water supply (e.g., drought, infrastructure failure, social factors).

When properly designed, these charges address the issues of the financial/revenue impacts of decreased consumption during declared water shortages or emergencies. When a utility enters a period of a declared shortage or emergency, the customer is asked (voluntarily or mandated) to reduce consumption by a prescribed amount. For purposes of establishing the drought recovery charges, the Department’s Urban Water Management Plan identifies five specific planning levels for reductions in use. These five levels are summarized below along with the estimated consumption reductions resulting from additional conservation restrictions.

Stage	Description	Reduction
1	Limited Irrigation / Outdoor Use	10%
2	Limited Irrigation / Outdoor Use	20%
3	Limited Irrigation / Outdoor Use	30%
4	Minimal Irrigation / Outdoor Use	40%
5/6	No Irrigation / Outdoor Use	50% +

Under the Department’s existing rates, when consumption decreases, revenues also decrease. Given that most of the Department’s costs are primarily fixed, reductions in revenue can place significant financial strain on the Department. To address that, drought recovery charges are developed. The intent of these charges is to reflect changes in the cost of service driven by reduced water use, while simultaneously providing sufficient revenue to maintain the water utility as customers to comply with the requested reductions in use.

In developing the proposed drought recovery charges, the monthly meter charge remains fixed at the same level regardless of the stage. The drought recovery charges are applied to the consumptive portion of the rates and they are applied to all customer classes of service. The drought recovery charges are individually analyzed and developed for each class of service. The specific drought recovery charges for each class of service were designed to maintain the current level of revenues for each customer class of service. Provided below in Table ES - 6 is a summary of the drought recovery charges for each level (stage).

Table ES – 6
Summary of the Drought Recovery Charges (\$ / CCF)

<i>Reduction</i>	Stage 1 10%	Stage 2 20%	Stage 3 30%	Stage 4 40%	Stage 5/6 50% +
Single-Family					
0 – 15 CCF	\$0.29	\$0.65	\$1.12	\$1.74	\$2.61
15 +CCF	0.29	0.65	1.12	1.74	2.61
Multi-Family					
Winter (Oct – Apr)	\$0.28	\$0.62	\$1.06	\$1.66	\$2.48
Summer (May – Sept)	0.28	0.62	1.06	1.66	2.48
Non-Residential					
Winter (Oct – Apr)	\$0.29	\$0.65	\$1.11	\$1.72	\$2.58
Summer (May – Sept)	0.29	0.65	1.11	1.72	2.58
Irrigation					
Winter (Oct – Apr)	\$0.31	\$0.69	\$1.19	\$1.84	\$2.77
Summer (May – Sept)	0.31	0.69	1.19	1.84	2.77

The drought recovery charges in Table ES - 6 are added to the adopted rates in place at the time the stage is declared. The charges would be applied to each tier of the Department’s rates. For example, the single family proposed rate for the first tier is \$2.49/CCF for FY 2023 and if the Department declares Stage 2; the rate for the first tier will change to \$3.14/CCF (\$2.49 + \$0.65). The implementation of the charges may be put in place once a drought or emergency is declared. The implementation of these charges would need to be requested by the Department management and formally approved by the City Council. A more detailed discussion of the drought recovery charges is provided in Section 5 of this report.

Water Rate Study Recommendations

Based on the results of the water rate study, HDR recommends the following:

- Rate revenue adjustments are necessary to prudently fund operating expenses and necessary capital investment in renewal and replacement of the existing system.
- Water rate revenues should be adjusted 0.0% in FY 2022, 3.5% in FY 2023 and FY 2024, and 4.0% from FY 2025 to FY 2026.
- The proposed rates reflect the results of the cost of service analysis average unit costs and the proportional allocation of costs to the various customer classes of service.
- Drought recovery charges should be adopted based on the need to maintain sufficient revenues for operating and capital needs during drought or water shortage events.
- Drought recovery charges should be adjusted when water rates are adjusted during the proposed period (FY 2022 – FY 2026).

- Prior to the implementation of the fifth, and final, proposed rate adjustment the Department should complete a water rate study.

Rate Adoption

Proposition 218 outlines a specific process to legally adopt and implement the proposed water rates. The first requirement is that the rates must be cost-based and proportional, which is the purpose of completing the water rate study. Once the proposed water rates have been developed, a public process must be undertaken to adopt the proposed rates. This began with the presentation of the proposed rates to the Stockton City Council in March 2021. At this meeting, the City Council directed staff to mail the Proposition 218 notices – shown in the Proposition 218 Appendix - to the City’s customers which outlines the proposed changes in rates. The notice also contains the time, date, and location of the public hearing, which is shown in the Approved Notice Appendix. The City Council then held a public hearing on May 25, 2021 to discuss the publicly noticed and proposed rates. Absent sufficient written protest by customers, the City Council moved to adopt the proposed water rates as outlined in the customer notification over the next five-year period.

Summary of the Water Rate Study

This completes the summary discussion of the development of the rate study for the Department’s water utility. The focus of this study has been the prudent and adequate funding of the annual water utility operation and maintenance expenses and capital funding needs. Furthermore, to meet the requirements of Proposition 218, the proposed rates were developed based on an equitable and proportional allocation of costs through the cost of service analysis. A full and complete discussion of the development of the Department’s water rate study can be found in following sections of this report.

1 Introduction and Overview

1.1 Introduction

HDR Engineering, Inc. (HDR) was retained by the City of Stockton Municipal Utilities Department (Department) to conduct a water rate study. The objective of a water rate study is to develop equitable and cost-based water rates which are compliant with the legal requirements of Proposition 218. This is accomplished by first reviewing and analyzing the Department’s water operating and capital costs and developing a projection of the overall revenue requirement of the water utility. Next, the Department’s revenue requirement is equitably and proportionally distributed to the Department’s customer classes of service (e.g., residential, commercial, etc.). The findings and conclusions from the cost of service process is then used to develop the Department’s proposed water rates which are reflective of how the Department incurs costs to provide water service. The result of the water rate study process is equitable and proportional water rates reflective of the water utility specific costs. The Department has historically developed water rate studies to establish their water rates and this study is a continuation of their past practices and commitment to establishing cost-based water rates.

The Department owns and operates a water supply, treatment, transmission, and distribution system. The Department also purchases water and supplements its purchased water with local ground water and surface water resources. The determination of the total costs associated with providing water supply, treatment, transmission, and distribution of water to the Department’s customers has been developed based on the Department’s accounting, operating, and customer billing records along with other relevant information.

1.2 Goals and Objectives

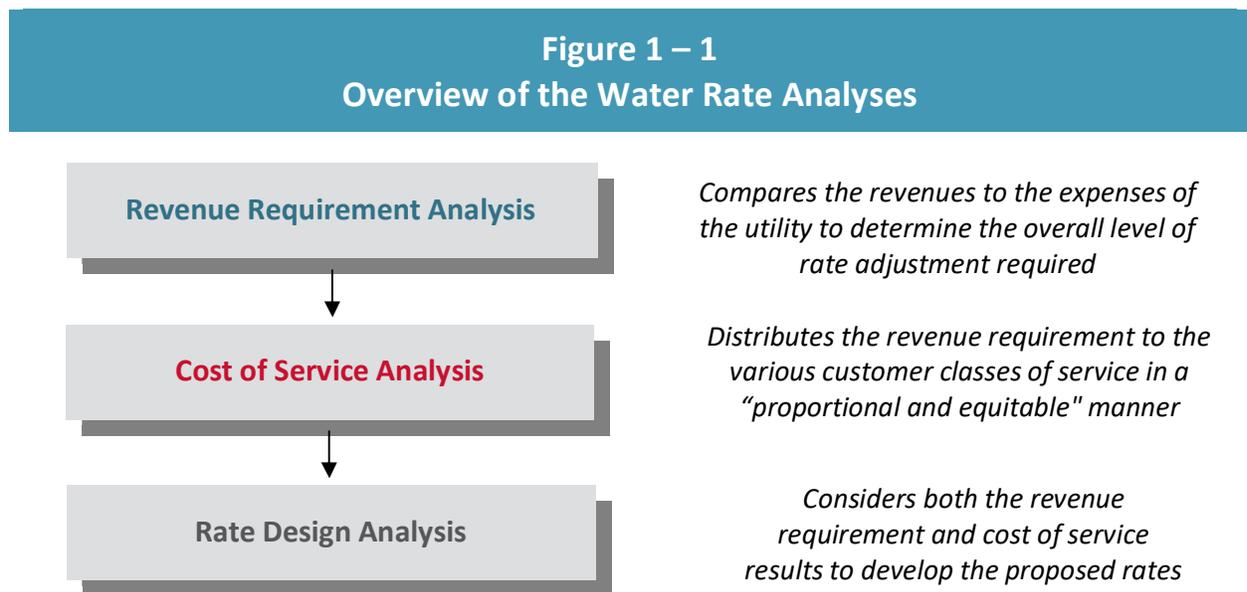
The Department had several key objectives in developing the water rate study. These key goals and objectives provide a framework for the technical analysis and policy decisions that are a part of this study. The Department’s key goals and objectives for this study were as follows:

- Develop the study in a manner consistent with the principles and methodologies established by the American Water Works Association (AWWA), M1 Manual, Principles of Water Rates, Fees, and Charges.
- In financial planning and establishing the Department’s proposed rates, review and utilize best industry practices, while recognizing and acknowledging the specific and unique characteristics of the Department’s system and customers.
- Utilizing “generally accepted” rate making methodologies review the Department’s costs to determine the adequacy and equity of the utility rates.
- Meet the Department’s financial planning criteria as it relates to legally required debt service coverage (DSC) ratios, adequate funding of capital infrastructure, and maintenance of adequate and prudent reserve levels.
- Develop a final proposed rate transition plan which adequately supports the utility’s funding requirements, while attempting to minimize overall impacts to rates.

- Provide rates designed to meet the intent and legal requirements of California Constitution article XIII D, section 6 (commonly referred to as Proposition 218).

1.3 Overview of the Rate Study Process

The water rates an agency charges must be set at a level where a utility’s operating and capital expenses are met with the revenues received from customers. This is an important point, as failure to achieve this objective may lead to insufficient funds to maintain system integrity. To evaluate the adequacy of a utility’s existing rates, a water rate study is often performed. A water rate study consists of three interrelated analyses. Figure 1 - 1 below provides an overview of these analyses.



The above framework was utilized for reviewing and evaluating the Department’s water rates.

1.4 Organization of the Study

This report is organized in a sequential manner that first provides an overview of utility rate setting principles, followed by sections that detail the specific technical and analytical steps used to review the Department’s water rates. The following sections comprise the Department’s water rate study report:

- **Section 2** – Overview of Water Rate Setting Principles
- **Section 3** – Development of the Revenue Requirement Analysis
- **Section 4** – Development of the Cost of Service Analysis
- **Section 5** – Development of the Proposed Rate Designs

A Technical Appendix is attached at the end of this report, which details the various technical analyses that were undertaken in the preparation of the Department’s water study.

1.5 Summary

This report will review and discuss the water rate analyses prepared for the Department. This report has been prepared utilizing generally accepted water rate setting methodologies and techniques.

2 Overview of Water Rate Setting Principles

2.1 Introduction

This section of the report provides background information about the water rate setting process, including descriptions of generally accepted principles, types of utilities, and the methodologies used to develop the revenue requirement, cost of service, and rate design analyses. This information is useful for gaining a better understanding of the details presented in Sections 3 through 5 of this report.

As a point of reference, the Department has historically used the rate setting principles and methodologies discussed in this section of the report to establish their water rates. The use of these principles and methodologies lead to cost-based and equitable water rates. This study is a continuation of the Department's use of cost of service to establish their water rates.

2.2 Generally Accepted Rate Setting Principles

As a practical matter, all utilities should consider setting their rates around some generally accepted or global principles and guidelines. That is, utility rates should be:

- Cost-based, equitable, and set at a level that meets the utility's full revenue requirement.
- Easy to understand and administer.
- Designed to conform to "generally accepted" rate setting techniques.
- Stable in their ability to provide adequate revenues for meeting the utility's financial, operating, and regulatory requirements.
- Established at a level that is stable from year-to-year from a customer's perspective.

2.3 Determining the Revenue Requirement

Most public utilities use the "cash basis"¹ approach for establishing their revenue requirement and setting rates. This approach conforms to most public utility budgetary requirements and the calculation is easy to understand. A public utility totals its cash expenditures for a period to determine required revenues. The revenue requirement for a public utility is usually comprised of the following costs or expenses:

- **Total Operating Expenses:** This includes a utility's operation and maintenance (O&M) expenses, plus any applicable taxes or transfer payments. Operation and maintenance expenses include the materials, electricity, labor, supplies, etc., needed to keep the utility functioning.
- **Total Capital Expenses:** Capital expenses are calculated by adding annual debt service payments (principal and interest) to capital improvements financed with rate revenues.

¹ "Cash basis" as used in the context of rate setting is not the same as the terminology used for accounting purposes and recognition of revenues and expenses. As used for rate setting, "cash basis" simply refers to the specific cost components to be included within the revenue requirement analysis.

In lieu of including capital improvements financed with rate revenues, a utility sometimes includes depreciation expense to stabilize the annual revenue requirement.

Under the cash basis approach, the sum of the total expenses plus the total capital expenses equals the utility’s revenue requirement during any selected period (historical or projected).

Note that the two portions of the capital expense component (debt service and capital improvements financed from rate revenues) are necessary under the cash basis approach because utilities generally cannot finance all their capital facilities with long-term debt. At the same time, it is often difficult to pay for all capital expenditures on a “pay-as-you-go” basis given that some major capital projects may have significant rate impacts upon the utility, even when financed with long-term debt. Many utilities have found that some combination of “pay-as-you-go” funding and long-term financing will often lead to minimization of rate increases over time.

As noted, public utilities typically use the cash basis methodology or approach to establish their revenue requirements. An exception may occur if a public utility provides service to a wholesale or large contract customer. In this situation, a public utility could use the “utility basis” approach (see Table 2 - 1) to earn a “fair” rate of return on the investment needed to serve the wholesale or large contract customer.

Table 2 – 1 Cash versus Utility Basis Comparison			
Cash Basis		Utility Basis (Accrual)	
+	O&M Expenses	+	O&M Expenses
+	Taxes/Transfer Payments	+	Taxes/Transfer Payments
+	Capital Improv. Funded from Rates (≥ Depreciation Expense)	+	Depreciation Expense
+	<u>Debt Service (Principal + Interest)</u>	+	<u>Return on Investment</u>
=	Total Revenue Requirement	=	Total Revenue Requirement

2.4 Analyzing Cost of Service

After the total revenue requirement is determined, it is equitably and proportionally distributed to the users of the service. The allocation and distribution process, usually analyzed through a cost of service analysis, reflects the cost relationships for producing and delivering water services. A cost of service analysis requires three analytical steps:

1. Costs are **functionalized**, or grouped, into the various cost categories related to providing service (supply, treatment, distribution, pumping, etc.). This step is largely accomplished by the utility’s accounting system.
2. The functionalized costs are then **allocated** to specific cost components. Allocation refers to the arrangement of the functionalized data into cost components. For example, a

water utility's costs – such as for the Department - are typically allocated as commodity (average day), capacity (peak day), or customer-related costs.

3. Once the total costs are allocated into the cost components, they are proportionally ***distributed*** to each of the customer classes of service (e.g., residential, multi-family, etc.) or rate schedule. The equitable distribution is based on each customer class' relative contribution to the cost component (i.e., benefits received from and burdens placed on the system and its resources). For example, customer-related costs are proportionally distributed to each class of service based on the total number of customers in that class of service, relative to all other customer classes of service. Once the total costs (i.e., revenue requirement) are proportionally distributed, the level or amount of revenues required from each customer class of service to achieve cost-based rates can be determined.

The Department's cost of service was developed based on water utility industry generally accepted approaches, while at the same time, taking into consideration the Department's unique customer and system characteristics. The cost of service analysis developed for the Department is discussed in more detail in Section 4 of this report.

2.5 Designing Water Rates

Water rates that meet the utility's cost-based and equitable objectives are designed based upon the findings and conclusions from the revenue requirement and cost of service analyses. Using the cost information from these two analyses results in rates that are strictly cost-based, equitable and proportional. The average unit costs (i.e., cost-based rates) from the cost of service analysis does not consider, or take into account, any other non-cost based goals and objectives (e.g., conservation, economic development, ability to pay, revenue stability, etc.). In designing water rates, many utilities consider or incorporate other rate design objectives such as ability to pay, continuity of past rate philosophy, economic development, ease of administration, and customer understanding into their final water rate designs. However, unlike other water utilities, the Department's proposed water rates must take into consideration each customer class's proportional share of costs allocated through the cost of service analysis to be legally defensible and meet the Proposition 218 legal requirements. The development of the District's proposed water rate designs is discussed in more detail in Section 5 of this report.

2.6 Economic Theory and Rate Setting

One of the major justifications for a rate study is founded in economic theory. Economic theory suggests that the price of a commodity must roughly equal its cost if equity among customers is to be maintained. This statement's implications on utility rate designs are significant. For example, a water utility usually incurs capacity-related costs to meet summer outdoor or non-domestic watering needs. It is presumed, then, that the customers who create excessive peak demands on the system - and create the need for upsizing of the water system infrastructure - should pay their proportional share of the costs related to the over-sizing of facilities to meet peak use requirements. When costing and

“Economic theory suggests that the price of a commodity must roughly equal its cost if equity among customers is to be maintained.”

pricing techniques are refined, consumers have a more accurate understanding of what the commodity costs to produce and deliver. This price-equals-cost concept provides the basis for the subsequent analysis and comments. This basic pricing technique has been incorporated and used within this study.

2.7 Summary

This section of the report has provided a brief introduction to the general principles, techniques, and economic theory used to set water rates. These principles and techniques provide the theoretical and technical basis for the analysis used to develop the Department's water rate study.

3 Development of the Revenue Requirement

3.1 Introduction

The development of a revenue requirement analysis is the first analytical step in the three-step water rate study process. This section describes the development of the revenue requirement analysis for the Department’s water utility. The Department provided to HDR detailed revenue and expenses data for the water system that allowed for the development of the revenue requirement analysis.

The revenue requirement analysis, as developed for the Department’s water utility, determines the adequacy of water rates at current rate levels. From this analysis, a determination can be made as to the overall level of rate revenue adjustment needed to provide adequate and prudent funding for both operating and capital expenses. HDR has developed an independent analysis based on the data and information provided by the Department.

“The revenue requirement analysis, as developed for the Department’s water utility, determines the adequacy of water rates at current rate levels.”

3.2 Determining the Revenue Requirement

In developing the Department’s water revenue requirement, the water utility, as an enterprise fund, must financially “stand on its own” and be properly funded. That is, no transfers from other City of Stockton funds or enterprise funds occur to support the Department’s water utility. As a result, the revenue requirement analysis - as developed herein - assumes the full and proper funding needed to operate and maintain the Department’s water system on a financially sound and prudent basis.

3.3 Establishing a Time Frame and Approach

The first step in developing the revenue requirement for the Department’s water utility was to establish a time frame for the revenue requirement analysis. For this study, the revenue requirement was developed for a 10-year period (FY 2021 – FY 2030). This time frame was composed of the FY 2021 budget which was projected through FY 2030. There were no additions or deletions to the FY 2021 budget, and it was assumed that it represented a ‘typical’ budget for the City’s water utility. While the revenue requirement was developed for a ten-year period, the focus for rate setting purposes was the immediate five-year period of FY 2022 – FY 2026. Reviewing a multi-year period is always recommended to attempt to identify any major financial impacts that may be on the horizon. By anticipating future financial requirements sooner, the Department can begin planning for these changes, thereby minimizing short-term rate impacts and likely overall long-term rate levels.

The second step in determining the revenue requirement was to decide based on accumulating costs. In this case, a “cash basis” revenue requirement was utilized. As noted in Section 2, the “cash basis” approach is the most common methodology used by municipal utilities to establish their revenue requirement. This is also the methodology that the Department has used in prior

rate studies to determine its water revenue requirement. Table 3 - 1 provides a summary of the “cash basis” approach and details the cost components used to develop the Department’s water revenue requirement.

Table 3 – 1
Overview of the Department’s “Cash Basis” Revenue Requirements

+	Water Operation and Maintenance Expenses
+	Rate Funded Capital
+	Debt Service (Principal + Interest) – Existing and Future
±	<u>Change in Working Capital</u>
=	Total Water Revenue Requirement
-	<u>Miscellaneous Revenues</u>
=	Net Revenue Requirement (<i>Balance Required from Water Rate Revenues</i>)

Given a period around which to develop the revenue requirement and a method to accumulate the costs, the focus shifts to the development and projection of the revenues and expenses of the Department.

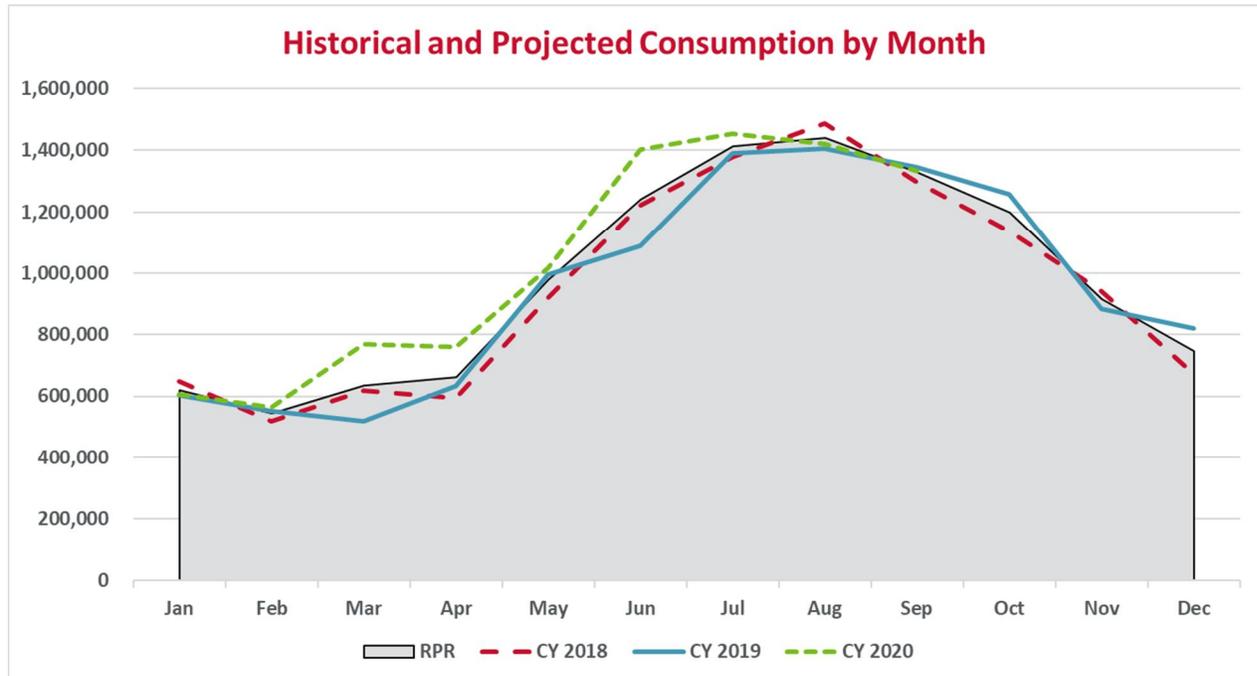
The primary financial inputs in the development of the revenue requirement were the Department’s FY 2021 budget document, 2018 through 2020 customer and consumption data to develop a projection of customer billing data that reflects typical consumption patterns, and the current water capital improvement plan which was developed by the Department based on the current Water Master Plan being completed concurrently. Presented below is a detailed discussion of the steps and key assumptions contained in the development of the Department’s water revenue requirement analysis.

3.4 Projecting Rate and Other Miscellaneous Revenues

Once the method and period for developing the revenue requirement was established, the next step is to develop a projection of the water rate revenues, at present rate levels. In general, this process involved developing projected billing units (i.e., meter size, metered consumption) for each customer group (e.g., single family, multi family, commercial, irrigation) based on historical billing records as provided by the Department. The billing units for each customer group were then multiplied by the current water rates for each customer group. This method of independently calculating revenues links the projected revenues used within the study to the projected billing units. It also helps to confirm that the billing units used within the study are reasonable for purposes of projecting future revenues, equitably and proportionally allocating and distributing costs and, ultimately, establishing proposed rates.

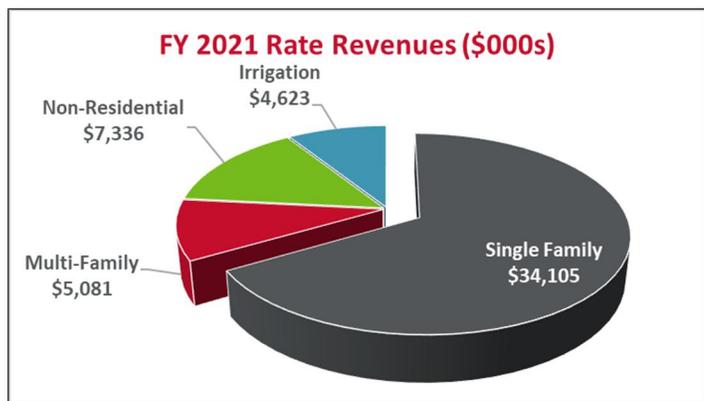
A key aspect of the projection of water rate revenues was to develop a projection of consumption levels. The consumption data from January 2018 through September 2020 was reviewed to develop a projection of customer consumption characteristics. In an effort to reflect anticipated future consumption levels, and in discussion with Department staff, it was determined that the

average consumption levels of the last few years would be used since it appears to reasonably reflect the anticipated average customer consumption characteristics for the next several years. This key assumption was made in large part due to the current pandemic caused by the Coronavirus spread as well as recent weather patterns in the area. Below is a graphic with the historical, and projected, consumption by month.



The Department currently has separate rate schedule for several different customer groups. All customers have a fixed monthly charge by service meter size and a variable consumption charge. The consumption charge for single family is an increasing two-tiered rate structure. The consumption charge for multi-family, non-residential, and irrigation customers is a seasonal rate structure with the summer billing period being May –September; and the winter billing period being October – April.

Most of the Department’s water rate revenues are derived from the single family residential customer class which is approximately 66.7% of the total rate revenues. Including the other customer classes, and at current rate levels, the Department is projected to receive approximately \$51.1 million in rate revenue in FY 2021. The rate study has assumed a conservative level of annual customer growth of 0.5%/year over the review period. In FY 2026, the rate



revenues, given assumed growth and at current rate levels, are projected to be approximately \$52.4 million.

The Department’s water utility also receives miscellaneous revenues in addition to the rate revenues described above. There are various miscellaneous revenue sources which are related to fire protection charges, interest earnings, California Water Service true-up, and other miscellaneous revenues. In total, the Department is projected to receive approximately \$7.0 million in miscellaneous revenues in FY 2021. This amount is projected to increase slightly over the projected five-year period and reach approximately \$7.5 million by FY 2026.

On a combined basis, summing the water rate revenues and the miscellaneous revenues, the Department’s water utility has total projected revenues of approximately \$58.1 million in FY 2021, which is projected to increase to approximately \$59.9 million by FY 2026.

3.5 Projecting Operation and Maintenance Expenses

Operation and maintenance (O&M) expenses are incurred by the Department to provide water service (supply, treatment, transmission, and distribution of water). This includes the daily operation and maintenance of the existing infrastructure, as well as purchasing SEWD and WID. For the development of the revenue requirement, the Department provided detailed historical and budgeted O&M expenses and capital improvement needs (discussed in Section 3.6) for the water utility. The budgeted FY 2021 O&M expenses were projected over the review period based on estimated annual inflationary (escalation) factors. These were developed based upon the recent experience of the Department and the general economy, as well as known changes in Department O&M. Shown below in Table 3 - 2 is a summary of the O&M escalation factors used to project the Department’s water O&M expenses within the revenue requirement analysis.

Table 3 – 2 Summary of the Escalation Factors							
		FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Labor	Budget		3.0%	3.0%	7.0%	4.0%	3.0%
Benefits - Medical	Budget		2.0%	2.0%	3.0%	3.0%	3.0%
Benefits - Other	Budget		4.0%	4.0%	4.0%	4.0%	4.0%
Prof. / Special Services	Budget		3.0%	3.0%	3.0%	3.0%	3.0%
Materials & Supplies	Budget		3.0%	3.0%	3.0%	3.0%	3.0%
Equipment	Budget		4.0%	4.0%	4.0%	4.0%	4.0%
Radio Equipment	Budget		50.0%	3.5%	3.5%	3.5%	3.5%
Miscellaneous	Budget		2.5%	2.5%	2.5%	2.5%	2.5%
Utilities	Budget		4.0%	4.0%	4.0%	4.0%	4.0%
Insurance	Budget		3.0%	3.0%	3.0%	3.0%	3.0%
Flat	Budget		0.0%	0.0%	0.0%	0.0%	0.0%
Purchased Water	Budget		6.5%	6.5%	6.5%	6.5%	6.5%

The total FY 2021 O&M expenses for the Department are budgeted at approximately \$35.0 million. Over the planning horizon, the total O&M expenses for the Department is projected to

increase to approximately \$44.7 million by FY 2026, based on upon the assumed impacts of inflation provided in Table 3 - 2. The largest annual cost for the water utility is from purchased water costs which is \$16.0 million in FY 2021. This single line item accounts for approximately 45.7% of the Department’s annual O&M expenses for the water utility.

3.6 Projecting Capital Funding Needs and Transfer Payments

A key component in the development of the water revenue requirement was properly and adequately funding capital improvement needs for the infrastructure of the Department’s system. One of the major issues facing utilities across the U.S. is the amount of deferred capital projects and the funding pressure from growth/expansion and regulatory-related improvements. The proper and adequate funding of capital projects is an important issue for all water utilities and is not just a local issue or concern of the Department.

“As the need for capital investment increases, it often directly impacts needed rate revenue adjustments.”

In general, there are three general types of capital projects that a utility may need to fund. These include the following types:

- **Renewal & Replacement** - A renewal and replacement project is essentially a project required for maintaining the existing system that is in place today. As the existing plant or pipelines become worn out, obsolete, etc., the utility should be making continuous (annual) investments to maintain the integrity of the facilities.
- **Growth / Capacity Expansion** - A utility may make capital investments to expand the capacity of facilities to accommodate future capacity needs (customers).
- **Regulatory-Related** - Another type of project may be a function of a regulatory (legal) requirement in which the Federal or State government mandates the need for an improvement to the system to meet a regulatory standard (e.g., water quality).

Understanding these different types of capital projects is important because it may aid in explaining any needed rate adjustments. As the need for capital investment increases, it often directly impacts needed rate revenue adjustments. In addition, and more importantly, the way in which projects are funded may vary by the type of capital project. For example, annual and on-going renewal and replacement projects may be paid for through rates and funded on a “pay-as-you-go” basis. In contrast to this, growth or capacity expansion projects may be funded through the collection of development or water connection fees (i.e., growth-related charges) in which new development pays a proportional and equitable share of the cost of facilities necessary to serve their respective development (impact). Finally, regulatory projects may be funded by a variety of different means, which may include annual rate revenues, long-term debt, grants, etc.

While the above discussion appears to precisely divide capital projects into three clearly defined categories, the reality of working with specific capital projects may be more complex. For example, a water pipeline may be replaced, but while being replaced, it is up-sized to accommodate greater capacity to serve increasing demands or new development. There are many projects that share these “joint” characteristics. At the same time, projects may not be “replacement” related, but rather “improvement” related.

For purposes of developing the capital funding plan for the revenue requirement analysis, the Department provided its long-term capital improvement plan (CIP) to HDR. In addition, the Department is also currently updating the Water Master Plan which, when completed, will provide a listing of long-term capital projects that address deficiencies and improvements needed on the water system.

Provided below in Table 3 - 3 is a summary of the capital funding plan based on the overall capital plan as developed by the Department based on current needs, and the improvements identified in the Water Master Plan. As noted, the focus of the Department’s water rate study was on the next five-year period for rate setting purposes. The capital plan detail has been simplified to the main categories for ease of reading. Exhibit 4 in the Technical Appendix provides details of the individual capital projects and identified funding sources.

Table 3 – 3						
Summary of the Capital Improvement Plan (\$000)						
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Capital Projects						
Capital Projects - 423/427	\$3,591	\$9,263	\$24,899	\$11,364	\$12,098	\$12,299
Capital Projects - 424	2,803	2,973	3,053	119	3,367	0
To Capital Reserves	0	0	0	0	0	0
Future Unidentified Projects	<u>5,409</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Capital Projects	\$11,803	\$12,235	\$27,952	\$11,484	\$15,466	\$12,299
Less: Outside Funding Sources						
Operating Cash	\$0	\$588	\$15,949	\$2,114	\$2,848	\$2,799
DWSP SWSF Fund	0	0	0	0	0	0
Connection Fee Reserve	2,803	2,973	3,053	119	3,367	0
New Revenue Bonds	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Outside Funding Sources	\$2,803	\$3,560	\$19,002	\$2,234	\$6,216	\$2,799
Rate Funded Capital	\$9,000	\$8,675	\$8,950	\$9,250	\$9,250	\$9,500

As can be seen in Table 3 - 3, there are several projects which vary from year-to-year. The capital improvements are primarily related to renewal and replacement needs (Fund 423 and Fund 427). While the total amount required to fund projects may vary from year-to-year, the rate study capital funding plan has attempted to provide a consistent funding source from rates for capital improvements. In this case, rates will annually fund on average \$9.1 million per year (as highlighted in Table 3 - 3). As a point of reference, the Department’s annual depreciation expense was approximately \$8.1 million for FY 2019. A desirable and recommended minimum funding target for rate funded capital is an amount equal to or greater than annual depreciation expense. The capital funding analysis has established a level of annual rate funding that is slightly greater than annual depreciation. However, it is important to note that the Department continues to monitor annual renewal and replacement needs and increase levels of rate funded capital over time to keep up with the cost escalation of capital projects. It is also important to note and understand that depreciation expense is not the same as replacement cost, which can be 1.5 to

2.0 times the original cost of the project. Thus, funding an amount which exceeds depreciation expense (i.e., \$8.1 million) is both prudent and appropriate. In developing this financial plan, HDR and the Department have attempted to minimize rate impacts while funding the planned capital improvement projects of the Department's water utility.

3.7 Projection of Debt Service

The Department currently has two outstanding debt issues for the water utility: the 2018 A Revenue Bond and the 2019 A Revenue Bond. In total, these two issues have an annual debt service payment of approximately \$14.3 million per year in FY 2021. A portion of this annual debt service is funded through connection fees and Delta Water Supply Project (DWSP) fees. The remaining balance of approximately \$13.8 million is funded through rates.

As shown in Table 3 - 3, it is assumed that the Department will not need to issue additional (new) long-term debt issues over the FY 2021 – FY 2026 period. It is important to note that projects related to Fund 424 (growth/expansion) may or may not materialize. If the growth does not occur, then the system improvements are not necessary, and these projects will be delayed accordingly.

In developing the capital plan and reviewing the current and anticipated debt service, HDR is not acting as a municipal advisor or providing municipal advice as it relates to bonds, terms, or structures of debt issuances. Rather, this rate study is a financial planning document which has identified projections of future funding needs and utilized general assumptions for long-term debt terms for modeling and projection purposes.

3.8 Reserve Funding

The final component of the revenue requirement analysis is the reserve funding. This relates to changes in working capital and the reserve funds. It includes transfers to, or from, reserve funds to maintain prudent ending fund balances or for future funding of capital projects. The City has a target minimum fund balance for the Operating (reserve) Fund of 180 days of O&M expenses, or approximately \$18 million. Any additional balance of funds after the transfers are made is transferred to the Operating fund to maintain the minimum fund balance. Funding from reserves may also be used to meet operating and capital needs in a deficient year.

3.9 Summary of the Revenue Requirement

Given the above projections of revenue and expense components, a summary of the Department's water revenue requirement analysis can be developed. In developing the revenue requirement analysis, consideration was given to the financial planning considerations of the Department. More specifically, emphasis was placed on minimizing rates while adequately funding the operational and capital improvement needs throughout the review period. Presented below in Table 3 - 4 is a summary of the Department's water revenue requirement analysis based on projected expenses and current rates. Detailed exhibits of this analysis can be found in the Technical Appendices in Exhibits 1 - 7.

Table 3 - 4
Summary of the Revenue Requirement Analysis (\$000)

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Revenues						
Rate Revenues	\$51,146	\$51,402	\$51,659	\$51,917	\$52,177	\$52,438
Misc. Revenues	<u>6,973</u>	<u>7,753</u>	<u>7,664</u>	<u>7,546</u>	<u>7,506</u>	<u>7,459</u>
Total Revenues	\$58,119	\$59,155	\$59,323	\$59,463	\$59,683	\$59,897
Expenses						
O & M	\$19,012	\$19,590	\$20,224	\$21,225	\$22,011	\$22,733
Purchased Water	16,011	17,051	18,160	19,340	20,597	21,936
Net Debt Service	13,785	13,793	13,801	13,522	13,528	13,189
Rate Funded Capital	9,000	8,675	8,950	9,250	9,250	9,500
Reserve Funding	<u>310</u>	<u>46</u>	<u>(5)</u>	<u>(175)</u>	<u>249</u>	<u>858</u>
Total Expenses	\$58,119	\$59,155	\$61,131	\$63,161	\$65,635	\$68,215
Bal. / (Def.) of Funds	\$0	\$0	(\$1,808)	(\$3,698)	(\$5,952)	(\$8,319)
Bal. as a % of Rate Rev.	0.0%	0.0%	3.5%	7.1%	11.4%	15.9%
Proposed Rate Adjustment	0.0%	0.0%	3.5%	3.5%	4.0%	4.0%
Add'l Rev. from Rate Adj.	\$0	\$0	\$1,808	\$3,698	\$5,952	\$8,319
Total Bal. / (Def.) of Funds	(0)	0	0	(0)	0	(0)

As can be seen, the revenue requirement has summed the O&M, rate funded capital, net debt service, and change in working capital (i.e., net funding to and from reserves). The Department's total revenue requirement is then compared to the total revenues which include the rate revenues - at present rate levels - and other miscellaneous revenues. From this comparison, a balance or deficiency of funds in each year can be determined. This balance or deficiency of funds is then compared to the present rate revenues to determine the level of rate adjustment needed to meet the revenue requirement. It is important to note the "Bal. / (Def.) of Funds" row is cumulative. That is, any adjustments in the initial years will reduce the deficiency in the later years. In FY 2023, a 3.5% rate adjustment is proposed, which would be implemented July of 2022 (the first month of the fiscal year). Over the five-year projected period, the total deficiency of rates is 15.9% for the Department's water utility.

Based on the revenue requirement analysis developed for the Department's water utility, HDR has concluded that the rate revenues will need to be adjusted over the next five years (FY 2022 – FY 2026) to maintain prudent funding of expenses and establish cost-based rates. Based on the rate transition plan, as can be seen above in Table 3 – 3, the proposed annual rate adjustments (blue shaded line) have been developed to meet the operating and capital needs of the Department's water utility as well as maintain strong financial metrics.

3.10 Reserve Levels

Another key element of determining the financial health and sustainability of the Department's water utility is a review of the level of available reserve levels after the proposed rate adjustments. Utilities can establish and maintain several different reserves. Each reserve has a

specific and different purpose. The typical types of reserves utilities maintain are generally referenced as an operating reserve, a capital reserve, a connection fee, and in some cases an emergency or rate stabilization reserve. Certain funds may establish a minimum ending balance that, if reached or falls below, is a signal that the Department should review the revenue sources associated with that fund and take appropriate action. The minimum ending balances will vary depending on the purpose of the fund and the expected revenue sources.

For the Department, there are three primary funds for the water utility. These are the operating reserve, connection fee, and surface water supply fee reserve funds. Each of these is discussed further below.

- **Operating Reserve** – The operating reserve is in place to meet the Department’s cash flow needs. The typical minimum ending balance for an operating reserve ranges from 90 – 365 days of annual O&M expenses. For the Department, the minimum target was previously set at 180 days of O&M expenses. This target results in a minimum ending balance of approximately \$17.3 million in FY 2021. Over the five -year rate setting period, the operating reserve maintains an ending balance greater than the target minimum.
- **Connection Fee** – The connection fee fund is used to track the collection of connection fee revenues from new customers connecting to the system. Given that this fund is related to customer growth and connection fees, there is no minimum reserve target. When funds are available, this fund is used to pay a proportional share of annual debt service payments related to providing new growth on the system and/or fund new growth-related capital improvements.
- **DWSP Fee** – The surface water supply fee fund is similar to the connection fee fund. This fund was established during the 2009 rate study for the fee developed for the growth component of the Delta Water Supply Project. Similar to the connection fee reserve, the DWSP reserve has no target minimum balance. When funds are available, this fund is used to offset annual debt service payments related to the Delta Water Supply Project or related capital improvement projects.

Each of these funds was reviewed during the development of the rate study process. The primary focus was on the operating reserve, given minimal customer growth on the system and expenditures related to growth-related capital infrastructure.

3.11 Debt Service Coverage Ratios

When long-term debt is issued it may have certain rate covenants associated with the debt issue. Specifically, the revenue bonds the Department issued for the DWSP require a specific level of revenue be generated each year more than O&M expenses and annual debt service payments. Compliance with this rate covenant is assessed via a debt service coverage (DSC) ratio. The Department is typically required to maintain a DSC which is 1.25 or greater.

As noted previously, the Department currently has two outstanding debt issuances; the 2018 “A” and 2019 “A” Revenue Bonds. The Department recently refinanced the existing debt issuances to take advantage of the savings because of more favorable long-term borrowing terms. Provided

in Table 3 - 5 is a summary of the debt service coverage (DSC) ratio calculations for the Department’s water utility before and after the proposed rate adjustments.

Table 3 - 5 Summary of the Debt Service Coverage Ratios						
	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Before Rate Adjustment	1.62	1.58	1.46	1.35	1.22	1.08
After Rate Adjustment	1.62	1.58	1.59	1.61	1.64	1.68

As can be seen in Table 3 - 5, with the proposed rate adjustments, the Department is meeting the debt service coverage ratios for all debt service. In contrast, should the Department not implement the proposed rate revenue adjustments, the DSC ratio would fall to just 1.08 by FY 2026. It is prudent financial practice to target at least 1.30 for the DSC ratio. That means that the utility has 30% of the outstanding debt amount to contribute to capital infrastructure or reserve funding after the O&M expenses and debt service have been paid. With this minimum financial planning target set, Table 3 – 5 demonstrates that the Department is well above this minimum threshold after the proposed rate adjustments. The Department is advised to continue to monitor revenues and expenses to maintain sufficient debt service coverage ratios.

3.12 Consultant’s Conclusions

The revenue requirement developed above for the Department’s water utility has indicated the need for annual revenue (rate) increases to adequately fund the Department’s operating and capital needs for the water utility. The proposed rate revenue adjustments are 0.0% in FY 2022, 3.5% in FY 2023 and FY 2024, and 4.0% in FY 2025 through FY 2026. HDR has reached this conclusion for the following reasons:

- Rate adjustments are necessary to adequately fund the water utility’s operating and capital expenses.
- The proposed rate adjustments maintain the Department’s financial health and provide long-term sustainable funding levels.
- The rate adjustments are needed to maintain, and exceed, the minimum debt service coverage requirements.
- Prior to the implementation of the fifth, and final, proposed rate adjustment the Department should complete a review of the water rates.

In reaching the above conclusions, HDR would recommend that the Department adopt the proposed annual rate adjustments through FY 2026 to provide sufficient funding for the Department’s projected operating expenses and capital improvement program.

4 Development of the Cost of Service Analysis

4.1 Introduction

In the previous section, the revenue requirement analysis focused on the total revenues and expenses required to adequately fund the Department's water utility. This section will provide an overview of the second step in a rate study; the cost of service analysis developed for the Department.

A water cost of service analysis determines the equitable and proportional distribution or assignment of the total revenue requirement between the various customer classes of service (e.g., residential, multi-family, etc.). The previously developed revenue requirement for FY 2023 was utilized in the development of the following cost of service analysis.

4.2 Objectives of a Cost of Service Study

There are two primary objectives in conducting a cost of service analysis:

- Equitably and proportionally allocate the Department's water revenue requirement among the customer classes of service, and
- Derive average unit costs (i.e., cost-based rates) for subsequent rate designs

The objectives of the cost of service analysis are different from determining a revenue requirement. As noted in the previous section, a revenue requirement analysis determines the utility's overall financial needs, while the cost of service analysis determines the equitable and proportional manner to collect the calculated revenue requirement from each customer class.

The results of the cost of service analysis determine the average unit costs which are eventually used in the development of the final step of the rate study process, the rate design analysis. The cost of service analysis provides a per unit cost of water consumption based on each customer class's equitable and proportional share of costs. For example, a water utility incurs costs related to average day and peak day demands, fire protection, and customer-related cost components. A water utility must build sufficient capacity² to meet summer peak capacity needs. Therefore, those customers contributing to those peak demands on the system should pay their proportionate (i.e., fair) share of the costs to provide the capacity in the system. The average unit costs derived from the cost of service analysis provides the relationship between these components which are then used to set cost-based rates. Similarly, the customer-related costs are totaled and allocated proportionately on an equivalent meter basis.

² System capacity is the system's ability to supply water to all delivery points at the time when demanded. Coincident peaking factors are calculated for each customer class at the time of greatest system demand. The time of greatest demand is known as a peak demand. Both the operating costs and capital asset related costs incurred to accommodate the peak demands are generally allocated to each customer class based upon the class's contribution to the specific peak month, peak day or peak hour event.

4.3 Determining the Customer Classes of Service

The first step in a cost of service analysis is to determine the customer classes of service. Based on discussion with Department staff, the classes of service used within the cost of service analysis were:

- Single Family
- Multi-Family
- Non-Residential
- Irrigation

To note, the “Non-Residential” class includes commercial, institutional, and industrial customers. In determining classes of service for cost of service purposes, the objective is to group customers together into similar or homogeneous groups based upon similar facility requirements and/or demand characteristics. HDR reviewed the current customer characteristics and facility requirements to determine the classes of service. In reviewing the customer classes of service, the Department has appropriately group customers into customer classes of service. The grouping of customers and rates into these classes of service creates the equity and fairness expected under Proposition 218 by having differing rates by customer classes of service that reflect both the level of revenue to be collected by the utility, but also the manner in which these costs are incurred and equitably and proportionally assigned to customer classes of service based upon their proportional impacts. Furthermore, when reviewing customer classes in the AWWA M1 Manual³, it identifies the general customer classes and approach to establishing customer classes for cost of service purposes. The customer classes identified in this study reflect industry standard approaches for Proposition 218 and general rate setting methodologies.

4.4 General Cost of Service Procedures

To determine the cost to serve each customer class of service on the Department’s water system, a cost of service analysis is conducted. A cost of service analysis utilizes a three-step approach to review costs. These steps take the form of *functionalization*, *allocation*, and *distribution*. Provided below is a detailed discussion of the water cost of service study conducted for the Department, and the specific steps taken within the analysis. The approach used for the Department’s study conforms to generally accepted, and industry standard, cost of service methodologies which are outlined in the AWWA M1 Manual.

4.4.1 Functionalization of Costs

The first analytical step in the cost of service process is called “functionalization”. Functionalization is the arrangement of expenses and asset (i.e., plant) data by major operating functions (e.g., supply, treatment, transmission, distribution, etc.). Within this study, there was a limited amount of functionalization of the cost data required since it was already largely accomplished within the Department’s system of accounts.

³ American Water Works Association, M1 Manual, *Principles of Water Rates, Fees, and Charges*, pg. 74

4.4.2 Allocation of Costs

The second analytical task performed in a water cost of service study is the “allocation” of the costs. The allocation of costs examines why each expense identified in the revenue requirement was incurred or what type of need is being met. The following cost allocators were used to develop the Department’s water cost of service analysis:

- **Commodity-Related Costs:** Commodity costs are those costs which tend to vary with the total quantity of water consumed by a customer. Commodity costs are those incurred under average load (demand) conditions and are generally specified for a period such as a month or year. Chemicals or utilities (electricity) are examples of commodity-related cost as these costs tend to vary based upon the total volumes of water consumed.
- **Capacity-Related Costs:** Capacity costs are those which vary with peak demand, or the maximum rates of flow to customers. System capacity is required when there are large demands for water placed upon the system (e.g., summer lawn watering). For water utilities, capacity-related costs are generally related to the sizing of facilities needed to meet a customer’s maximum water demand at any point in time. For example, portions of distribution storage reservoirs and mains (pipes) must be adequately sized to meet this type of requirement.
- **Customer-Related Costs:** Customer costs are those costs which vary with the number of customers on the water system. They do not vary with system output or consumption levels. These costs are also sometimes referred to as readiness to serve or availability costs. Customer costs may also sometimes be further allocated as either actual or weighted. Actual customer costs vary proportionally on a per customer basis, from customer to customer, with the addition or deletion of a customer regardless of the size of the customer. An example of an actual customer cost is postage for mailing bills. This cost does not vary from customer to customer, regardless of the size or consumption characteristics of the customer. In contrast, a weighted customer cost reflects a disproportionate cost, from customer to customer, with the addition or deletion of a customer. Examples of weighted customer costs are items such as meter maintenance expenses, where a large commercial customer requires a significantly more expensive meter than a typical residential customer.
- **Fire Protection-Related Costs:** Fire protection costs are those costs related to the public fire protection functions. Usually, such costs are those related to public fire hydrants and the over-sizing of mains and distribution storage reservoirs for fire protection purposes. Even with the largest peak demands on the system, there still must be sufficient capacity available to meet fire protection-related needs. These costs are properly included in water rates because public fire hydrants are primarily designed, installed, and used to deliver water for the purposes of extinguishing fires that threaten structures on properties served by the water utility and because public fire hydrants are also used for water system operations and maintenance⁴.

⁴ See Fire Chief Memorandum to Director of Public Utilities, August 18, 2020 and California Government Code, section 53750.5

- **Revenue-Related Costs:** Some costs associated with the utility may vary with the amount of revenue received by the utility. An example of a revenue related cost would be a utility tax which is based on the gross utility revenue.

4.4.3 Development of Distribution Factors

Once the allocation process is complete, and the customer groups have been defined, the various allocated costs were equitably distributed to each customer group. The Department's allocated costs for the water utility were distributed to the previously identified customer groups using the following distribution factors.

- **Commodity Distribution Factor:** As noted previously, commodity-related costs vary with the total water consumption. Therefore, the commodity distribution factor was based on the projected total metered water consumption plus water losses for each class of service for the projected test period. As noted, the consumption reflects the projected new baseline consumption levels. As part of the development of the projection, 3 years of historical data were used in the average.
- **Capacity Distribution Factor:** Capacity is related to peak usage. The capacity distribution factor was developed based on the estimated contribution to the water system peak day use of each customer class. Peak day use by customer class of service was estimated using peaking factors for each customer group. In this case, the peaking factor was defined as the relationship between peak day contribution and average day use and determined for each customer group based on a review of the average month to peak month usage. Given an estimated peaking factor, the peak day contribution for each class of service was developed.
- **Customer Distribution Factor:** Customer costs vary with the number of customers on the system. Two basic types of customer distribution factors were identified – actual and weighted. The distribution factor for actual customer was based on the projection of the number of customers (accounts) developed within the revenue requirement. The weighted customer distribution factors are also broken down further into two factors which attempt to reflect the disproportionate costs associated with serving different types of customers. The first weighted customer factor is for customer

Water Cost of Service Analysis Terminology

Functionalization – The arrangement of the cost data by functional category (e.g., source of supply, treatment, etc.).

Allocation – The assignment of functionalized costs to cost components (e.g., commodity, capacity, customer and fire protection related).

Distribution – Equitably distributing the allocated costs to each class of service based upon each class's proportional contribution to that specific cost component.

Commodity Costs – Costs that are allocated as commodity-related vary with the total volume of water consumed (e.g., chemical use at a treatment plant).

Capacity Costs – Costs allocated as capacity-related are related to meeting peak day or peak hour usage. Facilities are often designed and sized around meeting peak demands.

Fire Protection Costs – Costs that are related to fire protection services (e.g., hydrants, oversizing of storage and distribution mains).

Customer Costs – Costs allocated as customer-related vary with the number of customers on the system (e.g., metering costs).

Revenue Related Costs – Costs which vary with the amount of revenue received by the utility (e.g., utility tax).

service and accounting. This weighted customer distribution factor considers the fact that it may take more effort and time to read a meter and process a bill for various customer types. The second weighted customer distribution factor is for meters and services. This factor reflects the different costs associated with providing larger sized meters. For example, there is a significant cost difference associated with replacing a 3/4" meter compared to a 6" meter. This cost difference is reflected within the weighted distribution factor for meters and services.

- **Fire Protection Distribution Factor:** The development of the distribution factor for fire protection expenses involved an analysis of each class of service and their corresponding fire flow requirements. The analysis considered the gallon per minute fire flow requirements in the event of a fire, along with the duration of the required flow. The fire flow rates used within the distribution factor were based on industry standards and similar experiences with other water cost of service studies. The minimum fire flow requirements are then multiplied by the number of customers in each class of service, and the assumed duration of the fire, to determine each class' prorated fire flow requirements.
- **Revenue-Related Distribution Factor:** The revenue related distribution factor was developed from the projected rate revenues for FY 2023 for each customer class of service. These same revenues were used within the revenue requirement analysis discussed previously.

The distribution factors are developed for each customer class of service. At the same time, the distribution factors for commodity and capacity-related costs must be developed to also calculate the cost of tier and seasonal pricing. For example, the single-family commodity and capacity distribution factor has distribution factors for each of the two tiers and multi-family, non-residential, and irrigation have a distribution factor for the seasonal periods of winter (October to April) and summer (May to September). This level of distribution was provided within the analysis in order to demonstrate (i.e., calculate) the cost basis for the Department's tiered and seasonal rates (i.e., Proposition 218 / *San Juan Capistrano Decision*). Further discussion related to the distribution of costs to a greater cost level is discussed in more detail in the rate design analysis provided in Section 5 of this report.

4.5 Functionalization and Allocation of Plant in Service

As noted above, the first steps of the cost of service analysis are the *functionalization* and *allocation* of plant in service. In performing the functionalization of plant in service, HDR utilized the Department's historical plant (asset) records. Once the plant assets were functionalized, the analysis shifted to the allocation of the asset. The allocation process included reviewing each group of assets and determining which cost allocators the assets were related to. For example, the Department's assets were allocated as: commodity-related, capacity-related, customer-related, revenue-related, fire protection-related, or a direct assignment. Provided below is a summary overview of the allocation process used for the Department's plant assets. The following approach is based on the methodology as described in the AWWA M1 Manual.

Source of Supply

Source of supply provides service levels to customers to meet both average day and peak day needs. The Department's water system statistics from calendar year 2018 and 2019 were utilized

to develop the average day and peak day calculation. Given the purpose to meet both average and peak day needs, the Department's source of supply assets were allocated on the basis of the relationship of system average day to peak day demands. This resulted in 66.4% of the source of supply plant assets allocated to commodity-related costs (average day) and 33.6% to capacity-related costs (peak day). These allocation percentages reflect the Department's specific system peak demand (capacity needs) in relation to the system average day use (base needs).

Treatment

Treatment plant assets were allocated the same as the source of supply assets; 66.4% to commodity-related and 33.6% to capacity-related. Treatment plant is often considered to be an extension of the source of supply and this allocation also reflects the operation of the treatment facilities either as meeting customer average day or peak day needs on the system.

Pumping

Pumping was allocated as 100% capacity. Pumps must be sized to meet peak use requirements and this allocation assumes pumping plant is sized to meet peak use needs.

Storage

Distribution storage reservoirs, or water tanks, are typically designed to meet two types of needs –peak use demands and fire protection. The total storage capacity of the Department's reservoirs was examined, while consideration is also given to the additional capacity required for fire protection under a fire event scenario. This additional amount of capacity, in relation to the total storage capacity, is considered fire protection related. The balance of storage capacity is in place to meet peak use demands. This resulted in 96.6% of the storage plant assets being assigned to the capacity-related (peak day needs) cost component and the remaining 3.4% assigned to the fire protection component.

Transmission & Distribution

Transmission and distribution lines (mains) are typically assumed to provide three types of costs. First, a distribution system must be in place to meet a customer's minimum use requirements for water. This portion of the distribution main plant investment is a function of the number of customers on the system and, thus, a customer related cost. Next, a portion of the distribution system mains is considered a function of meeting peak flow (use) requirements on the system. Distribution mains must be sized to adequately meet the maximum peak flows demanded by customers. This portion of the distribution main plant investment is considered capacity related. Finally, even with sufficient capacity for meeting peak use demands, distribution mains must also be over-sized for fire flow demands. This final portion of over-sizing for distribution mains plant investment is classified as fire protection related. Based upon an analysis of the Department's distribution mains, the assignment of the distribution mains was allocated as 74% customer-related, 17% capacity (i.e., peak use)-related, and 9% fire protection related.

Transmission mains are defined as mains 16" or larger. For the Department's analysis, transmission main plant assets are assumed to be an extension of the supply and treatment system. Given that, they were assigned on an average day and peak day capacity basis. The

allocation of 66.4% commodity-related and 33.6% capacity-related. This is consistent with the allocation of source of supply and treatment plant assets.

Table 4 - 1 provides a summary of the basic functionalization and allocation of the major water plant items. A more detailed exhibit of the Department’s functionalization and allocation of plant investment can be found in the Technical Appendix Exhibit 13.1.

Table 4 - 1 Summary of the Allocation of Water Plant in Service					
Category	Commodity Related	Capacity Related	Customer Related	Equivalent Meters	Fire Protection
Source of Supply	66.4%	33.6%	0.0%	0.0%	0.0%
Treatment	66.4%	33.6%	0.0%	0.0%	0.0%
Pumping	0.0%	100.0%	0.0%	0.0%	0.0%
Trans. & Distrib. (All T&D Plant)	19.1%	25.6%	48.3%	0.9%	6.0%
General Plant	53.5%	31.6%	13.0%	0.2%	1.6%
Total Net Plant in Service	53.5%	31.6%	13.0%	0.2%	1.6%

4.6 Functionalization and Allocation of Operating Expenses

As noted in the AWWA M1 Manual, operating expenses are generally functionalized and allocated in a manner like the corresponding plant account. For example, maintenance of distribution mains is typically allocated in the same manner (allocation percentages) as the plant account for distribution mains. This approach to allocation of the Department’s water utility operating expenses was used for this analysis.

For the Department’s water rate study, the revenue requirement for FY 2023 was functionalized, allocated, and distributed. As noted in Section 3, the Department utilized a cash basis revenue requirement, which was comprised of operation and maintenance expenses, rate funded capital, net debt service, and reserve funding. A more detailed review of the functionalization and allocation of the revenue requirement can be found in the Technical Appendix in Exhibit 15.1.

Based on the functionalization and allocation of operating expenses, Provided in Table 4 – 2 is a summary of the allocation of the FY 2023 revenue requirement from the cost of service analysis.

Table 4 - 2
Summary of the Allocation of the FY 2023 Revenue Requirement (\$000)

Class of Service	Total	Commodity Related	Capacity Related	Customer Related	Fire Prot.	Revenue Related	Direct Assign.
Net Revenue Requirement	\$53,467	\$18,769	\$11,566	\$22,887	\$245	\$0	\$0

The total allocation of the FY 2023 revenue requirement, approximately \$53.5 million, has been allocated to the various cost components (commodity, capacity, etc.). These costs are then distributed to each customer class based on each customer classes proportional share of each cost component. The costs in Table 4 – 2 are taken from Exhibit 15 in the Water Technical Appendix.

4.7 Major Assumptions of the Cost of Service Study

Several key assumptions were used within the Department’s water cost of service analysis. Below is a brief discussion of the major assumptions used.

- The test period used for the water cost of service analysis was FY 2023. The revenue and expense data were previously developed within the revenue requirement analysis.
- A cash basis methodology was utilized which conforms to generally accepted water cost of service approaches and methodologies and is consistent with the City’s previous cost of service analyses.
- The allocation of plant in service was developed based upon generally accepted cost allocation techniques. Furthermore, when available the allocations were developed using the Department’s water utility specific data.
- Consumption by cost or class of service used within this study were developed for each class of service from historical usage information provided by the Department.
- Peak day capacity allocation factors were estimated based upon each customer group’s average month to peak month relationship.

4.8 Development of Cost-Based Water Rates

Equitable and proportional rates is of paramount importance in developing proposed water rates. While always a key consideration in developing water rates, meeting the legal requirements - and documenting the steps taken to meet the requirements - has been in the forefront with the recent legal challenges in the State of California on water rates. Given this, the Department’s proposed water rates have been developed to meet the legal requirements of Article XIII D. A key component of Article XIII D is the development of rates which reflect the cost of providing service and which proportionally distributed such costs among the various customer classes of service. There is no single prescribed methodology for equitably assigning costs to the various customer groups. The AWWA M1 Manual clearly delineates various methodologies which may be used to establish cost-based rates. Article XIII D does not prescribe a particular

methodology for establishing cost-based rates, consequently, HDR developed the Department's proposed water rates based on the methodologies provided in the AWWA M1 Manual to meet the requirements of Article XIII D to provide an administrative record of the steps taken to establish the Department's water rates.

HDR is of the opinion that the proposed rates comply with legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- **The revenue derived from water rates does not exceed the funds required to provide the property related service (i.e., water service).** The proposed rates are designed to collect the overall revenue requirements of the Department's water utility.
- **The revenues derived from water rates shall not be used for any purpose other than that for which the fee or charge is imposed.** The revenues derived from the Department's water rates are used exclusively to operate and maintain the Department's water system.
- **The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel.** This study has focused almost exclusively on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service (single-family, multi-family, etc.) that reflect the varying consumption patterns and system requirements of each customer class of service. The grouping of customers and rates into these classes of service creates the equity and fairness expected under Article XIII D by having differing rates by customer classes of service which reflect both the level of revenue to be collected by the utility, but also the manner in which these costs are incurred and equitably assigned to customer classes of service based upon their proportional impacts and burdens placed on the Department's the water system.

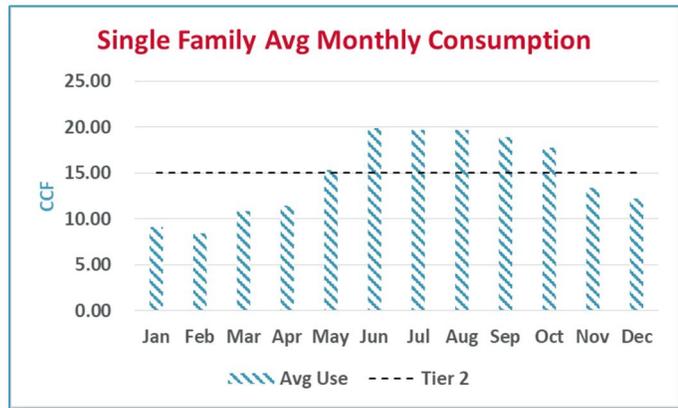
The above discussion provides an overview of the California legal requirements of setting rates. The cost of service developed herein has developed a set of average unit costs which provide the cost-basis for the development of the proposed water rates for the Department.

As a part of this study, HDR developed a water rate design discussion to clearly demonstrate and support the proposed water rates and tiered/seasonal pricing. The following discussion provides a more detailed analysis of the costing techniques and methodologies used to support the Department's proposed rate design.

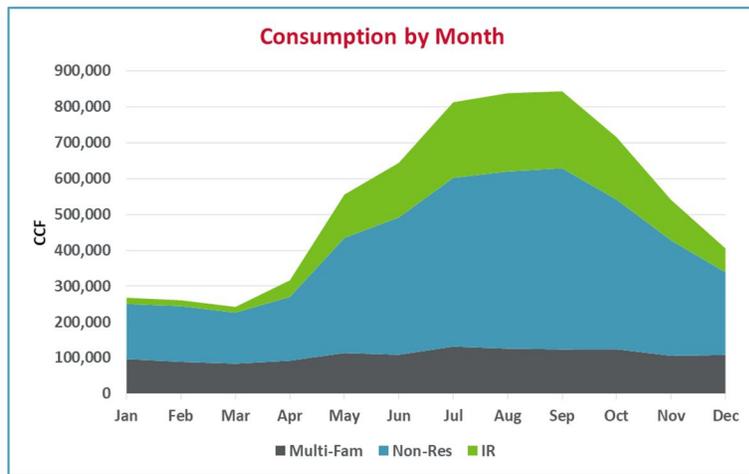
4.8.1 Determination of Sizing and Number of Tiers

As a part of the Department's prior rate study, the single family customer class was transitioned to a two-tiered consumption charge. As part of this study, the prior assumptions were reviewed considering recent consumption data to evaluate if any adjustments to tier sizes are appropriate or recommended. After reviewing the single family consumption profile, it was determined that the current number of tiers and their sizes appeared to still be appropriate. The goal of the tiers was to target typical monthly customer average annual consumption levels (14.72 CCF) in the first block and all usage above that block in the second block. This average annual monthly consumption level was calculated based on the total consumption of the single family customers, divided by twelve months, and divided by the number of single family customers. In reviewing

the individual customer consumption data, it was determined that the tiers reflected those targeted consumption levels, that is, that the average customers use up to 15 CCF in the nonpeak periods and over 15 CCF during the peak periods. Shown in the graph above is the average consumption by month for single family customers. As can be seen in the chart, the current block sizes closely correspond to the typical customers' average monthly water usage for the winter period (tier one) and the additional use in the summer period (tier two).



The current rate structure for the non-single family residential customers (multi-family, non-residential, irrigation) is a seasonal rate structure. This rate structure was originally proposed by the Department to provide a conservation-based rate structure for non-residential customers. A tiered rate structure is typically not used for non-residential customers as the total consumption levels between these customers can vary significantly. As a result, it is difficult to develop an



equitable tier size that reflects the various types of customer usage characteristics and needs. The seasonal rate structure, as compared to a tiered rate structure, reflects the difference in providing water service during these time periods. Similar to the tiered analysis for single family, the non-single family seasons were based around the non-single family residential customer usage patterns as shown in the chart. Based on this data from the last

two years, the winter period was identified as October through April and the summer period is May through September.

After the number and size of tiers and the seasonal periods have been identified, the pricing of the tiers and seasons is the next analytical step.

4.8.2 Establishing the Cost-Basis for Pricing Tiers

While there remains much discussion in the legal and rate community as to the impacts and stricter technical (legal) requirements as a result of the *San Juan Capistrano Decision*, HDR has concluded that utilities have available to them at least three technical approaches to be able to

justify the individual pricing of the tiers. These technical approaches encompass the following areas:

1. Cost differences in water supply (i.e., stacking of water supply resources to tiers/seasons).
2. Cost differences from high peak use consumers (relationship of average use to peak use).
3. Direct assignment of costs to specific tiers/seasons (e.g., conservation program costs, etc.)

In certain cases, the cost differences may be related to the cost of water supply when a utility has more than one source of water supply. Additionally, this water supply approach may also include the cost of alternative water supplies (i.e., recycled or reuse water). For example, reuse water may be assigned to higher tiers to reflect outdoor use or the need for additional/alternative water supply to meet the demands of the high use customers.

The second possible source of cost differences for the pricing of tiers is related to high-peak use (peak demand) customers. Customers that use more water in peak periods create greater demands and costs on the system. A water supply and distribution system must be sized to meet these peak use requirements. In other words, on the hottest day of the year when everyone is watering their lawn, the supply and distribution system must be sized to meet those peak use demands. Economic theory clearly states that equity is achieved when those that create the peak demand event, pay for the peak demand event. In this case, this has implications upon the equitable allocation of capacity-related costs to the different usage tiers (low use vs. high peak use).

Finally, certain costs may be directly assigned to specific tiers. For example, a conservation program which focuses on outdoor water use may be directly assigned to the upper water tier, or summer season, which are most directly related to outdoor use. The direct assignment to a specific price tier will create a price differential for that tier.

For the Department's water study, the focus of the analysis was on the second method of determining the cost impacts and cost differences associated with high peak and seasonal use customers. The pricing of the tiers was developed to provide the cost-basis and meet the proportionality requirements of Proposition 218.

4.9 Development of the Unit Costs for Rate Designs

To begin the assignment of costs related to specific tiers, the results of the cost of service analysis is utilized. In Table 4 – 2, the cost of service analysis allocated the revenue requirement between the various cost components. The total allocation of the FY 2023 revenue requirement, approximately \$53.5 million, is then distributed to the various customer classes of service. Given the legal requirement to provide the cost-basis for tiered and seasonal pricing, the allocated costs are further distributed between the various rate structure components based on the appropriate distribution factors.

Provided below is a discussion of the approach used to distribute the revenue requirement between the various customer classes of service to the various rate components for each customer class of service.

4.9.1 Commodity Distribution Factor

The commodity distribution factor is based on the average annual use for each of the customer classes of service, and more importantly by tier or seasons. For the development of the pricing of the proposed rates the following customer class distribution factors were used:

- Single Family – Tier 1
- Single Family – Tier 2
- Multi-Family – Winter
- Multi-Family - Summer
- Non-Residential – Winter
- Non-Residential – Summer
- Irrigation – Winter
- Irrigation – Summer

It is important to remember, the “Non-Residential” class includes commercial, institutional, and industrial customers.

To develop the commodity distribution factor for each customer class, the usage for each class was divided by the total usage of the system. This produces the percent (proportion) of the system that each class is responsible for and, therefore, their contribution to commodity-related costs. After the responsibility of commodity related costs has been identified, the total commodity related costs can be distributed to each customer class tier or season based on the distribution factor. The final step in developing the unit costs is to divide the costs for each customer class tier or season by the total amount of consumption used in determining their fair share of commodity related costs and this produces a value on a \$ per CCF basis.

Provided in Table 4 – 3 is a summary of the commodity distribution factor and unit cost development and is taken from Exhibit 8 in the Water Technical Analysis.

Table 4 - 3
Summary of the Commodity Distribution Factor

Reference Calculation	A	B	C	D D = C / A
	FY 2022 Consumption (CCF)	% of Total	Distributed Commodity Costs	Unit Cost (\$ / CCF)
Single Family				
Tier 1	4,879,372	41.6%	\$7,808,414	\$1.60
Tier 2	<u>1,647,288</u>	<u>14.0%</u>	<u>2,636,140</u>	1.60
Single Family Total	6,526,661	55.6%	10,444,554	
Multi-Family ^[1]				
Winter	699,503	6.0%	\$1,119,408	\$1.60
Summer	<u>615,992</u>	<u>5.3%</u>	<u>985,767</u>	1.60
Multi-Fam Total	1,315,495	11.2%	2,105,175	
Non-Residential ^[1]				
Winter	1,137,117	9.7%	1,819,718	\$1.60
Summer	<u>1,311,243</u>	<u>11.2%</u>	<u>2,098,370</u>	1.60
Non-Res Total	2,448,360	20.9%	3,918,088	
Irrigation ^[1]				
Winter	468,482	4.0%	\$749,708	\$1.60
Summer	<u>969,202</u>	<u>8.3%</u>	<u>1,551,004</u>	1.60
Irrigation Total	1,437,684	12.3%	2,300,712	
Total	11,728,200		\$18,768,528	

[1] – Winter: Oct – Apr; Summer: May – Sept

As can be seen, the development of the commodity distribution factor is straightforward. As an example, Tier 1 consumption of the single family class of service represents 41.6% of the total consumption on the system. As a result, 41.6% of the commodity related costs (\$18.8 million in total) is distributed to Tier 1 of the single family customers which is approximately \$7.8 million. The total costs in Column C are taken from Table 4 – 2. This approach then is used for each of the customer classes of service for each rate component, either tier or season. Finally, to develop the average unit cost for each component, the distributed costs in column C are divided by the consumption volumes shown in column A. The average unit costs are stated in \$/hundred cubic feet (CCF).

4.9.2 Capacity Distribution Factor

The capacity distribution factor utilizes the same customer classes of service as the commodity distribution factors. Whereas commodity costs are related to the volume of water consumed by

each class of service by tier or season, capacity is related to how the class uses that water in each tier or season. Customers use water in different ways and at different times, thus creating different usage patterns and resulting in different peaking factors. These usage patterns drive how the Department must size the system to meet the demands of customers regardless of when they occur. To determine the distribution by tier or season, peaking factors needed to be developed for each customer class of service tier or season. The peaking factors for a class of service must be reasonably estimated due to a lack of specific metered data related to peak day usage by individual customer or class of service. The method used to estimate a class's peaking factor is to review the average monthly volume of water consumed and compare it to the maximum monthly usage of water. By dividing the maximum month by the average month, a surrogate for a peak day peaking factor is calculated. This factor also provides a seasonal surrogate for the difference between the average use and peak day use in each tier or season. For example, if a customer used 10.0 CCF per month on average and in the peak month 15.0 CCF was used, the peaking factor would be 1.50 ($15.0 / 10.0 = 1.50$). In this example, the peaking factor is stating that the maximum usage in a month is 1.50 times higher than the average usage per month. Using this same calculation for each customer class tier or season, the allocation factors for capacity can be developed. Table 4 – 4 provides a summary of the capacity allocation factor for each customer class and is taken from Exhibit 9 in the Water Technical Analysis.

**Table 4 - 4
Summary of the Capacity Distribution Factor**

Reference Calculation	A	B	C C = A * B	D	E	F	G G = E / F
	Average Use (MGD)	Peaking Factors	Peak Day Use (MGD)	% of Total	Distributed Capacity Costs	FY 2023 Consumption (CCF)	Unit Cost (\$ / CCF)
Single Family							
Tier 1	11.00	1.29	14.18	36.1%	\$4,177,250	4,879,372	\$0.86
Tier 2	<u>3.71</u>	2.01	<u>7.46</u>	<u>19.0%</u>	<u>2,197,678</u>	1,647,288	1.33
SF Total	14.71		21.64	55.1%	\$6,374,929		
Multi-Family ^[1]							
Winter	1.58	1.16	1.83	4.7%	\$538,171	699,503	\$0.77
Summer	<u>1.39</u>	1.46	<u>2.02</u>	<u>5.2%</u>	<u>596,138</u>	615,992	0.97
MF Total	2.97		3.85	9.8%	\$1,134,309		
Non-Residential ^[1]							
Winter	2.56	1.15	2.96	7.5%	\$871,462	1,137,117	\$0.77
Summer	<u>2.96</u>	1.73	<u>5.13</u>	<u>13.1%</u>	<u>1,510,243</u>	1,311,243	1.15
Non-Res Total	5.52		8.08	20.6%	\$2,381,704		
Irrigation ^[1]							
Winter	1.06	1.34	1.42	3.6%	\$417,788	468,482	\$0.89
Summer	<u>2.18</u>	1.95	<u>4.27</u>	<u>10.9%</u>	<u>1,257,636</u>	969,202	1.30
Irrigation Total	3.24		5.69	14.5%	\$1,675,425		
Total	26.44		39.26		\$11,566,366		

[1] – Winter: Oct – Apr; Summer: May – Sept

Table 4 – 4 provides the development of the capacity distribution factor. Like that of the commodity cost distribution to the tiers or seasons, the capacity related costs are distributed in the same manner. For example, 36.1% of the total capacity costs are distributed to Tier 1 of the single family customers based on column D in Table 4 - 4. That translates to a distribution to tier 1 single family of approximately \$4.2 million. This cost, when divided by Tier 1 consumption for single family results an average unit cost of \$0.86/CCF. As can be seen in Table 4-4, the average unit costs vary by customer class of service and tier/season based upon the respective demands placed on the system by each classes tier or season. As can be seen from Table 4-4, the cost for the second tier (single family) and seasons (all other customers), is greater which reflects the costs to provide water service during these peak periods due to the infrastructure needs and costs to support those infrastructure needs.

Combining the unit costs from the commodity and capacity distribution factors result in the basis of the tiered or seasonal pricing. It is important to note that there is an additional average unit cost of \$0.02 / CCF from the costs distributed as revenue, fire protection, and direct assignment-related costs as identified in Table 4 – 2. This was calculated by totaling the amount which equals

\$245,000 and dividing it by the total consumption amount, less irrigation, of 11,728,200 CCF (\$245,000 / 11,141,205 CCF = \$0.02 / CCF). Irrigation was excluded from this distribution of these costs as this component only included fire protection related costs which are not a service provided to irrigation customers. The actual calculation for each customer class and tier / season was based on the actual consumption and varies slightly from the total average cost of \$0.02 / CCF.

Table 4 – 5 below, shows the summation of the costs for each tier/season rate. This table sums the costs from Table 4 – 3 column D and Table 4 – 4 column G, along with the other additional costs.

Table 4 - 5 Summary of the Tier / Season Cost Basis					
Reference	A	B	C	D	E
	Commodity Costs (\$ / CCF)	Capacity Costs (\$ / CCF)	Other Costs (\$ / CCF) ^[2]	Total Unit Cost (\$ / CCF)	Differential (\$ / CCF)
Single Family					
Tier 1	\$1.60	\$0.86	\$0.03	\$2.49	
Tier 2	1.60	1.33	0.03	2.96	\$0.47
Multi-Family ^[1]					
Winter	\$1.60	\$0.77	\$0.02	\$2.39	
Summer	1.60	0.97	0.02	2.59	\$0.20
Non-Residential ^[1]					
Winter	\$1.60	\$0.77	\$0.01	\$2.38	
Summer	1.60	1.15	0.01	2.76	\$0.38
Irrigation ^[1]					
Winter	\$1.60	\$0.89	\$0.00	\$2.49	
Summer	1.60	1.30	0.00	2.90	\$0.41

[1] – Winter: Oct – Apr; Summer: May – Sept

[2] – Includes revenue related, public fire protection, and direct assigned

The results shown in Table 4 – 5 above are the basis for the Department’s consumption pricing for the proposed tiered and seasonal rate structures - as described previously - and calculated in Tables 4 - 3 and Table 4 - 4. The analysis and average unit costs shown above have been developed to comply with the proportionality requirements of Proposition 218 when developing cost-based water rates.

The final unit cost development is the customer-related costs which are used to establish the monthly fixed meter charge which varies by meter size. A similar exercise as conducted above for the consumption components was completed for the customer costs. The total customer costs were divided by the number of equivalent meters on the system. An equivalent meter uses the

capacity ratio of a 1-inch meter to the larger meter sizes to determine the pricing for each meter size. In this way the meter charge reflects the equitable proportion of fixed costs on the system based on the capacity demands the customer can place on the system based on the size of the meter. Shown below in Table 4 – 6 is a summary of the fixed meter charge unit cost development which is taken from Exhibits 17 and 19 from the Water Technical Analysis.

Table 4 - 6 Summary of the Fixed Meter Charge Cost Basis	
Cost Component	Rate Calculation
Total Customer Costs	\$22,887,241
# of Equivalent Meters	54,037
Unit Cost (\$ / equivalent meter / month)	\$35.30 (1" Meter)

4.10 Summary Results of the Cost of Service Analysis

In summary form, the cost of service analysis began by functionalizing the Department’s revenue requirement. The functionalized revenue requirement was then allocated into the appropriate cost components based on industry standard cost of service methodologies. The individual allocated totals were then distributed to the various customer classes of service based on the appropriate distribution factors. The distributed expenses for each customer class were then aggregated to determine each customer class’s overall revenue responsibility (i.e., cost to provide service). Provided below in Table 4 - 7 is the summary results of the Department’s water cost of service analysis and is found in Exhibit 18 in the Water Technical Appendix.

Table 4 - 7 Summary of the Water Cost of Service Analysis (\$000)				
Class of Service	Present Rate Revenues	Allocated Costs	\$ Difference	% Difference
Residential	\$34,447	\$35,051	(\$604)	1.8%
Multi-Family	5,132	5,542	(410)	8.0%
Non-Residential	7,410	8,019	(609)	8.2%
Irrigation	<u>4,670</u>	<u>4,855</u>	<u>(186)</u>	4.0%
Total	\$51,659	\$53,467	(\$1,808)	3.5%

The cost of service study equitably and proportionally aligns the operating and capital costs to each customer class with their respective benefit received from and burdens placed on the water system (proportional distribution) based on the service requirements. The results of the analysis show that some cost differences exist between the various customer classes of service. It is important to understand that a cost of service analysis is based on one year’s O&M expense data

and projected customer usage information. The analysis can be impacted by several variables such as budget structure changes or a change in consumption characteristics. Given this, the results of the cost of service analysis may change from year to year. As the Department continues to monitor water rates and cost of service results through future studies, future cost of service adjustments may be necessary to reflect change costs and consumption patterns at that time.

4.11 Consultant’s Conclusions and Recommendations

While some cost differences exist, the overall allocation of costs between customers appears to be reasonable and reflect the impacts each customer class of service places on the system. However, given the requirements of Article XIII D, section 6, the results of the cost of service will be used to establish the proposed rate designs for each of the Department’s water customer classes of service. More specifically, it is recommended that the unit costs derived from the cost of service results be utilized as the basis for the rate design for each water customer class in Section 5.

4.12 Summary of the Cost of Service Analysis

This section of the report has provided the recommendations resulting from the cost of service analysis developed for the Department’s water utility. This analysis was prepared using generally accepted cost of service techniques as provided in the AWWA M1 Manual. The following section of the report will provide a summary of the present and proposed rates for the Department’s water utility. The Technical Appendix shows the detail of the cost of service analysis in Exhibits 8 – 19.

5 Development of the Rate Designs

5.1 Introduction

The final step of the Department's water rate study is the design of rates to collect the appropriate levels of revenues, based on the results of both the revenue requirement and the cost of service analyses. In developing the Department's proposed water rates, consideration is given to the level of the rates as well as the structure of the rates. The level of rates reflects the amount of revenues that should be collected while the structure of the rates is how it is collected (i.e., component charges) from the customers.

The overall revenue level for the Department has been established in the revenue requirement analysis (Section 3) while the equitable and proportional distribution of costs between the various customer classes has been developed in the cost of service analysis (Section 4) which provides the revenue levels to be collected from each class of service based on cost causation and the average unit costs for each rate component.

5.2 Rate Design Criteria and Considerations

Prudent rate administration dictates that several criteria must be considered when setting utility rates. Some of these rate design criteria are listed below:

- Rates which are easy to understand from the customer's perspective.
- Rates which are easy for the Department to administer.
- Consideration of the customer's ability to pay.
- Cost-based and equitable.
- Continuity, over time, of the rate making philosophy.
- Policy considerations (encourage efficient use, economic development, etc.).
- Provide revenue stability from month to month and year to year.
- Promote efficient allocation of the resource.
- Equitable and non-discriminatory (cost-based).
- Legally Defensible (Proposition 218 compliant).

It is important that the Department provide its water customers with a proper and accurate price signal as to what their consumption and peaking (demand) requirements are costing. This goal may be approached through both rate level and structure. When developing the proposed rate designs, all the above listed criteria were taken into consideration. However, it should be noted that it is difficult - if not impossible - to design a rate that meets all the goals and objectives listed above. A good example of this is that it may be difficult to design a rate that takes into consideration the customer's ability to pay while also being cost-based and equitable. In designing rates, there are always trade-offs between these various goals and objectives.

5.3 Overview of the Proposed Rate Structures

In discussion with Department staff several of the above goals and objectives were highlighted as key elements to be included within the proposed rate structure. These were:

- Equitable, proportional, and cost-based.
- Revenue stability.
- Conservation.

The first goal was to provide the cost basis, or justification, for the proposed rate structure to reflect the legal rate setting requirements in California. This was accomplished through the development of the cost of service analysis using industry standard approaches (AWWA M1 Manual).

The second goal was to maintain the revenue stability of the current rate structure. This was incorporated into the proposed rates by maintaining the current level of revenues collected through the monthly fixed meter charge and the volume charge. In other words, the ratio of fixed revenue collected through the current rate structure would be targeted to be maintained in the proposed rate structures. This was also further addressed through the development of the proposed drought recovery charges. The drought recovery charges are designed to maintain the target level of revenues during times when a reduction in consumption is necessary, such as a drought or other water supply shortage, that may impact water consumption related revenues.

The final goal was to promote conservation or efficient use. This is accomplished through the current consumption or volumetric charges that is a two-tiered rate structure for single family customers and a seasonal (winter/summer) uniform rate for all other customers.

5.4 Summary of the Present and Proposed Water Rates

The proposed rates for the Department's water utility were designed to meet the total system revenue needs discussed in Section 3 and reflect the cost of service results – including unit cost development - shown in Section 4. The proposed water rates have been developed for each customer class of service based on the development of the pricing through the cost of service analysis.

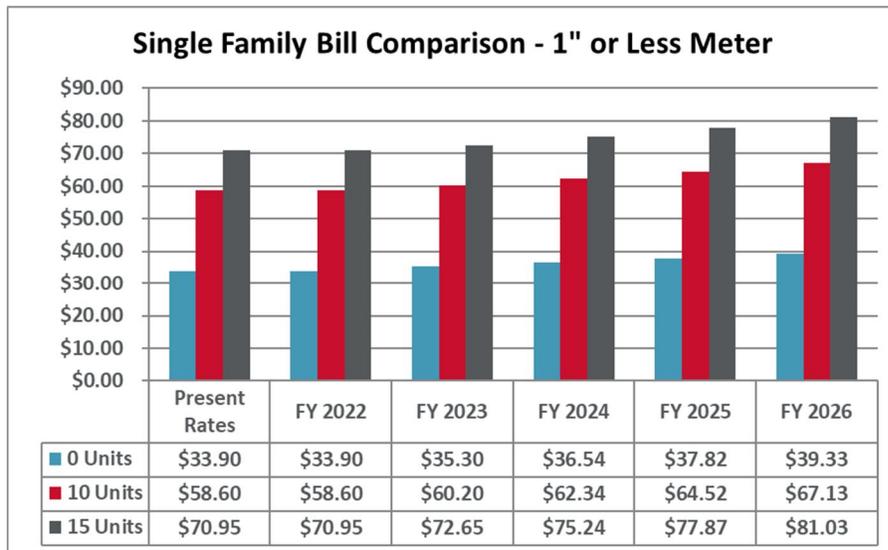
5.4.1 Review of the Present and Proposed Single Family Water Rates

The Department's proposed single family customers' rate structure maintains the current structure. This consists of a monthly fixed charge by meter size and a consumption charge which is a two-tiered increasing block rate structure. Provided below in Table 5 - 1 is a summary of the present and proposed rates for the Department's water single-family customers.

**Table 5 - 1
Summary of the Monthly Single Family Water Rates**

	Present Rate	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Fixed Charge	\$ / Acct/ Month					
1" & less	\$33.90	\$33.90	\$35.30	\$36.54	\$37.82	\$39.33
1 1/2"	67.80	67.80	70.60	73.08	75.64	78.66
2"	108.48	108.48	112.96	116.93	121.02	125.86
3"	203.40	203.40	211.80	219.24	226.92	235.98
4"	339.00	339.00	353.00	365.40	378.20	393.30
6"	678.00	678.00	706.00	730.80	756.40	786.60
8"	1,084.80	1,084.80	1,129.60	1,169.28	1,210.24	1,258.56
10"	1,559.40	1,559.40	1,623.80	1,680.84	1,739.72	1,809.18
12"	2,288.25	2,288.25	2,382.75	2,466.45	2,552.85	2,654.78
Consumption Charge	\$ / CCF					
0 - 15 CCF	\$2.47	\$2.47	\$2.49	\$2.58	\$2.67	\$2.78
15 + CCF	2.95	2.95	2.96	3.08	3.19	3.32

The proposed rates in Table 5 – 1 for FY 2023 show the fixed meter charge for 1-inch and less



based on the results of the unit costs developed in the cost of service and summarized in Table 4 - 6. The subsequent meter sizes are adjusted by the AWWA 1" meter equivalency. The AWWA meter equivalencies reflect the capacity of the larger meter sizes, and the fixed costs associated with providing that level of capacity. Also shown in the table are the proposed tiered rates for

FY 2023 which is taken directly from column D in Table 4 – 5, or the calculated average unit costs from the cost of service analysis. The above chart shows the bill impact to single family residential customers at varying water usage levels for a 1" or less service meter.

5.4.2 Review of the Present and Proposed Multi-Family Water Rates

For multi-family customers, the approach to developing the proposed water rates was done in a similar manner as single family. Multi-family has the same fixed charge by meter size as single family customers. For multi-family, the proposed consumption charge is a seasonal rate structure for the winter period (October – April) and summer period (May –September). The consumption charge for each season was determined through the cost of service process whereby costs were allocated to each season based on the consumption characteristics for the multi-family customers (See Table 4 – 5). Table 5 – 2 shows a summary of the present and proposed multi-family rates.

Table 5 - 2 Summary of the Monthly Multi-Family Water Rates						
	Present Rate	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Fixed Charge	\$ / Acct / Mth					
1" & less	\$33.90	\$33.90	\$35.30	\$36.54	\$37.82	\$39.33
1 1/2"	67.80	67.80	70.60	73.08	75.64	78.66
2"	108.48	108.48	112.96	116.93	121.02	125.86
3"	203.40	203.40	211.80	219.24	226.92	235.98
4"	339.00	339.00	353.00	365.40	378.20	393.30
6"	678.00	678.00	706.00	730.80	756.40	786.60
8"	1,084.80	1,084.80	1,129.60	1,169.28	1,210.24	1,258.56
10"	1,559.40	1,559.40	1,623.80	1,680.84	1,739.72	1,809.18
12"	2,288.25	2,288.25	2,382.75	2,466.45	2,552.85	2,654.78
Consumption Charge	\$ / CCF					
Winter (Oct – Apr)	\$2.11	\$2.11	\$2.39	\$2.47	\$2.56	\$2.66
Summer (May – Sept)	2.30	2.30	2.59	2.68	2.77	2.88

Similar to the single family rates, the multi-family fixed and consumption rates are based on the unit costs developed in the cost of service analysis in Table 4 – 6 and Table 4 – 5, respectively.

5.4.3 Review of the Present and Proposed Non-Residential Water Rates

Like the multi-family rates, the non-residential proposed rates were adjusted to reflect the overall revenue needs from the revenue requirement analysis and the calculated average unit costs from the cost of service analysis. The non-residential customer class is made up of the customers identified as commercial, institutional, and industrial. For purposes of the rate design and cost allocation, these classes were combined as their customer consumption characteristics are similar. The current rate structure is the same as multi-family with a fixed meter charge based on the size of meter and a seasonally varying uniform consumption charge on a per hundred cubic feet or CCF (1 CCF = 748 gallons) basis. The rates for the non-residential customers are based on the specific costs allocated in the cost of service analysis for the non-residential

customer class of service. Provided in Table 5 - 3 is a summary of the present and proposed non-residential water rates.

Table 5 - 3 Summary of the Monthly Non-Residential Water Rates						
	Present Rate	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Fixed Charge	<i>\$/Acct / Mth</i>					
1" & less	\$33.90	\$33.90	\$35.30	\$36.54	\$37.82	\$39.33
1 1/2"	67.80	67.80	70.60	73.08	75.64	78.66
2"	108.48	108.48	112.96	116.93	121.02	125.86
3"	203.40	203.40	211.80	219.24	226.92	235.98
4"	339.00	339.00	353.00	365.40	378.20	393.30
6"	678.00	678.00	706.00	730.80	756.40	786.60
8"	1,084.80	1,084.80	1,129.60	1,169.28	1,210.24	1,258.56
10"	1,559.40	1,559.40	1,623.80	1,680.84	1,739.72	1,809.18
12"	2,288.25	2,288.25	2,382.75	2,466.45	2,552.85	2,654.78
Consumption Charge	<i>\$/ CCF</i>					
Winter (Oct – Apr)	\$2.11	\$2.11	\$2.38	\$2.46	\$2.55	\$2.65
Summer (May – Sept)	2.46	2.46	2.76	2.85	2.96	3.07

As can be seen in Table 5 - 3, the proposed non-residential consumption charge is a seasonal rate. It should also be noted that the proposed fixed charge by meter size is identical to single family and multi-family customers and the consumption charges for FY 2023 are based on the average unit costs as developed in the cost of service analysis and previously shown in Table 4-6 and Table 4 - 5.

5.4.4 Review of the Present & Proposed Irrigation Water Rates

A similar approach was developed for the proposed irrigation customer rates as for multi-family and non-residential. The current irrigation rate structure was maintained with a monthly meter charge for the 1-inch and smaller on a 1-inch equivalency and the consumption charge is a seasonally varying uniform rate structure. It is important to note that the cost differences between the irrigation and all the other customers with a seasonal rate are due to the differing peak demands that are specific to irrigation customers and based on the best available data. Given that irrigation has a higher peak with more intermittent water requirements, however, the system must be sized to provide that level of water availability at all times. Again, these rates are the direct output of the calculated average unit costs within the cost of service analysis as shown in Table 4 – 5 in column D. Provided in Table 5 - 4 is a summary of the present and proposed rates for the irrigation customers.

Table 5 - 4
Summary of the Monthly Irrigation Water Rates

	Present Rate	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Fixed Charge	\$ / Acct/Mth					
1" & less	\$33.90	\$33.90	\$35.30	\$36.54	\$37.82	\$39.33
1 1/2"	67.80	67.80	70.60	73.08	75.64	78.66
2"	108.48	108.48	112.96	116.93	121.02	125.86
3"	203.40	203.40	211.80	219.24	226.92	235.98
4"	339.00	339.00	353.00	365.40	378.20	393.30
6"	678.00	678.00	706.00	730.80	756.40	786.60
8"	1,084.80	1,084.80	1,129.60	1,169.28	1,210.24	1,258.56
10"	1,559.40	1,559.40	1,623.80	1,680.84	1,739.72	1,809.18
12"	2,288.25	2,288.25	2,382.75	2,466.45	2,552.85	2,654.78
Consumption Charge	\$ / CCF					
Winter (Oct – Apr)	\$2.20	\$2.20	\$2.49	\$2.58	\$2.67	\$2.78
Summer (May – Sept)	2.79	2.79	2.90	3.00	3.11	3.24

5.5 Summary of the Proposed Rate Revenues

The rates for each customer class of service reflect the results of the revenue requirement and cost of service results. Provided in Table 5 - 5 is a summary of the revenue targets based on the revenue requirement and cost of service analyses for the FY 2023 proposed rate adjustments.

Table 5 - 5
Comparison of the FY 2023 Proposed Revenues and Allocated Costs (\$000's)

	Present Revenues	Cost of Service Adjustment	Proposed Revenues	\$ Difference
Single Family	\$34,447	\$35,051	\$34,929	(\$121)
Multi-Family	5,132	5,542	5,546	4
Non-Residential	7,410	8,019	8,107	88
Irrigation	<u>4,670</u>	<u>4,855</u>	<u>4,903</u>	<u>47</u>
Water System Total	\$51,659	\$53,467	\$53,485	\$18

As can be seen, the proposed revenues closely reflect the proportional allocation of costs to the various customer classes of service. A more detailed analysis of the projection of the proposed revenues (i.e., revenue proof) is included within the Technical Appendix of this report.

This concludes the discussion of the proposed water rates. Detailed exhibits for the various rate designs are included within the Technical Appendices.

5.6 Development of Drought Recovery Charges

As part of the water rate study, drought recovery charges were updated to maintain sufficient revenues during events that result in consumption-based revenue shortfalls. Previously, the Department identified these charges as Drought Surcharges. However, it is important to note that these charges may be in effect for reasons other than a drought (e.g., supply emergency) and in effect longer until consumption and revenue levels reflect targeted amounts. These drought recovery charges are an important tool that allows the Department to maintain adequate water revenues when consumption-based revenues declines; for example, during a pandemic, due to voluntary or mandatory conservation resulting from drought conditions, or other water shortage emergencies.

When properly designed, drought recovery charges mitigate the issues surrounding the financial/revenue impacts of decreased water consumption. When a utility enters a reduction stage, it is not uncommon for a utility to have a set of charges or rates to maintain sufficient revenues due to reductions in water usage. These charges also provide a user incentive to reduce consumption and comply with the drought stage.

The water rates proposed above assume typical or baseline water consumptions conditions. Under certain severe or emergency conditions, the Department may need to declare the need to enter a drought stage. For each stage, the Department has specific goals for reduction in consumptive use. For purposes of establishing rates for drought recovery charges, the Department has five different levels or stages for reductions. Each subsequent level results in additional reductions in consumption as established in the Department’s Water Management Plan. These five stages are summarized below along with the estimated consumption reductions resulting from additional conservation restrictions.

Stage	Description	Reduction
1	Limited Irrigation / Outdoor Use	10%
2	Limited Irrigation / Outdoor Use	20%
3	Limited Irrigation / Outdoor Use	30%
4	Limited Irrigation / Outdoor Use	40%
5/6	No Irrigation / Outdoor Use	50% +

To maintain the target level of revenue during each stage, the drought recovery charges are developed to collect the same revenue level with the lower level of consumption at each stage. The difference, stated in dollars per CCF, is then added to the water rates for each stage.

During a drought or emergency, the Department may incur, during any stage, additional costs over and above the revenue requirements incurred during normal water conditions. These

additional expenses can be for items such as additional water supply, pumping, advertising and notification, additional customer outreach, temporary staffing, enforcement, etc. As a part of developing the Department's proposed drought recovery charges, no additional or incremental costs have been considered or factored into the drought recovery charges.

Based on the Department's planning, the development of the proposed drought recovery charges does not simply increase the consumption rates. Rather, the drought recovery charges first targets discretionary use and then, if needed, non-discretionary use. As an example, discretionary use for a residential customer is often defined as outdoor usage, while non-discretionary water use is typically considered indoor use.

In developing the proposed drought recovery charges, the monthly meter charge remains fixed at the same level regardless of the declared stage. Based on the reduced consumption estimated for each stage, the charges were developed to maintain the current level of revenues for each customer class of service. The charges were developed by taking the targeted consumption at each level of conservation savings and dividing the revenue reduction by the remaining consumption. This resulted in charges that would need to be added to the proposed rates to maintain the target level of revenues during a period of reduced consumption-based revenue for the Department's water utility.

Provided in Table 5 - 6 is a summary of the proposed drought recovery charges for the five-year rate setting period. The detailed calculation of the drought recovery charges is provided in the Drought Recovery Charge Appendix.

Table 5 - 6
Summary of the Drought Recovery Charge Schedule – \$/CCF

	Current Rates	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family						
Stage 1	\$0.30	\$0.30	\$0.29	\$0.30	\$0.31	\$0.32
Stage 2	0.66	0.66	0.65	0.67	0.69	0.72
Stage 3	1.15	1.15	1.12	1.16	1.20	1.25
Stage 4	1.78	1.78	1.74	1.81	1.87	1.95
Stage 5/6	2.66	2.66	2.61	2.71	2.81	2.93
Multi-Family						
Stage 1	\$0.25	\$0.25	\$0.28	\$0.29	\$0.30	\$0.31
Stage 2	0.56	0.56	0.62	0.64	0.66	0.69
Stage 3	0.95	0.95	1.06	1.10	1.14	1.18
Stage 4	1.48	1.48	1.66	1.72	1.78	1.85
Stage 5/6	2.23	2.23	2.48	2.56	2.65	2.75
Non-Residential						
Stage 1	\$0.26	\$0.26	\$0.29	\$0.30	\$0.31	\$0.32
Stage 2	0.58	0.58	0.65	0.67	0.70	0.73
Stage 3	1.00	1.00	1.11	1.15	1.19	1.24
Stage 4	1.55	1.55	1.72	1.78	1.85	1.92
Stage 5/6	2.34	2.34	2.58	2.67	2.77	2.88
Irrigation						
Stage 1	\$0.29	\$0.29	\$0.31	\$0.32	\$0.33	\$0.34
Stage 2	0.65	0.65	0.69	0.71	0.74	0.77
Stage 3	1.14	1.14	1.19	1.23	1.28	1.33
Stage 4	1.76	1.76	1.84	1.90	1.97	2.04
Stage 5/6	2.65	2.65	2.77	2.86	2.97	3.08

As noted, the above charges are added to the water rates adopted for the period specified. Updating the drought recovery charges each time the water rates are updated will maintain the sufficient rate revenue levels necessary to fund the operating and capital needs of the Department’s water utility during times of drought or other period of reduced consumption levels.

Provided below in Table 5 - 7 is a summary of the drought recovery charges for each level based on the proposed FY 2023 rates and structures.

Table 5 - 7 Summary of the Drought Recovery Charges – \$ / CCF						
Reduction	Normal Conditions 0%	Stage 1 10%	Stage 2 20%	Stage 3 30%	Stage 4 40%	Stage 5/6 50% +
Single Family						
0 – 15 CCF	\$2.49	\$2.78	\$3.14	\$3.61	\$4.23	\$5.10
15 + CCF	2.96	3.25	3.61	4.08	4.70	5.57
Multi-Family						
Winter (Oct - Apr)	\$2.39	\$2.67	\$3.01	\$3.45	\$4.05	\$4.87
Summer (May - Sept)	2.59	2.87	3.21	3.65	4.25	5.07
Non-Residential						
Winter (Oct - Apr)	\$2.38	\$2.67	\$3.03	\$3.49	\$4.10	\$4.96
Summer (May - Sept)	2.76	3.05	3.41	3.87	4.48	5.34
Irrigation						
Winter (Oct - Apr)	\$2.49	\$2.80	\$3.18	\$3.68	\$4.33	\$5.26
Summer (May - Sept)	2.90	3.21	3.59	4.09	4.74	5.67

The drought recovery charges in Table 5 - 7 are added to the adopted rates in place at the time the reduction stage is declared. The charges would be applied to each tier of the Department's rates. For example, the proposed rate (FY 2023) for single family's first tier is \$2.49 / CCF and if the Department declares a Stage 2 reduction, then the first-tier rate will change to \$3.14 / CCF (\$2.49 + \$0.65).

Implementation of the drought recovery charges will help the Department maintain water rate revenue levels during times of consumption reductions. It is important to note that the drought recovery charges will not automatically go into effect once a drought stage is declared but the City Council will have to take action to implement the drought charges. This allows for the City Council and department staff to evaluate each situation on a case by case basis to decide if the water utility's financial health is at risk.

To better understand how the drought recovery charges work, Table 5 - 8 shows a comparison of the single family monthly bill assuming a customer does, and does not, adjust their consumption in response to the requested savings in each reduction stage.

Table 5 - 8 Single Family Charge Bill Impacts ^[1]						
Reduction	Normal Condition 0%	Stage 1 10%	Stage 2 20%	Stage 3 30%	Stage 4 40%	Stage 5/6 50% +
Customer Using 15 CCF						
Assumes No Change in Use (15 CCF)	\$71.25	\$75.60	\$81.00	\$88.05	\$97.35	\$110.40
Assumes Reduced Usage - Revised CCF Usage	71.25 15.0	72.82 14.0	71.58 12.0	73.61 11.0	71.97 9.0	74.70 8.0
Customer Using 30 CCF						
Assumes No Change in Use (30 CCF)	\$115.65	\$124.35	\$135.15	\$149.25	\$167.85	\$193.95
Assumes Reduced Usage - Revised CCF Usage	115.65 30.0	114.60 27.0	113.49 24.0	112.53 21.0	111.45 18.0	110.40 15.0
Customer Using 45 CCF						
Assumes No Change in Use (45 CCF)	\$160.05	\$173.10	\$189.30	\$210.45	\$238.35	\$277.50
Assumes Reduced Usage - Revised CCF Usage	\$160.05 45.0	\$160.10 41.0	\$156.81 36.0	\$157.41 32.0	\$153.75 27.0	\$154.96 23.0

[1] Assumes a 1" meter charge for a typical single family customer

As can be seen in the above table, if a customer does not modify their consumption, their utility bill will increase substantially. However, if the customer provides the requested savings, the customer's bill will be relatively the same as the pre-reduction stage bill and provide the Department with sufficient revenue to maintain normal operations. For example, a customer using 15 CCF would pay \$71.25 (red box) at the proposed rates. Assuming no reduction in use for Stage 2, the customer would pay \$81.00 (green box) for their 15 CCF of usage. However, with a reduction of 20% in use, the customer will pay \$71.58 (blue box) or roughly the same as their current bill.

As noted, the purpose of the drought recovery charges is to maintain sufficient water rate revenues during times of mandatory or voluntarily requested reductions in use. Therefore, as water rates are adjusted, the drought recovery charges will also need to be adjusted to reflect the target revenue needs with the proposed rate adjustments. The adjustment of the drought recovery charges is based on the percentage basis to reflect the change in the overall consumption revenues. It should be noted that this is not the same as the overall rate adjustment, only the percentage change in the consumption revenues resulting from the rate increase.

The technical appendix provides the calculation of the drought recovery charges for each customer class of service.

5.7 Water Rate Study Recommendations

Based on the results of the Department’s water rate study, HDR recommends the following:

- Rate revenues for the Department’s water utility should be adjusted by 0.0% in FY 2022, 3.5% in FY 2023 and FY 2024, and 4.0% in FY 2025 through FY 2026.
- The proposed rates should be implemented to reflect each customer class’ proportional allocation of costs.
- The rates are proposed to be implemented and effective each year on July 1.
- When funds are available, increase the level of annual replacement funding to transition towards funding an amount greater than the Department’s annual depreciation expense levels.
- Drought recovery charges should be proactively adopted based on the need to maintain sufficient water rate revenues for operating and capital needs. These rates are only implemented by the City Council when a water management (drought) stage is declared.
- Drought recovery charges should be adjusted whenever water rates are adjusted.
- Prior to the implementation of the fifth, and final, proposed rate adjustment the Department should complete another rate study to develop the projection of future water rates.

5.8 Rate Adoption

Proposition 218 outlines a specific process to legally adopt and implement the proposed water rates. The first requirement is that the rates must be cost-based and proportional, which is the purpose of completing the water rate study. Once the proposed water rates have been developed, a public process must be undertaken to adopt the proposed rates. This began with the presentation of the proposed rates to the Stockton City Council in March 2021. At this meeting, the City Council directed staff to mail the Proposition 218 notices – shown in the Proposition 218 Appendix - to the City’s customers which outlines the proposed changes in rates. The notice also contains the time, date, and location of the public hearing, which is shown in the Approved Notice Appendix. The City Council then held a public hearing on May 25, 2021 to discuss the publicly noticed and proposed rates. Absent sufficient written protest by customers, the City Council moved to adopt the proposed water rates as outlined in the customer notification over the next five-year period.

5.9 Summary of the Water Rate Study

This completes the rate study for the City of Stockton Municipal Utilities Department’s water utility. This study has provided a comprehensive review and development of proposed water rates and drought recovery charges for the Department. Adoption of the proposed water rates and drought recovery charges will allow the Department to meet their current and projected water system financial obligations for the time period reviewed based on the assumed customer growth, capital plan, and projected increases in operating costs. Should these assumptions change, the proposed rate adjustments may also need to be revised to reflect the changed conditions.



6 Water Technical Appendix

**City of Stockton MUD
Water Cost of Service Study
Revenue Requirement Summary
Exhibit 1**

	<i>Budgeted</i>	<i>Proposed</i>	<i>Projected</i>								
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenue											
Rate Revenues	\$50,878,160	\$51,146,122	\$51,401,852	\$51,658,862	\$51,917,156	\$52,176,742	\$52,437,626	\$52,699,814	\$52,963,313	\$53,228,129	\$53,494,270
Non-Operating Revenues	2,050,646	6,972,507	7,753,152	7,663,842	7,545,867	7,506,406	7,459,254	7,465,916	7,485,776	7,505,559	7,524,476
Total Revenues	\$52,928,806	\$58,118,628	\$59,155,004	\$59,322,704	\$59,463,023	\$59,683,148	\$59,896,880	\$60,165,730	\$60,449,089	\$60,733,688	\$61,018,745
Expenses											
Total Administrative & General	\$2,757,526	\$2,399,761	\$2,472,731	\$2,547,947	\$2,684,563	\$2,782,485	\$2,867,767	\$3,022,764	\$3,133,362	\$3,229,423	\$3,328,458
Total Operations and Maintenance	4,768,869	4,874,311	5,032,055	5,192,345	5,450,930	5,651,904	5,835,383	6,128,017	6,354,495	6,560,792	6,773,906
Total Utility Billing	852,062	1,011,829	1,042,171	1,073,423	1,147,115	1,192,616	1,228,380	1,312,787	1,364,881	1,405,812	1,447,970
Total Other Support Services	777,108	624,904	644,251	664,213	702,074	728,874	752,056	795,149	825,553	851,800	878,894
Total Water Conservation	68,065	164,260	117,768	121,386	127,107	131,591	135,700	142,151	147,182	151,778	156,520
Total Water Purchase	10,700,000	16,010,550	17,051,236	18,159,566	19,339,938	20,597,034	21,935,841	23,361,671	24,880,179	26,497,391	28,219,721
Total Hydrant Maintenance	3,215	322,572	332,663	342,833	358,482	371,010	382,615	400,232	414,263	427,225	440,597
Total Delta Water Production	4,713,450	4,800,596	4,975,095	5,146,215	5,372,479	5,571,438	5,764,569	6,019,406	6,242,792	6,459,337	6,683,559
Total Well Production	1,521,772	1,653,512	1,712,618	1,773,644	1,855,171	1,926,632	1,995,956	2,088,065	2,168,588	2,246,609	2,327,489
Total DWSP Maintenance & Repair	1,146,745	1,168,355	1,205,452	1,243,512	1,304,919	1,352,536	1,395,945	1,465,394	1,519,008	1,567,766	1,618,114
Total MUD Admin / Finance	683,854	729,513	752,625	776,140	818,168	848,862	875,918	923,649	958,374	988,914	1,020,442
Total Engineering Services	128,445	255,477	263,554	271,754	286,662	297,426	306,850	323,789	335,974	346,617	357,603
Total Lab Services	300,412	322,363	332,435	342,646	358,371	370,906	382,490	400,199	414,240	427,182	440,534
Total Safety	244,251	315,301	325,166	335,056	348,605	360,197	371,282	386,424	399,312	411,606	424,281
Total SCADA	250,056	251,712	260,108	268,793	281,774	292,340	302,227	316,908	328,815	339,936	351,441
Total Outreach & Training	133,858	117,826	121,140	124,548	128,086	131,702	135,413	139,268	143,205	147,246	151,402
Total O&M Expenses	\$29,049,688	\$35,022,842	\$36,641,066	\$38,384,019	\$40,564,443	\$42,607,554	\$44,668,391	\$47,225,873	\$49,630,222	\$52,059,434	\$54,620,932
Net Debt Service	\$11,962,394	\$13,785,486	\$13,793,287	\$13,801,450	\$13,521,588	\$13,528,223	\$13,188,633	\$13,206,793	\$13,221,724	\$13,232,584	\$13,233,693
Rate Funded Capital	\$9,000,000	\$9,000,000	\$8,675,000	\$8,950,000	\$9,250,000	\$9,250,000	\$9,500,000	\$10,000,000	\$10,400,000	\$10,700,000	\$11,000,000
Reserve Funding	\$0	\$310,300	\$45,651	(\$4,705)	(\$175,210)	\$249,381	\$858,402	\$535,600	\$606,486	\$552,718	\$482,677
Total Revenue Requirement	\$50,012,082	\$58,118,628	\$59,155,004	\$61,130,764	\$63,160,822	\$65,635,157	\$68,215,425	\$70,968,266	\$73,858,432	\$76,544,737	\$79,337,302
Bal. / (Def.) of Funds	\$2,916,724	\$0	\$0	(\$1,808,060)	(\$3,697,799)	(\$5,952,010)	(\$8,318,546)	(\$10,802,536)	(\$13,409,343)	(\$15,811,048)	(\$18,318,557)
Bal. / (Def.) as a % of Rate Rev.	-5.7%	0.0%	0.0%	3.5%	7.1%	11.4%	15.9%	20.5%	25.3%	29.7%	34.2%
Proposed Rate Adjustment	0.0%	0.0%	0.0%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	3.5%	3.5%
Add'l Revenue from Adj.	\$0	\$0	\$0	\$1,808,060	\$3,697,799	\$5,952,010	\$8,318,546	\$10,802,536	\$13,409,343	\$15,811,048	\$18,318,557
Total Bal/(Def.) of Funds	\$2,916,724	\$0	\$0	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	(\$0)
Additional Rate Increase Needed	-5.7%	0.0%									
Avg Res Mo Bill (1" or Less Meter + 15 CCF)	\$70.95	\$70.95	\$70.95	\$73.43	\$76.00	\$79.04	\$82.21	\$85.49	\$88.91	\$92.03	\$95.25
Ending Balance (not including 421 or 425)	\$70,368,596	\$68,307,112	\$65,234,166	\$46,679,585	\$44,389,884	\$39,225,611	\$37,284,789	\$37,820,390	\$38,426,876	\$38,979,594	\$39,462,270
<i>Total Target (180 days of O&M)</i>	<i>\$14,325,874</i>	<i>\$17,271,539</i>	<i>\$18,069,567</i>	<i>\$18,929,105</i>	<i>\$20,004,383</i>	<i>\$21,011,944</i>	<i>\$22,028,247</i>	<i>\$23,289,472</i>	<i>\$24,475,178</i>	<i>\$25,673,146</i>	<i>\$26,936,350</i>

City of Stockton MUD
Water Cost of Service Study
Exhibit 2
Escalation Factors

	<i>Budgeted</i>	<i>Proposed</i>	<i>Projected</i>								
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Revenues											
Customer Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
SF Cust Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
SF Consump Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MF Cust Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
MF Consump Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NonRes Cust Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
NonRes Consump Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Irr Cust Growth	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Irr Consump Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Misc Revenues	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Expenses											
Labor	Budgeted	Proposed	3.0%	3.0%	7.0%	4.0%	3.0%	7.0%	4.0%	3.0%	3.0%
Benefits - Medical	Budgeted	Proposed	2.0%	2.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Benefits - Other	Budgeted	Proposed	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Professional / Special Srvcs	Budgeted	Proposed	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Materials & Supplies	Budgeted	Proposed	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Equipment	Budgeted	Proposed	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Radio Equipment	Budgeted	Proposed	50.0%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Miscellaneous	Budgeted	Proposed	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Utilities	Budgeted	Proposed	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Insurance	Budgeted	Proposed	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Flat	Budgeted	Proposed	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Purchased Water	Budgeted	Proposed	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Interest	0.7%	0.8%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%

Acct. #	Budgeted	Proposed	Projected									Notes	
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030		
Revenues													
Rate Revenues													
Single Family	\$33,926,434	\$34,105,115	\$34,275,641	\$34,447,019	\$34,619,254	\$34,792,350	\$34,966,312	\$35,141,144	\$35,316,850	\$35,493,434	\$35,670,901	As Customer Growth	
Multi-Family	5,054,858	5,081,480	5,106,888	5,132,422	5,158,084	5,183,875	5,209,794	5,235,843	5,262,022	5,288,332	5,314,774	As Customer Growth	
Non-Residential	7,297,744	7,336,179	7,372,860	7,409,724	7,446,773	7,484,007	7,521,427	7,559,034	7,596,829	7,634,813	7,672,987	As Customer Growth	
Irrigation	4,599,125	4,623,347	4,646,464	4,669,696	4,693,045	4,716,510	4,740,092	4,763,793	4,787,612	4,811,550	4,835,608	As Customer Growth	
Total Rate Revenues	\$50,878,160	\$51,146,122	\$51,401,852	\$51,658,862	\$51,917,156	\$52,176,742	\$52,437,626	\$52,699,814	\$52,963,313	\$53,228,129	\$53,494,270		
Non-Operating Revenues													
Interest	\$879,119	\$712,171	\$905,879	\$805,969	\$677,297	\$627,032	\$568,976	\$564,628	\$573,371	\$581,930	\$589,521	Calculated	
Private Fire	174,510	175,396	176,281	177,171	178,062	178,961	179,861	180,767	181,679	182,594	183,510	Exhibit 7	
Linc Vill Maint	55,557	50,858	51,367	51,880	52,399	52,923	53,452	53,987	54,527	55,072	55,623	As Misc Revenues	
Service Penalties	582,202	0	582,202	588,024	593,904	599,843	605,842	611,900	618,019	624,199	630,441	As Misc Revenues	
Reconnection Admin Fees	349,310	324,082	327,323	330,596	333,902	337,241	340,613	344,020	347,460	350,934	354,444	As Misc Revenues	
Repayment of In-Lieu Transfers	0	0	0	0	0	0	0	0	0	0	0	City Provided	
Miscellaneous Other Revenues	9,948	10,000	10,100	10,201	10,303	10,406	10,510	10,615	10,721	10,829	10,937	As Misc Revenues	
Allocation Trueup - Cal Water	0	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000	5,700,000	As Flat	
Total Non-Operating Revenues	\$2,050,646	\$6,972,507	\$7,753,152	\$7,663,842	\$7,545,867	\$7,506,406	\$7,459,254	\$7,465,916	\$7,485,776	\$7,505,559	\$7,524,476		
Total Revenues	\$52,928,806	\$58,118,628	\$59,155,004	\$59,322,704	\$59,463,023	\$59,683,148	\$59,896,880	\$60,165,730	\$60,449,089	\$60,733,688	\$61,018,745		
Administrative & General													
Employee Services													
10-10	Salaries - Regular	\$290,216	\$571,632	\$588,781	\$606,444	\$648,895	\$674,851	\$695,097	\$743,754	\$773,504	\$796,709	\$820,610	As Labor
10-13	Regular Overtime	750	500	515	530	568	590	608	651	677	697	718	As Labor
10-20	Employee Separation Pay	2,865	4,213	4,382	4,557	4,739	4,929	5,126	5,331	5,544	5,766	5,996	As Benefits - Other
10-25	Retirement	81,681	167,088	173,772	180,722	187,951	195,469	203,288	211,420	219,876	228,671	237,818	As Benefits - Other
10-27	Medicare	4,112	8,158	8,403	8,655	9,261	9,631	9,920	10,614	11,039	11,370	11,711	As Labor
10-29	Health/Dental/Vision	28,911	54,036	55,117	56,219	57,906	59,643	61,432	63,275	65,173	67,128	69,142	As Benefits - Medical
10-31	L/T Disability Insurance	1,829	3,601	3,709	3,820	3,935	4,053	4,175	4,300	4,429	4,562	4,698	As Insurance
10-32	Life Insurance	248	454	468	482	496	511	526	542	558	575	592	As Insurance
10-33	Workers Compensation	8,204	12,484	12,983	13,503	14,043	14,605	15,189	15,796	16,428	17,085	17,769	As Benefits - Other
10-34	Unemployment Insurance	250	285	294	302	311	321	330	340	351	361	372	As Insurance
10-45	Cell Phone Allowance	1,440	3,030	3,151	3,277	3,408	3,545	3,686	3,834	3,987	4,147	4,313	As Benefits - Other
10-46	Retirement Pension Bond	10,972	19,656	20,246	20,853	22,313	23,205	23,901	25,575	26,598	27,395	28,217	As Labor
Total Employee Services	\$431,478	\$845,137	\$871,819	\$899,365	\$953,826	\$991,353	\$1,023,279	\$1,085,431	\$1,128,164	\$1,164,467	\$1,201,958		

Acct. #		Budgeted	Proposed	Projected									Notes
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	
Other Services													
20-15	Telephone	\$912	\$800	\$832	\$865	\$900	\$936	\$973	\$1,012	\$1,053	\$1,095	\$1,139	As Utilities
20-25	Maint. & Repair Services	5,392	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	As Materials & Supplies
20-34	Duplication/Copy Costs	1,600	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957	As Materials & Supplies
20-37	Insurance Premiums	15,234	37,899	39,036	40,207	41,413	42,656	43,935	45,253	46,611	48,009	49,450	As Insurance
20-41	Automotive Equip Rental	3,887	7,692	8,000	8,320	8,652	8,999	9,358	9,733	10,122	10,527	10,948	As Equipment
20-43	Computer/Tech/Oper Supprt	44,559	49,336	50,816	52,341	53,911	55,528	57,194	58,910	60,677	62,497	64,372	As Materials & Supplies
20-47	Telephone Rental	5,528	6,363	6,618	6,882	7,158	7,444	7,742	8,051	8,373	8,708	9,057	As Equipment
20-52	Publicity & Advertising	2,500	5,000	5,125	5,253	5,384	5,519	5,657	5,798	5,943	6,092	6,244	As Miscellaneous
20-53	Printing & Mapping	2,500	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167	3,262	As Materials & Supplies
20-54	Postage/Mailing Services	9,500	9,500	9,785	10,079	10,381	10,692	11,013	11,343	11,684	12,034	12,395	As Materials & Supplies
20-58	Legal Services	400,000	400,000	412,000	424,360	437,091	450,204	463,710	477,621	491,950	506,708	521,909	As Professional / Special Srvc
20-63	Testing & Analysis Servcs	3,875	3,000	3,075	3,152	3,231	3,311	3,394	3,479	3,566	3,655	3,747	As Miscellaneous
20-65	Prof & Special Services	517,656	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339	65,239	As Professional / Special Srvc
20-66	Other Services	2,500	85,000	87,550	90,177	92,882	95,668	98,538	101,494	104,539	107,675	110,906	As Professional / Special Srvc
	Total Other Services	\$1,477,256	\$673,590	\$693,906	\$714,837	\$736,401	\$758,617	\$781,505	\$805,085	\$829,380	\$854,409	\$880,196	
Materials and Supplies													
30-50	Materials & Supplies	\$5,000	\$7,700	\$7,931	\$8,169	\$8,414	\$8,666	\$8,926	\$9,194	\$9,470	\$9,754	\$10,047	As Materials & Supplies
30-51	Computer Software	900	900	927	955	983	1,013	1,043	1,075	1,107	1,140	1,174	As Materials & Supplies
30-53	Fuel - Gas/Oil/Propane	266	139	143	147	152	156	161	166	171	176	181	As Materials & Supplies
30-55	Library Materials	1,200	1,300	1,339	1,379	1,421	1,463	1,507	1,552	1,599	1,647	1,696	As Materials & Supplies
	Total Materials and Supplies	\$7,366	\$10,039	\$10,340	\$10,650	\$10,970	\$11,299	\$11,638	\$11,987	\$12,347	\$12,717	\$13,099	
Other Expenses													
40-10	Training	\$7,500	\$8,400	\$8,610	\$8,825	\$9,046	\$9,272	\$9,504	\$9,741	\$9,985	\$10,235	\$10,490	As Miscellaneous
40-12	Meetings & Travel	1,000	1,000	1,025	1,051	1,077	1,104	1,131	1,160	1,189	1,218	1,249	As Miscellaneous
40-14	Memberships	45,850	74,500	76,363	78,272	80,228	82,234	84,290	86,397	88,557	90,771	93,040	As Miscellaneous
40-22	Taxes	7,981	8,000	8,200	8,405	8,615	8,831	9,051	9,278	9,509	9,747	9,991	As Miscellaneous
40-25	Indirect Cost Allocation	779,095	779,095	802,468	826,542	884,400	919,776	947,369	1,013,685	1,054,232	1,085,859	1,118,435	As Labor
	Total Other Expenses	\$841,426	\$870,995	\$896,665	\$923,094	\$983,366	\$1,021,216	\$1,051,345	\$1,120,261	\$1,163,473	\$1,197,831	\$1,233,206	
	Total Administrative & General	\$2,757,526	\$2,399,761	\$2,472,731	\$2,547,947	\$2,684,563	\$2,782,485	\$2,867,767	\$3,022,764	\$3,133,362	\$3,229,423	\$3,328,458	

Acct. #		Budgeted	Proposed	Projected								Notes	
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		FY 2030
Operations and Maintenance													
Employee Services													
10-10	Salaries - Regular	\$1,648,320	\$1,771,933	\$1,825,091	\$1,879,844	\$2,011,433	\$2,091,890	\$2,154,647	\$2,305,472	\$2,397,691	\$2,469,622	\$2,543,710	As Labor
10-11	Salaries Part Time - Temp	0	25,000	25,750	26,523	28,379	29,514	30,400	32,528	33,829	34,844	35,889	As Labor
10-13	Regular Overtime	55,000	50,000	51,500	53,045	56,758	59,028	60,799	65,055	67,657	69,687	71,778	As Labor
10-17	Stand By Time (Call Back)	20,000	20,822	21,447	22,090	23,636	24,582	25,319	27,092	28,175	29,021	29,891	As Labor
10-18	Holiday Pay	3,300	2,800	2,884	2,971	3,178	3,306	3,405	3,643	3,789	3,902	4,020	As Labor
10-20	Separation Pay	11,884	13,830	14,383	14,959	15,557	16,179	16,826	17,499	18,199	18,927	19,684	As Benefits - Other
10-21	Additional Pay	60,376	64,001	65,921	67,899	72,652	75,558	77,824	83,272	86,603	89,201	91,877	As Labor
10-25	Retirement	478,733	533,021	554,342	576,516	599,576	623,559	648,502	674,442	701,419	729,476	758,655	As Benefits - Other
10-26	Deferred Compensation	88,269	95,455	98,319	101,268	108,357	112,691	116,072	124,197	129,165	133,040	137,031	As Labor
10-27	Medicare	25,326	27,724	28,556	29,412	31,471	32,730	33,712	36,072	37,515	38,640	39,799	As Labor
10-29	Health/Dental/Vision	305,910	298,620	304,592	310,684	320,005	329,605	339,493	349,678	360,168	370,973	382,102	As Benefits - Medical
10-31	L-T Disability Insurance	10,384	11,158	11,493	11,838	12,193	12,558	12,935	13,323	13,723	14,135	14,559	As Insurance
10-32	Life Insurance	2,765	2,591	2,669	2,749	2,831	2,916	3,004	3,094	3,187	3,282	3,381	As Insurance
10-33	Workers' Compensation	130,104	177,733	184,842	192,236	199,925	207,922	216,239	224,889	233,885	243,240	252,969	As Benefits - Other
10-34	Unemployment Insurance	2,688	1,575	1,622	1,671	1,721	1,773	1,826	1,881	1,937	1,995	2,055	As Insurance
10-45	Cell Phone Allowance	1,200	600	624	649	675	702	730	759	790	821	854	As Benefits - Other
10-46	Retirement Pension Bond	65,275	61,808	63,662	65,572	70,162	72,969	75,158	80,419	83,635	86,145	88,729	As Labor
	Total Employee Services	\$2,909,534	\$3,158,671	\$3,257,697	\$3,359,924	\$3,558,510	\$3,697,483	\$3,816,891	\$4,043,314	\$4,201,367	\$4,336,951	\$4,476,984	
Other Services & Charges													
20-11	Electricity	\$15,000	\$14,500	\$15,080	\$15,683	\$16,311	\$16,963	\$17,641	\$18,347	\$19,081	\$19,844	\$20,638	As Utilities
20-12	Gas	1,500	1,500	1,560	1,622	1,687	1,755	1,825	1,898	1,974	2,053	2,135	As Utilities
20-15	Telephone	21,200	23,100	24,024	24,985	25,984	27,024	28,105	29,229	30,398	31,614	32,879	As Utilities
20-25	Maint. & Repair Services	485,326	287,796	296,430	305,323	314,482	323,917	333,634	343,643	353,953	364,571	375,509	As Materials & Supplies
20-27	Uniform/Laundry Services	9,000	8,500	8,755	9,018	9,288	9,567	9,854	10,149	10,454	10,768	11,091	As Professional / Special Srvc
20-34	Duplication/Copy Costs	1,200	1,200	1,236	1,273	1,311	1,351	1,391	1,433	1,476	1,520	1,566	As Materials & Supplies
20-37	Insurance Premiums	94,778	127,779	131,612	135,561	139,628	143,816	148,131	152,575	157,152	161,867	166,723	As Insurance
20-41	Automotive Equip Rental	173,165	143,443	149,181	155,148	161,354	167,808	174,520	181,501	188,761	196,312	204,164	As Equipment
20-43	Computer/Tech/Oper Supprt	72,800	90,752	94,382	98,157	102,084	106,167	110,414	114,830	119,423	124,200	129,168	As Equipment
20-44	Radio Equipment Rental	4,374	5,625	8,438	8,733	9,038	9,355	9,682	10,021	10,372	10,735	11,111	As Radio Equipment
20-45	Other Rentals	0	5,000	5,200	5,408	5,624	5,849	6,083	6,327	6,580	6,843	7,117	As Equipment
20-47	Telephone Rental	3,685	3,636	3,781	3,933	4,090	4,254	4,424	4,601	4,785	4,976	5,175	As Equipment
20-54	Postage/Mailing Services	2,000	1,800	1,854	1,910	1,967	2,026	2,087	2,149	2,214	2,280	2,349	As Professional / Special Srvc
20-57	Processing Fees	73,000	65,000	66,950	68,959	71,027	73,158	75,353	77,613	79,942	82,340	84,810	As Professional / Special Srvc
20-63	Testing & Analysis Servcs	1,300	1,300	1,333	1,366	1,400	1,435	1,471	1,508	1,545	1,584	1,624	As Miscellaneous
20-65	Prof & Special Services	2,600	52,900	54,487	56,122	57,805	59,539	61,326	63,165	65,060	67,012	69,023	As Professional / Special Srvc
20-66	Other Services	99,790	96,241	99,128	102,102	105,165	108,320	111,570	114,917	118,364	121,915	125,573	As Professional / Special Srvc
	Total Other Services & Charges	\$1,060,718	\$930,072	\$963,431	\$995,301	\$1,028,246	\$1,062,303	\$1,097,510	\$1,133,907	\$1,171,534	\$1,210,434	\$1,250,651	

Acct. #		Budgeted	Proposed	Projected									Notes
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	
Materials and Supplies													
30-50	Materials & Supplies	\$531,440	\$505,000	\$520,150	\$535,755	\$551,827	\$568,382	\$585,433	\$602,996	\$621,086	\$639,719	\$658,910	As Materials & Supplies
30-51	Computer Software	500	500	515	530	546	563	580	597	615	633	652	As Materials & Supplies
30-53	Fuel - Gas/Oil/Propane	71,947	82,839	85,324	87,884	90,520	93,236	96,033	98,914	101,882	104,938	108,086	As Materials & Supplies
30-55	Library Materials	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957	As Materials & Supplies
	Total Materials and Supplies	\$605,387	\$589,839	\$607,534	\$625,760	\$644,533	\$663,869	\$683,785	\$704,299	\$725,428	\$747,190	\$769,606	
Other Expenses													
40-10	Training	\$5,000	\$8,000	\$8,200	\$8,405	\$8,615	\$8,831	\$9,051	\$9,278	\$9,509	\$9,747	\$9,991	As Miscellaneous
40-12	Meetings & Travel	1,000	500	513	525	538	552	566	580	594	609	624	As Miscellaneous
40-22	Taxes	2,500	2,500	2,563	2,627	2,692	2,760	2,829	2,899	2,972	3,046	3,122	As Miscellaneous
40-68	Retirement Expense	184,730	184,729	192,118	199,803	207,795	216,107	224,751	233,741	243,091	252,814	262,927	As Benefits - Other
	Total Other Expenses	\$193,230	\$195,729	\$203,393	\$211,360	\$219,641	\$228,249	\$237,197	\$246,498	\$256,166	\$266,217	\$276,664	
	Total Operations and Maintenance	\$4,768,869	\$4,874,311	\$5,032,055	\$5,192,345	\$5,450,930	\$5,651,904	\$5,835,383	\$6,128,017	\$6,354,495	\$6,560,792	\$6,773,906	
Utility Billing													
10-97	Employee Services Summary	\$505,692	\$519,433	\$535,016	\$551,066	\$589,641	\$613,227	\$631,624	\$675,837	\$702,871	\$723,957	\$745,676	As Labor
20-97	Other Services Summary	335,426	458,587	472,345	486,515	520,571	541,394	557,636	596,670	620,537	639,153	658,328	As Labor
30-97	Materials & Supplies Summary	9,204	31,199	32,135	33,099	34,092	35,115	36,168	37,253	38,371	39,522	40,708	As Materials & Supplies
40-97	Other Expenses Summary	1,740	2,610	2,675	2,742	2,811	2,881	2,953	3,027	3,102	3,180	3,260	As Miscellaneous
	Total Utility Billing	\$852,062	\$1,011,829	\$1,042,171	\$1,073,423	\$1,147,115	\$1,192,616	\$1,228,380	\$1,312,787	\$1,364,881	\$1,405,812	\$1,447,970	
	Total Utility Billing	\$852,062	\$1,011,829	\$1,042,171	\$1,073,423	\$1,147,115	\$1,192,616	\$1,228,380	\$1,312,787	\$1,364,881	\$1,405,812	\$1,447,970	
Other Support Services													
Employee Services													
10-10	Salaries - Regular	\$473,991	\$366,128	\$377,112	\$388,425	\$415,615	\$432,240	\$445,207	\$476,371	\$495,426	\$510,289	\$525,598	As Labor
10-13	Regular Overtime	0	2,000	2,060	2,122	2,270	2,361	2,432	2,602	2,706	2,787	2,871	As Labor
10-20	Employee Separation Pay	5,720	3,146	3,272	3,403	3,539	3,680	3,828	3,981	4,140	4,306	4,478	As Benefits - Other
10-21	Additional Pay	307	393	405	417	446	464	478	511	532	548	564	As Labor
10-25	Retirement	133,509	107,153	111,439	115,897	120,533	125,354	130,368	135,583	141,006	146,646	152,512	As Benefits - Other
10-26	Deferred Compensation	4,320	4,020	4,141	4,265	4,563	4,746	4,888	5,230	5,440	5,603	5,771	As Labor
10-27	Medicare	6,723	5,225	5,382	5,543	5,931	6,168	6,354	6,798	7,070	7,282	7,501	As Labor
10-29	Health/Dental/Vision	48,806	42,888	43,746	44,621	45,959	47,338	48,758	50,221	51,728	53,279	54,878	As Benefits - Medical
10-31	L/T Disability Insurance	2,987	2,307	2,376	2,447	2,521	2,597	2,674	2,755	2,837	2,922	3,010	As Insurance
10-32	Life Insurance	413	353	364	374	386	397	409	422	434	447	461	As Insurance
10-33	Workers Compensation	11,134	9,649	9,842	10,039	10,340	10,650	10,970	11,299	11,638	11,987	12,346	As Benefits - Medical
10-34	Unemployment Insurance	422	226	233	240	247	254	262	270	278	286	295	As Insurance
10-45	Cell Phone Allowance	1,773	2,208	2,296	2,388	2,484	2,583	2,686	2,794	2,906	3,022	3,143	As Benefits - Other
10-46	Retirement Pension Bond	17,371	16,197	16,683	17,183	18,386	19,122	19,695	21,074	21,917	22,574	23,252	As Labor
	Total Employee Services	\$707,476	\$561,893	\$579,349	\$597,364	\$633,220	\$657,954	\$679,009	\$719,911	\$748,057	\$771,980	\$796,679	

Acct. #		Budgeted	Proposed	Projected									Notes
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	
Other Services													
20-22	Contractual Employees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Labor
20-37	Insurance Premiums	24,446	24,320	25,050	25,801	26,575	27,372	28,194	29,039	29,911	30,808	31,732	As Insurance
20-65	Prof & Special Services	44,686	38,691	39,852	41,047	42,279	43,547	44,853	46,199	47,585	49,013	50,483	As Professional / Special Srvc
	Total Other Services	\$69,132	\$63,011	\$64,901	\$66,848	\$68,854	\$70,919	\$73,047	\$75,238	\$77,496	\$79,820	\$82,215	
Materials and Supplies													
30-50	Materials and Supplies	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Materials & Supplies
	Total Materials and Supplies	\$500	\$0										
Other Expenses													
40-10	Training	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Labor
40-12	Meetings & Travel	0	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
40-14	Memberships	0	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
	Total Other Expenses	\$0											
	Total Other Support Services	\$777,108	\$624,904	\$644,251	\$664,213	\$702,074	\$728,874	\$752,056	\$795,149	\$825,553	\$851,800	\$878,894	
Water Conservation													
Employee Services													
10-10	Salaries - Regular	\$16,003	\$44,544	\$45,880	\$47,257	\$50,565	\$52,587	\$54,165	\$57,956	\$60,275	\$62,083	\$63,945	As Labor
10-20	Employee Separation Pay	155	73	76	79	82	85	89	92	96	100	104	As Benefits - Other
10-25	Retirement	4,504	13,020	13,541	14,082	14,646	15,232	15,841	16,474	17,133	17,819	18,532	As Benefits - Other
10-27	Medicare	220	643	662	682	730	759	782	837	870	896	923	As Labor
10-29	Health/Dental/Vision	2,224	5,688	5,802	5,918	6,095	6,278	6,467	6,661	6,860	7,066	7,278	As Benefits - Medical
10-31	L/T Disability Insurance	101	281	289	298	307	316	326	336	346	356	367	As Insurance
10-32	Life Insurance	18	49	50	52	54	55	57	59	60	62	64	As Insurance
10-33	Workers Compensation	321	896	932	969	1,008	1,048	1,090	1,134	1,179	1,226	1,275	As Benefits - Other
10-34	Unemployment Insurance	19	30	31	32	33	34	35	36	37	38	39	As Insurance
10-45	Cell Phone Allowance	60	270	281	292	304	316	328	342	355	370	384	As Benefits - Other
10-46	Retirement Pension Bond	605	320	330	339	363	378	389	416	433	446	459	As Labor
	Total Employee Services	\$25,230	\$65,814	\$67,874	\$70,001	\$74,186	\$77,089	\$79,568	\$84,342	\$87,645	\$90,462	\$93,371	
Other Services													
20-15	Telephone	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Utilities
20-37	Insurance Premiums	835	2,940	3,028	3,119	3,213	3,309	3,408	3,511	3,616	3,724	3,836	As Insurance
20-51	Community/Program	41,500	41,000	42,230	43,497	44,802	46,146	47,530	48,956	50,425	51,938	53,496	As Materials & Supplies
20-65	Prof & Special Services	0	50,000	0	0	0	0	0	0	0	0	0	As Professional / Special Srvc
	Total Other Services	\$42,335	\$93,940	\$45,258	\$46,616	\$48,014	\$49,455	\$50,939	\$52,467	\$54,041	\$55,662	\$57,332	

Acct. #		Budgeted	Proposed	Projected								Notes	
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		FY 2030
Materials and Supplies													
30-50	Materials & Supplies	\$0	\$1,800	\$1,854	\$1,910	\$1,967	\$2,026	\$2,087	\$2,149	\$2,214	\$2,280	\$2,349	As Materials & Supplies
	Total Materials and Supplies	\$0	\$1,800	\$1,854	\$1,910	\$1,967	\$2,026	\$2,087	\$2,149	\$2,214	\$2,280	\$2,349	
Other Expenses													
40-10	Training	\$500	\$1,100	\$1,128	\$1,156	\$1,185	\$1,214	\$1,245	\$1,276	\$1,308	\$1,340	\$1,374	As Miscellaneous
40-68	Retirement Expense	0	1,606	1,654	1,704	1,755	1,808	1,862	1,918	1,975	2,034	2,095	As Materials & Supplies
	Total Other Expenses	\$500	\$2,706	\$2,782	\$2,859	\$2,939	\$3,022	\$3,106	\$3,193	\$3,283	\$3,375	\$3,469	
	Total Water Conservation	\$68,065	\$164,260	\$117,768	\$121,386	\$127,107	\$131,591	\$135,700	\$142,151	\$147,182	\$151,778	\$156,520	
Water Purchase													
Materials and Supplies													
30-56	Merchandise For Resale	\$8,900,000	\$14,210,550	\$15,134,236	\$16,117,961	\$17,165,629	\$18,281,394	\$19,469,685	\$20,735,215	\$22,083,004	\$23,518,399	\$25,047,095	As Purchased Water
	Total Materials and Supplies	\$8,900,000	\$14,210,550	\$15,134,236	\$16,117,961	\$17,165,629	\$18,281,394	\$19,469,685	\$20,735,215	\$22,083,004	\$23,518,399	\$25,047,095	
Other Expenses													
40-22	Groundwater Pumping Tax	\$1,800,000	\$1,800,000	\$1,917,000	\$2,041,605	\$2,174,309	\$2,315,639	\$2,466,156	\$2,626,456	\$2,797,176	\$2,978,992	\$3,172,627	As Purchased Water
	Total Other Expenses	\$1,800,000	\$1,800,000	\$1,917,000	\$2,041,605	\$2,174,309	\$2,315,639	\$2,466,156	\$2,626,456	\$2,797,176	\$2,978,992	\$3,172,627	
	Total Water Purchase	\$10,700,000	\$16,010,550	\$17,051,236	\$18,159,566	\$19,339,938	\$20,597,034	\$21,935,841	\$23,361,671	\$24,880,179	\$26,497,391	\$28,219,721	
Hydrant Maintenance													
Employee Services													
10-10	Salaries - Regular	\$0	\$100,339	\$103,349	\$106,450	\$113,901	\$118,457	\$122,011	\$130,552	\$135,774	\$139,847	\$144,042	As Labor
10-13	Regular Overtime	0	5,000	5,150	5,305	5,676	5,903	6,080	6,506	6,766	6,969	7,178	As Labor
10-20	Separation Pay	0	856	890	926	963	1,001	1,041	1,083	1,126	1,171	1,218	As Benefits - Other
10-25	Retirement	0	29,455	30,633	31,859	33,133	34,458	35,837	37,270	38,761	40,311	41,924	As Benefits - Other
10-26	Deferred Compensation	0	5,519	5,685	5,855	6,265	6,516	6,711	7,181	7,468	7,692	7,923	As Labor
10-27	Medicare	0	1,407	1,449	1,493	1,597	1,661	1,711	1,831	1,904	1,961	2,020	As Labor
10-29	Health/Dental/Vision	0	22,752	23,207	23,671	24,381	25,113	25,866	26,642	27,441	28,265	29,113	As Benefits - Medical
10-31	L-T Disability Insurance	0	632	651	670	691	711	733	755	777	801	825	As Insurance
10-32	Life Insurance	0	198	204	210	216	223	230	236	244	251	258	As Insurance
10-33	Workers' Compensation	0	9,733	10,122	10,527	10,948	11,386	11,842	12,315	12,808	13,320	13,853	As Benefits - Other
10-34	Unemployment Insurance	0	120	124	127	131	135	139	143	148	152	157	As Insurance
10-46	Retirement Pension Bond	0	3,777	3,890	4,007	4,288	4,459	4,593	4,914	5,111	5,264	5,422	As Labor
	Total Employee Services	\$0	\$179,788	\$185,355	\$191,100	\$202,190	\$210,023	\$216,793	\$229,428	\$238,327	\$246,004	\$253,932	

Acct. #		Budgeted	Proposed	Projected								Notes	
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		FY 2030
Other Services													
20-11	Electricity	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Utilities
20-15	Telephone	0	200	208	216	225	234	243	253	263	274	285	As Utilities
20-25	Maint. & Repair Services	0	80,000	82,400	84,872	87,418	90,041	92,742	95,524	98,390	101,342	104,382	As Materials & Supplies
20-27	Uniform/Laundry Services	0	500	515	530	546	563	580	597	615	633	652	As Professional / Special Srvc
20-37	Insurance Premiums	0	6,622	6,821	7,025	7,236	7,453	7,677	7,907	8,144	8,389	8,640	As Insurance
20-44	Radio Equipment Rental	429	508	762	789	816	845	874	905	937	969	1,003	As Radio Equipment
20-57	Processing Fees	0	2,000	2,060	2,122	2,185	2,251	2,319	2,388	2,460	2,534	2,610	As Professional / Special Srvc
20-66	Other Services	0	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957	As Professional / Special Srvc
	Total Other Services	\$429	\$91,330	\$94,311	\$97,146	\$100,066	\$103,075	\$106,173	\$109,365	\$112,654	\$116,040	\$119,529	
Materials and Supplies													
30-50	Materials & Supplies	\$0	\$50,000	\$51,500	\$53,045	\$54,636	\$56,275	\$57,964	\$59,703	\$61,494	\$63,339	\$65,239	As Materials & Supplies
30-53	Fuels - Gas/Oil/Propane	2,786	1,454	1,498	1,543	1,589	1,636	1,686	1,736	1,788	1,842	1,897	As Materials & Supplies
	Total Materials and Supplies	\$2,786	\$51,454	\$52,998	\$54,588	\$56,225	\$57,912	\$59,649	\$61,439	\$63,282	\$65,180	\$67,136	
Other Expenses													
40-12	Meetings/Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Miscellaneous
40-14	Memberships	0	0	0	0	0	0	0	0	0	0	0	As Miscellaneous
40-60	Miscellaneous Refunds	0	0	0	0	0	0	0	0	0	0	0	As Miscellaneous
	Total Other Expenses	\$0											
	Total Hydrant Maintenance	\$3,215	\$322,572	\$332,663	\$342,833	\$358,482	\$371,010	\$382,615	\$400,232	\$414,263	\$427,225	\$440,597	
Delta Water Production													
Employee Services													
10-10	Salaries - Regular	\$847,110	\$904,253	\$931,381	\$959,322	\$1,026,475	\$1,067,534	\$1,099,560	\$1,176,529	\$1,223,590	\$1,260,298	\$1,298,106	As Labor
10-13	Regular Overtime	150,000	120,000	123,600	127,308	136,220	141,668	145,918	156,133	162,378	167,249	172,267	As Labor
10-17	Stand By Time (Call Back)	12,000	12,000	12,360	12,731	13,622	14,167	14,592	15,613	16,238	16,725	17,227	As Labor
10-18	Holiday Pay	25,000	25,000	26,000	27,040	28,122	29,246	30,416	31,633	32,898	34,214	35,583	As Benefits - Other
10-20	Separation Pay	6,433	7,625	7,930	8,247	8,577	8,920	9,277	9,648	10,034	10,435	10,853	As Benefits - Other
10-21	Additional Pay	2,747	1,218	1,255	1,292	1,383	1,438	1,481	1,585	1,648	1,698	1,749	As Labor
10-25	Retirement	246,457	271,957	282,835	294,149	305,915	318,151	330,877	344,112	357,877	372,192	387,080	As Benefits - Other
10-26	Deferred Compensation	38,291	41,233	42,470	43,744	46,806	48,678	50,139	53,648	55,794	57,468	59,192	As Labor
10-27	Medicare	14,471	14,889	15,336	15,796	16,901	17,577	18,105	19,372	20,147	20,751	21,374	As Labor
10-29	Health/Dental/Vision	114,403	118,879	121,257	123,682	127,392	131,214	135,150	139,205	143,381	147,682	152,113	As Benefits - Medical
10-31	L-T Disability Insurance	5,338	5,696	5,867	6,043	6,224	6,411	6,603	6,801	7,005	7,216	7,432	As Insurance
10-32	Life Insurance	1,029	1,029	1,060	1,092	1,124	1,158	1,193	1,229	1,266	1,304	1,343	As Insurance
10-33	Workers' Compensation	72,268	91,997	95,677	99,504	103,484	107,623	111,928	116,406	121,062	125,904	130,940	As Benefits - Other
10-34	Unemployment Insurance	1,003	627	646	665	685	706	727	749	771	794	818	As Insurance
10-45	Cell Phone Allowance	1,200	1,200	1,248	1,298	1,350	1,404	1,460	1,518	1,579	1,642	1,708	As Benefits - Other
10-46	Retirement Pension Bond	33,205	34,381	35,412	36,475	39,028	40,589	41,807	44,733	46,523	47,918	49,356	As Labor
	Total Employee Services	\$1,570,955	\$1,651,984	\$1,704,333	\$1,758,387	\$1,863,308	\$1,936,486	\$1,999,234	\$2,118,914	\$2,202,191	\$2,273,491	\$2,347,140	

Acct. #		Budgeted	Proposed	Projected									Notes
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	
Other Services													
20-11	Electricity	\$1,675,000	\$1,750,000	\$1,820,000	\$1,892,800	\$1,968,512	\$2,047,252	\$2,129,143	\$2,214,308	\$2,302,881	\$2,394,996	\$2,490,796	As Utilities
20-15	Telephone	25,224	19,000	19,760	20,550	21,372	22,227	23,116	24,041	25,003	26,003	27,043	As Utilities
20-25	Maint. & Repair Services	3,403	3,800	3,914	4,031	4,152	4,277	4,405	4,537	4,674	4,814	4,958	As Materials & Supplies
20-27	Uniform/Laundry Services	8,632	9,100	9,373	9,654	9,944	10,242	10,549	10,866	11,192	11,528	11,873	As Professional / Special Srvc
20-37	Insurance Premiums	54,888	70,180	72,285	74,454	76,688	78,988	81,358	83,799	86,313	88,902	91,569	As Materials & Supplies
20-41	Automotive Equip Rental	52,679	49,097	51,061	53,103	55,227	57,437	59,734	62,123	64,608	67,193	69,880	As Equipment
20-43	Computer/Tech/Oper Supprt	58,735	32,382	33,677	35,024	36,425	37,882	39,398	40,974	42,613	44,317	46,090	As Equipment
20-44	Radio Equipment Rental	23,147	20,498	30,747	31,823	32,937	34,090	35,283	36,518	37,796	39,119	40,488	As Radio Equipment
20-45	Other Rentals	6,060	10,000	10,400	10,816	11,249	11,699	12,167	12,653	13,159	13,686	14,233	As Equipment
20-47	Telephone Rental	4,607	4,545	4,727	4,916	5,113	5,317	5,530	5,751	5,981	6,220	6,469	As Equipment
20-57	Processing Fees	94,582	100,000	103,000	106,090	109,273	112,551	115,927	119,405	122,987	126,677	130,477	As Professional / Special Srvc
20-63	Testing & Analysis Servcs	1,835	2,000	2,050	2,101	2,154	2,208	2,263	2,319	2,377	2,437	2,498	As Miscellaneous
20-64	Training Services	3,940	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,224	9,501	9,786	As Professional / Special Srvc
20-65	Prof & Special Services	33,124	40,000	41,200	42,436	43,709	45,020	46,371	47,762	49,195	50,671	52,191	As Professional / Special Srvc
20-66	Other Services	261,246	222,230	228,897	235,764	242,837	250,122	257,625	265,354	273,315	281,514	289,960	As Professional / Special Srvc
	Total Other Services	\$2,307,102	\$2,340,332	\$2,438,816	\$2,531,520	\$2,627,787	\$2,727,753	\$2,831,563	\$2,939,366	\$3,051,317	\$3,167,576	\$3,288,311	
Materials and Supplies													
30-50	Materials And Supplies	\$106,199	\$105,000	\$108,150	\$111,395	\$114,736	\$118,178	\$121,724	\$125,375	\$129,137	\$133,011	\$137,001	As Materials & Supplies
30-53	Fuels-Gas/Oil/Propane	35,615	21,480	22,124	22,788	23,472	24,176	24,901	25,648	26,418	27,210	28,027	As Materials & Supplies
30-54	Chemicals	582,825	565,300	582,259	599,727	617,719	636,250	655,338	674,998	695,248	716,105	737,588	As Materials & Supplies
	Total Materials and Supplies	\$724,639	\$691,780	\$712,533	\$733,909	\$755,927	\$778,604	\$801,963	\$826,021	\$850,802	\$876,326	\$902,616	
Other Expenses													
40-10	Training	\$5,000	\$5,000	\$5,125	\$5,253	\$5,384	\$5,519	\$5,657	\$5,798	\$5,943	\$6,092	\$6,244	As Miscellaneous
40-12	Meetings & Travel	1,500	1,500	1,538	1,576	1,615	1,656	1,697	1,740	1,783	1,828	1,873	As Miscellaneous
40-22	Taxes	104,254	110,000	112,750	115,569	118,458	121,419	124,455	127,566	130,755	134,024	137,375	As Miscellaneous
	Total Other Expenses	\$110,754	\$116,500	\$119,413	\$122,398	\$125,458	\$128,594	\$131,809	\$135,104	\$138,482	\$141,944	\$145,493	
	Total Delta Water Production	\$4,713,450	\$4,800,596	\$4,975,095	\$5,146,215	\$5,372,479	\$5,571,438	\$5,764,569	\$6,019,406	\$6,242,792	\$6,459,337	\$6,683,559	
Well Production													
Employee Services													
10-10	Salaries - Regular	\$321,285	\$338,600	\$348,758	\$359,221	\$384,366	\$399,741	\$411,733	\$440,554	\$458,177	\$471,922	\$486,080	As Labor
10-13	Regular Overtime	7,500	5,300	5,459	5,623	6,016	6,257	6,445	6,896	7,172	7,387	7,608	As Labor
10-17	Stand By Time (Call Back)	24,000	21,000	21,630	22,279	23,838	24,792	25,536	27,323	28,416	29,269	30,147	As Labor
10-18	Holiday Pay	3,200	3,200	3,296	3,395	3,633	3,778	3,891	4,164	4,330	4,460	4,594	As Labor
10-20	Separation Pay	2,295	2,161	2,226	2,293	2,453	2,551	2,628	2,812	2,924	3,012	3,102	As Labor
10-21	Additional Pay	11,002	10,302	10,611	10,929	11,694	12,162	12,527	13,404	13,940	14,358	14,789	As Labor
10-25	Retirement	93,923	101,702	105,770	110,001	114,401	118,977	123,736	128,685	133,833	139,186	144,754	As Benefits - Other
10-26	Deferred Compensation	17,671	18,623	19,182	19,757	21,140	21,986	22,645	24,230	25,200	25,956	26,734	As Labor
10-27	Medicare	5,196	5,408	5,570	5,737	6,139	6,385	6,576	7,036	7,318	7,537	7,763	As Labor
10-29	Health/Dental/Vision	56,675	56,425	57,554	58,705	60,466	62,280	64,148	66,073	68,055	70,096	72,199	As Benefits - Medical
10-31	L-T Disability Insurance	2,024	2,133	2,176	2,219	2,286	2,354	2,425	2,498	2,573	2,650	2,729	As Benefits - Medical
10-32	Life Insurance	514	492	507	522	538	554	570	587	605	623	642	As Insurance
10-33	Workers' Compensation	27,893	36,762	38,232	39,762	41,352	43,006	44,727	46,516	48,376	50,311	52,324	As Benefits - Other
10-34	Unemployment Insurance	498	298	307	316	326	335	345	356	367	377	389	As Insurance
10-45	Cell Phone Allowance	138	576	599	623	648	674	701	729	758	788	820	As Benefits - Other
10-46	Retirement Pension Bond	12,809	11,630	11,979	12,338	13,202	13,730	14,142	15,132	15,737	16,209	16,696	As Labor
	Total Employee Services	\$586,623	\$614,612	\$633,855	\$653,720	\$692,498	\$719,562	\$742,775	\$786,995	\$817,780	\$844,143	\$871,370	

Acct. #		Budgeted	Proposed	Projected									Notes
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	
Other Services													
20-11	Electricity	\$721,200	\$800,000	\$832,000	\$865,280	\$899,891	\$935,887	\$973,322	\$1,012,255	\$1,052,745	\$1,094,855	\$1,138,649	As Utilities
20-15	Telephone	5,832	5,500	5,720	5,949	6,187	6,434	6,692	6,959	7,238	7,527	7,828	As Utilities
20-17	Storm Water	3,000	3,000	3,120	3,245	3,375	3,510	3,650	3,796	3,948	4,106	4,270	As Utilities
20-25	Maint. & Repair Services	3,806	4,500	4,635	4,774	4,917	5,065	5,217	5,373	5,534	5,700	5,871	As Materials & Supplies
20-37	Insurance Premiums	19,464	24,994	25,744	26,516	27,312	28,131	28,975	29,844	30,739	31,662	32,612	As Insurance
20-41	Automotive Equip Rental	32,054	14,458	15,036	15,638	16,263	16,914	17,590	18,294	19,026	19,787	20,578	As Equipment
20-43	Computer/Tech/Oper Supprt	6,583	22,324	23,217	24,146	25,111	26,116	27,161	28,247	29,377	30,552	31,774	As Equipment
20-44	Radio Equipment Rental	0	508	762	789	816	845	874	905	937	969	1,003	As Radio Equipment
20-47	Telephone Rental	461	908	944	982	1,021	1,062	1,105	1,149	1,195	1,243	1,292	As Equipment
20-57	Processing Fees	500	500	515	530	546	563	580	597	615	633	652	As Professional / Special Srvc
20-65	Prof & Special Services	0	15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	As Professional / Special Srvc
20-66	Other Services	38,409	27,000	27,810	28,644	29,504	30,389	31,300	32,239	33,207	34,203	35,229	As Professional / Special Srvc
	Total Other Services	\$833,309	\$918,692	\$954,953	\$992,406	\$1,031,335	\$1,071,797	\$1,113,855	\$1,157,570	\$1,203,009	\$1,250,239	\$1,299,331	
Materials and Supplies													
30-50	Materials And Supplies	\$31,962	\$50,000	\$51,500	\$53,045	\$54,636	\$56,275	\$57,964	\$59,703	\$61,494	\$63,339	\$65,239	As Materials & Supplies
30-53	Fuels-Gas/Oil/Propane	6,039	9,208	9,484	9,769	10,062	10,364	10,675	10,995	11,325	11,664	12,014	As Materials & Supplies
30-54	Chemicals	62,839	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286	As Materials & Supplies
	Total Materials and Supplies	\$100,840	\$119,208	\$122,784	\$126,468	\$130,262	\$134,170	\$138,195	\$142,341	\$146,611	\$151,009	\$155,539	
Other Expenses													
40-10	Training	\$1,000	\$1,000	\$1,025	\$1,051	\$1,077	\$1,104	\$1,131	\$1,160	\$1,189	\$1,218	\$1,249	As Miscellaneous
	Total Other Expenses	\$1,000	\$1,000	\$1,025	\$1,051	\$1,077	\$1,104	\$1,131	\$1,160	\$1,189	\$1,218	\$1,249	
	Total Well Production	\$1,521,772	\$1,653,512	\$1,712,618	\$1,773,644	\$1,855,171	\$1,926,632	\$1,995,956	\$2,088,065	\$2,168,588	\$2,246,609	\$2,327,489	
DWSP Maintenance & Repair													
Employee Services													
10-10	Salaries - Regular	\$386,121	\$425,489	\$438,254	\$451,401	\$482,999	\$502,319	\$517,389	\$553,606	\$575,750	\$593,023	\$610,814	As Labor
10-13	Regular Overtime	13,400	10,000	10,300	10,609	11,352	11,806	12,160	13,011	13,531	13,937	14,356	As Labor
10-17	Stand By Time (Call Back)	21,000	17,500	18,025	18,566	19,865	20,660	21,280	22,769	23,680	24,391	25,122	As Labor
10-18	Holiday Pay	500	500	515	530	568	590	608	651	677	697	718	As Labor
10-20	Separation Pay	2,692	3,803	3,917	4,035	4,317	4,490	4,624	4,948	5,146	5,300	5,459	As Labor
10-21	Additional Pay	2,743	4,626	4,765	4,908	5,251	5,461	5,625	6,019	6,260	6,447	6,641	As Labor
10-25	Retirement	109,247	125,160	130,166	135,373	140,788	146,419	152,276	158,367	164,702	171,290	178,142	As Benefits - Other
10-26	Deferred Compensation	19,145	23,066	23,758	24,471	26,184	27,231	28,048	30,011	31,212	32,148	33,113	As Labor
10-27	Medicare	5,886	6,494	6,689	6,889	7,372	7,667	7,897	8,449	8,787	9,051	9,323	As Labor
10-29	Health/Dental/Vision	59,673	60,748	61,963	63,202	65,098	67,051	69,063	71,135	73,269	75,467	77,731	As Benefits - Medical
10-31	L-T Disability Insurance	2,432	2,680	2,787	2,899	3,015	3,135	3,261	3,391	3,527	3,668	3,814	As Benefits - Other
10-32	Life Insurance	540	528	544	560	577	594	612	630	649	669	689	As Insurance
10-33	Workers' Compensation	30,038	44,273	46,044	47,886	49,801	51,793	53,865	56,019	58,260	60,591	63,014	As Benefits - Other
10-34	Unemployment Insurance	524	320	330	339	350	360	371	382	394	405	418	As Insurance
10-45	Cell Phone Allowance	672	3,144	3,270	3,401	3,537	3,678	3,825	3,978	4,137	4,303	4,475	As Benefits - Other
10-46	Retirement Pension Bond	14,222	14,805	15,249	15,707	16,806	17,478	18,003	19,263	20,033	20,634	21,253	As Labor
	Total Employee Services	\$668,835	\$743,136	\$766,575	\$790,775	\$837,879	\$870,734	\$898,906	\$952,631	\$990,015	\$1,022,021	\$1,055,081	

Acct. #		Budgeted	Proposed	Projected									Notes
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	
Other Services													
20-15	Telephone	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Utilities
20-25	Maint. & Repair Services	122,270	100,000	103,000	106,090	109,273	112,551	115,927	119,405	122,987	126,677	130,477	As Materials & Supplies
20-27	Uniform/Laundry Services	2,400	2,400	2,472	2,546	2,623	2,701	2,782	2,866	2,952	3,040	3,131	As Professional / Special Srvc
20-37	Insurance Premiums	22,388	30,206	31,112	32,046	33,007	33,997	35,017	36,068	37,150	38,264	39,412	As Insurance
20-41	Automotive Equip Rental	46,544	36,761	38,231	39,761	41,351	43,005	44,725	46,514	48,375	50,310	52,322	As Equipment
20-43	Computer/Tech/Oper Supprt	28,136	31,974	33,253	34,583	35,966	37,405	38,901	40,457	42,076	43,759	45,509	As Equipment
20-44	Radio Equipment Rental	429	508	762	789	816	845	874	905	937	969	1,003	As Radio Equipment
20-47	Telephone Rental	1,382	1,363	1,418	1,474	1,533	1,595	1,658	1,725	1,794	1,865	1,940	As Equipment
20-52	Publicity & Advertising	1,200	1,200	1,230	1,261	1,292	1,325	1,358	1,392	1,426	1,462	1,499	As Miscellaneous
20-61	Engineering Services	7,500	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	As Professional / Special Srvc
20-63	Testing & Analysis Servcs	0	500	513	525	538	552	566	580	594	609	624	As Miscellaneous
20-65	Prof & Special Services	5,000	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524	As Professional / Special Srvc
20-66	Other Services	0	0	0	0	0	0	0	0	0	0	0	As Professional / Special Srvc
	Total Other Services	\$238,449	\$214,912	\$222,291	\$229,683	\$237,327	\$245,230	\$253,402	\$261,852	\$270,589	\$279,624	\$288,966	
Materials and Supplies													
30-50	Materials And Supplies	\$227,348	\$201,000	\$207,030	\$213,241	\$219,638	\$226,227	\$233,014	\$240,005	\$247,205	\$254,621	\$262,259	As Materials & Supplies
30-53	Fuels-Gas/Oil/Propane	6,813	3,307	3,406	3,508	3,614	3,722	3,834	3,949	4,067	4,189	4,315	As Materials & Supplies
	Total Materials and Supplies	\$234,161	\$204,307	\$210,436	\$216,749	\$223,252	\$229,949	\$236,848	\$243,953	\$251,272	\$258,810	\$266,574	
Other Expenses													
40-10	Training	\$5,300	\$6,000	\$6,150	\$6,304	\$6,461	\$6,623	\$6,788	\$6,958	\$7,132	\$7,310	\$7,493	As Miscellaneous
	Total Other Expenses	\$5,300	\$6,000	\$6,150	\$6,304	\$6,461	\$6,623	\$6,788	\$6,958	\$7,132	\$7,310	\$7,493	
	Total DWSP Maintenance & Repair	\$1,146,745	\$1,168,355	\$1,205,452	\$1,243,512	\$1,304,919	\$1,352,536	\$1,395,945	\$1,465,394	\$1,519,008	\$1,567,766	\$1,618,114	
MUD Admin / Finance													
Employee Services													
10-10	Salaries - Regular		\$381,672	\$393,122	\$404,916	\$433,260	\$450,590	\$464,108	\$496,596	\$516,459	\$531,953	\$547,912	As Labor
10-13	Regular Overtime		2,100	2,163	2,228	2,384	2,479	2,554	2,732	2,842	2,927	3,015	As Labor
10-20	Separation Pay		3,231	3,328	3,428	3,668	3,814	3,929	4,204	4,372	4,503	4,638	As Labor
10-21	Additional Pay		644	663	683	731	760	783	838	871	898	924	As Labor
10-25	Retirement		111,751	116,221	120,870	125,705	130,733	135,962	141,401	147,057	152,939	159,057	As Benefits - Other
10-27	Medicare		5,090	5,243	5,400	5,778	6,009	6,189	6,623	6,888	7,094	7,307	As Labor
10-29	Health/Dental/Vision		46,642	47,575	48,526	49,982	51,482	53,026	54,617	56,255	57,943	59,681	As Benefits - Medical
10-31	L-T Disability Insurance		2,405	2,501	2,601	2,705	2,814	2,926	3,043	3,165	3,291	3,423	As Benefits - Other
10-32	Life Insurance		381	392	404	416	429	442	455	469	483	497	As Insurance
10-33	Workers' Compensation		7,719	8,028	8,349	8,683	9,030	9,391	9,767	10,158	10,564	10,987	As Benefits - Other
10-34	Unemployment Insurance		246	253	261	269	277	285	294	303	312	321	As Insurance
10-45	Cell Phone Allowance		1,560	1,622	1,687	1,755	1,825	1,898	1,974	2,053	2,135	2,220	As Benefits - Other
10-46	Retirement Pension Bond		14,344	14,774	15,218	16,283	16,934	17,442	18,663	19,410	19,992	20,592	As Labor
	Total Employee Services	\$517,179	\$577,785	\$595,886	\$614,571	\$651,618	\$677,176	\$698,935	\$741,206	\$770,300	\$795,033	\$820,574	

Acct. #		Budgeted	Proposed	Projected								Notes		
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		FY 2030	
Other Services														
20-14	Water		\$158	\$164	\$171	\$178	\$185	\$192	\$200	\$208	\$216	\$225	As Utilities	
20-15	Telephone		0	0	0	0	0	0	0	0	0	0	As Utilities	
20-17	Stormwater		480	499	519	540	562	584	607	632	657	683	As Utilities	
20-25	Maint. & Repair Services		3,300	3,399	3,501	3,606	3,714	3,826	3,940	4,059	4,180	4,306	As Materials & Supplies	
20-27	Uniform/Laundry Services		780	803	828	852	878	904	931	959	988	1,018	As Professional / Special Srvc	
20-34	Duplication/Copy Costs		900	927	955	983	1,013	1,043	1,075	1,107	1,140	1,174	As Materials & Supplies	
20-37	Insurance Premiums		25,431	26,194	26,980	27,789	28,623	29,481	30,366	31,277	32,215	33,182	As Materials & Supplies	
20-41	Automotive Equip Rental		9,718	10,107	10,511	10,931	11,369	11,823	12,296	12,788	13,300	13,832	As Equipment	
20-44	Radio Equipment Rental		724	1,086	1,124	1,163	1,204	1,246	1,290	1,335	1,382	1,430	As Radio Equipment	
20-47	Telephone Rental		3,136	3,261	3,392	3,528	3,669	3,815	3,968	4,127	4,292	4,464	As Equipment	
20-52	Publicity & Advertising		450	461	473	485	497	509	522	535	548	562	As Miscellaneous	
20-54	Postage/Mailing Services		330	340	350	361	371	383	394	406	418	431	As Professional / Special Srvc	
20-57	Processing Fees		150	155	159	164	169	174	179	184	190	196	As Professional / Special Srvc	
20-58	Legal Services		3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914	As Professional / Special Srvc	
20-63	Testing & Analysis Servcs		60	62	63	65	66	68	70	71	73	75	As Miscellaneous	
20-64	Training Services		3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914	As Professional / Special Srvc	
20-65	Prof & Special Services		15,000	15,450	15,914	16,391	16,883	17,389	17,911	18,448	19,002	19,572	As Professional / Special Srvc	
20-66	Other Services		26,400	27,192	28,008	28,848	29,713	30,605	31,523	32,469	33,443	34,446	As Professional / Special Srvc	
	Total Other Services		\$138,418	\$93,017	\$96,280	\$99,312	\$102,440	\$105,668	\$108,999	\$112,437	\$115,984	\$119,645	\$123,422	
Materials and Supplies														
30-50	Materials And Supplies		\$54,900	\$56,547	\$58,243	\$59,991	\$61,790	\$63,644	\$65,553	\$67,520	\$69,546	\$71,632	As Materials & Supplies	
30-51	Computer Software		150	156	162	169	175	182	190	197	205	213	As Equipment	
30-53	Fuels-Gas/Oil/Propane		353	364	374	386	397	409	422	434	447	461	As Materials & Supplies	
	Total Materials and Supplies		\$21,507	\$55,403	\$57,067	\$58,780	\$60,545	\$62,363	\$64,236	\$66,165	\$68,152	\$70,198	\$72,306	
Other Expenses														
40-10	Training		\$3,000	\$3,075	\$3,152	\$3,231	\$3,311	\$3,394	\$3,479	\$3,566	\$3,655	\$3,747	As Miscellaneous	
40-12	Meetings & Travel		150	154	158	162	166	170	174	178	183	187	As Miscellaneous	
40-14	Memberships		158	163	168	173	178	183	189	194	200	206	As Materials & Supplies	
	Total Other Expenses		\$6,750	\$3,308	\$3,391	\$3,477	\$3,565	\$3,655	\$3,747	\$3,842	\$3,939	\$4,038	\$4,140	
	Total MUD Admin / Finance		\$683,854	\$729,513	\$752,625	\$776,140	\$818,168	\$848,862	\$875,918	\$923,649	\$958,374	\$988,914	\$1,020,442	
Engineering Services														
Employee Services														
10-10	Salaries - Regular		\$123,841	\$127,556	\$131,383	\$140,580	\$146,203	\$150,589	\$161,130	\$167,575	\$172,603	\$177,781	As Labor	
10-13	Regular Overtime		300	309	318	341	354	365	390	406	418	431	As Labor	
10-20	Separation Pay		3,987	4,107	4,230	4,526	4,707	4,848	5,188	5,395	5,557	5,724	As Labor	
10-21	Additional Pay		947	975	1,005	1,075	1,118	1,152	1,232	1,281	1,320	1,359	As Labor	
10-25	Retirement		36,475	37,934	39,451	41,029	42,671	44,377	46,153	47,999	49,919	51,915	As Benefits - Other	
10-27	Medicare		1,776	1,829	1,884	2,016	2,097	2,160	2,311	2,403	2,475	2,550	As Labor	
10-29	Health/Dental/Vision		13,992	14,272	14,557	14,994	15,444	15,907	16,384	16,876	17,382	17,904	As Benefits - Medical	
10-31	L-T Disability Insurance		780	796	812	836	861	887	913	941	969	998	As Benefits - Medical	
10-32	Life Insurance		113	116	120	123	127	131	135	139	143	147	As Insurance	
10-33	Workers' Compensation		3,182	3,309	3,442	3,579	3,722	3,871	4,026	4,187	4,355	4,529	As Benefits - Other	
10-34	Unemployment Insurance		74	76	79	81	83	86	88	91	94	97	As Insurance	
10-45	Cell Phone Allowance		194	202	210	218	227	236	245	255	266	276	As Benefits - Other	
10-46	Retirement Pension Bond		17,419	17,942	18,480	19,773	20,564	21,181	22,664	23,571	24,278	25,006	As Labor	
	Total Employee Services		\$93,536	\$203,080	\$209,423	\$215,970	\$229,172	\$238,178	\$245,790	\$260,860	\$271,119	\$279,777	\$288,716	

Acct. #		Budgeted	Proposed	Projected								Notes		
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		FY 2030	
Other Services														
20-15	Telephone		210	218	227	236	246	255	266	276	287	299	As Utilities	
20-25	Maint. & Repair Services		900	927	955	983	1,013	1,043	1,075	1,107	1,140	1,174	As Materials & Supplies	
20-27	Uniform/Laundry Services		83	85	88	91	93	96	99	102	105	108	As Professional / Special Srvc	
20-34	Duplication/Copy Costs		300	309	318	328	338	348	358	369	380	391	As Materials & Supplies	
20-37	Insurance Premiums		8,260	8,508	8,763	9,026	9,297	9,576	9,863	10,159	10,464	10,777	As Insurance	
20-41	Automotive Equip Rental		430	447	465	484	503	523	544	566	588	612	As Equipment	
20-44	Radio Equipment Rental		286	429	444	460	476	492	510	527	546	565	As Radio Equipment	
20-47	Telephone Rental		1,159	1,205	1,254	1,304	1,356	1,410	1,467	1,525	1,586	1,650	As Equipment	
20-52	Publicity & Advertising		750	769	788	808	828	849	870	892	914	937	As Miscellaneous	
20-53	Printing & Mapping		75	77	80	82	84	87	90	92	95	98	As Materials & Supplies	
20-54	Postage/Mailing Services		75	77	80	82	84	87	90	92	95	98	As Professional / Special Srvc	
20-57	Processing Fees		138	142	146	151	155	160	165	170	175	180	As Professional / Special Srvc	
20-63	Testing & Analysis Servcs		75	77	79	81	83	85	87	89	91	94	As Miscellaneous	
20-65	Prof & Special Services		11,250	11,588	11,935	12,293	12,662	13,042	13,433	13,836	14,251	14,679	As Professional / Special Srvc	
20-66	Other Services		90	93	95	98	101	104	107	111	114	117	As Professional / Special Srvc	
	Total Other Services		\$28,826	\$24,081	\$24,952	\$25,717	\$26,506	\$27,319	\$28,157	\$29,022	\$29,913	\$30,832	\$31,779	
Materials and Supplies														
30-50	Materials And Supplies		\$23,750	\$24,463	\$25,196	\$25,952	\$26,731	\$27,533	\$28,359	\$29,210	\$30,086	\$30,988	As Materials & Supplies	
30-51	Computer Software		2,250	2,340	2,434	2,531	2,632	2,737	2,847	2,961	3,079	3,202	As Equipment	
30-52	Subscription-Periodical		8	8	8	9	9	9	10	10	10	10	As Materials & Supplies	
30-53	Fuels-Gas/Oil/Propane		140	144	149	153	158	162	167	172	177	183	As Materials & Supplies	
	Total Materials and Supplies		\$4,568	\$26,148	\$26,955	\$27,787	\$28,645	\$29,530	\$30,442	\$31,382	\$32,352	\$33,353	\$34,384	
Other Expenses														
40-10	Training		\$1,800	\$1,845	\$1,891	\$1,938	\$1,987	\$2,037	\$2,087	\$2,140	\$2,193	\$2,248	As Miscellaneous	
40-12	Meetings & Travel		75	77	79	81	83	85	87	89	91	94	As Miscellaneous	
40-14	Memberships		270	278	286	295	304	313	322	332	342	352	As Materials & Supplies	
40-15	Car Mileage Reimbursement		23	24	24	25	26	27	27	28	29	30	As Materials & Supplies	
	Total Other Expenses		\$1,515	\$2,168	\$2,224	\$2,281	\$2,339	\$2,399	\$2,461	\$2,524	\$2,589	\$2,656	\$2,724	
	Total Engineering Services		\$128,445	\$255,477	\$263,554	\$271,754	\$286,662	\$297,426	\$306,850	\$323,789	\$335,974	\$346,617	\$357,603	
Lab Services														
Employee Services														
10-10	Salaries - Regular		\$101,859	\$104,915	\$108,062	\$115,627	\$120,252	\$123,859	\$132,529	\$137,830	\$141,965	\$146,224	As Labor	
10-11	Salaries Part Time - Temp		8,000	8,240	8,487	9,081	9,445	9,728	10,409	10,825	11,150	11,484	As Labor	
10-13	Regular Overtime		860	886	912	976	1,015	1,046	1,119	1,164	1,199	1,235	As Labor	
10-18	Holiday Pay		560	577	594	636	661	681	729	758	780	804	As Labor	
10-21	Additional Pay		209	215	222	237	247	254	272	283	291	300	As Labor	
10-25	Retirement		30,030	31,231	32,480	33,780	35,131	36,536	37,998	39,517	41,098	42,742	As Benefits - Other	
10-26	Deferred Compensation		5,304	5,463	5,627	6,021	6,262	6,450	6,901	7,177	7,392	7,614	As Labor	
10-27	Medicare		1,582	1,629	1,678	1,796	1,868	1,924	2,058	2,141	2,205	2,271	As Labor	
10-29	Health/Dental/Vision		16,495	16,825	17,161	17,676	18,207	18,753	19,315	19,895	20,492	21,106	As Benefits - Medical	
10-31	L-T Disability Insurance		642	668	694	722	751	781	812	845	879	914	As Benefits - Other	
10-32	Life Insurance		144	148	153	157	162	167	172	177	182	188	As Insurance	
10-33	Workers' Compensation		2,823	2,936	3,053	3,175	3,303	3,435	3,572	3,715	3,863	4,018	As Benefits - Other	
10-34	Unemployment Insurance		87	90	92	95	98	101	104	107	110	114	As Insurance	
10-45	Cell Phone Allowance		210	218	227	236	246	255	266	276	287	299	As Benefits - Other	
10-46	Retirement Pension Bond		21	22	22	24	25	26	27	28	29	30	As Labor	
	Total Employee Services		\$162,660	\$168,826	\$174,063	\$179,467	\$190,240	\$197,670	\$203,995	\$216,283	\$224,739	\$231,924	\$239,343	

Acct. #		Budgeted	Proposed	Projected								Notes		
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		FY 2030	
Other Services														
20-15	Telephone		\$540	\$562	\$584	\$607	\$632	\$657	\$683	\$711	\$739	\$769	As Utilities	
20-25	Maint. & Repair Services		18,100	18,643	19,202	19,778	20,372	20,983	21,612	22,261	22,929	23,616	As Materials & Supplies	
20-27	Uniform/Laundry Services		480	494	509	525	540	556	573	590	608	626	As Professional / Special Srvc	
20-34	Duplication/Copy Costs		100	103	106	109	113	116	119	123	127	130	As Materials & Supplies	
20-37	Insurance Premiums		7,368	7,589	7,817	8,051	8,293	8,542	8,798	9,062	9,334	9,614	As Materials & Supplies	
20-41	Automotive Equip Rental		3,698	3,846	4,000	4,160	4,326	4,499	4,679	4,866	5,061	5,263	As Equipment	
20-44	Radio Equipment Rental		381	572	592	612	634	656	679	703	727	753	As Radio Equipment	
20-47	Telephone Rental		636	661	688	715	744	774	805	837	870	905	As Equipment	
20-52	Publicity & Advertising		200	205	210	215	221	226	232	238	244	250	As Miscellaneous	
20-54	Postage/Mailing Services		50	52	53	55	56	58	60	61	63	65	As Professional / Special Srvc	
20-57	Processing Fees		5,840	6,015	6,196	6,382	6,573	6,770	6,973	7,182	7,398	7,620	As Professional / Special Srvc	
20-63	Testing & Analysis Servcs		120	123	126	129	132	136	139	143	146	150	As Miscellaneous	
20-64	Training Service		150	155	159	164	169	174	179	184	190	196	As Professional / Special Srvc	
20-65	Prof & Special Services		12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657	As Professional / Special Srvc	
20-66	Other Services		30	31	32	33	34	35	36	37	38	39	As Professional / Special Srvc	
20-68	Laboratory Service		54,280	55,908	57,586	59,313	61,093	62,925	64,813	66,758	68,760	70,823	As Professional / Special Srvc	
	Total Other Services		\$104,766	\$103,973	\$107,318	\$110,590	\$113,962	\$117,437	\$121,018	\$124,709	\$128,514	\$132,435	\$136,476	
Materials and Supplies														
30-50	Materials And Supplies		\$31,750	\$32,703	\$33,684	\$34,694	\$35,735	\$36,807	\$37,911	\$39,048	\$40,220	\$41,427	As Materials & Supplies	
30-51	Computer Software		1,700	1,768	1,839	1,912	1,989	2,068	2,151	2,237	2,327	2,420	As Equipment	
30-53	Fuels-Gas/Oil/Propane		602	620	639	658	678	698	719	740	763	785	As Materials & Supplies	
30-54	Chemicals		12,200	12,566	12,943	13,331	13,731	14,143	14,567	15,004	15,455	15,918	As Materials & Supplies	
30-55	Library Materials		120	124	127	131	135	139	143	148	152	157	As Materials & Supplies	
	Total Materials and Supplies		\$30,170	\$46,372	\$47,780	\$49,231	\$50,727	\$53,855	\$55,492	\$57,178	\$58,916	\$60,706		
Other Expenses														
40-10	Training		\$2,400	\$2,460	\$2,522	\$2,585	\$2,649	\$2,715	\$2,783	\$2,853	\$2,924	\$2,997	As Miscellaneous	
40-12	Meetings & Travel		416	426	437	448	459	471	482	494	507	520	As Miscellaneous	
40-14	Memberships		376	387	399	411	423	436	449	462	476	491	As Materials & Supplies	
	Total Other Expenses		\$2,816	\$3,192	\$3,274	\$3,357	\$3,443	\$3,532	\$3,622	\$3,715	\$3,810	\$3,907	\$4,007	
	Total Lab Services		\$300,412	\$322,363	\$332,435	\$342,646	\$358,371	\$370,906	\$382,490	\$400,199	\$414,240	\$427,182	\$440,534	
Safety														
Employee Services														
10-10	Salaries - Regular		\$73,191	\$75,387	\$77,648	\$83,084	\$86,407	\$88,999	\$95,229	\$99,038	\$102,010	\$105,070	As Labor	
10-13	Regular Overtime		750	773	796	851	885	912	976	1,015	1,045	1,077	As Labor	
10-25	Retirement		21,414	22,271	23,161	24,088	25,051	26,053	27,096	28,179	29,307	30,479	As Benefits - Other	
10-26	Deferred Compensation		1,404	1,446	1,490	1,594	1,658	1,707	1,827	1,900	1,957	2,016	As Labor	
10-27	Medicare		1,009	1,039	1,070	1,145	1,191	1,227	1,313	1,365	1,406	1,448	As Labor	
10-29	Health/Dental/Vision		10,921	11,139	11,362	11,703	12,054	12,416	12,788	13,172	13,567	13,974	As Benefits - Medical	
10-31	L-T Disability Insurance		461	479	499	519	539	561	583	607	631	656	As Benefits - Other	
10-32	Life Insurance		91	94	97	99	102	105	109	112	115	119	As Insurance	
10-33	Workers' Compensation		1,486	1,545	1,607	1,672	1,738	1,808	1,880	1,955	2,034	2,115	As Benefits - Other	
10-34	Unemployment Insurance		58	60	62	63	65	67	69	71	73	76	As Insurance	
10-45	Cell Phone Allowance		384	399	415	432	449	467	486	505	526	547	As Benefits - Other	
	Total Employee Services		\$79,742	\$111,169	\$114,632	\$118,207	\$125,250	\$130,141	\$134,323	\$142,356	\$147,920	\$152,670	\$157,576	

City of Stockton MUD
Water Cost of Service Study
Exhibit 3
Revenue Requirement

Acct. #		Budgeted	Proposed	Projected								Notes		
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		FY 2030	
Other Services														
20-25	Maint. & Repair Services		\$600	\$618	\$637	\$656	\$675	\$696	\$716	\$738	\$760	\$783	As Materials & Supplies	
20-27	Uniform/Laundry Services		250	258	265	273	281	290	299	307	317	326	As Professional / Special Srvc	
20-34	Duplication/Copy Costs		1,250	1,288	1,326	1,366	1,407	1,449	1,493	1,537	1,583	1,631	As Materials & Supplies	
20-37	Insurance Premiums		4,881	5,027	5,178	5,334	5,494	5,658	5,828	6,003	6,183	6,369	As Insurance	
20-44	Radio Equipment Rental		603	905	936	969	1,003	1,038	1,074	1,112	1,151	1,191	As Radio Equipment	
20-47	Telephone Rental		227	236	246	255	266	276	287	299	311	323	As Equipment	
20-54	Postage/Mailing Services		63	65	67	69	71	73	75	77	80	82	As Professional / Special Srvc	
20-64	Training Service		50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339	65,239	As Professional / Special Srvc	
20-65	Prof & Special Services		25,000	25,750	26,523	27,318	28,138	28,982	29,851	30,747	31,669	32,619	As Professional / Special Srvc	
20-66	Other Services		87,652	90,282	92,990	95,780	98,653	101,613	104,661	107,801	111,035	114,366	As Professional / Special Srvc	
	Total Other Services		\$138,860	\$170,526	\$175,927	\$181,212	\$186,656	\$192,263	\$198,038	\$203,987	\$210,115	\$216,427	\$222,929	
Materials and Supplies														
30-50	Materials And Supplies		\$24,788	\$25,532	\$26,298	\$27,087	\$27,899	\$28,736	\$29,598	\$30,486	\$31,401	\$32,343	As Materials & Supplies	
30-51	Computer Software		1,875	1,950	2,028	2,109	2,193	2,281	2,372	2,467	2,566	2,669	As Equipment	
30-52	Subscription-Periodicals		750	773	796	820	844	869	896	922	950	979	As Materials & Supplies	
30-55	Library Materials		625	644	663	683	703	725	746	769	792	815	As Materials & Supplies	
	Total Materials and Supplies		\$24,144	\$28,038	\$28,898	\$29,784	\$30,698	\$31,640	\$32,611	\$33,612	\$34,645	\$35,709	\$36,805	
Other Expenses														
40-10	Training		\$5,250	\$5,381	\$5,516	\$5,654	\$5,795	\$5,940	\$6,088	\$6,241	\$6,397	\$6,557	As Miscellaneous	
40-14	Memberships		318	328	337	347	358	369	380	391	403	415	As Materials & Supplies	
	Total Other Expenses		\$1,505	\$5,568	\$5,709	\$5,853	\$6,001	\$6,153	\$6,309	\$6,468	\$6,632	\$6,799	\$6,971	
	Total Safety		\$244,251	\$315,301	\$325,166	\$335,056	\$348,605	\$360,197	\$371,282	\$386,424	\$399,312	\$411,606	\$424,281	
SCADA														
Employee Services														
10-10	Salaries - Regular		\$89,616	\$92,304	\$95,074	\$101,729	\$105,798	\$108,972	\$116,600	\$121,264	\$124,902	\$128,649	As Labor	
10-13	Regular Overtime		640	659	679	727	756	778	833	866	892	919	As Labor	
10-25	Retirement		26,195	27,243	28,333	29,466	30,644	31,870	33,145	34,471	35,850	37,284	As Benefits - Other	
10-27	Medicare		1,287	1,326	1,365	1,461	1,519	1,565	1,675	1,742	1,794	1,848	As Labor	
10-29	Health/Dental/Vision		10,921	11,139	11,362	11,703	12,054	12,416	12,788	13,172	13,567	13,974	As Benefits - Medical	
10-31	L-T Disability Insurance		565	582	599	617	636	655	675	695	716	737	As Insurance	
10-32	Life Insurance		86	89	91	94	97	100	103	106	109	112	As Insurance	
10-33	Workers' Compensation		1,813	1,886	1,961	2,039	2,121	2,206	2,294	2,386	2,481	2,580	As Benefits - Other	
10-34	Unemployment Insurance		58	60	62	63	65	67	69	71	73	76	As Insurance	
10-45	Cell Phone Allowance		384	399	415	432	449	467	486	505	526	547	As Benefits - Other	
	Total Employee Services		\$126,355	\$131,565	\$135,687	\$139,941	\$148,331	\$154,140	\$159,096	\$168,667	\$175,277	\$180,909	\$186,725	

Acct. #		Budgeted	Proposed	Projected									Notes
		FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	
Other Services													
20-15	Telephone		\$11,200	\$11,648	\$12,114	\$12,598	\$13,102	\$13,627	\$14,172	\$14,738	\$15,328	\$15,941	As Utilities
20-37	Insurance Premiums		5,957	6,136	6,320	6,509	6,705	6,906	7,113	7,326	7,546	7,773	As Materials & Supplies
20-47	Telephone Rental		582	605	629	655	681	708	736	766	797	828	As Equipment
20-65	Prof & Special Services		27,200	28,016	28,856	29,722	30,614	31,532	32,478	33,453	34,456	35,490	As Professional / Special Srvc
	Total Other Services	\$58,869	\$44,939	\$46,405	\$47,920	\$49,485	\$51,102	\$52,773	\$54,499	\$56,283	\$58,127	\$60,032	
Materials and Supplies													
30-50	Materials And Supplies		\$17,000	\$17,510	\$18,035	\$18,576	\$19,134	\$19,708	\$20,299	\$20,908	\$21,535	\$22,181	As Materials & Supplies
30-51	Computer Software		56,128	58,373	60,708	63,136	65,662	68,288	71,020	73,861	76,815	79,888	As Equipment
	Total Materials and Supplies	\$62,752	\$73,128	\$75,883	\$78,743	\$81,713	\$84,795	\$87,996	\$91,319	\$94,768	\$98,350	\$102,069	
Other Expenses													
40-10	Training		\$480	\$492	\$504	\$517	\$530	\$543	\$557	\$571	\$585	\$599	As Miscellaneous
40-12	Meeting & Travel		1,280	1,312	1,345	1,378	1,413	1,448	1,484	1,522	1,560	1,599	As Miscellaneous
40-15	Car Mileage Reimbursement		320	330	339	350	360	371	382	394	405	418	As Materials & Supplies
	Total Other Expenses	\$2,080	\$2,080	\$2,134	\$2,189	\$2,245	\$2,303	\$2,362	\$2,423	\$2,486	\$2,550	\$2,616	
	Total SCADA	\$250,056	\$251,712	\$260,108	\$268,793	\$281,774	\$292,340	\$302,227	\$316,908	\$328,815	\$339,936	\$351,441	
Outreach & Training													
Employee Services													
10-13	Regular Overtime	\$0	\$750	\$773	\$796	\$851	\$885	\$912	\$976	\$1,015	\$1,045	\$1,077	As Labor
10-27	Medicare	0	11	11	12	12	13	13	14	15	15	16	As Labor
10-33	Workers Compensation	0	15	15	16	17	18	18	20	20	21	22	As Labor
10-97	Summary Account	19,251	0	0	0	0	0	0	0	0	0	0	As Labor
	Total Employee Services	\$19,251	\$776	\$799	\$823	\$881	\$916	\$944	\$1,010	\$1,050	\$1,082	\$1,114	
Other Services													
20-34	Duplication/Copy Costs	\$15,000	\$5,000	\$5,200	\$5,408	\$5,624	\$5,849	\$6,083	\$6,327	\$6,580	\$6,843	\$7,117	As Utilities
20-37	Insurance Premiums	0	50	52	53	55	56	58	60	61	63	65	As Insurance
20-52	Publicity & Advertising	55,000	55,000	56,375	57,784	59,229	60,710	62,227	63,783	65,378	67,012	68,687	As Miscellaneous
20-53	Printing & Mapping	0	250	260	270	281	292	304	316	329	342	356	As Equipment
20-54	Postage/Mailing Services	1,500	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,335	26,095	As Professional / Special Srvc
20-64	Training Services	1,500	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900	1,957	As Professional / Special Srvc
20-65	Prof & Special Services	19,295	18,000	18,540	19,096	19,669	20,259	20,867	21,493	22,138	22,802	23,486	As Professional / Special Srvc
20-97	Summary Account	2,032	0	0	0	0	0	0	0	0	0	0	
	Total Other Services	\$95,827	\$99,800	\$102,572	\$105,421	\$108,352	\$111,365	\$114,464	\$117,651	\$120,928	\$124,298	\$127,764	
Materials and Supplies													
30-50	Materials & Supplies	\$16,500	\$15,500	\$15,965	\$16,444	\$16,937	\$17,445	\$17,969	\$18,508	\$19,063	\$19,635	\$20,224	As Materials & Supplies
30-51	Computer Software	0	500	520	541	562	585	608	633	658	684	712	As Equipment
30-52	Subscription-Periodical	0	250	258	265	273	281	290	299	307	317	326	As Materials & Supplies
30-97	Summary Account (2)	1,800	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
	Total Materials and Supplies	\$18,300	\$16,250	\$16,743	\$17,250	\$17,773	\$18,312	\$18,867	\$19,439	\$20,028	\$20,636	\$21,262	

Acct. #	Budgeted	Proposed	Projected									Notes	
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030		
Other Expenses													
40-10	Training	\$0	\$500	\$513	\$525	\$538	\$552	\$566	\$580	\$594	\$609	\$624	As Miscellaneous
40-12	Meetings & Travel	0	250	256	263	269	276	283	290	297	305	312	As Miscellaneous
40-14	Memberships	0	250	258	265	273	281	290	299	307	317	326	As Materials & Supplies
40-97	Summary Account (3)	480	0	0	0	0	0	0	0	0	0	0	As Materials & Supplies
	Total Other Expenses	\$480	\$1,000	\$1,026	\$1,053	\$1,081	\$1,109	\$1,138	\$1,168	\$1,199	\$1,230	\$1,263	
	Total Outreach & Training	\$133,858	\$117,826	\$121,140	\$124,548	\$128,086	\$131,702	\$135,413	\$139,268	\$143,205	\$147,246	\$151,402	
	Total Operations & Maintenance	\$29,049,688	\$35,022,842	\$36,641,066	\$38,384,019	\$40,564,443	\$42,607,554	\$44,668,391	\$47,225,873	\$49,630,222	\$52,059,434	\$54,620,932	
Debt Service													
	2002 A Revenue Bond	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Ref - 2018 A
	2005 A Revenue Bond	0	0	0	0	0	0	0	0	0	0	0	Ref - 2018 A
	2009 A Revenue Bond	0	0	0	0	0	0	0	0	0	0	0	Ref - 2018 A
	2009 B Revenue Bond	0	0	0	0	0	0	0	0	0	0	0	Ref - 2018 A
	Less BAB Interest Rebate	0	0	0	0	0	0	0	0	0	0	0	
	2010 A Revenue Bond	0	0	0	0	0	0	0	0	0	0	0	Ref - 2019 A
	2017 A Revenue Bond	0	0	0	0	0	0	0	0	0	0	0	Ref - 2018 A
	Drought Relief Loan	0	0	0	0	0	0	0	0	0	0	0	Exhibit 5
	2018 A Revenue Bond	11,853,175	11,860,050	11,873,675	11,878,425	11,601,050	11,611,050	11,620,675	11,634,050	11,650,175	11,663,175	11,662,550	Exhibit 5
	2019 A Revenue Bond	609,219	2,425,436	2,419,612	2,423,025	2,420,538	2,417,173	2,417,958	2,422,743	2,421,549	2,419,409	2,421,143	Exhibit 6
	New SRF Loans	0	0	0	0	0	0	0	0	0	0	0	Calc @ 2.4% for 20 Yrs
	New Revenue Bonds	0	0	0	0	0	0	0	0	0	0	0	Calc @ 4.6% for 20 Yrs
	Balance to Debt Paid		0	0	0	0	0	0	0	0	0	0	
	Total Debt Service	\$12,462,394	\$14,285,486	\$14,293,287	\$14,301,450	\$14,021,588	\$14,028,223	\$14,038,633	\$14,056,793	\$14,071,724	\$14,082,584	\$14,083,693	
	Less Connection Fees Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$350,000	\$350,000	\$350,000	\$350,000	\$350,000	
	Less DWSP Fee Fund	500,000											
	Net Debt Service	\$11,962,394	\$13,785,486	\$13,793,287	\$13,801,450	\$13,521,588	\$13,528,223	\$13,188,633	\$13,206,793	\$13,221,724	\$13,232,584	\$13,233,693	
	Rate Funded Capital	\$9,000,000	\$9,000,000	\$8,675,000	\$8,950,000	\$9,250,000	\$9,250,000	\$9,500,000	\$10,000,000	\$10,400,000	\$10,700,000	\$11,000,000	\$8,071,035 FY 2019 Dep. Exp.
Reserve Funding													
	To/(From) Operating Cash	\$0	\$310,300	\$45,651	(\$4,705)	(\$175,210)	\$249,381	\$858,402	\$535,600	\$606,486	\$552,718	\$482,677	
	Total Reserve Funding	\$0	\$310,300	\$45,651	(\$4,705)	(\$175,210)	\$249,381	\$858,402	\$535,600	\$606,486	\$552,718	\$482,677	
	Total Revenue Requirement	\$50,012,082	\$58,118,628	\$59,155,004	\$61,130,764	\$63,160,822	\$65,635,157	\$68,215,425	\$70,968,266	\$73,858,432	\$76,544,737	\$79,337,302	
	Bal/(Def.) of Funds	\$2,916,724	\$0	\$0	(\$1,808,060)	(\$3,697,799)	(\$5,952,010)	(\$8,318,546)	(\$10,802,536)	(\$13,409,343)	(\$15,811,048)	(\$18,318,557)	
	Rate Adj. as a % of Rate Rev.	-5.7%	0.0%	0.0%	3.5%	7.1%	11.4%	15.9%	20.5%	25.3%	29.7%	34.2%	
	Proposed Rate Adjustment	0.0%	0.0%	0.0%	3.5%	3.5%	4.0%	4.0%	4.0%	4.0%	3.5%	3.5%	
	<i>Effective Months</i>	<i>12</i>											
	Add'l Revenue from Adj.	\$0	\$0	\$0	\$1,808,060	\$3,697,799	\$5,952,010	\$8,318,546	\$10,802,536	\$13,409,343	\$15,811,048	\$18,318,557	
	Total Bal/(Def.) of Funds	\$2,916,724	\$0	\$0	\$0	(\$0)	\$0	(\$0)	\$0	\$0	\$0	(\$0)	
	Additional Rate Increase Needed	-5.7%	0.0%										

Acct. #	Budgeted	Proposed	Projected									Notes
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	
Avg Res Mo Bill (1" or Less Meter + 15 CCF)	\$70.95											
After Proposed Rate Adjustment	\$70.95	\$70.95	\$70.95	\$73.43	\$76.00	\$79.04	\$82.21	\$85.49	\$88.91	\$92.03	\$95.25	
Annual \$ Change		0.00	0.00	2.48	2.57	3.04	3.16	3.29	3.42	3.11	3.22	
Cumulative Change		0.00	0.00	2.48	5.05	8.09	11.26	14.54	17.96	21.08	24.30	
Reserve Funds												
Beginning Balance (not including 421 or 425)	\$69,853,333	\$70,368,596	\$68,307,112	\$65,234,166	\$46,679,585	\$44,389,884	\$39,225,611	\$37,284,789	\$37,820,390	\$38,426,876	\$38,979,594	
421 Operating Cash												
Beginning Balance	\$69,853,333	\$70,368,596	\$68,307,112	\$65,234,166	\$46,679,585	\$44,389,884	\$39,225,611	\$37,284,789	\$37,820,390	\$38,426,876	\$38,979,594	
Plus: To Operating Reserves	4,210,000	310,300	45,651	0	0	249,381	858,402	535,600	606,486	552,718	482,677	
Less: Transfer to 424	(3,694,737)	(2,371,784)	(2,530,939)	(2,600,529)	0	(2,565,202)	0	0	0	0	0	
Less: Defeasance	0	0	0	0	0	0	0	0	0	0	0	
Less: Uses of Funds	0	0	(587,658)	(15,954,051)	(2,289,702)	(2,848,452)	(2,799,223)	0	0	0	0	
Ending Balance	\$70,368,596	\$68,307,112	\$65,234,166	\$46,679,585	\$44,389,884	\$39,225,611	\$37,284,789	\$37,820,390	\$38,426,876	\$38,979,594	\$39,462,270	
Target: 180 days of O&M	\$14,325,874	\$17,271,539	\$18,069,567	\$18,929,105	\$20,004,383	\$21,011,944	\$22,028,247	\$23,289,472	\$24,475,178	\$25,673,146	\$26,936,350	
days of O&M	884	712	650	444	399	336	305	292	283	273	264	
424 Connection Fee Reserve												
Beginning Balance	(\$4,104,595)	(\$0)	\$0	\$0	\$0	\$327,305	\$0	\$115,625	\$241,684	\$378,466	\$526,268	
Plus: Connection Fees	409,858	418,055	426,416	434,945	443,644	452,517	461,567	470,798	480,214	489,819	499,615	
Plus: Transfer from 421	3,694,737	2,371,784	2,530,939	2,600,529	0	2,565,202	0	0	0	0	0	
Plus: Interest	0	12,883	15,296	17,439	2,814	22,373	4,058	5,260	6,568	7,984	9,511	
Less: Uses of Funds	0	(2,802,722)	(2,972,652)	(3,052,913)	(119,153)	(3,367,396)	(350,000)	(350,000)	(350,000)	(350,000)	(350,000)	
Ending Balance	(\$0)	\$0	\$0	\$0	\$327,305	\$0	\$115,625	\$241,684	\$378,466	\$526,268	\$685,394	
425 DWSP SWSF Fund												
Beginning Balance	\$3,064,194	\$3,295,762	\$3,546,595	\$3,817,630	\$4,109,875	\$4,420,175	\$4,749,011	\$5,096,879	\$5,464,282	\$5,851,739	\$6,259,776	
Plus: Connection Fees	709,385	723,573	738,044	752,805	767,861	783,219	798,883	814,861	831,158	847,781	864,737	
Plus: Interest	22,182	27,260	32,991	39,440	42,438	45,618	48,985	52,543	56,299	60,256	64,421	
Less: Uses of Funds	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	(500,000)	
Ending Balance	\$3,295,762	\$3,546,595	\$3,817,630	\$4,109,875	\$4,420,175	\$4,749,011	\$5,096,879	\$5,464,282	\$5,851,739	\$6,259,776	\$6,688,934	
Ending Balance (not including 421 or 425)	\$70,368,596	\$68,307,112	\$65,234,166	\$46,679,585	\$44,389,884	\$39,225,611	\$37,284,789	\$37,820,390	\$38,426,876	\$38,979,594	\$39,462,270	
Total Target (180 days of O&M)	\$14,325,874	\$17,271,539	\$18,069,567	\$18,929,105	\$20,004,383	\$21,011,944	\$22,028,247	\$23,289,472	\$24,475,178	\$25,673,146	\$26,936,350	

Fund	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total	
Water Connection Fee													
424	Henry Long Loop Reimbursement	\$0	\$0	\$0	\$0	\$0	\$149,069	\$0	\$0	\$0	\$0	\$0	\$149,069
424	Holman Rd / Hendrix Dr to Eight Mile Oversizing	0	0	0	0	0	240,290	0	0	0	0	0	240,290
424	Lower Sac Rd Water Main (Marlette and 8 Mile Rd)	0	0	0	0	0	229,165	0	0	0	0	0	229,165
424	Northest Reservoir No. 1 and Pump Station	0	0	0	0	0	0	0	0	0	0	0	0
424	Origone Ranch Oversizing Reimbursment	0	0	0	0	0	291,463	0	0	0	0	0	291,463
424	Preserve / Atlas Tract Oversizing	0	0	0	0	0	537,315	0	0	0	0	0	537,315
424	Sactury / Shima Tract Oversizing Reimbursement	0	0	0	0	0	1,920,094	0	0	0	0	0	1,920,094
424	Tam O'Shanter Dr and Knickerbocker Dr Roundabout	0	0	0	0	0	0	0	0	0	0	0	0
424	Veteran Affairs Medical Center Off-Site Improv.	0	0	0	0	0	0	0	0	0	0	0	0
424	Waterline Extension for VA Medical Facility	0	0	0	0	0	0	0	0	0	0	0	0
424	West, East, and South Bear Creek Oversizing Reimb.	0	1,045,000	2,972,652	3,052,913	0	0	0	0	0	0	0	7,070,565
424	Westlake Village Oversizing Reimb.	0	0	0	0	119,153	0	0	0	0	0	0	119,153
424	Waterline Extension for VA Medical Facility	0	1,757,722	0	0	0	0	0	0	0	0	0	1,757,722
	Total	\$0	\$2,802,722	\$2,972,652	\$3,052,913	\$119,153	\$3,367,396	\$0	\$0	\$0	\$0	\$0	\$12,314,835
Water													
423/427	16" Water Line Along I-5 North of East Roth Rd	\$0	\$0	\$0	\$0	\$94,759	\$708,099	\$0	\$0	\$0	\$0	\$0	\$802,858
423/427	Cathodic Protection (Bear Creek & Trinity Pkwy)	0	121,000	0	0	0	0	0	0	0	0	0	121,000
423/427	Left Turn Lane Additions at Various Locations	0	0	0	0	0	0	0	0	0	0	0	0
423/427	Lincoln St and 8th St Roundabout	0	0	0	0	0	0	0	0	0	0	0	0
423/427	Groundwater Recharge Basin	0	329,000	0	0	0	0	0	0	0	0	0	329,000
423/427	Water Main Relocation - Bonniebrook Dr	0	281,000	0	0	0	0	0	0	0	0	0	281,000
423/427	Water Service Line Replacement	0	195,400	513,500	527,365	541,603	556,227	571,245	586,668	0	0	0	3,492,008
423/427	Water Service Lateral Replacement	0	0	0	0	0	0	0	0	0	0	0	0
423/427	Water System Street Improvements	0	77,000	77,025	79,105	81,241	83,434	85,687	88,000	0	0	0	571,491
423/427	Water System Street Improvements (PW)	0	140,000	154,050	158,209	162,481	166,868	171,373	176,001	0	0	0	1,128,982
423/427	Water Well South Stockton System #10	0	1,750,000	0	0	0	0	0	0	0	0	0	1,750,000
423/427	Abandonment of Wells 1, 9, 11, & 16	0	0	0	0	0	0	0	0	0	0	0	0
423/427	Master Plan Update	0	0	0	0	0	0	0	0	0	0	0	0
423/427	West Lane Pedestrian Access, Improv	0	0	0	0	0	0	0	0	0	0	0	0
423/427	Well/Reservoir Site Improv Ph 2	0	0	77,025	79,105	81,241	83,434	0	0	0	0	0	320,804
423/427	Zephyr Rd Water Main Connection	0	548,000	0	0	0	0	0	0	0	0	0	548,000
423/427	Condition Assessment (Pipelines)	0	0	256,750	263,682	0	0	0	0	0	0	0	520,432
423/427	North & South Well Capacity Study	0	0	256,750	0	0	0	0	0	0	0	0	256,750
423/427	Water Supply - Well #33	0	0	459,069	0	0	0	0	0	0	0	0	459,069
	Total	\$0	\$3,441,400	\$1,794,169	\$1,107,465	\$961,324	\$1,598,061	\$828,305	\$850,669	\$0	\$0	\$0	\$10,581,394

Fund	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Total
Water Master Plan												
423/427 Pipeline Improvements Priority 1	\$0	\$0	\$934,022	\$959,241	\$985,140	\$688,386	\$706,973	\$0	\$0	\$0	\$0	\$4,273,762
423/427 Pipeline Improvements Priority 2	0	0	156,104	160,319	0	0	687,017	1,445,238	0	0	0	2,448,678
423/427 Replace Undersized and/or Old Mains	0	0	0	2,114,521	2,404,881	2,469,813	2,536,498	0	0	0	0	9,525,713
423/427 South Wells - SEWD Reliability (0 Wells)	0	0	0	0	0	0	0	0	0	0	0	0
423/427 North Well - Aging Infrs. Replac. (2 Well)	0	0	0	0	0	0	0	6,758,419	6,940,897	0	0	13,699,316
424 South Wells - SEWD Reliability (1 Well)	0	0	0	0	0	0	0	0	2,819,739	0	0	2,819,739
423/427 DWTP - Raw Water Pipeline Improvements	0	150,000	2,567,500	2,636,823	0	0	0	0	0	0	0	5,354,323
423/427 DWTP - Campus Improvements	0	0	924,300	12,014,495	5,280,015	0	0	0	0	0	0	18,218,810
423/427 Groundwater Supply Management	0	0	1,643,200	1,687,566	1,733,131	1,779,925	1,827,983	0	0	0	0	8,671,806
423/427 Advanced Metering Infrastructure (Pilot)	0	0	503,923	4,218,916	0	5,562,266	5,712,448	0	0	0	0	15,997,553
423/427 Backup Power Improvements	0	0	739,440	0	0	0	0	0	0	0	0	739,440
Total	\$0	\$150,000	\$7,468,489	\$23,791,880	\$10,403,168	\$10,500,391	\$11,470,918	\$8,203,657	\$9,760,636	\$0	\$0	\$81,749,140
Summary by Fund												
423/427 Total Capital Projects	\$4,790,000	\$3,591,400	\$9,262,658	\$24,899,346	\$11,364,492	\$12,098,452	\$12,299,223	\$9,054,327	\$6,940,897	\$0	\$0	\$94,300,795
424 Total Capital Projects	0	2,802,722	2,972,652	3,052,913	119,153	3,367,396	0	0	2,819,739	0	0	15,134,575
Total	\$4,790,000	\$6,394,122	\$12,235,310	\$27,952,259	\$11,483,645	\$15,465,848	\$12,299,223	\$9,054,327	\$9,760,636	\$0	\$0	\$109,435,369
Future Unidentified Projects	\$0	\$5,408,600	\$0	\$0	\$0	\$0	\$0	\$945,673	\$639,364	\$10,700,000	\$11,000,000	\$37,693,637
To Capital Reserves	\$4,210,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,210,000
Total Capital Improvement Projects	\$9,000,000	\$11,802,722	\$12,235,310	\$27,952,259	\$11,483,645	\$15,465,848	\$12,299,223	\$10,000,000	\$10,400,000	\$10,700,000	\$11,000,000	\$151,339,006
Less: Outside Funding Sources												
Operating Cash	\$0	\$0	\$587,658	\$15,949,346	\$2,114,492	\$2,848,452	\$2,799,223	\$0	\$0	\$0	\$0	\$24,299,171
DWSP SWSF Fund	0	0	0	0	0	0	0	0	0	0	0	0
Connection Fee Reserve	0	2,802,722	2,972,652	3,052,913	119,153	3,367,396	0	0	0	0	0	12,314,835
Developer Funded	0	0	0	0	0	0	0	0	0	0	0	0
New SRF Loans	0	0	0	0	0	0	0	0	0	0	0	0
New Revenue Bonds	0	0	0	0	0	0	0	0	0	0	0	0
Total Outside Funding Sources	\$0	\$2,802,722	\$3,560,310	\$19,002,259	\$2,233,645	\$6,215,848	\$2,799,223	\$0	\$0	\$0	\$0	\$36,614,006
Rate Funded Capital	\$9,000,000	\$9,000,000	\$8,675,000	\$8,950,000	\$9,250,000	\$9,250,000	\$9,500,000	\$10,000,000	\$10,400,000	\$10,700,000	\$11,000,000	\$114,725,000

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 5
 Connection Fee Revenue Calculation

Inflation = 2.0%

	Budgeted	Proposed	Projected								
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Connection Fee											
Add'l DUEs - Equiv. 3/4"	181	181	181	181	181	181	181	181	181	181	181
3/4" Meter	\$2,264	\$2,310	\$2,356	\$2,403	\$2,451	\$2,500	\$2,550	\$2,601	\$2,653	\$2,706	\$2,760
Total CF Revenue	\$409,858	\$418,055	\$426,416	\$434,945	\$443,644	\$452,517	\$461,567	\$470,798	\$480,214	\$489,819	\$499,615
Surface Water Supply Fee											
Add'l DUEs - Equiv. 3/4"	132	132	132	132	132	132	132	132	132	132	132
3/4" Meter	\$5,374	\$5,482	\$5,591	\$5,703	\$5,817	\$5,933	\$6,052	\$6,173	\$6,297	\$6,423	\$6,551
Total SWS Fee Revenue	\$709,385	\$723,573	\$738,044	\$752,805	\$767,861	\$783,219	\$798,883	\$814,861	\$831,158	\$847,781	\$864,737
Total Revenues	\$1,119,243	\$1,141,628	\$1,164,461	\$1,187,750	\$1,211,505	\$1,235,735	\$1,260,450	\$1,285,659	\$1,311,372	\$1,337,599	\$1,364,351

City of Stockton MUD
Water Cost of Service Study
Exhibit 6
Existing Debt Service

Year	2002 A Revenue Bond	2005 A Revenue Bond	2009 A Revenue Bond	2009 B Revenue Bond	Less BAB Interest Rebate	2010 A Revenue Bond	2017 A Revenue Bond	Drought Relief Loan	2018 A Revenue Bond	2019 A Revenue Bond	Total
FY 2014	\$1,112,038	\$1,150,313	\$3,809,350	\$11,928,589	(\$3,864,991)	\$0	\$0	\$95,342	\$0	\$0	\$14,230,639
FY 2015	1,115,188	1,150,313	3,805,450	11,928,589	(3,924,373)	3,489,638	0	95,342	0	0	17,660,146
FY 2016	328,460	1,150,313	282,750	11,928,589	(3,776,328)	3,319,838	0	95,342	0	0	13,328,963
FY 2017	154,671	575,156	0	11,928,589	(3,889,251)	3,317,138	0	82,679	0	0	12,168,981
FY 2018	0	0	0	15,646,813	(3,855,019)	3,441,838	2,202,906	0	0	0	17,436,537
FY 2019	0	0	0	15,557,557	(2,456,546)	3,441,538	2,197,500	0	0	0	18,740,049
FY 2020	0	0	0	0	0	0	0	0	11,853,175	609,219	12,462,394
FY 2021	0	0	0	0	0	0	0	0	11,860,050	2,425,436	14,285,486
FY 2022	0	0	0	0	0	0	0	0	11,873,675	2,419,612	14,293,287
FY 2023	0	0	0	0	0	0	0	0	11,878,425	2,423,025	14,301,450
FY 2024	0	0	0	0	0	0	0	0	11,601,050	2,420,538	14,021,588
FY 2025	0	0	0	0	0	0	0	0	11,611,050	2,417,173	14,028,223
FY 2026	0	0	0	0	0	0	0	0	11,620,675	2,417,958	14,038,633
FY 2027	0	0	0	0	0	0	0	0	11,634,050	2,422,743	14,056,793
FY 2028	0	0	0	0	0	0	0	0	11,650,175	2,421,549	14,071,724
FY 2029	0	0	0	0	0	0	0	0	11,663,175	2,419,409	14,082,584
FY 2030	0	0	0	0	0	0	0	0	11,662,550	2,421,143	14,083,693
FY 2031	0	0	0	0	0	0	0	0	11,682,175	2,426,398	14,108,573
FY 2032	0	0	0	0	0	0	0	0	11,695,675	2,425,127	14,120,802
FY 2033	0	0	0	0	0	0	0	0	11,716,925	2,422,528	14,139,453
FY 2034	0	0	0	0	0	0	0	0	11,734,675	2,428,588	14,163,263
FY 2035	0	0	0	0	0	0	0	0	11,747,925	2,423,460	14,171,385
FY 2036	0	0	0	0	0	0	0	0	10,166,425	4,605,946	14,772,371
FY 2037	0	0	0	0	0	0	0	0	12,413,675	2,424,648	14,838,323
FY 2038	0	0	0	0	0	0	0	0	12,438,900	2,420,895	14,859,795
FY 2039	0	0	0	0	0	0	0	0	0	15,976,788	15,976,788
FY 2040	0	0	0	0	0	0	0	0	0	16,007,490	16,007,490
	\$2,710,356	\$4,026,094	\$7,897,550	\$78,918,724	(\$21,766,508)	\$17,009,988	\$4,400,406	\$368,705	\$222,504,425	\$78,379,672	\$394,449,412

	January	February	March	April	May	June	July	August	September	October	November	December	Total	
Single Family														
Service Charge	\$ / Acct.													
1" or less	\$33.90	42,037	42,037	42,037	42,037	42,037	42,037	42,037	42,037	42,037	42,037	42,037	42,037	42,037
1 1/2"	67.80	66	66	66	66	66	66	66	66	66	66	66	66	66
2"	108.48	27	27	27	27	27	27	27	27	27	27	27	27	27
3"	203.40	0	0	0	0	0	0	0	0	0	0	0	0	0
4"	339.00	1	1	1	1	1	1	1	1	1	1	1	1	1
6"	678.00	0	0	0	0	0	0	0	0	0	0	0	0	0
8"	1,084.80	0	0	0	0	0	0	0	0	0	0	0	0	0
10"	1,559.40	0	0	0	0	0	0	0	0	0	0	0	0	0
12"	2,288.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		<u>42,131</u>	<u>42,131</u>											
Total Service Charge Revenue	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$1,432,797	\$17,193,565
Water Use	\$ / CCF													
0 - 15 Units	\$2.47	321,469	284,303	314,310	330,304	418,788	449,786	524,152	518,478	468,206	501,075	382,808	365,695	4,879,372
15 + Units	2.95	41,057	28,759	43,101	56,594	137,611	237,531	246,230	270,557	235,775	175,364	102,666	72,043	1,647,288
		<u>362,526</u>	<u>313,062</u>	<u>357,411</u>	<u>386,898</u>	<u>556,399</u>	<u>687,317</u>	<u>770,382</u>	<u>789,035</u>	<u>703,981</u>	<u>676,439</u>	<u>485,474</u>	<u>437,738</u>	<u>6,526,661</u>
Total Water Use Revenue	\$915,146	\$787,068	\$903,493	\$982,802	\$1,440,358	\$1,811,689	\$2,021,034	\$2,078,783	\$1,852,005	\$1,754,980	\$1,248,400	\$1,115,793	\$16,911,551	
Total Single Family	\$2,347,943	\$2,219,865	\$2,336,290	\$2,415,599	\$2,873,155	\$3,244,486	\$3,453,831	\$3,511,580	\$3,284,802	\$3,187,777	\$2,681,197	\$2,548,590	\$34,105,115	

	January	February	March	April	May	June	July	August	September	October	November	December	Total	
Multi-Family														
Service Charge	\$ / Acct.													
1" or less	\$33.90	4,426	4,426	4,426	4,426	4,426	4,426	4,426	4,426	4,426	4,426	4,426	4,426	4,426
1 1/2"	67.80	118	118	118	118	118	118	118	118	118	118	118	118	118
2"	108.48	142	142	142	142	142	142	142	142	142	142	142	142	142
3"	203.40	14	14	14	14	14	14	14	14	14	14	14	14	14
4"	339.00	6	6	6	6	6	6	6	6	6	6	6	6	6
6"	678.00	6	6	6	6	6	6	6	6	6	6	6	6	6
8"	1,084.80	0	0	0	0	0	0	0	0	0	0	0	0	0
10"	1,559.40	0	0	0	0	0	0	0	0	0	0	0	0	0
12"	2,288.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		4,712	4,712	4,712										
Total Service Charge Revenue	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$182,396	\$2,188,747
Water Use	\$ / CCF													
Winter (Oct - Apr)	\$2.11	101,251	82,090	92,204	92,218					126,995	104,165	100,581		699,503
Summer (May - Sept)	2.30					109,217	124,982	129,770	128,714	123,310				615,992
		101,251	82,090	92,204	92,218	109,217	124,982	129,770	128,714	123,310	126,995	104,165	100,581	1,315,495
Total Water Use Revenue	\$213,640	\$173,211	\$194,550	\$194,579	\$251,199	\$287,458	\$298,470	\$296,041	\$283,614	\$267,959	\$219,787	\$212,225		\$2,892,734
Total Multi-Family	\$396,036	\$355,606	\$376,945	\$376,975	\$433,595	\$469,853	\$480,866	\$478,437	\$466,009	\$450,355	\$402,183	\$394,620		\$5,081,480

	January	February	March	April	May	June	July	August	September	October	November	December	Total	
Non-Residential														
Service Charge	\$ / Acct.													
1" or less	\$33.90	395	395	395	395	395	395	395	395	395	395	395	395	395
1 1/2"	67.80	219	219	219	219	219	219	219	219	219	219	219	219	219
2"	108.48	595	595	595	595	595	595	595	595	595	595	595	595	595
3"	203.40	62	62	62	62	62	62	62	62	62	62	62	62	62
4"	339.00	49	49	49	49	49	49	49	49	49	49	49	49	49
6"	678.00	16	16	16	16	16	16	16	16	16	16	16	16	16
8"	1,084.80	4	4	4	4	4	4	4	4	4	4	4	4	4
10"	1,559.40	2	2	2	2	2	2	2	2	2	2	2	2	2
12"	2,288.25	1	1	1	1	1	1	1	1	1	1	1	1	1
		1,343	1,343	1,343										
Total Service Charge Revenue	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$142,600	\$1,711,204
Water Use	\$ / CCF													
Winter (Oct - Apr)	\$2.11	134,197	128,441	141,300	131,682					235,443	213,112	152,942		1,137,117
Summer (May - Sept)	2.46					194,299	246,282	284,274	291,525	294,864				1,311,243
		134,197	128,441	141,300	131,682	194,299	246,282	284,274	291,525	294,864	235,443	213,112	152,942	2,448,360
Total Water Use Revenue	\$283,156	\$271,010	\$298,143	\$277,850	\$477,976	\$605,854	\$699,313	\$717,150	\$725,365	\$496,784	\$449,667	\$322,708		\$5,624,975
Total Non-Residential	\$425,756	\$413,610	\$440,743	\$420,450	\$620,576	\$748,454	\$841,914	\$859,751	\$867,965	\$639,384	\$592,267	\$465,309		\$7,336,179

	January	February	March	April	May	June	July	August	September	October	November	December	Total	
Irrigation														
Service Charge	\$ / Acct.													
1" or less	\$33.90	208	208	208	208	208	208	208	208	208	208	208	208	208
1 1/2"	67.80	151	151	151	151	151	151	151	151	151	151	151	151	151
2"	108.48	402	402	402	402	402	402	402	402	402	402	402	402	402
3"	203.40	23	23	23	23	23	23	23	23	23	23	23	23	23
4"	339.00	19	19	19	19	19	19	19	19	19	19	19	19	19
6"	678.00	3	3	3	3	3	3	3	3	3	3	3	3	3
8"	1,084.80	0	0	0	0	0	0	0	0	0	0	0	0	0
10"	1,559.40	0	0	0	0	0	0	0	0	0	0	0	0	0
12"	2,288.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		806	806	806										
Total Service Charge Revenue	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$74,051	\$888,614
Water Use	\$ / CCF													
Winter (Oct - Apr)	\$2.20	21,192	21,638	45,105	52,200					160,877	112,517	54,954		468,482
Summer (May - Sept)	2.79					118,747	181,568	228,116	232,598	208,172				969,202
		21,192	21,638	45,105	52,200	118,747	181,568	228,116	232,598	208,172	160,877	112,517	54,954	1,437,684
Total Water Use Revenue	\$46,623	\$47,603	\$99,230	\$114,839	\$331,304	\$506,574	\$636,444	\$648,949	\$580,801	\$353,929	\$247,538	\$120,899		\$3,734,733
Total Irrigation	\$120,674	\$121,654	\$173,282	\$188,891	\$405,355	\$580,625	\$710,495	\$723,001	\$654,852	\$427,980	\$321,589	\$194,950		\$4,623,347

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 8
 Commodity Distribution Factor

	Test Period Consumption (CCF)	10.0% Unaccounted ^[1]	Net Water Delivered (Flow + Losses)	Total Consumption (MGD)	Component % of Total	Class Total % of Total
Single Family						55.6%
Tier 1	4,879,372	487,937	5,367,310	11.00	41.6%	
Tier 2	1,647,288	164,729	1,812,017	3.71	14.0%	
Multi-Family ^[2]						11.2%
Winter	699,503	69,950	769,453	1.58	6.0%	
Summer	615,992	61,599	677,592	1.39	5.3%	
Non-Residential ^[2]						20.9%
Winter	1,137,117	113,712	1,250,829	2.56	9.7%	
Summer	1,311,243	131,124	1,442,367	2.96	11.2%	
Irrigation						12.3%
Winter	468,482	46,848	515,331	1.06	4.0%	
Summer	969,202	96,920	1,066,122	2.18	8.3%	
	11,728,200	1,172,820	12,901,020	26.44	100.0%	100.0%

City Water Production Report ^[3] 27.39

Notes

- [1] - Estimated to tie to actula production reports
- [2] - Winter: Oct - Apr ; Summer: May - Sept
- [3] - Water Supply provided by City (Based on CY 2019)

Factor (COM)

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 9
 Capacity Distribution Factor

	Average Consumption (MGD)	Peaking Factors ^[1]	Peak Day Use (MGD)	Component % of Total	Class % of Total
Single Family					55.1%
Tier 1	11.00	1.29	14.18	36.1%	
Tier 2	3.71	2.01	7.46	19.0%	
Multi-Family					9.8%
Winter	1.58	1.16	1.83	4.7%	
Summer	1.39	1.46	2.02	5.2%	
Non-Residential					20.6%
Winter	2.56	1.15	2.96	7.5%	
Summer	2.96	1.73	5.13	13.1%	
Irrigation					14.5%
Winter	1.06	1.34	1.42	3.6%	
Summer	2.18	1.95	4.27	10.9%	
	----- 26.44		----- 39.26	----- 100.0%	----- 100.0%
		<i>Historical Peak Day ^[2]</i>	39.80		

Notes

- [1] - Tier / Season relationship based on peak to average month usage in each tier or season
 [2] - Water System Peak Day Data Provided by City for CY 2019

Factor

(CAP)

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 10
 Customer Distribution Factors

	<i>Actual Customer</i>		<i>Customer Service & Acctng.</i>		<i>Meters & Services</i>		
	Number of Meters	% of Total	Number of Living Units	% of Total	Weighting Factor ^[1]	Weighted Customer	% of Total
Single Family	42,131	86.0%	42,131	71.4%	1.00	42,265	78.2%
Multi-Family	4,712	9.6%	14,753	25.0%	1.14	5,380	10.0%
Non-Residential	1,343	2.7%	1,343	2.3%	3.13	4,207	7.8%
Irrigation	806	1.6%	806	1.4%	2.71	2,184	4.0%
Total	48,992	100.0%	59,033	100.0%		54,037	100.0%

Notes

[1] - Based on number of equivalent meters using AWWA meter equivalency factors for 1" meter

Factor (AC) (WCA) (WCMS)

Development of Equivalent Meter Distribution Factor

	<i>Number of Meters</i>										Total	% of Total
	1" or less	1 1/2"	2"	3"	4"	6"	8"	10"	12"			
Single Family	42,037	66	27	0	1	0	0	0	0	0	42,131	86.0%
Multi-Family	4,426	118	142	14	6	6	0	0	0	0	4,712	9.6%
Non-Residential	395	219	595	62	49	16	4	2	1	1	1,343	2.7%
Irrigation	208	151	402	23	19	3	0	0	0	0	806	1.6%
Total Meters	47,066	554	1,166	99	75	25	4	2	1	1	48,992	
<i>Equiv. Meters (1")</i>	<i>1.00</i>	<i>2.00</i>	<i>3.20</i>	<i>6.00</i>	<i>10.00</i>	<i>20.00</i>	<i>32.00</i>	<i>46.00</i>	<i>67.50</i>			
	<i>Equivalent Meters</i>										Total	
	1" or less	1 1/2"	2"	3"	4"	6"	8"	10"	12"			
Single Family	42,037	132	86	0	10	0	0	0	0	0	42,265	1.00
Multi-Family	4,426	236	454	84	60	120	0	0	0	0	5,380	1.14
Non-Residential	395	438	1,904	372	490	320	128	92	68	68	4,207	3.13
Irrigation	208	302	1,286	138	190	60	0	0	0	0	2,184	2.71
Total Equiv. Meters	47,066	1,108	3,731	594	750	500	128	92	68	68	54,037	

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 11
 Public Fire Distribution Factor

	Number of Meters	Fire Prot. Requirements (gals/min)	Duration (minutes)	Total FP Requirements (1,000 g/min)	% of Total
Single Family	42,131	1,000	90	3,791,790	73.6%
Multi-Family	4,712	1,500	90	636,120	12.3%
Non-Residential	1,343	3,000	180	725,220	14.1%
Irrigation	806	0	0	0	0.0%
Total	48,992			5,153,130	100.0%
Factor					(FP)

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 12
 Revenue Related Distribution Factor

	Projected FY 2023	% of Total
Single Family	\$34,447,019	66.7%
Multi-Family	5,132,422	9.9%
Non-Residential	7,409,724	14.3%
Irrigation	4,669,696	9.0%
Total Rate Revenues	\$51,658,862	100.0%
Factor		(RR)

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 13.1
 Net Plant In Service

	Net Plant 06/30/19	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification		
				Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)						
Land												
North	\$6,665,266	\$4,424,403	\$2,240,862	\$0	\$0	\$0	\$0	\$0	\$0	66.4% COM	33.6% CAP	
South	81,765	54,276	27,489	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Walnut	0	0	0	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Total Land	\$6,747,031	\$4,478,679	\$2,268,352	\$0	\$0	\$0	\$0	\$0	\$0			
Source of Supply - Wells												
North	\$2,510,729	\$1,666,622	\$844,107	\$0	\$0	\$0	\$0	\$0	\$0	66.4% COM	33.6% CAP	
South	1,714,349	1,137,985	576,364	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Walnut	0	0	0	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Total Source of Supply - Wells	\$4,225,078	\$2,804,607	\$1,420,471	\$0	\$0	\$0	\$0	\$0	\$0			
Treatment												
North	\$212,563,270	\$141,099,499	\$71,463,771	\$0	\$0	\$0	\$0	\$0	\$0	66.4% COM	33.6% CAP	
South	3,742	2,484	1,258	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Walnut	0	0	0	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Total Treatment	\$212,567,012	\$141,101,983	\$71,465,029	\$0	\$0	\$0	\$0	\$0	\$0			
Pumping												
North	\$362,594	\$0	\$362,594	\$0	\$0	\$0	\$0	\$0	\$0	100.0% CAP		
South	225,768	0	225,768	0	0	0	0	0	0	100.0% CAP		
Walnut	0	0	0	0	0	0	0	0	0	100.0% CAP		
Total Pumping	\$588,362	\$0	\$588,362	\$0	\$0	\$0	\$0	\$0	\$0			
Transmission & Distribution												
Structures and Improvements												
North	\$216,817	\$143,923	\$72,894	\$0	\$0	\$0	\$0	\$0	\$0	66.4% COM	33.6% CAP	
South	171,045	113,540	57,505	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Walnut	0	0	0	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Reservoirs and Standpipes												
North	\$3,418,356	\$0	\$3,301,526	\$0	\$0	\$0	\$116,830	\$0	\$0	96.6% CAP	3.4% FP	
South	682,583	0	\$659,254	0	0	0	23,329	0	0	96.6% CAP	3.4% FP	
Walnut	0	0	\$0	0	0	0	0	0	0	96.6% CAP	3.4% FP	
Distribution Mains												
North	\$47,270,531	\$0	\$8,052,657	\$34,980,193	\$0	\$0	\$4,237,681	\$0	\$0	17.0% CAP	74.0% AC	9.0% FP
South	6,777,086	0	1,154,494	5,015,044	0	0	607,548	0	0	17.0% CAP	74.0% AC	9.0% FP
Walnut	27,736	0	4,725	20,525	0	0	2,486	0	0	17.0% CAP	74.0% AC	9.0% FP
Transmission Mains												
North	\$11,801,978	\$7,834,153	\$3,967,825	\$0	\$0	\$0	\$0	\$0	\$0	66.4% COM	33.6% CAP	
South	11,691,751	7,760,984	\$3,930,767	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Walnut	8,145	5,407	\$2,738	0	0	0	0	0	0	66.4% COM	33.6% CAP	
Meter												
North	\$761,792	\$0	\$0	\$0	\$0	\$761,792	\$0	\$0	\$0	100.0% WCMS		
South	0	0	0	0	0	0	0	0	0	100.0% WCMS		
Walnut	0	0	0	0	0	0	0	0	0	100.0% WCMS		
Other	0	0	0	0	0	0	0	0	0	As T&D Assets Above		
Total Transmission & Distribution	\$82,827,819	\$15,858,007	\$21,204,385	\$40,015,761	\$0	\$761,792	\$4,987,875	\$0	\$0			
Plant Before General Plant	\$306,955,302	\$164,243,275	\$96,946,599	\$40,015,761	\$0	\$761,792	\$4,987,875	\$0	\$0			
<i>Percent Plant Before General Plant</i>	<i>100.0%</i>	<i>53.5%</i>	<i>31.6%</i>	<i>13.0%</i>	<i>0.0%</i>	<i>0.2%</i>	<i>1.6%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>Factor PBG</i>		
General Plant												
Water Admin Equipment	\$63,178	\$33,805	\$19,954	\$8,236	\$0	\$157	\$1,027	\$0	\$0	As Factor PBG		
Equipment in Storage	318	170	100	41	0	1	5	0	0	As Factor PBG		
Water Shop Equipment	643,918	344,543	203,371	83,943	0	1,598	10,463	0	0	As Factor PBG		
Total General Plant	\$707,414	\$378,518	\$223,425	\$92,221	\$0	\$1,756	\$11,495	\$0	\$0			
Total Net Plant in Service	\$307,662,716	\$164,621,793	\$97,170,024	\$40,107,982	\$0	\$763,547	\$4,999,370	\$0	\$0			

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 14
 Distribution System Analysis

Fire Protection			
	hrs	gal/min	Total
Fire Flow Requirements	3	3,000	540,000
Storage Capacity		15,800,000	15,800,000
% Public Fire Protection			3.4%
% Capacity			96.6%

Source of Supply (avg of 2018 & 2019)			
Average Day	27.15	COM	66.4%
Peak Day	40.90	(1-COM) = CAP	33.6%

Distribution Main Analysis					
	Main Size	Length (ft)	Replcmt \$	Total	
Distribution	1"	318	\$35.00	\$11,115	
	2"	9,907	35.00	\$346,735	
	3"	3,134	35.00	109,701	
	4"	117,279	70.85	8,309,217	
	5"	22	70.85	1,535	
	6"	433,978	70.85	30,747,339	
	8"	1,523,979	92.90	141,577,673	
	10"	107,313	88.56	9,503,598	
	11"	14	100.00	1,351	
	12"	724,059	124.60	90,217,755	
	14"	2,706	123.98	335,549	
	Total 1" - 14"		2,922,708		\$281,161,568
	Transmission	16"	172,149	148.64	25,588,296
		18"	45,209	173.64	7,850,083
20"		370	198.64	73,478	
21"		14,760	223.64	3,300,851	
22"		114	248.64	28,457	
24"		89,768	273.64	24,564,014	
30"		79,748	298.64	23,816,075	
36"		4,223	323.64	1,366,758	
42"		46,960	348.64	16,372,101	
48"		34,279	373.64	12,808,058	
60"	287	398.64	114,592		
Total 16" - 60"		487,868		\$115,882,764	
Customer				Adjusted	
⁽¹⁾ Total @ 4" Equiv			\$207,073,865		
/ Total Cost			74.0%	74.0%	
Capacity					
⁽²⁾ Cost for 1" - 10"			\$190,606,913		
⁽³⁾ Equiv 10" - 14"			\$64,363,549		
(2+3-1) / 4			17.0%	17.0%	
Fire Protection					
1-cust-cap			9.0%	9.0%	

Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification		
				Actual Customer (AC)	Weighted for: Cust. Acctg. (WCA)	Meters & Services (WCMS)						
Administrative & General												
Employee Services												
10-10		Salaries - Regular	\$606,444	\$335,828	\$208,391	\$35,773	\$0	\$18,600	\$7,851	\$0	\$0	As O&M Below
10-11		Salaries-Part Time/Temp	0	0	0	0	0	0	0	0	0	As O&M Below
10-13	530	Regular Overtime	294	182	31	31	0	16	7	0	0	As O&M Below
10-17		Stand By Time (Call Back)	0	0	0	0	0	0	0	0	0	As O&M Below
10-19		Vacation Sell Back	0	0	0	0	0	0	0	0	0	As O&M Below
10-20	4,557	Employee Separation Pay	2,523	1,566	269	269	0	140	59	0	0	As O&M Below
10-21		Additional Pay	0	0	0	0	0	0	0	0	0	As O&M Below
10-25	180,722	Retirement	100,078	62,101	10,661	10,661	0	5,543	2,340	0	0	As O&M Below
10-26		Deferred Compensation	0	0	0	0	0	0	0	0	0	As O&M Below
10-27	8,655	Medicare	4,793	2,974	511	511	0	265	112	0	0	As O&M Below
10-29	56,219	Health/Dental/Vision	31,132	19,318	3,316	3,316	0	1,724	728	0	0	As O&M Below
10-31	3,820	L/T Disability Insurance	2,116	1,313	225	225	0	117	49	0	0	As O&M Below
10-32	482	Life Insurance	267	166	28	28	0	15	6	0	0	As O&M Below
10-33	13,503	Workers Compensation	7,477	4,640	797	797	0	414	175	0	0	As O&M Below
10-34	302	Unemployment Insurance	167	104	18	18	0	9	4	0	0	As O&M Below
10-42		Retiree Medical Trust	0	0	0	0	0	0	0	0	0	As O&M Below
10-45	3,277	Cell Phone Allowance	1,815	1,126	193	193	0	101	42	0	0	As O&M Below
10-46	20,853	Retirement Pension Bond	11,548	7,166	1,230	1,230	0	640	270	0	0	As O&M Below
10-47		Retiree Health - City Pd	0	0	0	0	0	0	0	0	0	As O&M Below
10-99		Compensated Absences Adj	0	0	0	0	0	0	0	0	0	As O&M Below
		Total Employee Services	\$899,365	\$498,038	\$309,047	\$53,052	\$0	\$27,584	\$11,644	\$0	\$0	
Other Services												
20-15	\$865	Telephone	\$479	\$297	\$51	\$51	\$0	\$27	\$11	\$0	\$0	As O&M Below
20-22	0	Contractual Employees	0	0	0	0	0	0	0	0	0	As O&M Below
20-25	15,914	Maint. & Repair Services	8,812	5,468	939	939	0	488	206	0	0	As O&M Below
20-34	1,591	Duplication/Copy Costs	881	547	94	94	0	49	21	0	0	As O&M Below
20-37	40,207	Insurance Premiums	22,265	13,816	2,372	2,372	0	1,233	521	0	0	As O&M Below
20-41	8,320	Automotive Equip Rental	4,607	2,859	491	491	0	255	108	0	0	As O&M Below
20-43	52,341	Computer/Tech/Oper Supprt	28,984	17,986	3,087	3,087	0	1,605	678	0	0	As O&M Below
20-45	0	Other Rentals	0	0	0	0	0	0	0	0	0	As O&M Below
20-46	0	Pool Vehicle Rental	0	0	0	0	0	0	0	0	0	As O&M Below
20-47	6,882	Telephone Rental	3,811	2,365	406	406	0	211	89	0	0	As O&M Below
20-51	0	Community / Program	0	0	0	0	0	0	0	0	0	As O&M Below
20-52	5,253	Publicity & Advertising	2,909	1,805	310	310	0	161	68	0	0	As O&M Below
20-53	2,652	Printing & Mapping	1,469	911	156	156	0	81	34	0	0	As O&M Below
20-54	10,079	Postage/Mailing Services	5,581	3,463	595	595	0	309	130	0	0	As O&M Below
20-55	0	Recoverable Legal Expense	0	0	0	0	0	0	0	0	0	As O&M Below
20-57	0	Processing Fees	0	0	0	0	0	0	0	0	0	As O&M Below
20-58	424,360	Legal Services	234,996	145,822	25,032	25,032	0	13,015	5,494	0	0	As O&M Below
20-60	0	Computer/Programming Svcs	0	0	0	0	0	0	0	0	0	As O&M Below
20-63	3,152	Testing & Analysis Svcs	1,745	1,083	186	186	0	97	41	0	0	As O&M Below
20-64	0	Training Services	0	0	0	0	0	0	0	0	0	As O&M Below
20-65	53,045	Prof & Special Services	29,375	18,228	3,129	3,129	0	1,627	687	0	0	As O&M Below
20-66	90,177	Other Services	49,937	30,987	5,319	5,319	0	2,766	1,167	0	0	As O&M Below
		Total Other Services	\$714,837	\$395,853	\$245,638	\$42,167	\$0	\$21,924	\$9,255	\$0	\$0	

City of Stockton MUD
Water Cost of Service Study
Exhibit 15.1
Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification		
				Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)						
Materials and Supplies												
30-50		Materials & Supplies	\$8,169	\$4,524	\$2,807	\$482	\$0	\$251	\$106	\$0	\$0	As O&M Below
30-51		Computer Software	955	529	328	56	0	29	12	0	0	As O&M Below
30-52		Subscriptions - Periodicals	0	0	0	0	0	0	0	0	0	As O&M Below
30-53		Fuel - Gas/Oil/Propane	147	82	51	9	0	5	2	0	0	As O&M Below
30-55		Library Materials	1,379	764	474	81	0	42	18	0	0	As O&M Below
		Total Materials and Supplies	\$10,650	\$5,898	\$3,660	\$628	\$0	\$327	\$138	\$0	\$0	
Other Expenses												
40-10		Training	\$8,825	\$4,887	\$3,033	\$521	\$0	\$271	\$114	\$0	\$0	As O&M Below
40-12		Meetings & Travel	1,051	582	361	62	0	32	14	0	0	As O&M Below
40-14		Memberships	78,272	43,344	26,896	4,617	0	2,401	1,013	0	0	As O&M Below
40-22		Taxes	8,405	4,654	2,888	496	0	258	109	0	0	As O&M Below
40-25		Indirect Cost Allocation	826,542	457,711	284,023	48,756	0	25,351	10,701	0	0	As O&M Below
		Total Other Expenses	\$923,094	\$511,179	\$317,201	\$54,452	\$0	\$28,312	\$11,951	\$0	\$0	
		Total Administrative & General	\$2,547,947	\$1,410,967	\$875,546	\$150,299	\$0	\$78,147	\$32,988	\$0	\$0	
Operations and Maintenance												
Employee Services												
10-10		Salaries - Regular	\$1,879,844	\$1,005,852	\$593,717	\$245,063	\$0	\$4,665	\$30,547	\$0	\$0	As Plant in Service
10-11		Salaries Part Time - Temp	26,523	14,191	8,377	3,458	0	66	431	0	0	As Plant in Service
10-13		Regular Overtime	53,045	28,383	16,753	6,915	0	132	862	0	0	As Plant in Service
10-17		Stand By Time (Call Back)	22,090	11,820	6,977	2,880	0	55	359	0	0	As Plant in Service
10-18		Holiday Pay	2,971	1,589	938	387	0	7	48	0	0	As Plant in Service
10-19		Vacation Sell Back	0	0	0	0	0	0	0	0	0	As Plant in Service
10-20		Separation Pay	14,959	8,004	4,724	1,950	0	37	243	0	0	As Plant in Service
10-21		Additional Pay	67,899	36,331	21,445	8,852	0	169	1,103	0	0	As Plant in Service
10-25		Retirement	576,516	308,477	182,083	75,157	0	1,431	9,368	0	0	As Plant in Service
10-26		Deferred Compensation	101,268	54,186	31,984	13,202	0	251	1,646	0	0	As Plant in Service
10-27		Medicare	29,412	15,738	9,289	3,834	0	73	478	0	0	As Plant in Service
10-29		Health/Dental/Vision	310,684	166,239	98,124	40,502	0	771	5,048	0	0	As Plant in Service
10-30		Retiree Health Insurance	0	0	0	0	0	0	0	0	0	As Plant in Service
10-31		L-T Disability Insurance	11,838	6,334	3,739	1,543	0	29	192	0	0	As Plant in Service
10-32		Life Insurance	2,749	1,471	868	358	0	7	45	0	0	As Plant in Service
10-33		Workers' Compensation	192,236	102,860	60,714	25,061	0	477	3,124	0	0	As Plant in Service
10-34		Unemployment Insurance	1,671	894	528	218	0	4	27	0	0	As Plant in Service
10-35		Tool Allowance	0	0	0	0	0	0	0	0	0	As Plant in Service
10-42		Retiree Medical Trust	0	0	0	0	0	0	0	0	0	As Plant in Service
10-45		Cell Phone Allowance	649	347	205	85	0	2	11	0	0	As Plant in Service
10-46		Retirement Pension Bond	65,572	35,086	20,710	8,548	0	163	1,066	0	0	As Plant in Service
10-47		Retiree Health - City Pd	0	0	0	0	0	0	0	0	0	As Plant in Service
10-99		Vacancy Savings	0	0	0	0	0	0	0	0	0	As Plant in Service
		Total Employee Services	\$3,359,924	\$1,797,802	\$1,061,175	\$438,011	\$0	\$8,339	\$54,597	\$0	\$0	

Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related					Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
				Actual Customer (AC)	Weighted for:		Meters & Services (WCMS)	Revenue Related (RR)				
					Cust. Acctg. (WCA)	Actual Customer (AC)						
Other Services & Charges												
20-11	Electricity	\$15,683	\$8,392	\$4,953	\$2,045	\$0	\$39	\$255	\$0	\$0	As Plant in Service	
20-12	Gas	1,622	868	512	212	0	4	26	0	0	As Plant in Service	
20-13	Sanitary Sewer	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-14	Water	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-15	Telephone	24,985	13,369	7,891	3,257	0	62	406	0	0	As Plant in Service	
20-17	Storm Water	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-22	Contractual Employees	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-25	Maint. & Repair Services	305,323	163,370	96,431	39,803	0	758	4,961	0	0	As Plant in Service	
20-27	Uniform/Laundry Services	9,018	4,825	2,848	1,176	0	22	147	0	0	As Plant in Service	
20-34	Duplication/Copy Costs	1,273	681	402	166	0	3	21	0	0	As Plant in Service	
20-37	Insurance Premiums	135,561	72,535	42,815	17,672	0	336	2,203	0	0	As Plant in Service	
20-41	Automotive Equip Rental	155,148	83,015	49,001	20,226	0	385	2,521	0	0	As Plant in Service	
20-43	Computer/Tech/Oper Supprt	98,157	52,521	31,001	12,796	0	244	1,595	0	0	As Plant in Service	
20-44	Radio Equipment Rental	8,733	4,673	2,758	1,138	0	22	142	0	0	As Plant in Service	
20-45	Other Rentals	5,408	2,894	1,708	705	0	13	88	0	0	As Plant in Service	
20-46	Pool Vehicle Rental	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-47	Telephone Rental	3,933	2,104	1,242	513	0	10	64	0	0	As Plant in Service	
20-52	Publicity & Advertising	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-53	Printing & Mapping	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-54	Postage/Mailing Services	1,910	1,022	603	249	0	5	31	0	0	As Plant in Service	
20-57	Processing Fees	68,959	36,898	21,779	8,990	0	171	1,121	0	0	As Plant in Service	
20-60	Computer/Programming Svcs	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-63	Testing & Analysis Svcs	1,366	731	431	178	0	3	22	0	0	As Plant in Service	
20-64	Training Services	0	0	0	0	0	0	0	0	0	As Plant in Service	
20-65	Prof & Special Services	56,122	30,029	17,725	7,316	0	139	912	0	0	As Plant in Service	
20-66	Other Services	102,102	54,632	32,247	13,310	0	253	1,659	0	0	As Plant in Service	
20-67	Graffiti Abatement	0	0	0	0	0	0	0	0	0	As Plant in Service	
Total Other Services & Charges		\$995,301	\$532,558	\$314,349	\$129,751	\$0	\$2,470	\$16,173	\$0	\$0		
Materials and Supplies												
30-50	Materials & Supplies	\$535,755	\$286,667	\$169,209	\$69,843	\$0	\$1,330	\$8,706	\$0	\$0	As Plant in Service	
30-51	Computer Software	530	284	168	69	0	1	9	0	0	As Plant in Service	
30-52	Subscription-Periodical	0	0	0	0	0	0	0	0	0	As Plant in Service	
30-53	Fuel - Gas/Oil/Propane	87,884	47,024	27,757	11,457	0	218	1,428	0	0	As Plant in Service	
30-54	Chemicals	0	0	0	0	0	0	0	0	0	As Plant in Service	
30-55	Library Materials	1,591	851	503	207	0	4	26	0	0	As Plant in Service	
Total Materials and Supplies		\$625,760	\$334,827	\$197,636	\$81,576	\$0	\$1,553	\$10,168	\$0	\$0		
Other Expenses												
40-10	Training	\$8,405	\$4,497	\$2,655	\$1,096	\$0	\$21	\$137	\$0	\$0	As Plant in Service	
40-12	Meetings & Travel	525	281	166	68	0	1	9	0	0	As Plant in Service	
40-14	Memberships	0	0	0	0	0	0	0	0	0	As Plant in Service	
40-15	Car Mileage Reimbursement	0	0	0	0	0	0	0	0	0	As Plant in Service	
40-22	Taxes	2,627	1,405	830	342	0	7	43	0	0	As Plant in Service	
40-25	Indirect Cost Allocation	0	0	0	0	0	0	0	0	0	As Plant in Service	
40-60	Miscellaneous Refunds	0	0	0	0	0	0	0	0	0	As Plant in Service	
40-68	Retirement Expense	199,803	106,909	63,104	26,047	0	496	3,247	0	0	As Plant in Service	
Total Other Expenses		\$211,360	\$113,093	\$66,754	\$27,554	\$0	\$525	\$3,434	\$0	\$0		
Total Operations and Maintenance		\$5,192,345	\$2,778,280	\$1,639,914	\$676,892	\$0	\$12,886	\$84,373	\$0	\$0		

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
				Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)				
Utility Billing										
10-97	Employee Services Summary	\$551,066	\$0	\$0	\$551,066	\$0	\$0	\$0	\$0	100.0% AC
20-97	Other Services Summary	486,515	0	0	486,515	0	0	0	0	100.0% AC
30-97	Materials & Supplies Summary	33,099	0	0	33,099	0	0	0	0	100.0% AC
40-97	Other Expenses Summary	2,742	0	0	2,742	0	0	0	0	100.0% AC
	Total Utility Billing	\$1,073,423	\$0	\$0	\$1,073,423	\$0	\$0	\$0	\$0	
	Total Utility Billing	\$1,073,423	\$0	\$0	\$1,073,423	\$0	\$0	\$0	\$0	
Other Support Services										
Employee Services										
10-10	Salaries - Regular	\$388,425	\$207,836	\$122,677	\$50,636	\$0	\$964	\$6,312	\$0	As Plant in Service
10-11	Salaries-Part Time/Temp	0	0	0	0	0	0	0	0	As Plant in Service
10-13	Regular Overtime	2,122	1,135	670	277	0	5	34	0	As Plant in Service
10-17	Stand By Time (Call Back)	0	0	0	0	0	0	0	0	As Plant in Service
10-18	Holiday Pay	0	0	0	0	0	0	0	0	As Plant in Service
10-19	Vacation Sell Back	0	0	0	0	0	0	0	0	As Plant in Service
10-20	Employee Separation Pay	3,403	1,821	1,075	444	0	8	55	0	As Plant in Service
10-21	Additional Pay	417	223	132	54	0	1	7	0	As Plant in Service
10-25	Retirement	115,897	62,013	36,604	15,109	0	288	1,883	0	As Plant in Service
10-26	Deferred Compensation	4,265	2,282	1,347	556	0	11	69	0	As Plant in Service
10-27	Medicare	5,543	2,966	1,751	723	0	14	90	0	As Plant in Service
10-29	Health/Dental/Vision	44,621	23,875	14,093	5,817	0	111	725	0	As Plant in Service
10-31	L/T Disability Insurance	2,447	1,310	773	319	0	6	40	0	As Plant in Service
10-32	Life Insurance	374	200	118	49	0	1	6	0	As Plant in Service
10-33	Workers Compensation	10,039	5,371	3,171	1,309	0	25	163	0	As Plant in Service
10-34	Unemployment Insurance	240	128	76	31	0	1	4	0	As Plant in Service
10-40	Flat Rate Mileage Allow	0	0	0	0	0	0	0	0	As Plant in Service
10-42	Retiree Medical Trust	0	0	0	0	0	0	0	0	As Plant in Service
10-45	Cell Phone Allowance	2,388	1,278	754	311	0	6	39	0	As Plant in Service
10-46	Retirement Pension Bond	17,183	9,194	5,427	2,240	0	43	279	0	As Plant in Service
10-47	Retiree Health - City Pd	0	0	0	0	0	0	0	0	As Plant in Service
10-99	Compensated Absences Adj	0	0	0	0	0	0	0	0	As Plant in Service
	Total Employee Services	\$597,364	\$319,633	\$188,667	\$77,874	\$0	\$1,483	\$9,707	\$0	
Other Services										
20-22	Contractual Employees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Plant in Service
20-37	Insurance Premiums	25,801	13,805	8,149	3,364	0	64	419	0	As Plant in Service
20-65	Prof & Special Services	41,047	21,963	12,964	5,351	0	102	667	0	As Plant in Service
20-66	Other Services	0	0	0	0	0	0	0	0	As Plant in Service
	Total Other Services	\$66,848	\$35,769	\$21,113	\$8,715	\$0	\$166	\$1,086	\$0	
Materials and Supplies										
30-50	Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Plant in Service
	Total Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
				Actual Customer (AC)	Weighted for: Cust. Acctg. (WCA)	Meters & Services (WCMS)				
Other Expenses										
40-10	Training	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Plant in Service
40-12	Meetings & Travel	0	0	0	0	0	0	0	0	As Plant in Service
40-14	Memberships	0	0	0	0	0	0	0	0	As Plant in Service
	Total Other Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Total Other Support Services	\$664,213	\$355,402	\$209,780	\$86,589	\$1,648	\$10,793	\$0	\$0	
Water Conservation										
Employee Services										
10-10	Salaries - Regular	\$47,257	\$0	\$47,257	\$0	\$0	\$0	\$0	\$0	100.0% CAP
10-11	Salaries-Part Time/Temp	0	0	0	0	0	0	0	0	100.0% CAP
10-13	Regular Overtime	0	0	0	0	0	0	0	0	100.0% CAP
10-19	Vacation Sell Back	0	0	0	0	0	0	0	0	100.0% CAP
10-20	Employee Separation Pay	79	0	79	0	0	0	0	0	100.0% CAP
10-21	Additional Pay	0	0	0	0	0	0	0	0	100.0% CAP
10-25	Retirement	14,082	0	14,082	0	0	0	0	0	100.0% CAP
10-27	Medicare	682	0	682	0	0	0	0	0	100.0% CAP
10-29	Health/Dental/Vision	5,918	0	5,918	0	0	0	0	0	100.0% CAP
10-31	L/T Disability Insurance	298	0	298	0	0	0	0	0	100.0% CAP
10-32	Life Insurance	52	0	52	0	0	0	0	0	100.0% CAP
10-33	Workers Compensation	969	0	969	0	0	0	0	0	100.0% CAP
10-34	Unemployment Insurance	32	0	32	0	0	0	0	0	100.0% CAP
10-45	Cell Phone Allowance	292	0	292	0	0	0	0	0	100.0% CAP
10-46	Retirement Pension Bond	339	0	339	0	0	0	0	0	100.0% CAP
	Total Employee Services	\$70,001	\$0	\$70,001	\$0	\$0	\$0	\$0	\$0	
Other Services										
20-15	Telephone	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100.0% CAP
20-34	Duplication/Copy Costs	0	0	0	0	0	0	0	0	100.0% CAP
20-37	Insurance Premiums	3,119	0	3,119	0	0	0	0	0	100.0% CAP
20-43	Computer/Tech/Oper Supprt	0	0	0	0	0	0	0	0	100.0% CAP
20-45	Other Rentals	0	0	0	0	0	0	0	0	100.0% CAP
20-47	Telephone Rental	0	0	0	0	0	0	0	0	100.0% CAP
20-51	Community/Program	43,497	0	43,497	0	0	0	0	0	100.0% CAP
20-52	Publicity & Advertising	0	0	0	0	0	0	0	0	100.0% CAP
20-53	Printing & Mapping	0	0	0	0	0	0	0	0	100.0% CAP
20-54	Postage/Mailing Services	0	0	0	0	0	0	0	0	100.0% CAP
20-57	Processing Fees	0	0	0	0	0	0	0	0	100.0% CAP
20-64	Training Services	0	0	0	0	0	0	0	0	100.0% CAP
20-65	Prof & Special Services	0	0	0	0	0	0	0	0	100.0% CAP
20-66	Other Services	0	0	0	0	0	0	0	0	100.0% CAP
	Total Other Services	\$46,616	\$0	\$46,616	\$0	\$0	\$0	\$0	\$0	

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
				Actual Customer (AC)	Weighted for: Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Materials and Supplies											
30-50		Materials & Supplies	\$1,910	\$0	\$1,910	\$0	\$0	\$0	\$0	\$0	100.0% CAP
30-51		Computer Software	0	0	0	0	0	0	0	0	100.0% CAP
30-55		Library Materials	0	0	0	0	0	0	0	0	100.0% CAP
		Total Materials and Supplies	\$1,910	\$0	\$1,910	\$0	\$0	\$0	\$0	\$0	
Other Expenses											
40-10		Training	\$1,156	\$0	\$1,156	\$0	\$0	\$0	\$0	\$0	100.0% CAP
40-14		Memberships	0	0	0	0	0	0	0	0	100.0% CAP
40-15		Car Milage Reimbursement	0	0	0	0	0	0	0	0	100.0% CAP
40-68		Retirement Expense	1,704	0	1,704	0	0	0	0	0	100.0% CAP
		Total Other Expenses	\$2,859	\$0	\$2,859	\$0	\$0	\$0	\$0	\$0	
		Total Water Conservation	\$121,386	\$0	\$121,386	\$0	\$0	\$0	\$0	\$0	
Water Purchase											
Materials and Supplies											
30-56		Merchandise For Resale	\$16,117,961	\$10,699,103	\$5,418,859	\$0	\$0	\$0	\$0	\$0	66.4% COM 33.6% CAP
		Total Materials and Supplies	\$16,117,961	\$10,699,103	\$5,418,859	\$0	\$0	\$0	\$0	\$0	
Other Expenses											
40-22		Groundwater Pumping Tax	\$2,041,605	\$1,355,217	\$686,388	\$0	\$0	\$0	\$0	\$0	66.4% COM 33.6% CAP
		Total Other Expenses	\$2,041,605	\$1,355,217	\$686,388	\$0	\$0	\$0	\$0	\$0	
		Total Water Purchase	\$18,159,566	\$12,054,320	\$6,105,246	\$0	\$0	\$0	\$0	\$0	
Hydrant Maintenance											
Employee Services											
10-10		Salaries - Regular	\$106,450	\$0	\$0	\$0	\$0	\$106,450	\$0	\$0	100.0% FP
10-11		Salaries Part Time - Temp	0	0	0	0	0	0	0	0	100.0% FP
10-13		Regular Overtime	5,305	0	0	0	0	5,305	0	0	100.0% FP
10-17		Stand By Time (Call Back)	0	0	0	0	0	0	0	0	100.0% FP
10-18		Holiday Pay	0	0	0	0	0	0	0	0	100.0% FP
10-19		Vacation Sell Back	0	0	0	0	0	0	0	0	100.0% FP
10-20		Separation Pay	926	0	0	0	0	926	0	0	100.0% FP
10-21		Additional Pay	0	0	0	0	0	0	0	0	100.0% FP
10-25		Retirement	31,859	0	0	0	0	31,859	0	0	100.0% FP
10-26		Deferred Compensation	5,855	0	0	0	0	5,855	0	0	100.0% FP
10-27		Medicare	1,493	0	0	0	0	1,493	0	0	100.0% FP
10-29		Health/Dental/Vision	23,671	0	0	0	0	23,671	0	0	100.0% FP
10-31		L-T Disability Insurance	670	0	0	0	0	670	0	0	100.0% FP
10-32		Life Insurance	210	0	0	0	0	210	0	0	100.0% FP
10-33		Workers' Compensation	10,527	0	0	0	0	10,527	0	0	100.0% FP
10-34		Unemployment Insurance	127	0	0	0	0	127	0	0	100.0% FP
10-46		Retirement Pension Bond	4,007	0	0	0	0	4,007	0	0	100.0% FP
10-47		Retiree Health - City Pd	0	0	0	0	0	0	0	0	100.0% FP
		Total Employee Services	\$191,100	\$0	\$0	\$0	\$0	\$191,100	\$0	\$0	

City of Stockton MUD
Water Cost of Service Study
Exhibit 15.1
Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
				Actual Customer (AC)	Weighted for:					
					Cust. Acctg. (WCA)	Meters & Services (WCMS)				
Other Services										
20-11		Electricity	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100.0% FP
20-12		Gas	0	0	0	0	0	0	0	100.0% FP
20-13		Sanitary Sewer	0	0	0	0	0	0	0	100.0% FP
20-14		Water	0	0	0	0	0	0	0	100.0% FP
20-15		Telephone	216	0	0	0	216	0	0	100.0% FP
20-17		Storm Water	0	0	0	0	0	0	0	100.0% FP
20-22		Contractual Employees	0	0	0	0	0	0	0	100.0% FP
20-25		Maint. & Repair Services	84,872	0	0	0	84,872	0	0	100.0% FP
20-27		Uniform/Laundry Services	530	0	0	0	530	0	0	100.0% FP
20-34		Duplication/Copy Costs	0	0	0	0	0	0	0	100.0% FP
20-37		Insurance Premiums	7,025	0	0	0	7,025	0	0	100.0% FP
20-41		Automotive Equip Rental	0	0	0	0	0	0	0	100.0% FP
20-43		Computer/Tech/Oper Supprt	0	0	0	0	0	0	0	100.0% FP
20-44		Radio Equipment Rental	789	0	0	0	789	0	0	100.0% FP
20-46		Pool Vehicle Rental	0	0	0	0	0	0	0	100.0% FP
20-47		Telephone Rental	0	0	0	0	0	0	0	100.0% FP
20-54		Postage/Mailing Services	0	0	0	0	0	0	0	100.0% FP
20-57		Processing Fees	2,122	0	0	0	2,122	0	0	100.0% FP
20-66		Other Services	1,591	0	0	0	1,591	0	0	100.0% FP
		Total Other Services	\$97,146	\$0	\$0	\$0	\$97,146	\$0	\$0	
Materials and Supplies										
30-50		Materials & Supplies	\$53,045	\$0	\$0	\$0	\$53,045	\$0	\$0	100.0% FP
30-53		Fuels - Gas/Oil/Propane	1,543	0	0	0	1,543	0	0	100.0% FP
		Total Materials and Supplies	\$54,588	\$0	\$0	\$0	\$54,588	\$0	\$0	
Other Expenses										
40-12		Meetings/Travel	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100.0% FP
40-14		Memberships	0	0	0	0	0	0	0	100.0% FP
40-60		Miscellaneous Refunds	0	0	0	0	0	0	0	100.0% FP
		Total Other Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
		Total Hydrant Maintenance	\$342,833	\$0	\$0	\$0	\$342,833	\$0	\$0	

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
				Actual Customer (AC)	Weighted for:					
					Cust. Acctg. (WCA)	Meters & Services (WCMS)				
Delta Water Production										
Employee Services										
10-10	Salaries - Regular	\$959,322	\$636,798	\$322,524	\$0	\$0	\$0	\$0	\$0	As Treatment North
10-11	Salaries Part Time - Temp	0	0	0	0	0	0	0	0	As Treatment North
10-13	Regular Overtime	127,308	84,507	42,801	0	0	0	0	0	As Treatment North
10-17	Stand By Time (Call Back)	12,731	8,451	4,280	0	0	0	0	0	As Treatment North
10-18	Holiday Pay	27,040	17,949	9,091	0	0	0	0	0	As Treatment North
10-19	Vacation Sell Back	0	0	0	0	0	0	0	0	As Treatment North
10-20	Separation Pay	8,247	5,474	2,773	0	0	0	0	0	As Treatment North
10-21	Additional Pay	1,292	858	434	0	0	0	0	0	As Treatment North
10-25	Retirement	294,149	195,256	98,893	0	0	0	0	0	As Treatment North
10-26	Deferred Compensation	43,744	29,037	14,707	0	0	0	0	0	As Treatment North
10-27	Medicare	15,796	10,485	5,311	0	0	0	0	0	As Treatment North
10-29	Health/Dental/Vision	123,682	82,100	41,582	0	0	0	0	0	As Treatment North
10-30	Retiree Health Insurance	0	0	0	0	0	0	0	0	As Treatment North
10-31	L-T Disability Insurance	6,043	4,011	2,032	0	0	0	0	0	As Treatment North
10-32	Life Insurance	1,092	725	367	0	0	0	0	0	As Treatment North
10-33	Workers' Compensation	99,504	66,051	33,453	0	0	0	0	0	As Treatment North
10-34	Unemployment Insurance	665	442	224	0	0	0	0	0	As Treatment North
10-45	Cell Phone Allowance	1,298	862	436	0	0	0	0	0	As Treatment North
10-46	Retirement Pension Bond	36,475	24,212	12,263	0	0	0	0	0	As Treatment North
10-47	Retiree Health - City Pd	0	0	0	0	0	0	0	0	As Treatment North
10-99	Vacancy Savings	0	0	0	0	0	0	0	0	As Treatment North
Total Employee Services		\$1,758,387	\$1,167,217	\$591,170	\$0	\$0	\$0	\$0	\$0	
Other Services										
20-11	Electricity	\$1,892,800	\$1,256,441	\$636,359	\$0	\$0	\$0	\$0	\$0	As Treatment North
20-12	Gas	0	0	0	0	0	0	0	0	As Treatment North
20-15	Telephone	20,550	13,641	6,909	0	0	0	0	0	As Treatment North
20-22	Contractual Employees	0	0	0	0	0	0	0	0	As Treatment North
20-24	Prof/Spec Svcs-Consultant	0	0	0	0	0	0	0	0	As Treatment North
20-25	Maint. & Repair Services	4,031	2,676	1,355	0	0	0	0	0	As Treatment North
20-27	Uniform/Laundry Services	9,654	6,408	3,246	0	0	0	0	0	As Treatment North
20-34	Duplication/Copy Costs	0	0	0	0	0	0	0	0	As Treatment North
20-37	Insurance Premiums	74,454	49,423	25,031	0	0	0	0	0	As Treatment North
20-41	Automotive Equip Rental	53,103	35,250	17,853	0	0	0	0	0	As Treatment North
20-43	Computer/Tech/Oper Supprt	35,024	23,249	11,775	0	0	0	0	0	As Treatment North
20-44	Radio Equipment Rental	31,823	21,124	10,699	0	0	0	0	0	As Treatment North
20-45	Other Rentals	10,816	7,180	3,636	0	0	0	0	0	As Treatment North
20-46	Pool Vehicle Rental	0	0	0	0	0	0	0	0	As Treatment North
20-47	Telephone Rental	4,916	3,263	1,653	0	0	0	0	0	As Treatment North
20-52	Publicity & Advertising	0	0	0	0	0	0	0	0	As Treatment North
20-53	Printing & Mapping	0	0	0	0	0	0	0	0	As Treatment North
20-54	Postage/Mailing Services	0	0	0	0	0	0	0	0	As Treatment North
20-57	Processing Fees	106,090	70,423	35,667	0	0	0	0	0	As Treatment North
20-58	Legal Services	0	0	0	0	0	0	0	0	As Treatment North
20-60	Computer/Programming Svcs	0	0	0	0	0	0	0	0	As Treatment North
20-63	Testing & Analysis Svcs	2,101	1,395	706	0	0	0	0	0	As Treatment North
20-64	Training Services	7,957	5,282	2,675	0	0	0	0	0	As Treatment North
20-65	Prof & Special Services	42,436	28,169	14,267	0	0	0	0	0	As Treatment North
20-66	Other Services	235,764	156,500	79,264	0	0	0	0	0	As Treatment North
Total Other Services		\$2,531,520	\$1,680,423	\$851,097	\$0	\$0	\$0	\$0	\$0	

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 15.1
 Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
				Actual Customer (AC)	Weighted for:						
					Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Materials and Supplies											
30-50		Materials And Supplies	\$111,395	\$73,944	\$37,451	\$0	\$0	\$0	\$0	\$0	As Treatment North
30-51		Computer Software	0	0	0	0	0	0	0	0	As Treatment North
30-52		Subscription-Periodical	0	0	0	0	0	0	0	0	As Treatment North
30-53		Fuels-Gas/Oil/Propane	22,788	15,127	7,661	0	0	0	0	0	As Treatment North
30-54		Chemicals	599,727	398,099	201,628	0	0	0	0	0	As Treatment North
30-55		Library Materials	0	0	0	0	0	0	0	0	As Treatment North
		Total Materials and Supplies	\$733,909	\$487,169	\$246,740	\$0	\$0	\$0	\$0	\$0	
Other Expenses											
40-10		Training	\$5,253	\$3,487	\$1,766	\$0	\$0	\$0	\$0	\$0	As Treatment North
40-12		Meetings & Travel	1,576	1,046	530	0	0	0	0	0	As Treatment North
40-14		Memberships	0	0	0	0	0	0	0	0	As Treatment North
40-15		Car Mileage Reimbursement	0	0	0	0	0	0	0	0	As Treatment North
40-22		Taxes	115,569	76,715	38,854	0	0	0	0	0	As Treatment North
		Total Other Expenses	\$122,398	\$81,248	\$41,150	\$0	\$0	\$0	\$0	\$0	
		Total Delta Water Production	\$5,146,215	\$3,416,057	\$1,730,157	\$0	\$0	\$0	\$0	\$0	
Well Production											
Employee Services											
10-10		Salaries - Regular	\$359,221	\$0	\$359,221	\$0	\$0	\$0	\$0	\$0	100.0% CAP
10-11		Salaries Part Time - Temp	0	0	0	0	0	0	0	0	100.0% CAP
10-13		Regular Overtime	5,623	0	5,623	0	0	0	0	0	100.0% CAP
10-17		Stand By Time (Call Back)	22,279	0	22,279	0	0	0	0	0	100.0% CAP
10-18		Holiday Pay	3,395	0	3,395	0	0	0	0	0	100.0% CAP
10-19		Vacation Sell Back	0	0	0	0	0	0	0	0	100.0% CAP
10-20		Separation Pay	2,293	0	2,293	0	0	0	0	0	100.0% CAP
10-21		Additional Pay	10,929	0	10,929	0	0	0	0	0	100.0% CAP
10-25		Retirement	110,001	0	110,001	0	0	0	0	0	100.0% CAP
10-26		Deferred Compensation	19,757	0	19,757	0	0	0	0	0	100.0% CAP
10-27		Medicare	5,737	0	5,737	0	0	0	0	0	100.0% CAP
10-29		Health/Dental/Vision	58,705	0	58,705	0	0	0	0	0	100.0% CAP
10-31		L-T Disability Insurance	2,219	0	2,219	0	0	0	0	0	100.0% CAP
10-32		Life Insurance	522	0	522	0	0	0	0	0	100.0% CAP
10-33		Workers' Compensation	39,762	0	39,762	0	0	0	0	0	100.0% CAP
10-34		Unemployment Insurance	316	0	316	0	0	0	0	0	100.0% CAP
10-45		Cell Phone Allowance	623	0	623	0	0	0	0	0	100.0% CAP
10-46		Retirement Pension Bond	12,338	0	12,338	0	0	0	0	0	100.0% CAP
		Total Employee Services	\$653,720	\$0	\$653,720	\$0	\$0	\$0	\$0	\$0	

Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification
				Actual Customer (AC)	Weighted for:					
				Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Other Services										
20-11	Electricity	\$865,280	\$0	\$865,280	\$0	\$0	\$0	\$0	\$0	100.0% CAP
20-15	Telephone	5,949	0	5,949	0	0	0	0	0	100.0% CAP
20-17	Storm Water	3,245	0	3,245	0	0	0	0	0	100.0% CAP
20-25	Maint. & Repair Services	4,774	0	4,774	0	0	0	0	0	100.0% CAP
20-34	Duplication/Copy Costs	0	0	0	0	0	0	0	0	100.0% CAP
20-37	Insurance Premiums	26,516	0	26,516	0	0	0	0	0	100.0% CAP
20-41	Automotive Equip Rental	15,638	0	15,638	0	0	0	0	0	100.0% CAP
20-43	Computer/Tech/Oper Supprt	24,146	0	24,146	0	0	0	0	0	100.0% CAP
20-44	Radio Equipment Rental	789	0	789	0	0	0	0	0	100.0% CAP
20-47	Telephone Rental	982	0	982	0	0	0	0	0	100.0% CAP
20-57	Processing Fees	530	0	530	0	0	0	0	0	100.0% CAP
20-63	Testing & Analysis Servcs	0	0	0	0	0	0	0	0	100.0% CAP
20-64	Training Services	0	0	0	0	0	0	0	0	100.0% CAP
20-65	Prof & Special Services	15,914	0	15,914	0	0	0	0	0	100.0% CAP
20-66	Other Services	28,644	0	28,644	0	0	0	0	0	100.0% CAP
Total Other Services		\$992,406	\$0	\$992,406	\$0	\$0	\$0	\$0	\$0	
Materials and Supplies										
30-50	Materials And Supplies	\$53,045	\$0	\$53,045	\$0	\$0	\$0	\$0	\$0	100.0% CAP
30-53	Fuels-Gas/Oil/Propane	9,769	0	9,769	0	0	0	0	0	100.0% CAP
30-54	Chemicals	63,654	0	63,654	0	0	0	0	0	100.0% CAP
Total Materials and Supplies		\$126,468	\$0	\$126,468	\$0	\$0	\$0	\$0	\$0	
Other Expenses										
40-10	Training	\$1,051	\$0	\$1,051	\$0	\$0	\$0	\$0	\$0	100.0% CAP
40-22	Taxes	0	0	0	0	0	0	0	0	100.0% CAP
Total Other Expenses		\$1,051	\$0	\$1,051	\$0	\$0	\$0	\$0	\$0	
Total Well Production		\$1,773,644	\$0	\$1,773,644	\$0	\$0	\$0	\$0	\$0	
DWSP Maintenance & Repair										
Employee Services										
10-10	Salaries - Regular	\$451,401	\$299,640	\$151,761	\$0	\$0	\$0	\$0	\$0	As Delta Water Production
10-11	Salaries Part Time - Temp	0	0	0	0	0	0	0	0	As Delta Water Production
10-13	Regular Overtime	10,609	7,042	3,567	0	0	0	0	0	As Delta Water Production
10-17	Stand By Time (Call Back)	18,566	12,324	6,242	0	0	0	0	0	As Delta Water Production
10-18	Holiday Pay	530	352	178	0	0	0	0	0	As Delta Water Production
10-20	Separation Pay	4,035	2,678	1,356	0	0	0	0	0	As Delta Water Production
10-21	Additional Pay	4,908	3,258	1,650	0	0	0	0	0	As Delta Water Production
10-25	Retirement	135,373	89,861	45,512	0	0	0	0	0	As Delta Water Production
10-26	Deferred Compensation	24,471	16,244	8,227	0	0	0	0	0	As Delta Water Production
10-27	Medicare	6,889	4,573	2,316	0	0	0	0	0	As Delta Water Production
10-29	Health/Dental/Vision	63,202	41,954	21,249	0	0	0	0	0	As Delta Water Production
10-31	L-T Disability Insurance	2,899	1,924	975	0	0	0	0	0	As Delta Water Production
10-32	Life Insurance	560	372	188	0	0	0	0	0	As Delta Water Production
10-33	Workers' Compensation	47,886	31,787	16,099	0	0	0	0	0	As Delta Water Production
10-34	Unemployment Insurance	339	225	114	0	0	0	0	0	As Delta Water Production
10-45	Cell Phone Allowance	3,401	2,257	1,143	0	0	0	0	0	As Delta Water Production
10-46	Retirement Pension Bond	15,707	10,426	5,281	0	0	0	0	0	As Delta Water Production
Total Employee Services		\$790,775	\$524,917	\$265,859	\$0	\$0	\$0	\$0	\$0	

Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related						Direct Assign. (DA)	Basis of Classification
				Actual Customer (AC)	Weighted for:		Public Fire Protection (FP)	Revenue Related (RR)			
					Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Other Services											
20-15		Telephone	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Delta Water Production
20-25	106,090	Maint. & Repair Services	70,423	35,667	0	0	0	0	0	0	As Delta Water Production
20-27	2,546	Uniform/Laundry Services	1,690	856	0	0	0	0	0	0	As Delta Water Production
20-34	0	Duplication/Copy Costs	0	0	0	0	0	0	0	0	As Delta Water Production
20-37	32,046	Insurance Premiums	21,272	10,774	0	0	0	0	0	0	As Delta Water Production
20-41	39,761	Automotive Equip Rental	26,393	13,368	0	0	0	0	0	0	As Delta Water Production
20-43	34,583	Computer/Tech/Oper Supprt	22,956	11,627	0	0	0	0	0	0	As Delta Water Production
20-44	789	Radio Equipment Rental	524	265	0	0	0	0	0	0	As Delta Water Production
20-45	0	Other Rentals	0	0	0	0	0	0	0	0	As Delta Water Production
20-47	1,474	Telephone Rental	979	496	0	0	0	0	0	0	As Delta Water Production
20-52	1,261	Publicity & Advertising	837	424	0	0	0	0	0	0	As Delta Water Production
20-53	0	Printing & Mapping	0	0	0	0	0	0	0	0	As Delta Water Production
20-54	0	Postage/Mailing Services	0	0	0	0	0	0	0	0	As Delta Water Production
20-61	5,305	Engineering Services	3,521	1,783	0	0	0	0	0	0	As Delta Water Production
20-63	525	Testing & Analysis Servcs	349	177	0	0	0	0	0	0	As Delta Water Production
20-65	5,305	Prof & Special Services	3,521	1,783	0	0	0	0	0	0	As Delta Water Production
20-66	0	Other Services	0	0	0	0	0	0	0	0	As Delta Water Production
Total Other Services			\$152,464	\$77,220	\$0	\$0	\$0	\$0	\$0	\$0	
Materials and Supplies											
30-50	\$213,241	Materials And Supplies	\$141,549	\$71,692	\$0	\$0	\$0	\$0	\$0	\$0	As Delta Water Production
30-51	0	Computer Software	0	0	0	0	0	0	0	0	As Delta Water Production
30-52	0	Subscription-Periodical	0	0	0	0	0	0	0	0	As Delta Water Production
30-53	3,508	Fuels-Gas/Oil/Propane	2,329	1,180	0	0	0	0	0	0	As Delta Water Production
Total Materials and Supplies			\$143,878	\$72,871	\$0	\$0	\$0	\$0	\$0	\$0	
Other Expenses											
40-10	\$6,304	Training	\$4,184	\$2,119	\$0	\$0	\$0	\$0	\$0	\$0	As Delta Water Production
40-12	0	Meetings & Travel	0	0	0	0	0	0	0	0	As Delta Water Production
Total Other Expenses			\$4,184	\$2,119	\$0	\$0	\$0	\$0	\$0	\$0	
Total DWSP Maintenance & Repair			\$825,443	\$418,069	\$0	\$0	\$0	\$0	\$0	\$0	
MUD Admin / Finance											
Employee Services											
10-10	\$404,916	Salaries - Regular	\$0	\$0	\$0	\$0	\$404,916	\$0	\$0	\$0	100.0% WCMS
10-11	0	Salaries Part Time - Temp	0	0	0	0	0	0	0	0	100.0% WCMS
10-13	2,228	Regular Overtime	0	0	0	0	2,228	0	0	0	100.0% WCMS
10-20	3,428	Separation Pay	0	0	0	0	3,428	0	0	0	100.0% WCMS
10-21	683	Additional Pay	0	0	0	0	683	0	0	0	100.0% WCMS
10-25	120,870	Retirement	0	0	0	0	120,870	0	0	0	100.0% WCMS
10-27	5,400	Medicare	0	0	0	0	5,400	0	0	0	100.0% WCMS
10-29	48,526	Health/Dental/Vision	0	0	0	0	48,526	0	0	0	100.0% WCMS
10-31	2,601	L-T Disability Insurance	0	0	0	0	2,601	0	0	0	100.0% WCMS
10-32	404	Life Insurance	0	0	0	0	404	0	0	0	100.0% WCMS
10-33	8,349	Workers' Compensation	0	0	0	0	8,349	0	0	0	100.0% WCMS
10-34	261	Unemployment Insurance	0	0	0	0	261	0	0	0	100.0% WCMS
10-45	1,687	Cell Phone Allowance	0	0	0	0	1,687	0	0	0	100.0% WCMS
10-46	15,218	Retirement Pension Bond	0	0	0	0	15,218	0	0	0	100.0% WCMS
Total Employee Services			\$0	\$0	\$0	\$0	\$614,571	\$0	\$0	\$0	

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
				Actual Customer (AC)	Weighted for: Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Other Services											
20-14	Water	171	\$0	\$0	\$0	\$0	\$171	\$0	\$0	\$0	100.0% WCMS
20-15	Telephone	0	0	0	0	0	0	0	0	0	100.0% WCMS
20-17	Stormwater	519	0	0	0	0	519	0	0	0	100.0% WCMS
20-25	Maint. & Repair Services	3,501	0	0	0	0	3,501	0	0	0	100.0% WCMS
20-27	Uniform/Laundry Services	828	0	0	0	0	828	0	0	0	100.0% WCMS
20-34	Duplication/Copy Costs	955	0	0	0	0	955	0	0	0	100.0% WCMS
20-37	Insurance Premiums	26,980	0	0	0	0	26,980	0	0	0	100.0% WCMS
20-41	Automotive Equip Rental	10,511	0	0	0	0	10,511	0	0	0	100.0% WCMS
20-44	Radio Equipment Rental	1,124	0	0	0	0	1,124	0	0	0	100.0% WCMS
20-47	Telephone Rental	3,392	0	0	0	0	3,392	0	0	0	100.0% WCMS
20-52	Publicity & Advertising	473	0	0	0	0	473	0	0	0	100.0% WCMS
20-53	Printing & Mapping	0	0	0	0	0	0	0	0	0	100.0% WCMS
20-58	Legal Services	3,183	0	0	0	0	3,183	0	0	0	100.0% WCMS
20-63	Testing & Analysis Servcs	63	0	0	0	0	63	0	0	0	100.0% WCMS
20-64	Training Services	3,183	0	0	0	0	3,183	0	0	0	100.0% WCMS
20-65	Prof & Special Services	15,914	0	0	0	0	15,914	0	0	0	100.0% WCMS
20-66	Other Services	28,008	0	0	0	0	28,008	0	0	0	100.0% WCMS
Total Other Services		\$99,312	\$0	\$0	\$0	\$0	\$99,312	\$0	\$0	\$0	
Materials and Supplies											
30-50	Materials And Supplies	58,243	\$0	\$0	\$0	\$0	\$58,243	\$0	\$0	\$0	100.0% WCMS
30-51	Computer Software	162	0	0	0	0	162	0	0	0	100.0% WCMS
30-53	Fuels-Gas/Oil/Propane	374	0	0	0	0	374	0	0	0	100.0% WCMS
Total Materials and Supplies		\$58,780	\$0	\$0	\$0	\$0	\$58,780	\$0	\$0	\$0	
Other Expenses											
40-10	Training	3,152	\$0	\$0	\$0	\$0	\$3,152	\$0	\$0	\$0	100.0% WCMS
40-12	Meetings & Travel	158	0	0	0	0	158	0	0	0	100.0% WCMS
40-14	Memberships	168	0	0	0	0	168	0	0	0	100.0% WCMS
Total Other Expenses		\$3,477	\$0	\$0	\$0	\$0	\$3,477	\$0	\$0	\$0	
Total MUD Admin / Finance		\$776,140	\$0	\$0	\$0	\$0	\$776,140	\$0	\$0	\$0	
Engineering Services											
Employee Services											
10-10	Salaries - Regular	\$131,383	\$70,299	\$41,495	\$17,128	\$0	\$326	\$2,135	\$0	\$0	As Plant in Service
10-11	Salaries Part Time - Temp	0	0	0	0	0	0	0	0	0	As Plant in Service
10-13	Regular Overtime	318	170	101	41	0	1	5	0	0	As Plant in Service
10-20	Separation Pay	4,230	2,263	1,336	551	0	10	69	0	0	As Plant in Service
10-21	Additional Pay	1,005	538	317	131	0	2	16	0	0	As Plant in Service
10-25	Retirement	39,451	21,109	12,460	5,143	0	98	641	0	0	As Plant in Service
10-27	Medicare	1,884	1,008	595	246	0	5	31	0	0	As Plant in Service
10-29	Health/Dental/Vision	14,557	7,789	4,598	1,898	0	36	237	0	0	As Plant in Service
10-31	L-T Disability Insurance	812	434	256	106	0	2	13	0	0	As Plant in Service
10-32	Life Insurance	120	64	38	16	0	0	2	0	0	As Plant in Service
10-33	Workers' Compensation	3,442	1,842	1,087	449	0	9	56	0	0	As Plant in Service
10-34	Unemployment Insurance	79	42	25	10	0	0	1	0	0	As Plant in Service
10-45	Cell Phone Allowance	210	112	66	27	0	1	3	0	0	As Plant in Service
10-46	Retirement Pension Bond	18,480	9,888	5,837	2,409	0	46	300	0	0	As Plant in Service
Total Employee Services		\$215,970	\$115,559	\$68,210	\$28,155	\$0	\$536	\$3,509	\$0	\$0	

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
				Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Other Services											
20-15		Telephone	\$227	\$122	\$72	\$30	\$0	\$1	\$4	\$0	As Plant in Service
20-25		Maint. & Repair Services	955	511	302	124	0	2	16	0	As Plant in Service
20-27		Uniform/Laundry Services	88	47	28	11	0	0	1	0	As Plant in Service
20-34		Duplication/Copy Costs	318	170	101	41	0	1	5	0	As Plant in Service
20-37		Insurance Premiums	8,763	4,689	2,768	1,142	0	22	142	0	As Plant in Service
20-41		Automotive Equip Rental	465	249	147	61	0	1	8	0	As Plant in Service
20-43		Computer/Tech/Oper Supprt	0	0	0	0	0	0	0	0	As Plant in Service
20-44		Radio Equipment Rental	444	238	140	58	0	1	7	0	As Plant in Service
20-47		Telephone Rental	1,254	671	396	163	0	3	20	0	As Plant in Service
20-52		Publicity & Advertising	788	422	249	103	0	2	13	0	As Plant in Service
20-53		Printing & Mapping	80	43	25	10	0	0	1	0	As Plant in Service
20-54		Postage/Mailing Services	80	43	25	10	0	0	1	0	As Plant in Service
20-57		Processing Fees	146	78	46	19	0	0	2	0	As Plant in Service
20-63		Testing & Analysis Servcs	79	42	25	10	0	0	1	0	As Plant in Service
20-65		Prof & Special Services	11,935	6,386	3,770	1,556	0	30	194	0	As Plant in Service
20-66		Other Services	95	51	30	12	0	0	2	0	As Plant in Service
		Total Other Services	\$25,717	\$13,760	\$8,122	\$3,353	\$0	\$64	\$418	\$0	
Materials and Supplies											
30-50		Materials And Supplies	\$25,196	\$13,482	\$7,958	\$3,285	\$0	\$63	\$409	\$0	As Plant in Service
30-51		Computer Software	2,434	1,302	769	317	0	6	40	0	As Plant in Service
30-52		Subscription-Periodical	8	5	3	1	0	0	0	0	As Plant in Service
30-53		Fuels-Gas/Oil/Propane	149	79	47	19	0	0	2	0	As Plant in Service
		Total Materials and Supplies	\$27,787	\$14,868	\$8,776	\$3,622	\$0	\$69	\$452	\$0	
Other Expenses											
40-10		Training	\$1,891	\$1,012	\$597	\$247	\$0	\$5	\$31	\$0	As Plant in Service
40-12		Meetings & Travel	79	42	25	10	0	0	1	0	As Plant in Service
40-14		Memberships	286	153	90	37	0	1	5	0	As Plant in Service
40-15		Car Mileage Reimbursement	24	13	8	3	0	0	0	0	As Plant in Service
		Total Other Expenses	\$2,281	\$1,220	\$720	\$297	\$0	\$6	\$37	\$0	
		Total Engineering Services	\$271,754	\$145,408	\$85,829	\$35,427	\$0	\$674	\$4,416	\$0	
Lab Services											
Employee Services											
10-10		Salaries - Regular	\$108,062	\$71,732	\$36,331	\$0	\$0	\$0	\$0	\$0	As Treatment
10-11		Salaries Part Time - Temp	8,487	5,634	2,853	0	0	0	0	0	As Treatment
10-13		Regular Overtime	912	606	307	0	0	0	0	0	As Treatment
10-18		Holiday Pay	594	394	200	0	0	0	0	0	As Treatment
10-20		Separation Pay	0	0	0	0	0	0	0	0	As Treatment
10-21		Additional Pay	222	147	75	0	0	0	0	0	As Treatment
10-25		Retirement	32,480	21,561	10,920	0	0	0	0	0	As Treatment
10-26		Deferred Compensation	5,627	3,735	1,892	0	0	0	0	0	As Treatment
10-27		Medicare	1,678	1,114	564	0	0	0	0	0	As Treatment
10-29		Health/Dental/Vision	17,161	11,392	5,770	0	0	0	0	0	As Treatment
10-31		L-T Disability Insurance	694	461	233	0	0	0	0	0	As Treatment
10-32		Life Insurance	153	101	51	0	0	0	0	0	As Treatment
10-33		Workers' Compensation	3,053	2,027	1,027	0	0	0	0	0	As Treatment
10-34		Unemployment Insurance	92	61	31	0	0	0	0	0	As Treatment
10-45		Cell Phone Allowance	227	151	76	0	0	0	0	0	As Treatment
10-46		Retirement Pension Bond	22	15	7	0	0	0	0	0	As Treatment
		Total Employee Services	\$179,467	\$119,130	\$60,337	\$0	\$0	\$0	\$0	\$0	

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
				Actual Customer (AC)	Weighted for: Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Other Services											
20-15		Telephone	\$584	\$388	\$196	\$0	\$0	\$0	\$0	\$0	As Treatment
20-25		Maint. & Repair Services	19,202	12,746	6,456	0	0	0	0	0	As Treatment
20-27		Uniform/Laundry Services	509	338	171	0	0	0	0	0	As Treatment
20-34		Duplication/Copy Costs	106	70	36	0	0	0	0	0	As Treatment
20-37		Insurance Premiums	7,817	5,189	2,628	0	0	0	0	0	As Treatment
20-41		Automotive Equip Rental	4,000	2,655	1,345	0	0	0	0	0	As Treatment
20-43		Computer/Tech/Oper Supprt	0	0	0	0	0	0	0	0	As Treatment
20-44		Radio Equipment Rental	592	393	199	0	0	0	0	0	As Treatment
20-47		Telephone Rental	688	457	231	0	0	0	0	0	As Treatment
20-52		Publicity & Advertising	210	139	71	0	0	0	0	0	As Treatment
20-54		Postage/Mailing Services	53	35	18	0	0	0	0	0	As Treatment
20-57		Processing Fees	6,196	4,113	2,083	0	0	0	0	0	As Treatment
20-63		Testing & Analysis Servcs	126	84	42	0	0	0	0	0	As Treatment
20-64		Training Service	159	106	54	0	0	0	0	0	As Treatment
20-65		Prof & Special Services	12,731	8,451	4,280	0	0	0	0	0	As Treatment
20-66		Other Services	32	21	11	0	0	0	0	0	As Treatment
20-68		Laboratory Service	57,586	38,225	19,360	0	0	0	0	0	As Treatment
		Total Other Services	\$110,590	\$73,410	\$37,180	\$0	\$0	\$0	\$0	\$0	
Materials and Supplies											
30-50		Materials And Supplies	\$33,684	\$22,359	\$11,324	\$0	\$0	\$0	\$0	\$0	As Treatment
30-51		Computer Software	1,839	1,221	618	0	0	0	0	0	As Treatment
30-53		Fuels-Gas/Oil/Propane	639	424	215	0	0	0	0	0	As Treatment
30-54		Chemicals	12,943	8,592	4,351	0	0	0	0	0	As Treatment
30-55		Library Materials	127	85	43	0	0	0	0	0	As Treatment
		Total Materials and Supplies	\$49,231	\$32,680	\$16,552	\$0	\$0	\$0	\$0	\$0	
Other Expenses											
40-10		Training	\$2,522	\$1,674	\$848	\$0	\$0	\$0	\$0	\$0	As Treatment
40-12		Meetings & Travel	437	290	147	0	0	0	0	0	As Treatment
40-14		Memberships	399	265	134	0	0	0	0	0	As Treatment
40-68		Retirement Expense	0	0	0	0	0	0	0	0	As Treatment
		Total Other Expenses	\$3,357	\$2,229	\$1,129	\$0	\$0	\$0	\$0	\$0	
		Total Lab Services	\$342,646	\$227,448	\$115,197	\$0	\$0	\$0	\$0	\$0	
Safety											
Employee Services											
10-10		Salaries - Regular	\$77,648	\$41,547	\$24,524	\$10,123	\$0	\$193	\$1,262	\$0	As Plant in Service
10-11		Salaries Part Time - Temp	0	0	0	0	0	0	0	0	As Plant in Service
10-13		Regular Overtime	796	426	251	104	0	2	13	0	As Plant in Service
10-20		Separation Pay	0	0	0	0	0	0	0	0	As Plant in Service
10-21		Additional Pay	0	0	0	0	0	0	0	0	As Plant in Service
10-25		Retirement	23,161	12,393	7,315	3,019	0	57	376	0	As Plant in Service
10-26		Deferred Compensation	1,490	797	470	194	0	4	24	0	As Plant in Service
10-27		Medicare	1,070	573	338	140	0	3	17	0	As Plant in Service
10-29		Health/Dental/Vision	11,362	6,080	3,589	1,481	0	28	185	0	As Plant in Service
10-31		L-T Disability Insurance	499	267	157	65	0	1	8	0	As Plant in Service
10-32		Life Insurance	97	52	30	13	0	0	2	0	As Plant in Service
10-33		Workers' Compensation	1,607	860	508	210	0	4	26	0	As Plant in Service
10-34		Unemployment Insurance	62	33	19	8	0	0	1	0	As Plant in Service
10-45		Cell Phone Allowance	415	222	131	54	0	1	7	0	As Plant in Service
10-46		Retirement Pension Bond	0	0	0	0	0	0	0	0	As Plant in Service
		Total Employee Services	\$118,207	\$63,249	\$37,334	\$15,410	\$0	\$293	\$1,921	\$0	

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification		
				Actual Customer (AC)	Weighted for: Cust. Acctg. (WCA)	Meters & Services (WCMS)						
Other Services												
20-25		Maint. & Repair Services	637	\$341	\$201	\$83	\$0	\$2	\$10	\$0	\$0	As Plant in Service
20-27		Uniform/Laundry Services	265	142	84	35	0	1	4	0	0	As Plant in Service
20-34		Duplication/Copy Costs	1,326	710	419	173	0	3	22	0	0	As Plant in Service
20-37		Insurance Premiums	5,178	2,771	1,635	675	0	13	84	0	0	As Plant in Service
20-43		Computer/Tech/Oper Supprt	0	0	0	0	0	0	0	0	0	As Plant in Service
20-44		Radio Equipment Rental	936	501	296	122	0	2	15	0	0	As Plant in Service
20-47		Telephone Rental	246	131	78	32	0	1	4	0	0	As Plant in Service
20-54		Postage/Mailing Services	67	36	21	9	0	0	1	0	0	As Plant in Service
20-64		Training Service	53,045	28,383	16,753	6,915	0	132	862	0	0	As Plant in Service
20-65		Prof & Special Services	26,523	14,191	8,377	3,458	0	66	431	0	0	As Plant in Service
20-66		Other Services	92,990	49,756	29,369	12,123	0	231	1,511	0	0	As Plant in Service
		Total Other Services	\$181,212	\$96,962	\$57,233	\$23,623	\$0	\$450	\$2,945	\$0	\$0	
Materials and Supplies												
30-50		Materials And Supplies	\$26,298	\$14,071	\$8,306	\$3,428	\$0	\$65	\$427	\$0	\$0	As Plant in Service
30-51		Computer Software	2,028	1,085	641	264	0	5	33	0	0	As Plant in Service
30-52		Subscription-Periodicals	796	426	251	104	0	2	13	0	0	As Plant in Service
30-55		Library Materials	663	355	209	86	0	2	11	0	0	As Plant in Service
		Total Materials and Supplies	\$29,784	\$15,937	\$9,407	\$3,883	\$0	\$74	\$484	\$0	\$0	
Other Expenses												
40-10		Training	\$5,516	\$2,951	\$1,742	\$719	\$0	\$14	\$90	\$0	\$0	As Plant in Service
40-14		Memberships	337	181	107	44	0	1	5	0	0	As Plant in Service
		Total Other Expenses	\$5,853	\$3,132	\$1,849	\$763	\$0	\$15	\$95	\$0	\$0	
		Total Safety	\$335,056	\$179,279	\$105,822	\$43,679	\$0	\$832	\$5,445	\$0	\$0	
SCADA												
Employee Services												
10-10		Salaries - Regular	\$95,074	\$0	\$0	\$0	\$0	\$95,074	\$0	\$0	\$0	100.0% WCMS
10-11		Salaries Part Time - Temp	0	0	0	0	0	0	0	0	0	100.0% WCMS
10-13		Regular Overtime	679	0	0	0	0	679	0	0	0	100.0% WCMS
10-20		Separation Pay	0	0	0	0	0	0	0	0	0	100.0% WCMS
10-21		Additional Pay	0	0	0	0	0	0	0	0	0	100.0% WCMS
10-25		Retirement	28,333	0	0	0	0	28,333	0	0	0	100.0% WCMS
10-27		Medicare	1,365	0	0	0	0	1,365	0	0	0	100.0% WCMS
10-29		Health/Dental/Vision	11,362	0	0	0	0	11,362	0	0	0	100.0% WCMS
10-31		L-T Disability Insurance	599	0	0	0	0	599	0	0	0	100.0% WCMS
10-32		Life Insurance	91	0	0	0	0	91	0	0	0	100.0% WCMS
10-33		Workers' Compensation	1,961	0	0	0	0	1,961	0	0	0	100.0% WCMS
10-34		Unemployment Insurance	62	0	0	0	0	62	0	0	0	100.0% WCMS
10-45		Cell Phone Allowance	415	0	0	0	0	415	0	0	0	100.0% WCMS
10-46		Retirement Pension Bond	0	0	0	0	0	0	0	0	0	100.0% WCMS
		Total Employee Services	\$139,941	\$0	\$0	\$0	\$0	\$139,941	\$0	\$0	\$0	

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 15.1
 Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
				Actual Customer (AC)	Weighted for: Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Other Services											
20-15	Telephone	\$12,114	\$0	\$0	\$0	\$0	\$12,114	\$0	\$0	\$0	100.0% WCMS
20-37	Insurance Premiums	6,320	0	0	0	0	6,320	0	0	0	100.0% WCMS
20-43	Computer/Tech/Oper Supprt	0	0	0	0	0	0	0	0	0	100.0% WCMS
20-47	Telephone Rental	629	0	0	0	0	629	0	0	0	100.0% WCMS
20-60	Computer Programming Service	0	0	0	0	0	0	0	0	0	100.0% WCMS
20-65	Prof & Special Services	28,856	0	0	0	0	28,856	0	0	0	100.0% WCMS
	Total Other Services	\$47,920	\$0	\$0	\$0	\$0	\$47,920	\$0	\$0	\$0	
Materials and Supplies											
30-50	Materials And Supplies	\$18,035	\$0	\$0	\$0	\$0	\$18,035	\$0	\$0	\$0	100.0% WCMS
30-51	Computer Software	60,708	0	0	0	0	60,708	0	0	0	100.0% WCMS
	Total Materials and Supplies	\$78,743	\$0	\$0	\$0	\$0	\$78,743	\$0	\$0	\$0	
Other Expenses											
40-10	Training	\$504	\$0	\$0	\$0	\$0	\$504	\$0	\$0	\$0	100.0% WCMS
40-12	Meeting & Travel	1,345	0	0	0	0	1,345	0	0	0	100.0% WCMS
40-15	Car Mileage Reimbursement	339	0	0	0	0	339	0	0	0	100.0% WCMS
	Total Other Expenses	\$2,189	\$0	\$0	\$0	\$0	\$2,189	\$0	\$0	\$0	
	Total SCADA	\$268,793	\$0	\$0	\$0	\$0	\$268,793	\$0	\$0	\$0	
Outreach & Training											
Employee Services											
10-13	Regular Overtime	\$796	\$0	\$0	\$796	\$0	\$0	\$0	\$0	\$0	100.0% AC
10-27	Medicare	12	0	0	12	0	0	0	0	0	100.0% AC
10-33	Workers Compensation	16	0	0	16	0	0	0	0	0	100.0% AC
10-97	Summary Account	0	0	0	0	0	0	0	0	0	100.0% AC
	Total Employee Services	\$823	\$0	\$0	\$823	\$0	\$0	\$0	\$0	\$0	
Other Services											
20-34	Duplication/Copy Costs	\$5,408	\$0	\$0	\$5,408	\$0	\$0	\$0	\$0	\$0	100.0% AC
20-37	Insurance Premiums	53	0	0	53	0	0	0	0	0	100.0% AC
20-52	Publicity & Advertising	57,784	0	0	57,784	0	0	0	0	0	100.0% AC
20-53	Printing & Mapping	270	0	0	270	0	0	0	0	0	100.0% AC
20-54	Postage/Mailing Services	21,218	0	0	21,218	0	0	0	0	0	100.0% AC
20-57	Processing Fees	0	0	0	0	0	0	0	0	0	100.0% AC
20-64	Training Services	1,591	0	0	1,591	0	0	0	0	0	100.0% AC
20-65	Prof & Special Services	19,096	0	0	19,096	0	0	0	0	0	100.0% AC
20-97	Summary Account	0	0	0	0	0	0	0	0	0	100.0% AC
	Total Other Services	\$105,421	\$0	\$0	\$105,421	\$0	\$0	\$0	\$0	\$0	

City of Stockton MUD
Water Cost of Service Study
Exhibit 15.1
Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classification	
				Actual Customer (AC)	Weighted for:						
					Cust. Acctg. (WCA)	Meters & Services (WCMS)					
Materials and Supplies											
30-50	Materials & Supplies	\$16,444	\$0	\$0	\$16,444	\$0	\$0	\$0	\$0	\$0	100.0% AC
30-51	Computer Software	541	0	0	541	0	0	0	0	0	100.0% AC
30-52	Subscription-Periodical	265	0	0	265	0	0	0	0	0	100.0% AC
30-97	Summary Account (2)	0	0	0	0	0	0	0	0	0	100.0% AC
	Total Materials and Supplies	\$17,250	\$0	\$0	\$17,250	\$0	\$0	\$0	\$0	\$0	
Other Expenses											
40-10	Training	\$525	\$0	\$0	\$525	\$0	\$0	\$0	\$0	\$0	100.0% AC
40-12	Meetings & Travel	263	0	0	263	0	0	0	0	0	100.0% AC
40-14	Memberships	265	0	0	265	0	0	0	0	0	100.0% AC
40-97	Summary Account (3)	0	0	0	0	0	0	0	0	0	100.0% AC
	Total Other Expenses	\$1,053	\$0	\$0	\$1,053	\$0	\$0	\$0	\$0	\$0	
	Total Outreach & Training	\$124,548	\$0	\$0	\$124,548	\$0	\$0	\$0	\$0	\$0	
Total Operations & Maintenance		\$38,384,019	\$21,392,605	\$13,180,590	\$2,190,857	\$0	\$1,139,120	\$480,847	\$0	\$0	
Debt Service											
	2002 A Revenue Bond	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100.0% WCMS
	2005 A Revenue Bond	0	0	0	0	0	0	0	0	0	100.0% WCMS
	2009 A Revenue Bond	0	0	0	0	0	0	0	0	0	100.0% WCMS
	2009 B Revenue Bond	0	0	0	0	0	0	0	0	0	100.0% WCMS
	Less BAB Interest Rebate	0	0	0	0	0	0	0	0	0	100.0% WCMS
	2010 A Revenue Bond	0	0	0	0	0	0	0	0	0	100.0% WCMS
	2017 A Revenue Bond	0	0	0	0	0	0	0	0	0	100.0% WCMS
	Drought Relief Loan	0	0	0	0	0	0	0	0	0	100.0% WCMS
	2018 A Revenue Bond	11,878,425	0	0	0	11,878,425	0	0	0	0	100.0% WCMS
	2019 A Revenue Bond	2,423,025	0	0	0	2,423,025	0	0	0	0	100.0% WCMS
	New SRF Loans	0	0	0	0	0	0	0	0	0	100.0% WCMS
	New SRF Loans	0	0	0	0	0	0	0	0	0	100.0% WCMS
	New Revenue Bonds	0	0	0	0	0	0	0	0	0	100.0% WCMS
	Balance to Debt Paid	0	0	0	0	0	0	0	0	0	100.0% WCMS
	Total Debt Service	\$14,301,450	\$0	\$0	\$0	\$14,301,450	\$0	\$0	\$0	\$0	
	<i>Less Connection Fees Fund</i>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	As Debt Service
	<i>Less DWSP Fee Fund</i>	500,000	0	0	0	0	500,000	0	0	0	As Debt Service
	Net Debt Service	\$13,801,450	\$0	\$0	\$0	\$13,801,450	\$0	\$0	\$0	\$0	

City of Stockton MUD
Water Cost of Service Study
Exhibit 15.1
Allocation of the Revenue Requirement

Acct. #	FY 2023	Commodity (COM)	Capacity (CAP)	Customer Related			Public Fire Protection (FP)	Revenue Related (RR)	Direct Assign. (DA)	Basis of Classificatio
				Actual Customer (AC)	Cust. Acctg. (WCA)	Meters & Services (WCMS)				
Rate Funded Capital	\$8,950,000	\$0	\$0	\$0	\$0	\$8,950,000	\$0	\$0	\$0	100.0% WCMS
Reserve Funding										
To/(From) Operating Cash	(\$4,705)	(\$4,705)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	100.0% COM
To/(From) Capital Reserve	0	0	0	0	0	0	0	0	0	100.0% COM
To/(From) Rate Stabilization	0	0	0	0	0	0	0	0	0	100.0% COM
Total Reserve Funding	(\$4,705)	(\$4,705)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Revenue Requirement	\$61,130,764	\$21,387,900	\$13,180,590	\$2,190,857	\$0	\$23,890,570	\$480,847	\$0	\$0	
Less: Non-Operating Revenues										
Interest	\$805,969	281,986	173,778	28,885	0	314,982	6,340	0	0	As Total Rev Req
Private Fire	177,171	0	0	0	0	0	177,171	0	0	100.0% FP
Linc Vill Maint	51,880	18,151	11,186	1,859	0	20,275	408	0	0	As Total Rev Req
Service Penalties	588,024	205,733	126,786	21,074	0	229,806	4,625	0	0	As Total Rev Req
Reconnection Admin Fees	330,596	115,666	71,281	11,848	0	129,201	2,600	0	0	As Total Rev Req
Repayment of In-Lieu Transfers	0	0	0	0	0	0	0	0	0	As Total Rev Req
Miscellaneous Other Revenues	10,201	3,569	2,199	366	0	3,987	80	0	0	As Total Rev Req
Allocation Trueup - Cal Water	5,700,000	1,994,266	1,228,994	204,281	0	2,227,622	44,836	0	0	As Total Rev Req
Total Non-Operating Revenues	\$7,663,842	\$2,619,371	\$1,614,224	\$268,314	\$0	\$2,925,873	\$236,061	\$0	\$0	
Net Revenue Requirement	\$53,466,922	\$18,768,528	\$11,566,366	\$1,922,543	\$0	\$20,964,698	\$244,786	\$0	\$0	

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 16
 Distribution of Revenue Requirement - COM, CAP, & DA

		Single Family		Multi-Family		Non-Residential		Irrigation		Factor
		Tier 1	Tier 2	Winter	Summer	Winter	Summer	Winter	Summer	
Commodity	\$18,768,528	\$7,808,414	\$2,636,140	\$1,119,408	\$985,767	\$1,819,718	\$2,098,370	\$749,708	\$1,551,004	COM
Capacity	\$11,566,366	\$4,177,250	\$2,197,678	\$538,171	\$596,138	\$871,462	\$1,510,243	\$417,788	\$1,257,636	CAP
Direct Assign.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Exhibit 15.2
Net Revenue Requirement	\$30,334,895	\$11,985,664	\$4,833,818	\$1,657,579	\$1,581,904	\$2,691,179	\$3,608,612	\$1,167,496	\$2,808,640	

City of Stockton MUD
Water Cost of Service Study
Exhibit 17
Distribution of Revenue Requirement

	Total	Single Family	Multi-Family	Non-Residential	Irrigation	Factor
Commodity	\$18,768,528	\$10,444,554	\$2,105,175	\$3,918,088	\$2,300,712	<i>From Exhibit 14</i>
Capacity	\$11,566,366	\$6,374,929	\$1,134,309	\$2,381,704	\$1,675,425	<i>From Exhibit 14</i>
Customer						
Actual Customer	\$1,922,543	\$1,653,304	\$184,908	\$52,702	\$31,629	<i>(AC)</i>
Cust. Acctg.	0	0	0	0	0	<i>(WCA)</i>
Meters & Services	20,964,698	16,397,769	2,087,442	1,632,002	847,485	<i>(WCMS)</i>
Total Customer	\$22,887,241	\$18,051,073	\$2,272,350	\$1,684,704	\$879,114	
Public Fire Protection	\$244,786	\$180,119	\$30,217	\$34,450	\$0	<i>(FP)</i>
Revenue Related	\$0	\$0	\$0	\$0	\$0	<i>(RR)</i>
Direct Assign.	\$0	\$0	\$0	\$0	\$0	<i>From Exhibit 14</i>
Net Revenue Requirement	\$53,466,922	\$35,050,675	\$5,542,051	\$8,018,945	\$4,855,251	

City of Stockton MUD
 Water Cost of Service Study
 Exhibit 18
 Summary of Cost of Service

	Total	Single Family	Multi-Family	Non-Residential	Irrigation	Notes
Revenues at Present Rates	\$51,658,862	\$34,447,019	\$5,132,422	\$7,409,724	\$4,669,696	
Net Revenue Requirement	\$53,466,922	\$35,050,675	\$5,542,051	\$8,018,945	\$4,855,251	
<i>Bal. / (Def.) of Funds</i>	<i>(\$1,808,060)</i>	<i>(\$603,656)</i>	<i>(\$409,628)</i>	<i>(\$609,221)</i>	<i>(\$185,554)</i>	
Required % Change in Rates	3.5%	1.8%	8.0%	8.2%	4.0%	

City of Stockton MUD
Water Cost of Service Study
Exhibit 19
Summary of Unit Costs

		Single Family		Multi-Family		Non-Residential		Irrigation	
		Tier 1	Tier 2	Winter	Summer	Winter	Summer	Winter	Summer
Consumption Related	\$ / CCF								
Commodity	\$1.60	\$1.60	\$1.60	\$1.60	\$1.60	\$1.60	\$1.60	\$1.60	\$1.60
Capacity	0.99	0.86	1.33	0.77	0.97	0.77	1.15	0.89	1.30
RR/FP/DA - \$/CCF	0.02	0.03	0.03	0.02	0.02	0.01	0.01	0.00	0.00
	\$2.61	\$2.49	\$2.96	\$2.39	\$2.59	\$2.38	\$2.76	\$2.49	\$2.90
Customer Related	\$ / Equiv. Mtr. / Mo		\$0.48		\$0.19		\$0.35		\$0.59
Actual Customer	\$2.96								
Cust. Acctg.	0.00								
Meters & Services	32.33								
	\$35.30								

Rate Schedule
Proposed Rate Alternative

	<i>Present Rates</i>	<i>Proposed</i>				
		FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Service Charge						
1" or less	\$33.90	\$33.90	\$35.30	\$36.54	\$37.82	\$39.33
1 1/2"	67.80	67.80	70.60	73.08	75.64	78.66
2"	108.48	108.48	112.96	116.93	121.02	125.86
3"	203.40	203.40	211.80	219.24	226.92	235.98
4"	339.00	339.00	353.00	365.40	378.20	393.30
6"	678.00	678.00	706.00	730.80	756.40	786.60
8"	1,084.80	1,084.80	1,129.60	1,169.28	1,210.24	1,258.56
10"	1,559.40	1,559.40	1,623.80	1,680.84	1,739.72	1,809.18
12"	2,288.25	2,288.25	2,382.75	2,466.45	2,552.85	2,654.78
Water Use						
<i>Single Family</i>						
0 - 15 Units	\$2.47	\$2.47	\$2.49	\$2.58	\$2.67	\$2.78
15 + Units	2.95	2.95	2.96	3.08	3.19	3.32
<i>Multi-Family</i>						
Winter (Oct - Apr)	\$2.11	\$2.11	\$2.39	\$2.47	\$2.56	\$2.66
Summer (May - Sept)	2.30	2.30	2.59	2.68	2.77	2.88
<i>Non-Residential</i>						
Winter (Oct - Apr)	\$2.11	\$2.11	\$2.38	\$2.46	\$2.55	\$2.65
Summer (May - Sept)	2.46	2.46	2.76	2.85	2.96	3.07
<i>Irrigation</i>						
Winter (Oct - Apr)	\$2.20	\$2.20	\$2.49	\$2.58	\$2.67	\$2.78
Summer (May - Sept)	2.79	2.79	2.90	3.00	3.11	3.24

1 Unit = 748 gallons

**City of Stockton MUD
Water Cost of Service Study
Single Family Rates - 1" & less
Proposed Rate Alternative: Year 2 - FY 2023**

Consumption (CCF)	Present Rates	Proposed Rates	Difference	
			\$	%
0	\$33.90	\$35.30	\$1.40	4.1%
2	38.84	40.28	1.44	3.7%
4	43.78	45.26	1.48	3.4%
6	48.72	50.24	1.52	3.1%
8	53.66	55.22	1.56	2.9%
10	58.60	60.20	1.60	2.7%
15	70.95	72.65	1.70	2.4%
20	85.70	87.45	1.75	2.0%
25	100.45	102.25	1.80	1.8%
35	129.95	131.85	1.90	1.5%
45	159.45	161.45	2.00	1.3%
60	203.70	205.85	2.15	1.1%
75	247.95	250.25	2.30	0.9%
90	292.20	294.65	2.45	0.8%
130	410.20	413.05	2.85	0.7%

Present Rates

<u>Service Charge</u>	<u>\$/Acct.</u>
1" & less	\$33.90

<u>Water Use</u>	<u>\$/CCF</u>
0 - 15 Units	\$2.47
15 + Units	2.95

Proposed Rates

<u>Service Charge</u>	<u>\$/Acct.</u>
1" & less	\$35.30

<u>Water Use</u>	<u>\$/CCF</u>
0 - 15 Units	\$2.49
15 + Units	2.96

**City of Stockton MUD
Water Cost of Service Study
Multi-Family Rates - 2"
Proposed Rate Alternative: Year 2 - FY 2023**

Consumption (CCF)	Present Rates	Proposed Rates	Difference	
			\$	%
<i>Summer</i>				
0	\$108.48	\$112.96	\$4.48	4.1%
10	131.48	138.86	7.38	5.6%
20	154.48	164.76	10.28	6.7%
30	177.48	190.66	13.18	7.4%
50	223.48	242.46	18.98	8.5%
75	280.98	307.21	26.23	9.3%
100	338.48	371.96	33.48	9.9%
150	453.48	501.46	47.98	10.6%
<i>Winter</i>				
0	\$108.48	\$112.96	\$4.48	4.1%
10	129.58	136.86	7.28	5.6%
20	150.68	160.76	10.08	6.7%
30	171.78	184.66	12.88	7.5%
50	213.98	232.46	18.48	8.6%
75	266.73	292.21	25.48	9.6%
100	319.48	351.96	32.48	10.2%
150	424.98	471.46	46.48	10.9%

PRESENT RATES		PROPOSED RATES	
<u>Service Charge</u>	<u>\$/Acct.</u>	<u>Service Charge</u>	<u>\$/Acct.</u>
2"	\$108.48	2"	\$112.96
<u>Water Use</u>	<u>\$/CCF</u>	<u>Water Use</u>	<u>\$/CCF</u>
Winter (Oct - Apr)	\$2.11	Winter (Oct - Apr)	\$2.39
Summer (May - Sept)	2.30	Summer (May - Sept)	2.59

**City of Stockton MUD
Water Cost of Service Study
Non Residential Rates - 4"
Proposed Rate Alternative: Year 2 - FY 2023**

Consumption (CCF)	Present Rates	Proposed Rates	Difference	
			\$	%
<i>Summer</i>				
50	\$462.00	\$491.00	\$29.00	6.3%
100	585.00	629.00	44.00	7.5%
150	708.00	767.00	59.00	8.3%
250	954.00	1,043.00	89.00	9.3%
500	1,569.00	1,733.00	164.00	10.5%
1,000	2,799.00	3,113.00	314.00	11.2%
1,500	4,029.00	4,493.00	464.00	11.5%
2,000	5,259.00	5,873.00	614.00	11.7%
<i>Winter</i>				
50	\$444.50	\$472.00	\$27.50	6.2%
100	550.00	591.00	41.00	7.5%
150	655.50	710.00	54.50	8.3%
250	866.50	948.00	81.50	9.4%
500	1,394.00	1,543.00	149.00	10.7%
1,000	2,449.00	2,733.00	284.00	11.6%
1,500	3,504.00	3,923.00	419.00	12.0%
2,000	4,559.00	5,113.00	554.00	12.2%

PRESENT RATES		PROPOSED RATES	
<u>Service Charge</u> 4"	<u>\$/Acct.</u> \$339.00	<u>Service Charge</u> 4"	<u>\$/Acct.</u> \$353.00
<u>Water Use</u> Winter (Oct - Apr)	<u>\$/CCF</u> \$2.11	<u>Water Use</u> Winter (Oct - Apr)	<u>\$/CCF</u> \$2.38
Summer (May - Sept)	2.46	Summer (May - Sept)	2.76

**City of Stockton MUD
Water Cost of Service Study
Irrigation Rates - 2"
Proposed Rate Alternative: Year 2 - FY 2023**

Consumption (CCF)	Present Rates	Proposed Rates	Difference	
			\$	%
<i>Summer</i>				
0	\$108.48	\$112.96	\$4.48	4.1%
15	150.33	156.46	6.13	4.1%
30	192.18	199.96	7.78	4.0%
45	234.03	243.46	9.43	4.0%
75	317.73	330.46	12.73	4.0%
100	387.48	402.96	15.48	4.0%
150	526.98	547.96	20.98	4.0%
200	666.48	692.96	26.48	4.0%
<i>Winter</i>				
0	\$108.48	\$112.96	\$4.48	4.1%
15	141.48	150.31	8.83	6.2%
30	174.48	187.66	13.18	7.6%
45	207.48	225.01	17.53	8.4%
75	273.48	299.71	26.23	9.6%
100	328.48	361.96	33.48	10.2%
150	438.48	486.46	47.98	10.9%
200	548.48	610.96	62.48	11.4%

PRESENT RATES		PROPOSED RATES	
<u>Service Charge</u>	<u>\$/Acct.</u>	<u>Service Charge</u>	<u>\$/Acct.</u>
2"	\$108.48	2"	\$112.96
<u>Water Use</u>	<u>\$/CCF</u>	<u>Water Use</u>	<u>\$/CCF</u>
Winter (Oct - Apr)	\$2.20	Winter (Oct - Apr)	\$2.49
Summer (May - Sept)	2.79	Summer (May - Sept)	2.90



7 Drought Recovery Charges Technical Appendix

**City of Stockton MUD
Water Cost of Service Study
Drought Recovery Charges**

<i>Targeted Savings</i>	Stage 1 10.0%	Stage 2 20.0%	Stage 3 30.0%	Stage 4 40.0%	Stage 5/6 50% +
Single Family (\$/Unit)					
0 - 15 Units	\$0.29	\$0.65	\$1.12	\$1.74	\$2.61
15 + Units	0.29	0.65	1.12	1.74	2.61
Multi-Family (\$/Unit)					
Winter (Oct - Apr)	\$0.28	\$0.62	\$1.06	\$1.66	\$2.48
Summer (May - Sept)	0.28	0.62	1.06	1.66	2.48
Non Residential (\$/Unit)					
Winter (Oct - Apr)	\$0.29	\$0.65	\$1.11	\$1.72	\$2.58
Summer (May - Sept)	0.29	0.65	1.11	1.72	2.58
Irrigation (\$/Unit)					
Winter (Oct - Apr)	\$0.31	\$0.69	\$1.19	\$1.84	\$2.77
Summer (May - Sept)	0.31	0.69	1.19	1.84	2.77

**City of Stockton MUD
Water Cost of Service Study
Drought Recovery Charges**

	<i>Proposed FY 2023 Rates</i>	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5/6
<i>Targeted Savings</i>		10.0%	20.0%	30.0%	40.0%	50% +
Single Family	<i>\$/Unit</i>					
0 - 15 Units	\$2.49	\$2.78	\$3.14	\$3.61	\$4.23	\$5.10
15 + Units	2.96	3.25	3.61	4.08	4.70	5.57
Multi-Family						
Winter (Oct - Apr)	\$2.39	\$2.67	\$3.01	\$3.45	\$4.05	\$4.87
Summer (May - Sept)	2.59	2.87	3.21	3.65	4.25	5.07
Non Residential						
Winter (Oct - Apr)	\$2.38	\$2.67	\$3.03	\$3.49	\$4.10	\$4.96
Summer (May - Sept)	2.76	3.05	3.41	3.87	4.48	5.34
Irrigation						
Winter (Oct - Apr)	\$2.49	\$2.80	\$3.18	\$3.68	\$4.33	\$5.26
Summer (May - Sept)	2.90	3.21	3.59	4.09	4.74	5.67

Total Monthly 1" or less Meter Bill - Proposed Single Family Rates

	Normal Water Conditions	Mandatory Conservation Stage 1	Mandatory Conservation Stage 2	Mandatory Conservation Stage 3	Mandatory Conservation Stage 4	Mandatory Conservation Stage 5/6
<i>Target Reduction Goal</i>	0%	10%	20%	30%	40%	50% +
Residential Customer Using 15 Units						
Assuming No Change in Use (15 Units)	\$72.65	\$77.00	\$82.40	\$89.45	\$98.75	\$111.80
Assuming Reduced Usage - Revised Usage - Units	15.0	14.0	12.0	11.0	9.0	8.0
Total Monthly Bill	\$72.65	\$74.22	\$72.98	\$75.01	\$73.37	\$76.10
Residential Customer Using 30 Units						
Assuming No Change in Use (30 Units)	\$117.05	\$125.75	\$136.55	\$150.65	\$169.25	\$195.35
Assuming Reduced Usage - Revised Usage - Units	30.0	27.0	24.0	21.0	18.0	15.0
Total Monthly Bill	\$117.05	\$116.00	\$114.89	\$113.93	\$112.85	\$111.80
Residential Customer Using 45 Units						
Assuming No Change in Use (45 Units)	\$161.45	\$174.50	\$190.70	\$211.85	\$239.75	\$278.90
Assuming Reduced Usage - Revised Usage - Units	45.0	41.0	36.0	32.0	27.0	23.0
Total Monthly Bill	\$161.45	\$161.50	\$158.21	\$158.81	\$155.15	\$156.36

**City of Stockton MUD
Water Cost of Service Study
Drought Surcharge Schedule**

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family					
<i>Stage 1</i>		\$0.29	\$0.30	\$0.31	\$0.32
<i>Stage 2</i>		0.65	0.67	0.69	0.72
<i>Stage 3</i>		1.12	1.16	1.20	1.25
<i>Stage 4</i>		1.74	1.81	1.87	1.95
<i>Stage 5/6</i>		2.61	2.71	2.81	2.93
Multi-Family					
<i>Stage 1</i>		\$0.28	\$0.29	\$0.30	\$0.31
<i>Stage 2</i>		0.62	0.64	0.66	0.69
<i>Stage 3</i>		1.06	1.10	1.14	1.18
<i>Stage 4</i>		1.66	1.72	1.78	1.85
<i>Stage 5/6</i>		2.48	2.56	2.65	2.75
Non Residential					
<i>Stage 1</i>		\$0.29	\$0.30	\$0.31	\$0.32
<i>Stage 2</i>		0.65	0.67	0.70	0.73
<i>Stage 3</i>		1.11	1.15	1.19	1.24
<i>Stage 4</i>		1.72	1.78	1.85	1.92
<i>Stage 5/6</i>		2.58	2.67	2.77	2.88
Irrigation					
<i>Stage 1</i>		\$0.31	\$0.32	\$0.33	\$0.34
<i>Stage 2</i>		0.69	0.71	0.74	0.77
<i>Stage 3</i>		1.19	1.23	1.28	1.33
<i>Stage 4</i>		1.84	1.90	1.97	2.04
<i>Stage 5/6</i>		2.77	2.86	2.97	3.08

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 1 - REQUIRED TOTAL SAVINGS

	<u>Estimated % Savings</u>	<u>Est. Savings in Total CCF</u>
Stage 1 - Target Conservation (Savings)	10.0%	652,666 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	<u>Normal Water Conditions (CCF) [1]</u>	<u>Estimated % Savings by Block</u>	<u>Estimated Savings (CCF)</u>	<u>Volume Savings (CCF)</u>
0 - 15 Units	4,879,372	10.0%	487,937	4,391,435
15 + Units	1,647,288	10.0%	164,729	1,482,560
	-----		-----	-----
Total Consumption	6,526,661		652,666	5,873,995
Target Savings Difference (CCF)			652,666	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

<u>Revenue @ Present Rates</u>			<u>Usage After Vol. & Rate Impact (CCF)</u>	<u>% Adjst. to Rates</u>	<u>Proposed Rate \$/CCF</u>	<u>Current Rates</u>	<u>Commodity Revenue</u>
Revenue	\$15,323,050	0 - 15 Units	4,391,435	11.6%	\$2.78	\$2.49	\$12,208,190
Balance/(Deficiency)	(\$1,702,561)	15 + Units	1,482,560	9.8%	3.25	2.96	4,818,319
Consumption	5,873,995		-----				-----
Needed Increase per CCF	\$0.29	Total	5,873,995				\$17,026,508
Needed Rev Increase	10.0%						

Plus: Targeted Additional Stage 1 Costs (Residential Share) \$0

Target - Total Revenue \$17,025,611
 \$ Difference \$897

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 2 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 2 - Target Conservation (Savings)	20.0%	1,305,332 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
0 - 15 Units	4,879,372	20.0%	975,874	3,903,498
15 + Units	1,647,288	20.0%	329,458	1,317,831
	-----		-----	-----
Total Consumption	6,526,661		1,305,332	5,221,329
Target Savings Difference (CCF)			1,305,332	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates			Usage After Vol. & Rate Impact (CCF)	% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue
Revenue	\$13,620,489	0 - 15 Units	3,903,498	26.1%	\$3.14	\$2.49	\$12,256,984
Balance/(Deficiency)	(\$3,405,122)	15 + Units	1,317,831	22.0%	3.61	2.96	4,757,369
Consumption	5,221,329		-----				-----
Needed Increase per CCF	\$0.65	Total	5,221,329				\$17,014,352
Needed Rev Increase	20.0%						

Plus: Targeted Additional Stage 2 Costs (Residential Share) \$0

Target - Total Revenue \$17,025,611
 \$ Difference (\$11,259)

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 3 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 3 - Target Conservation (Savings)	30.0%	1,957,998 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
0 - 15 Units	4,879,372	30.0%	1,463,812	3,415,561
15 + Units	1,647,288	30.0%	494,187	1,153,102
Total Consumption	6,526,661		1,957,998	4,568,663
Target Savings Difference (CCF)			1,957,998	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates			Usage After Vol. & Rate Impact (CCF)	% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue
Revenue	\$11,917,928	0 - 15 Units	3,415,561	45.0%	\$3.61	\$2.49	\$12,330,174
Balance/(Deficiency)	(\$5,107,683)	15 + Units	1,153,102	37.8%	4.08	2.96	4,704,656
Consumption	4,568,663	Total	4,568,663				\$17,034,830
Needed Increase per CCF	\$1.12						
Needed Rev Increase	30.0%						

Plus: Targeted Additional Stage 3 Costs (Residential Share) \$0

Target - Total Revenue \$17,025,611
 \$ Difference \$9,219

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 4 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 4 - Target Conservation (Savings)	40.0%	2,610,664 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
0 - 15 Units	4,879,372	40.0%	1,951,749	2,927,623
15 + Units	1,647,288	40.0%	658,915	988,373
	-----		-----	-----
Total Consumption	6,526,661		2,610,664	3,915,996
Target Savings			2,610,664	
Difference (CCF)			0	

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates			Usage After Vol. & Rate Impact (CCF)	% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue
Revenue	\$10,215,367	0 - 15 Units	2,927,623	69.9%	\$4.23	\$2.49	\$12,383,847
Balance/(Deficiency)	(\$6,810,244)	15 + Units	988,373	58.8%	4.70	2.96	4,645,353
Consumption	3,915,996		-----				-----
Needed Increase per CCF	\$1.74	Total	3,915,996				\$17,029,200
Needed Rev Increase	40.0%						

Plus: Targeted Additional Stage 4 Costs (Residential Share) \$0

Target - Total Revenue \$17,025,611
 \$ Difference \$3,590

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 5 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 5 - Target Conservation (Savings)	50.0%	3,263,330 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
0 - 15 Units	4,879,372	50.0%	2,439,686	2,439,686
15 + Units	1,647,288	50.0%	823,644	823,644
	-----		-----	-----
Total Consumption	6,526,661		3,263,330	3,263,330
Target Savings			3,263,330	
Difference (CCF)			0	

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates			Usage After Vol. & Rate Impact (CCF)	% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue
Revenue	\$8,512,805	0 - 15 Units	2,439,686	104.8%	\$5.10	\$2.49	\$12,442,400
Balance/(Deficiency)	(\$8,512,805)	15 + Units	823,644	88.2%	5.57	2.96	4,587,698
Consumption	3,263,330		-----				-----
Needed Increase per CCF	\$2.61	Total	3,263,330				\$17,030,098
Needed Rev Increase	50.0%						

Plus: Targeted Additional Stage 5 Costs (Residential Share) \$0

Target - Total Revenue \$17,025,611
 \$ Difference \$4,487

[1] - Assumes FY 2021 is normal consumption

Total Monthly 1" or less Meter Bill - Multi-Family WINTER

	Normal Water Conditions	Mandatory Conservation Stage 1	Mandatory Conservation Stage 2	Mandatory Conservation Stage 3	Mandatory Conservation Stage 4	Mandatory Conservation Stage 5/6
<i>Target Reduction Goal</i>	0%	10%	20%	30%	40%	50% +
Non Residential Customer Using 25 CCF						
Assuming No Change in Use (25 CCF)	\$93.65	\$100.65	\$109.15	\$120.15	\$135.15	\$155.65
Assuming Reduced Usage - Revised CCF Usage	25.0	23.0	20.0	18.0	15.0	13.0
Total Monthly Bill	\$93.65	\$95.31	\$94.10	\$96.00	\$94.65	\$97.21
Non Residential Customer Using 50 CCF						
Assuming No Change in Use (50 CCF)	\$153.40	\$167.40	\$184.40	\$206.40	\$236.40	\$277.40
Assuming Reduced Usage - Revised CCF Usage	50.0	45.0	40.0	35.0	30.0	25.0
Total Monthly Bill	\$153.40	\$154.05	\$154.30	\$154.65	\$155.40	\$155.65
Non Residential Customer Using 75 CCF						
Assuming No Change in Use (75 CCF)	\$213.15	\$234.15	\$259.65	\$292.65	\$337.65	\$399.15
Assuming Reduced Usage - Revised CCF Usage	75.0	68.0	60.0	53.0	45.0	38.0
Total Monthly Bill	\$213.15	\$215.46	\$214.50	\$216.75	\$216.15	\$218.96

Total Monthly 1" or less Meter Bill - Multi-Family SUMMER

	Normal Water Conditions	Mandatory Conservation Stage 1	Mandatory Conservation Stage 2	Mandatory Conservation Stage 3	Mandatory Conservation Stage 4	Mandatory Conservation Stage 5/6
<i>Target Reduction Goal</i>	0%	10%	20%	30%	40%	50% +
Non Residential Customer Using 25 CCF						
Assuming No Change in Use (25 CCF)	\$98.65	\$105.65	\$114.15	\$125.15	\$140.15	\$160.65
Assuming Reduced Usage -						
Revised CCF Usage	25.0	23.0	20.0	18.0	15.0	13.0
Total Monthly Bill	\$98.65	\$99.91	\$98.10	\$99.60	\$97.65	\$99.81
Non Residential Customer Using 50 CCF						
Assuming No Change in Use (50 CCF)	\$163.40	\$177.40	\$194.40	\$216.40	\$246.40	\$287.40
Assuming Reduced Usage -						
Revised CCF Usage	50.0	45.0	40.0	35.0	30.0	25.0
Total Monthly Bill	\$163.40	\$163.05	\$162.30	\$161.65	\$161.40	\$160.65
Non Residential Customer Using 75 CCF						
Assuming No Change in Use (75 CCF)	\$228.15	\$249.15	\$274.65	\$307.65	\$352.65	\$414.15
Assuming Reduced Usage -						
Revised CCF Usage	75.0	68.0	60.0	53.0	45.0	38.0
Total Monthly Bill	\$228.15	\$229.06	\$226.50	\$227.35	\$225.15	\$226.56

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 1 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 1 - Target Conservation (Savings)	10.0%	131,550 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	699,503	10.0%	69,950	629,553
Summer (May - Sept)	615,992	10.0%	61,599	554,393
Total Consumption	1,315,495		131,550	1,183,946
Target Savings Difference (CCF)			131,550	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 1				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$2,940,509	Winter (Oct - Apr)	629,553	11.7%	\$2.67	\$2.39	\$1,680,906
Balance/(Deficiency)	(\$326,723)	Summer (May - Sept)	554,393	10.8%	2.87	2.59	1,591,108
Consumption	1,183,946	Total	1,183,946				\$3,272,014
Needed Increase per CCF	\$0.28						
Needed Rev Increase	10.0%						

Plus: Targeted Additional Stage 1 Costs (MF Share) \$0

Target - Total Revenue \$3,267,232
 \$ Difference \$4,782

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 2 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 2 - Target Conservation (Savings)	20.0%	263,099 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	699,503	20.0%	139,901	559,602
Summer (May - Sept)	615,992	20.0%	123,198	492,794
Total Consumption	1,315,495		263,099	1,052,396
Target Savings Difference (CCF)			263,099	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 2				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$2,613,786	Winter (Oct - Apr)	559,602	25.9%	\$3.01	\$2.39	\$1,684,403
Balance/(Deficiency)	(\$653,446)	Summer (May - Sept)	492,794	23.9%	3.21	2.59	1,581,868
Consumption	1,052,396	Total	1,052,396				\$3,266,272
Needed Increase per CCF	\$0.62						
Needed Rev Increase	20.0%						

Plus: Targeted Additional Stage 2 Costs (MF Share) \$0

Target - Total Revenue \$3,267,232
 \$ Difference (\$961)

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 3 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 3 - Target Conservation (Savings)	30.0%	394,649 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	699,503	30.0%	209,851	489,652
Summer (May - Sept)	615,992	30.0%	184,798	431,195
Total Consumption	1,315,495		394,649	920,847
Target Savings Difference (CCF)			394,649	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 3				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$2,287,063	Winter (Oct - Apr)	489,652	44.4%	\$3.45	\$2.39	\$1,689,300
Balance/(Deficiency)	(\$980,170)	Summer (May - Sept)	431,195	40.9%	3.65	2.59	1,573,860
Consumption	920,847	Total	920,847				\$3,263,160
Needed Increase per CCF	\$1.06						
Needed Rev Increase	30.0%						

Plus: Targeted Additional Stage 3 Costs (MF Share) \$0

Target - Total Revenue \$3,267,232
 \$ Difference (\$4,072)

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 4 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 4 - Target Conservation (Savings)	40.0%	526,198 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	699,503	40.0%	279,801	419,702
Summer (May - Sept)	615,992	40.0%	246,397	369,595
Total Consumption	1,315,495		526,198	789,297
Target Savings Difference (CCF)			526,198	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 4				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$1,960,339	Winter (Oct - Apr)	419,702	69.5%	\$4.05	\$2.39	\$1,699,792
Balance/(Deficiency)	(\$1,306,893)	Summer (May - Sept)	369,595	64.1%	4.25	2.59	1,570,780
Consumption	789,297	Total	789,297				\$3,270,573
Needed Increase per CCF	\$1.66						
Needed Rev Increase	40.0%						

Plus: Targeted Additional Stage 4 Costs (MF Share) \$0

Target - Total Revenue \$3,267,232
 \$ Difference \$3,340

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 5 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 5 - Target Conservation (Savings)	50.0%	657,748 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	699,503	50.0%	349,752	349,752
Summer (May - Sept)	615,992	50.0%	307,996	307,996
Total Consumption	1,315,495		657,748	657,748
Target Savings Difference (CCF)			657,748	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 5				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$1,633,616	Winter (Oct - Apr)	349,752	103.8%	\$4.87	\$2.39	\$1,703,290
Balance/(Deficiency)	(\$1,633,616)	Summer (May - Sept)	307,996	95.8%	5.07	2.59	1,561,541
Consumption	657,748	Total	657,748				\$3,264,830
Needed Increase per CCF	\$2.48						
Needed Rev Increase	50.0%						

Plus: Targeted Additional Stage 5 Costs (MF Share) \$0

Target - Total Revenue \$3,267,232
 \$ Difference (\$2,402)

[1] - Assumes FY 2021 is normal consumption

Total Monthly 1" or less Meter Bill - Non Residential WINTER

	Normal Water Conditions	Mandatory Conservation Stage 1	Mandatory Conservation Stage 2	Mandatory Conservation Stage 3	Mandatory Conservation Stage 4	Mandatory Conservation Stage 5/6
<i>Target Reduction Goal</i>	0%	10%	20%	30%	40%	50% +
Non Residential Customer Using 25 CCF						
Assuming No Change in Use (25 CCF)	\$93.40	\$100.65	\$109.65	\$121.15	\$136.40	\$157.90
Assuming Reduced Usage - Revised CCF Usage	25.0	23.0	20.0	18.0	15.0	13.0
Total Monthly Bill	\$93.40	\$95.31	\$94.50	\$96.72	\$95.40	\$98.38
Non Residential Customer Using 50 CCF						
Assuming No Change in Use (50 CCF)	\$152.90	\$167.40	\$185.40	\$208.40	\$238.90	\$281.90
Assuming Reduced Usage - Revised CCF Usage	50.0	45.0	40.0	35.0	30.0	25.0
Total Monthly Bill	\$152.90	\$154.05	\$155.10	\$156.05	\$156.90	\$157.90
Non Residential Customer Using 75 CCF						
Assuming No Change in Use (75 CCF)	\$212.40	\$234.15	\$261.15	\$295.65	\$341.40	\$405.90
Assuming Reduced Usage - Revised CCF Usage	75.0	68.0	60.0	53.0	45.0	38.0
Total Monthly Bill	\$212.40	\$215.46	\$215.70	\$218.87	\$218.40	\$222.38

Total Monthly 1" of less Meter Bill - Non Residential SUMMER

	Normal Water Conditions	Mandatory Conservation Stage 1	Mandatory Conservation Stage 2	Mandatory Conservation Stage 3	Mandatory Conservation Stage 4	Mandatory Conservation Stage 5/6
<i>Target Reduction Goal</i>	0%	10%	20%	30%	40%	50% +
Non Residential Customer Using 25 CCF						
Assuming No Change in Use (25 CCF)	\$102.90	\$110.15	\$119.15	\$130.65	\$145.90	\$167.40
Assuming Reduced Usage -						
Revised CCF Usage	25.0	23.0	20.0	18.0	15.0	13.0
Total Monthly Bill	\$102.90	\$104.05	\$102.10	\$103.56	\$101.10	\$103.32
Non Residential Customer Using 50 CCF						
Assuming No Change in Use (50 CCF)	\$171.90	\$186.40	\$204.40	\$227.40	\$257.90	\$300.90
Assuming Reduced Usage -						
Revised CCF Usage	50.0	45.0	40.0	35.0	30.0	25.0
Total Monthly Bill	\$171.90	\$171.15	\$170.30	\$169.35	\$168.30	\$167.40
Non Residential Customer Using 75 CCF						
Assuming No Change in Use (75 CCF)	\$240.90	\$262.65	\$289.65	\$324.15	\$369.90	\$434.40
Assuming Reduced Usage -						
Revised CCF Usage	75.0	68.0	60.0	53.0	45.0	38.0
Total Monthly Bill	\$240.90	\$241.30	\$238.50	\$239.01	\$235.50	\$236.82

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 1 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 1 - Target Conservation (Savings)	10.0%	244,836 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	1,137,117	10.0%	113,712	1,023,405
Summer (May - Sept)	1,311,243	10.0%	131,124	1,180,119
Total Consumption	2,448,360		244,836	2,203,524
Target Savings Difference (CCF)			244,836	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 1				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$5,692,832	Winter (Oct - Apr)	1,023,405	12.2%	\$2.67	\$2.38	\$2,732,492
Balance/(Deficiency)	(\$632,537)	Summer (May - Sept)	1,180,119	10.5%	3.05	2.76	3,599,362
Consumption	2,203,524						
Needed Increase per CCF	\$0.29	Total	2,203,524				\$6,331,854
Needed Rev Increase	10.0%						

Plus: Targeted Additional Stage 1 Costs (Non Residential Share) \$0

Target - Total Revenue \$6,325,369
 \$ Difference \$6,485

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 2 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 2 - Target Conservation (Savings)	20.0%	489,672 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	1,137,117	20.0%	227,423	909,694
Summer (May - Sept)	1,311,243	20.0%	262,249	1,048,994
Total Consumption	2,448,360		489,672	1,958,688
Target Savings Difference (CCF)			489,672	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 2				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$5,060,295	Winter (Oct - Apr)	909,694	27.3%	\$3.03	\$2.38	\$2,756,372
Balance/(Deficiency)	(\$1,265,074)	Summer (May - Sept)	1,048,994	23.6%	3.41	2.76	3,577,071
Consumption	1,958,688	Total	1,958,688				\$6,333,443
Needed Increase per CCF	\$0.65						
Needed Rev Increase	20.0%						

Plus: Targeted Additional Stage 2 Costs (Non Residential Share) \$0

Target - Total Revenue \$6,325,369
 \$ Difference \$8,073

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 3 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 3 - Target Conservation (Savings)	30.0%	734,508 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	1,137,117	30.0%	341,135	795,982
Summer (May - Sept)	1,311,243	30.0%	393,373	917,870
Total Consumption	2,448,360		734,508	1,713,852
Target Savings Difference (CCF)			734,508	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 3				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$4,427,758	Winter (Oct - Apr)	795,982	46.6%	\$3.49	\$2.38	\$2,777,977
Balance/(Deficiency)	(\$1,897,611)	Summer (May - Sept)	917,870	40.2%	3.87	2.76	3,552,157
Consumption	1,713,852						
Needed Increase per CCF	\$1.11	Total	1,713,852				\$6,330,134
Needed Rev Increase	30.0%						

Plus: Targeted Additional Stage 3 Costs (Non Residential Share) \$0

Target - Total Revenue \$6,325,369
 \$ Difference \$4,765

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 4 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 4 - Target Conservation (Savings)	40.0%	979,344 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	1,137,117	40.0%	454,847	682,270
Summer (May - Sept)	1,311,243	40.0%	524,497	786,746
Total Consumption	2,448,360		979,344	1,469,016
Target Savings Difference (CCF)			979,344	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 4			
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue
Revenue	\$3,795,222	Winter (Oct - Apr)	682,270	72.3%	\$4.10	\$2,797,308
Balance/(Deficiency)	(\$2,530,148)	Summer (May - Sept)	786,746	62.3%	4.48	3,524,621
Consumption	1,469,016	Total	1,469,016			\$6,321,929
Needed Increase per CCF	\$1.72					
Needed Rev Increase	40.0%					

Plus: Targeted Additional Stage 4 Costs (Non Residential Share) \$0

Target - Total Revenue \$6,325,369
 \$ Difference (\$3,440)

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 5 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 5 - Target Conservation (Savings)	50.0%	1,224,180 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	1,137,117	50.0%	568,559	568,559
Summer (May - Sept)	1,311,243	50.0%	655,621	655,621
Total Consumption	2,448,360		1,224,180	1,224,180
Target Savings Difference (CCF)			1,224,180	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 5				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$3,162,685	Winter (Oct - Apr)	568,559	108.4%	\$4.96	\$2.38	\$2,820,050
Balance/(Deficiency)	(\$3,162,685)	Summer (May - Sept)	655,621	93.5%	5.34	2.76	3,501,019
Consumption	1,224,180						
Needed Increase per CCF	\$2.58	Total	1,224,180				\$6,321,069
Needed Rev Increase	50.0%						

Plus: Targeted Additional Stage 5 Costs (Non Residential Share) \$0

Target - Total Revenue \$6,325,369
 \$ Difference (\$4,300)

[1] - Assumes FY 2021 is normal consumption

Total Monthly 1" or less Meter Bill - Irrigation WINTER

	Normal Water Conditions	Mandatory Conservation Stage 1	Mandatory Conservation Stage 2	Mandatory Conservation Stage 3	Mandatory Conservation Stage 4	Mandatory Conservation Stage 5/6
<i>Target Reduction Goal</i>	0%	10%	20%	30%	40%	50% +
Irrigation Customer Using 25 CCF						
Assuming No Change in Use (25 CCF)	\$96.15	\$103.90	\$113.40	\$125.90	\$142.15	\$165.40
Assuming Reduced Usage - Revised CCF Usage	25.0	23.0	20.0	18.0	15.0	13.0
Total Monthly Bill	\$96.15	\$98.30	\$97.50	\$100.14	\$98.85	\$102.28
Irrigation Customer Using 50 CCF						
Assuming No Change in Use (50 CCF)	\$158.40	\$173.90	\$192.90	\$217.90	\$250.40	\$296.90
Assuming Reduced Usage - Revised CCF Usage	50.0	45.0	40.0	35.0	30.0	25.0
Total Monthly Bill	\$158.40	\$159.90	\$161.10	\$162.70	\$163.80	\$165.40
Irrigation Customer Using 75 CCF						
Assuming No Change in Use (75 CCF)	\$220.65	\$243.90	\$272.40	\$309.90	\$358.65	\$428.40
Assuming Reduced Usage - Revised CCF Usage	75.0	68.0	60.0	53.0	45.0	38.0
Total Monthly Bill	\$220.65	\$224.30	\$224.70	\$228.94	\$228.75	\$233.78

Total Monthly 1" or less Meter Bill - Irrigation SUMMER

	Normal Water Conditions	Mandatory Conservation Stage 1	Mandatory Conservation Stage 2	Mandatory Conservation Stage 3	Mandatory Conservation Stage 4	Mandatory Conservation Stage 5/6
<i>Target Reduction Goal</i>	0%	10%	20%	30%	40%	50% +
Irrigation Customer Using 25 CCF						
Assuming No Change in Use (25 CCF)	\$106.40	\$114.15	\$123.65	\$136.15	\$152.40	\$175.65
Assuming Reduced Usage -						
Revised CCF Usage	25.0	23.0	20.0	18.0	15.0	13.0
Total Monthly Bill	\$106.40	\$107.73	\$105.70	\$107.52	\$105.00	\$107.61
Irrigation Customer Using 50 CCF						
Assuming No Change in Use (50 CCF)	\$178.90	\$194.40	\$213.40	\$238.40	\$270.90	\$317.40
Assuming Reduced Usage -						
Revised CCF Usage	50.0	45.0	40.0	35.0	30.0	25.0
Total Monthly Bill	\$178.90	\$178.35	\$177.50	\$177.05	\$176.10	\$175.65
Irrigation Customer Using 75 CCF						
Assuming No Change in Use (75 CCF)	\$251.40	\$274.65	\$303.15	\$340.65	\$389.40	\$459.15
Assuming Reduced Usage -						
Revised CCF Usage	75.0	68.0	60.0	53.0	45.0	38.0
Total Monthly Bill	\$251.40	\$252.18	\$249.30	\$250.67	\$247.20	\$249.36

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 1 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 1 - Target Conservation (Savings)	10.0%	143,768 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	468,482	10.0%	46,848	421,634
Summer (May - Sept)	969,202	10.0%	96,920	872,281
Total Consumption	1,437,684		143,768	1,293,915
Target Savings Difference (CCF)			143,768	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 1				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$3,579,485	Winter (Oct - Apr)	421,634	12.4%	\$2.80	\$2.49	\$1,180,575
Balance/(Deficiency)	(\$397,721)	Summer (May - Sept)	872,281	10.7%	3.21	2.90	2,800,023
Consumption	1,293,915						
Needed Increase per CCF	\$0.31	Total	1,293,915				\$3,980,598
Needed Rev Increase	10.0%						

Plus: Targeted Additional Stage 1 Costs (Irrigation Share) \$0

Target - Total Revenue \$3,977,205
 \$ Difference \$3,393

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 2 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 2 - Target Conservation (Savings)	20.0%	287,537 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	468,482	20.0%	93,696	374,786
Summer (May - Sept)	969,202	20.0%	193,840	775,361
Total Consumption	1,437,684		287,537	1,150,147
Target Savings Difference (CCF)			287,537	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 2				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$3,181,764	Winter (Oct - Apr)	374,786	27.7%	\$3.18	\$2.49	\$1,191,819
Balance/(Deficiency)	(\$795,441)	Summer (May - Sept)	775,361	23.8%	3.59	2.90	2,783,547
Consumption	1,150,147	Total	1,150,147				\$3,975,366
Needed Increase per CCF	\$0.69						
Needed Rev Increase	20.0%						

Plus: Targeted Additional Stage 2 Costs (Irrigation Share)

\$0

Target - Total Revenue
\$ Difference

\$3,977,205
(\$1,840)

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 3 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 3 - Target Conservation (Savings)	30.0%	431,305 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	468,482	30.0%	140,545	327,938
Summer (May - Sept)	969,202	30.0%	290,760	678,441
Total Consumption	1,437,684		431,305	1,006,379
Target Savings Difference (CCF)			431,305	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 3				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$2,784,044	Winter (Oct - Apr)	327,938	47.8%	\$3.68	\$2.49	\$1,206,810
Balance/(Deficiency)	(\$1,193,162)	Summer (May - Sept)	678,441	41.0%	4.09	2.90	2,774,824
Consumption	1,006,379	Total	1,006,379				\$3,981,634
Needed Increase per CCF	\$1.19						
Needed Rev Increase	30.0%						

Plus: Targeted Additional Stage 3 Costs (Irrigation Share)

\$0

Target - Total Revenue

\$3,977,205

\$ Difference

\$4,429

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 4 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 4 - Target Conservation (Savings)	40.0%	575,074 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF) [1]	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	Volume Savings (CCF)
Winter (Oct - Apr)	468,482	40.0%	187,393	281,089
Summer (May - Sept)	969,202	40.0%	387,681	581,521
Total Consumption	1,437,684		575,074	862,610
Target Savings Difference (CCF)			575,074	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 4				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$2,386,323	Winter (Oct - Apr)	281,089	73.9%	\$4.33	\$2.49	\$1,217,117
Balance/(Deficiency)	(\$1,590,882)	Summer (May - Sept)	581,521	63.4%	4.74	2.90	2,756,409
Consumption	862,610	Total	862,610				\$3,973,526
Needed Increase per CCF	\$1.84						
Needed Rev Increase	40.0%						

Plus: Targeted Additional Stage 4 Costs (Irrigation Share)

\$0

Target - Total Revenue
\$ Difference

\$3,977,205
(\$3,679)

[1] - Assumes FY 2021 is normal consumption

Step 1 - Determine Total Targeted Stage 1 Savings and Savings Achieved from Voluntary Impacts

STAGE 5 - REQUIRED TOTAL SAVINGS

	Estimated % Savings	Est. Savings in Total CCF
Stage 5 - Target Conservation (Savings)	50.0%	718,842 CCF

Step 2 - Estimate the Voluntary Impacts (Savings) By Price Block

	Normal Water Conditions (CCF)	Voluntary Savings Impacts		
		Estimated % Savings by Block	Estimated Savings (CCF)	After Vol. Savings (CCF)
Winter (Oct - Apr)	468,482	50.0%	234,241	234,241
Summer (May - Sept)	969,202	50.0%	484,601	484,601
Total Consumption	1,437,684		718,842	718,842
Target Savings Difference (CCF)			718,842	0

Step 3 - Determine the Price (Rate) By Block Needed to Achieve Needed Savings and Meet Revenue Requirement

Revenue @ Present Rates		Usage After Vol. & Rate Impact (CCF)	STAGE 5				
			% Adjst. to Rates	Proposed Rate \$/CCF	Current Rates	Commodity Revenue	
Revenue	\$1,988,603	Winter (Oct - Apr)	234,241	111.2%	\$5.26	\$2.49	\$1,232,108
Balance/(Deficiency)	(\$1,988,603)	Summer (May - Sept)	484,601	95.5%	5.67	2.90	2,747,686
Consumption	718,842	Total	718,842				\$3,979,795
Needed Increase per CCF	\$2.77						
Needed Rev Increase	50.0%						

Plus: Targeted Additional Stage 5 Costs (Irrigation Share) \$0

Target - Total Revenue \$3,977,205
 \$ Difference \$2,589

[1] - Assumes FY 2021 is normal consumption



8 Approved Ordinance Appendix

Resolution No. 2021-05-25-1602

STOCKTON CITY COUNCIL

RESOLUTION ADOPTING THE WATER RATE STUDY AND APPROVING THE WATER RATE ADJUSTMENTS

On March 24, 2020, by Resolution 2020-03-24-1113, the Stockton City Council approved a Professional Services Agreement with HDR Engineering, Inc., to evaluate the Water Utility's revenue requirements, prepare a cost-of-service analysis, and design rates that are equitably distributed among all customer classes; and

The Final Water Rate Study, dated March 2021, and attached as Exhibit 1, is complete and indicates the need to increase the rates for the City's water service charges to enable the Water Utility to meet its projected operation, maintenance, and capital improvement costs; and

On March 09, 2021, this Council adopted Resolution 2021-03-09-1505 which authorized the mailing of the notice of a Proposition 218 Public Protest Hearing (Notice) to be held no less than 45-days from the mailing of the Notice at 5:30 p.m. in City Hall at 425 N. El Dorado Street, Stockton, California, to take testimony and consider written protests to the proposed wastewater rate adjustments and final action on the Water Rate Study, dated March 2021; and

A certificate has been filed with the City Clerk setting forth the time and manner of the compliance with the requirements of law for mailing notice of the time and place for said Public Hearing and the Notice required by Article XIID of the California Constitution has been done in the time, form, and manner required by law; and

The Notices were mailed to the record owners of any parcels upon which the water service charges are proposed for imposition, and any tenants who may be liable for the payment of water service charges; and

The Notices were mailed on March 29, 2021, to 65,744 affected customers and property owners; and

Notice of the time and place of the Public Hearing was published in The Record on April 24, 2021 and May 4, 2021; and

The Final Water Rate Study, dated March 2021, containing the calculated rates, was made available at <http://www.stocktonca.gov/WaterRates> and placed on file with the City Clerk; and

The City Council held the Public Hearing on May 25, 2021, more than forty-five days after the Notice was mailed, and at the Public Hearing the City Council heard all oral

testimony, and considered all written materials and written protests concerning the adoption and imposition of the proposed increases to the rates for the water services charges; and

At the close of the Public Hearing, the City did not receive written protests regarding the establishment and appointment of the proposed increases to the rates for water services charges from a majority of the affected property owners or tenants directly liable for the payment of the Water service charges; and

The City Council is authorized and has determined to approve the proposed water rate adjustments and act accordingly on the matter; now, therefore,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF STOCKTON, AS FOLLOWS:

1. The matters set forth above are true and correct statements and are made legislative findings and determinations of the City Council and by this reference are made an operative part of this Resolution.

2. The City Council adopts the Final Water Rate Study, dated March 2021, attached as Exhibit 1, and incorporated by this reference.

3. The City Council has evaluated and adopts the Water service charges at the maximum rates and on the effective dates set forth in Exhibit 2 to this Resolution.

4. The City Council finds that the revenues derived from the Water service charges established by this Resolution: (a) do not exceed the funds required to provide water services; (b) shall not be used for any other purpose than that for which the rates and charges are imposed; (c) do not exceed the proportional cost of the service attributable to each parcel upon which the charges are imposed; (d) provide services that are immediately available to the customer; and (e) are not levied for general governmental purposes.

5. The City Manager is hereby authorized to take whatever actions are necessary and appropriate to carry out the purpose and intent of this Resolution.

6. In accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, the City Council has determined that the increases in the water service charges are exempt from CEQA pursuant to section 15378 and section 15273 of the CEQA Guidelines and the Public Resources Code section 21080(b)(8) because: (a) the increased charges are for the purpose of meeting operational and maintenance expenses of the aforementioned services; and (b) the charges constitute the creation of a funding mechanism/or other governmental fiscal activity which does not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment. The documents and materials that constitute the record of

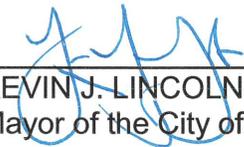
proceedings on which these findings have been based are in the Office of the City Clerk at 425 N. El Dorado Street, Stockton CA 95202.

7. If any section, subsection, subdivision, sentence, clause, or phrase in this Resolution or any part thereof is for any reason held to be unconstitutional or invalid, or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Resolution or any part thereof. The City Council hereby declares that it would have adopted any section irrespective of the fact that any one or more subsections, subdivision, sentences, clauses, or phrases be declared unconstitutional, invalid, or ineffective.

8. All resolutions, ordinances, or administrative actions by the City Council, or parts thereof, that are inconsistent or in conflict with any provision of this Resolution are hereby superseded only to the extent of such inconsistency or conflict.

9. This Resolution shall take effect immediately upon its adoption.

PASSED, APPROVED, and ADOPTED May 25, 2021.



KEVIN J. LINCOLN II
Mayor of the City of Stockton

ATTEST:



ELIZA R. GARZA, CMC
City Clerk of the City of Stockton



THE RECORD
PROOF OF PUBLICATION

STATE OF CALIFORNIA
COUNTY OF SAN JOAQUIN

THE UNDERSIGNED SAYS:

I am a citizen of the United States and a resident of San Joaquin County; I am over the age of 18 years and not a part to or interested in the above-entitled matter. I am the principal clerk of the printer of THE RECORD, a newspaper of general publication, printed and published daily in the City of Stockton, County of San Joaquin by the Superior Court of the County of San Joaquin, State of California, under the date of February 26, 1952, File No. 52857, San Joaquin County Records; that the notice of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published each regular and entire issue of said newspaper and not in any supplement thereof on the following dates,
To wit,
April 24 2021,
May 04 2021

I declare under penalty of perjury that the foregoing is true and correct.
Executed on May 4, 2021 In Stockton California



Delailah Little,
The Record

0000231852

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the City of Stockton will hold a public hearing at 5:30 pm on Tuesday, May 25, 2021, in the City Council Chamber, at 425 N. El Dorado St., Stockton, CA 95202. The purpose of this hearing is to consider all testimony and written protests to the adoption of proposed rate adjustments to the City's water service fees. The record owner of any property receiving water service in the City of Stockton service area and any person who is not the owner of a property receiving water service but is directly responsible for the payment of water utility charges for the corresponding property may file a written protest to the proposed rate adjustments. Written protests must be received by the City Clerk at the address listed above prior to the close of the public hearing and must include the name and signature of the person submitting the protest, the street address or Assessor's Parcel Number (APN) where water service is provided, and a statement that the person submitting the protest is opposed to the proposed rate adjustments. Only one protest will be accepted per parcel.

The City Council invites the public to two virtual informational meetings on the proposed rates. The first meeting will be held at 6:00 pm on Thursday, April 22, 2021. The link to this meeting is available at www.stocktonca.gov/WaterRates. To join by telephone, dial (415) 655-0001 and enter access code 133 289 7116. The second virtual informational meeting will be held at 6:00 pm on Tuesday, May 4, 2021. The link to this meeting is available at www.stocktonca.gov/WaterRates. To join by telephone, dial (415) 655-0001 and enter access code 133 353 4161. More information regarding the proposed water rate adjustments is available at www.stocktonca.gov/WaterRates.

ELIZA R. GARZA, CMC
CITY CLERK
CITY OF STOCKTON

#231852 4/24, 5/4, 2021



9 Proposition 218 Notice Appendix



Municipal Utilities Department
 2500 Navy Drive
 Stockton, CA 95206

PRESORTED STD
 MAIL
 U.S. POSTAGE
 PAID
 PCF

Notice of Public Hearing On Proposed Adjustments to Water Rates

Read this notice to learn more about proposed water rate adjustments for City of Stockton water utility customers.

El contenido de este mensaje está disponible en español en la página de internet www.stocktonca.gov/WaterRates.

The City of Stockton provides the highest quality water to approximately 49,000 residential and commercial connections in North and South Stockton.

California Proposition 218 (California Constitution Article XIII D, section 6) requires each parcel be charged only what is required to cover their respective proportional cost of service to provide water service, including water system costs like operations, maintenance, and construction of critical infrastructure.

Pursuant to Proposition 218, the City Council invites the public to attend a public hearing at **5:30 p.m. on Tuesday, May 25, 2021**, in the City Council Chamber, at **425 N. El Dorado Street**, to consider all testimony and written protests to the adoption of proposed rate adjustments to City of Stockton water service fees.

The following persons may submit a written protest on the proposed water rate adjustments before the close of the public hearing referenced above:

- ◇ A record owner(s) of property(s) receiving water service in the City of Stockton service area. If the person signing the protest is not shown on the last equalized assessment roll as the owner of the property(s), the protest must include written evidence that such person signing the protest is the owner of the property(s) receiving water service; or
- ◇ A customer of record, such as a tenant, whose name appears on the City of Stockton's records as the customer of record directly responsible for payment of water utility charges for the corresponding property receiving water service.

Although billed customers and record property owners will both be notified, only one protest per property will be counted.

Each protest must:

- ◇ **Be submitted in writing and received by the City Clerk at or before the close of the public hearing on May 25, 2021. Written protests may be mailed or hand-delivered to the Office of the City Clerk at 425 N. El Dorado Street, Stockton, CA 95202 or delivered at the public hearing;**
- ◇ **Contain a statement protesting the rate adjustments.**
- ◇ **Identify the property, either by street address or Assessor's Parcel Number (APN); and**
- ◇ **Include the name and signature of the person submitting the written protest.**

Protests submitted by email or other electronic means will not qualify as valid written protests. At the public hearing, all interested persons will be provided an opportunity to express comments or concerns to the proposed rate adjustments. At the conclusion of the hearing, the City Council will consider the adoption of a maximum proposed annual rate increases. If approved, the proposed rates will go into effect on July 1, 2021, and be adjusted each July 1 thereafter, through and including July 1, 2025.

Comments made at the public hearing will not qualify as written protests, unless accompanied by a written protest. If qualified written protests are submitted by a majority of the record property owner(s) or customer(s) of record, the Council may not approve the proposed rate adjustments.

How Are Water Rates Calculated?

The City's proposed water rate structure includes a fixed charge and a consumption charge.

- ◇ The **fixed charge** applies to all customer groups and is determined by the size of the meter serving the property. The fixed charge recovers a portion of the City's fixed costs.
- ◇ The **consumption charge** is based on the amount of water consumed for each property, measured in hundred cubic feet ("CCF"). One CCF is equivalent to 748 gallons:
 - For **single family residential** customers, consumption charges are calculated based on the amount of water consumed. A higher rate applies to water use higher than 15 CCF, to account for the increased costs associated with greater demand on the water system.
 - The consumption charge for **multi-family, non-residential (including commercial, institutional, and industrial), and irrigation** customers is based upon a seasonal rate structure with the summer billing period between May – September; and the winter billing period between October – April.

Summary of Proposed Monthly Fixed Meter Service Charge (\$/Meter Size)						
Meter Size (in inches)	Present Rates	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025
1" & Less	\$33.90	\$33.90	\$35.30	\$36.54	\$37.82	\$39.33
1 1/2"	67.80	67.80	70.60	73.08	75.64	78.66
2"	108.48	108.48	112.96	116.93	121.02	125.86
3"	203.40	203.40	211.80	219.24	226.92	235.98
4"	339.00	339.00	353.00	365.40	378.20	393.30
6"	678.00	678.00	706.00	730.80	756.40	786.60
8"	1,084.80	1,084.80	1,129.60	1,169.28	1,210.24	1,258.56
10"	1,559.40	1,559.40	1,623.80	1,680.84	1,739.72	1,809.18
12"	2,288.25	2,288.25	2,382.75	2,466.45	2,552.85	2,654.78

Summary of Proposed Monthly Consumption Charge (\$/CCF) 1 CCF Unit = 748 gallons						
Customer Class	Present Rates	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025
Single Family						
0 - 15 Units	\$2.47	\$2.47	\$2.49	\$2.58	\$2.67	\$2.78
15 + Units	2.95	2.95	2.96	3.08	3.19	3.32
Multi-Family						
Winter (Oct - Apr)	\$2.11	\$2.11	\$2.39	\$2.47	\$2.56	\$2.66
Summer (May - Sept)	2.30	2.30	2.59	2.68	2.77	2.88
Non-Residential						
Winter (Oct - Apr)	\$2.11	\$2.11	\$2.38	\$2.46	\$2.55	\$2.65
Summer (May - Sept)	2.46	2.46	2.76	2.85	2.96	3.07
Irrigation						
Winter (Oct - Apr)	\$2.20	\$2.20	\$2.49	\$2.58	\$2.67	\$2.78
Summer (May - Sept)	2.79	2.79	2.90	3.00	3.11	3.24

Drought Recovery Charges

A substantial portion of the costs to operate and maintain the water system is fixed. In other words, the costs remain the same regardless of water usage. Under the existing water rates, when consumption decreases, revenues also decrease. Reductions in revenue can place significant financial strain on the water utility funds.

Drought Recovery Charges are developed to reflect changes in the cost of service driven by reduced water use, while simultaneously providing sufficient revenue to maintain the water utility as customers comply with the requested reductions in use.

The Drought Recovery Charges are an additional charge per CCF that may be activated by a declared water shortage level pursuant to the City's Urban Water Management Plan, such as a drought, a statewide order mandating water use reductions, or other natural disaster or event that results in a water shortage and an unforeseen drop in water demand. The Urban Water Management Plan establishes six stages of water use reductions and restrictions. See below for these six stages, along with the estimated consumption reductions resulting from additional conservation restrictions implemented at each stage:

- ◇ **Stage 1 – Limited Irrigation/Outdoor Use – 10% reduction in water usage.**
- ◇ **Stage 2 – Limited Irrigation/Outdoor Use – 20% reduction in water usage.**
- ◇ **Stage 3 – Limited Irrigation/Outdoor Use – 30% reduction in water usage.**
- ◇ **Stage 4 – Minimal Irrigation/Outdoor Use – 40% reduction in water usage.**
- ◇ **Stages 5/6 – No Irrigation/Outdoor Use – 50% or higher reduction in water usage.**

Summary of Proposed Drought Recovery Charges (\$/CCF)

1 CCF Unit = 748 gallons

Customer Class	Present Rates	July 1, 2021	July 1, 2022	July 1, 2023	July 1, 2024	July 1, 2025
Single Family	\$/CCF	\$/CCF	\$/CCF	\$/CCF	\$/CCF	\$/CCF
Stage 1	\$0.30	\$0.30	\$0.29	\$0.30	\$0.31	\$0.32
Stage 2	0.66	0.66	0.65	0.67	0.69	0.72
Stage 3	1.15	1.15	1.12	1.16	1.20	1.25
Stage 4	1.78	1.78	1.74	1.81	1.87	1.95
Stages 5/6	2.66	2.66	2.61	2.71	2.81	2.93
Multi-Family	\$/CCF	\$/CCF	\$/CCF	\$/CCF	\$/CCF	\$/CCF
Stage 1	\$0.25	\$0.25	\$0.28	\$0.29	\$0.30	\$0.31
Stage 2	0.56	0.56	0.62	0.64	0.66	0.69
Stage 3	0.95	0.95	1.06	1.10	1.14	1.18
Stage 4	1.48	1.48	1.66	1.72	1.78	1.85
Stages 5/6	2.23	2.23	2.48	2.56	2.65	2.75
Non-Residential	\$/CCF	\$/CCF	\$/CCF	\$/CCF	\$/CCF	\$/CCF
Stage 1	\$0.26	\$0.26	\$0.29	\$0.30	\$0.31	\$0.32
Stage 2	0.58	0.58	0.65	0.67	0.70	0.73
Stage 3	1.00	1.00	1.11	1.15	1.19	1.24
Stage 4	1.55	1.55	1.72	1.78	1.85	1.92
Stages 5/6	2.34	2.34	2.58	2.67	2.77	2.88
Irrigation	\$/CCF	\$/CCF	\$/CCF	\$/CCF	\$/CCF	\$/CCF
Stage 1	\$0.29	\$0.29	\$0.31	\$0.32	\$0.33	\$0.34
Stage 2	0.65	0.65	0.69	0.71	0.74	0.77
Stage 3	1.14	1.14	1.19	1.23	1.28	1.33
Stage 4	1.76	1.76	1.84	1.90	1.97	2.04
Stages 5/6	2.65	2.65	2.77	2.86	2.97	3.08

Private Fire Hydrant Service Charge and Private Fire Protection Service Charge

The City of Stockton applies a monthly Private Fire Hydrant Service Charge for hydrants that are specific to certain private businesses. A monthly Private Fire Protection Service Charge is also applied on certain properties that have a private fire service meter. The payment of the Private Fire Protection Service Charges is a condition to extend or initiate water service by the installation of a private fire suppression system, and upon the request of the customer or property owner for delivery of water to the property for the purpose of fire protection service. These charges are not proposed to change at this time.

Private Fire Hydrant Service Charge			
Effective Date	Description	Current Amount	Proposed Amount
July 1, 2021	Hydrant	\$6.13	No Change
Private Fire Protection Service Charges			
Effective Date	Description	Current Amount	Proposed Amount
July 1, 2021	1 1/2-inch connection	\$9.19	No Change
July 1, 2021	2-inch connection	\$11.23	No Change
July 1, 2021	3-inch connection	\$17.48	No Change
July 1, 2021	4-inch connection	\$23.03	No Change
July 1, 2021	6-inch connection	\$34.68	No Change
July 1, 2021	8-inch connection	\$43.94	No Change
July 1, 2021	10-inch connection	\$57.46	No Change
July 1, 2021	12-inch connection	\$68.85	No Change

Why Are Rate Adjustments Necessary?

The City of Stockton is committed to providing the highest water quality at the lowest possible rates for our customers. To meet this commitment, the City hired HDR Engineering, Inc., an independent rate consultant, to evaluate the Water Utility revenue requirements, prepare a cost of service analysis and Water Rate Study Report (2021 Water Rate Study) to support a new five-year rate schedule that:

- ◇ Provides sufficient revenue to operate and maintain the City's water infrastructure and capital improvement projects;
- ◇ Reflects prudent financial planning criteria;
- ◇ Determines that rates are cost-based and equitable;
- ◇ Reflects the findings of the revenue requirement and cost of service analyses; and
- ◇ Meets the rate design goals and objectives of the City.

The 2021 Water Rate Study determines how customers equitably and fairly pay for the water services over a new five-year period.

Additional Information

The 2021 Water Rate Study is available at the City's website at www.stocktonca.gov/WaterRates and at the Office of the City Clerk: **425 N. El Dorado Street Stockton, CA 95202**

For questions about the proposed water rate adjustments, the rates applicable to your property or for more information, call **209-937-5001**. Submit a question via email using the link provided at www.stocktonca.gov/WaterRates.

Public Hearing
 Tuesday, May 25, 2021
 5:30 p.m.
 City Council Chamber
 425 N. El Dorado Street
 Stockton, CA 95202