Fallbrook Public Utility District

2022 Water, Wastewater, and Recycled Water Rate Study

Draft Report / September 21, 2022

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

Fallbrook Public Utility District

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September 21, 2022

David Shank, Assistant General Manager/CFO
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Re: Water, Wastewater & Recycled Water Rate Study

Bartle Wells Associates is pleased to submit the attached *Water, Wastewater & Recycled Water Rate Study*. The study develops long-term financial projections for the District's water, wastewater and recycled water utilities and calculates new rates designed to equitably recover the costs of providing service. The recommended rates are designed to meet the District's funding needs, comply with legal requirements, and be fair to all customers.

The proposed rates incorporate both overall rate increases as well as some modifications to the rate structures designed to improve rate equity and align rates with the cost of providing service. Rate increases are phased in over five years to minimize the annual impact on customers.

We enjoyed working with the District on this project and appreciate the assistance and input received from the District throughout the project. Final recommendations were developed with input from the District's project team, the District's Fiscal Policy & Insurance Committee, and independent legal counsel. Please contact us anytime if you have questions about the recommendations in this report or other issues regarding utility rates and finances.

Sincerely,

BARTLE WELLS ASSOCIATES

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Glossary of Terms

Terms	Descriptions
Active Customer	A service receiving regular water service
AF	Acre foot / Acre feet
AWWA	American Water Works Association
BWA	Bartle Wells Associates
CIC	Capital Improvement Charge
CIP	Capital Improvement Projects
COS	Cost of Service
CPI	Consumer Price Index/Indices
CWA	San Diego County Water Authority
CY	Calendar Year
District	Fallbrook Public Utility District
EDU	Equivalent Dwelling Unit
EMU	Equivalent Meter Unit
ENR CCI	Engineering News-Record Construction Cost Indices
FPUD	Fallbrook Public Utility District
FY	Fiscal Year (July 1 – June 30)
GPCD	Gallons per capita per day
IAC	Infrastructure Access Charge
Kgal	Kilogallons or thousand gallons
M1 Manual	"Principles of Water Rates, Fees, and Charges: Manual of Water Supply Practices M1", 6th edition published by AWWA
MET	Metropolitan Water District of Southern California
MFR	Multi-Family Residential
MWD	Metropolitan Water District of Southern California
O&M	Operations and Maintenance
PAYGO	Pay-As-You-Go
R&R	Repair and Replacement
RP	Reduce Pressure
RTS	Readiness-to-Serve (Water Section), Return-to-Sewer (WW Section)
RW	Recycled Water
SAWR	Special Agriculture Water Rate
SDCWA	San Diego County Water Authority
Service	A connection to the District's water system
SFR	Single Family Residential
SMCUP	Santa Margarita Conjunctive Use Project
SP&YB	Sport Park and Youth Baseball
SRF	State Revolving Fund
Standby Service	A service with a locked water meter
W	Water
WW	Wastewater

1 EXECUTIVE SUMMARY

1.1 Introduction

Fallbrook Public Utility District's (FPUD or District) water, wastewater and recycled water utilities are financially self-supporting enterprises that rely primarily on revenues from service charges to fund the costs of providing service. As such, the District's rates need to be set at adequate levels to a) fund the costs of operating and maintaining the water, wastewater and recycled water systems, b) fund necessary capital improvements to keep the District's infrastructure in good operating condition, c) pay for the wholesale costs of water supply, and d) meet annual debt service funding requirements.

The District has provided proactive financial stewardship by gradually raising rates over the past decade to keep revenues in line with the cost of providing service. The gradual rate increases have enabled the District to maintain the financial health of its utilities while avoiding the need for large rate spikes despite a number of financial challenges that have faced the water and wastewater utilities in recent years.

Some major accomplishments of the District in recent years include:

- Constructed the Santa Margarita Conjunctive Use Project (SMCUP) which will provide the District with its own local water supply, reduce reliance on imported water, and improve water supply reliability. The SMCUP was financed via a low-interest rate State Revolving Fund Loan.
- Recently completed Advanced Metering Infrastructure upgrades which will improve meter accuracy and enable the District and most customers to access real-time water use data.
- Completed a $28 million rehabilitation and upgrade of the District's aging Water Reclamation Plant (WRP) that treats wastewater to stringent regulatory standards.
- Expanded the recycled water distribution system and increased the District's recycled water system capacity.

In 2022, the District retained Bartle Wells Associates (BWA) to develop updated financial projections and rate studies for the District's utilities. Final recommendations incorporate input from District staff and the District's Fiscal Policy and Insurance (FP&I) Committee, and independent legal review for compliance with the substantive provisions of Proposition 218. The proposed rates are designed to fund the operating and capital needs of the District's utilities and equitably recover costs from all customers.

1.2 Water Rate Recommendations

The District's water utility currently maintains a healthy level of fund reserves but has faced increased financial pressures in recent years, particularly due to large increases in wholesale water rates. The water utility is facing a number of financial challenges that will require rate increases in upcoming years. These challenges include:

- **Wholesale Water Rate Increases** - Historically, the District has relied almost entirely on imported water from the San Diego County Water Authority (SDCWA) for its water supply. SDCWA wholesale water rates have increased substantially over time. SDCWA's wholesale rates for water supply and treatment increased over 75% from 2010 to 2022 and are scheduled to increase by an additional 8.8% starting January 1, 2023. With the introduction of new local water supply from the Santa Margarita Conjunctive Use Project (SMCUP), the District is projected to reduce its reliance on imported water to about 60% of its total water supply by FY 2026/27 and replace higher-cost SDCWA water with lower-cost SMCUP water supply.
- **Capital Improvements to an Aging Water System** - The District takes a proactive approach to maintaining its water system which requires a steady stream of repair and improvement projects. Accounting for construction cost inflation, the District anticipates funding approximately $34 million of capital improvement projects over the next 5 years, averaging $6.9 million per year. With the proposed rate increases, the District will be able to fund this level of capital spending on a pay-as-you-go basis without incurring additional debt.
- **New Debt Service** – The District was successful in obtaining a low-interest-rate State Revolving Fund Loan to finance the cost of the Santa Margarita Conjunctive Use Project. Debt service on the loan phases in starting FY 22/23 to a little over $3 million per year beginning FY 23/24. While this debt service represents a substantial increase in annual expenses, lower cost water supply provided by the SMCUP is projected to result in a net reduction of expenses in future years.
- **Ongoing Cost Inflation** – On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. In recent months, inflation has reached forty-year highs with CPI and the ENR Construction Cost Index reaching roughly 9% in early 2022. However, inflation is not projected to remain at such elevated levels in future years.

Updated water utility financial projections indicate the need for water rate revenues to increase by 6.5% per year over the next five years, the period covered by the current rate study. The proposed rates also incorporate a few modifications to the District's water rate structure designed to align rates with the current cost of providing service. Due to these modifications, impacts to water bills will vary based on customer class and water use when the first year proposed rates are implemented on

January 1, 2023. Future water rate increases starting January 1, 2024, are applied on an across-the-board basis with the same percentage increase to all water rates in future years.

The proposed water structure remains relatively consistent with FPUD's existing rate structure but incorporates some modifications designed to align rates with current projected costs of service. Rate structure recommendations are described as follows:

- Residential: Maintain a lower volumetric rate for the first 5,000 gallons (5 Kgal) of residential water use in Tier 1, reflecting the lower cost to provide water supply for base indoor demands. Combine residential Tiers 2 & 3 into a single tier for all water use above the first 5,000 gallons to reflect current costs of service.
- Non-Residential: Charge the same uniform volumetric rate to Commercial, Government, and Irrigation customer classes, which currently have extremely close but slightly different rates.
- Agricultural: Maintain volumetric rates for Agricultural water use based on lower-cost water supply including reduced SDCWA wholesale water supply rates for customers who qualify for SDCWA's Permanent Special Agricultural Water Rate Program.
- Recover MWD's Readiness-to-Serve Charge via the District's volumetric water rates, instead of as a small, separate pass-through charge based on meter size, to align costs with sources of water supply to each customer class,
- Maintain the supplemental Pumping Charges to recover the incremental costs of electricity needed to provide water supply to higher-elevation service areas but eliminate the small supplemental $0.10 per thousand gallons Pumping Capital Improvement Charge as the District's pumping facilities provide some benefit to all customers.
- Eliminate the reduced Standby Capital Improvement Charges levied on standby customers (accounts with suspended service) and instead have Standby customers pay the same Capital Improvement Charges as all other customers.
- Continue the historical practice of automatic annual adjustments to a) Capital Improvement Charges based on the annual change in the Engineering News-Record Construction Cost Index + 3% to account for a planned gradual increase in capital improvement funding, and to b) SDCWA Infrastructure Access Charges based on actual charges established by SDCWA.

The tables on the following pages show schedules of proposed water rates and charges for the next five years. The rates shown represent the maximum rates proposed for each year. In line with historical practice, FPUD will continue to review rates each year and only increase rates as needed.

Table ES1: Proposed Water Rates

Proposed Maximum Water Rates						
	Current Water Rates*	Proposed Maximum Rates Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Monthly Fixed Service Charges						
Billed based on meter size.						
3/4"	$57.91	$60.60	$64.54	$68.74	$73.21	$77.97
1"	88.65	96.51	102.78	109.46	116.57	124.15
1-1/2"	165.42	185.46	197.51	210.35	224.02	238.58
2"	257.59	292.64	311.66	331.92	353.49	376.47
3"	503.36	578.82	616.44	656.51	699.18	744.63
4"	779.84	900.36	958.88	1,021.21	1,087.59	1,158.28
6"	1,547.83	1,793.16	1,909.72	2,033.85	2,166.05	2,306.84
Volumetric Charges						
Billed based on metered water use as measured in units of 1,000 gallons ($/Kgal).						
Residential: Domestic (D), Large Lot Domestic (LD) & Multi Unit (M)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: >5 Kgal	6-30 Kgal: 7.27 >30 Kgal: 8.86	8.06	8.58	9.14	9.73	10.36
Commercial (C)	$7.38	$7.72	$8.22	$8.75	$9.32	$9.93
Government (G)	7.26	7.72	8.22	8.75	9.32	9.93
Irrigation Only (I)	7.39	7.72	8.22	8.75	9.32	9.93
Agriculture SAWR (AS)	$5.31	$5.63	$6.00	$6.39	$6.81	$7.25
Commercial Ag (CA)	6.15	6.38	6.79	7.23	7.70	8.20
Agriculture Domestic (AT)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: 6-17 Kgal	6.15	6.38	6.79	7.23	7.70	8.20
Tier 3: >17 Kgal	5.31	5.63	6.00	6.39	6.81	7.25
Commercial Domestic Ag (CB)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: >5 Kgal	6.15	6.38	6.79	7.23	7.70	8.20
Pumping Charges (Deluz & Toyon Service Areas)	$0.88	$0.72	$0.77	$0.82	$0.87	$0.93

Table ES2: Proposed Other Water Service Charges

Proposed Maximum Other Water Service Charges						
	Current Charges	Proposed Maximum Charges Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Water Capital Improvement Charges (CIC)						
Monthly charge billed based on meter size to all active water service accounts.						
3/4"	$10.10	$11.11	Water CIC Charges will be adjusted each January 1 based on the annual change in the Engineering News-Record Construction Cost Index for Los Angeles through February of the preceding year, plus 3%, subject to a maximum adjustment of 10% per year.			
1"	16.82	18.50				
1-1/2"	33.66	37.03				
2"	53.84	59.22				
3"	107.68	118.45				
4"	168.25	185.08				
6"	336.50	370.15				
SDCWA Infrastructure Access Charges (IAC)						
Monthly charge billed based on meter size to all active water service accounts.						
3/4"	$4.00	$4.24	SDCWA IAC Charges will be adjusted each January 1 based on the IAC charges adopted by SDCWA in future years, subject to a maximum adjustment of 10% per year.			
1"	6.69	7.08				
1-1/2"	13.33	14.12				
2"	21.34	22.60				
3"	42.75	45.24				
4"	66.79	70.68				
6"	133.53	141.32				
Monthly Fire Service Charges						
Billed based on service size to customers with private fire service connections.						
2"	$12.25	$7.66	$8.16	$8.69	$9.25	$9.85
3"	13.06	8.90	9.48	10.10	10.76	11.46
4"	14.47	11.03	11.75	12.51	13.32	14.19
6"	19.50	18.70	19.92	21.21	22.59	24.06
8"	28.18	31.92	33.99	36.20	38.55	41.06
Monthly Standby Fixed Service Charges						
Billed based on meter size to customers with inactive, standby service.						
3/4"	$25.22	$17.44	$18.57	$19.78	$21.07	$22.44
1"	34.15	24.43	26.02	27.71	29.51	31.43
1-1/2"	56.46	41.75	44.46	47.35	50.43	53.71
2"	83.23	62.61	66.68	71.01	75.63	80.55
3"	154.65	118.30	125.99	134.18	142.90	152.19
4"	235.00	180.88	192.64	205.16	218.50	232.70
6"	458.16	354.65	377.70	402.25	428.40	456.25

1.3 Wastewater Rate Recommendations

The District's wastewater utility fund reserves are currently significantly below target levels. Additionally, the wastewater utility faces a number of financial challenges in upcoming years that can be addressed via modest annual rate increases. These financial challenges include:

- **Revenue Variability** - Residential variable rate revenue has been volatile due to annual changes in winter water use largely based on weather and outdoor irrigation. Based on current wastewater rates, residential rate revenues over the past three years would have varied by up to $700,000 per year.
- **Low Fund Reserves** - The wastewater enterprise generated less revenue than projected over the past 5 fiscal years, resulting in deficits and a gradual drawdown of wastewater fund reserves. The beginning balance for FY 22/23 is estimated at $1.8 million, approximately $3 million below the target fund reserve for the enterprise.
- **Capital Improvements to Wastewater Facilities** - The District takes a proactive approach to maintaining its wastewater system which requires a steady stream of repair and improvement projects. Accounting for construction cost inflation, the District anticipates funding approximately $4.5 million of capital improvement projects over the next 5 years, averaging about $0.9 million per year. With the proposed rate increases, the District will be able to fund this level of capital spending on a pay-as-you-go basis without incurring additional debt.
- **Ongoing Cost Inflation** – On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. In recent months, inflation has reached forty-year highs with CPI and the ENR Construction Cost Index reaching roughly 9% in early 2022. However, inflation is not expected to remain at such elevated levels in future years.

Updated wastewater utility financial projections indicate the need to increase wastewater revenue by 5% per year over the next five years. The proposed rates also incorporate modifications to the wastewater rate structure designed to improve revenue stability and align rates with the current cost of providing service. Proposed rate structure modifications include:

- Transition residential rate recovery from 30% fixed rate recovery to 70% fixed rate recovery over the next 5 years to reflect costs of service and improve revenue stability, while still providing a significant level of volumetric rate recovery and customer control over their wastewater service charges. The proposed residential wastewater rates include a 5-year phase-in of increased fixed service charges coupled with a gradual decrease in residential volumetric rates.
- Adjust the residential return-to-sewer factor (RTS) used to calculate volumetric charges from 75% to 80% of winter water use (from December through February) based on an updated analysis of water use and influent flows at the wastewater treatment plant.

- Update the volumetric wastewater rates for the District's various commercial and non-residential wastewater customer classes based on an updated cost-of-service analysis. These rate structure adjustments will result in slightly different first-year impacts to each customer class effective January 1, 2023. Future wastewater rate increases starting January 1, 2024, are applied on an across-the-board basis with the same percentage increase to all charges in future years.
- Continue historical practice of automatic annual adjustments to Wastewater Capital Improvement Charges based on the annual change in the Engineering News-Record Construction Cost Index.

The following table shows a schedule of proposed wastewater rates for the next five years.

Table ES3: Proposed Wastewater Rates

Proposed Maximum Wastewater Rates						
	Current Wastewater Rates	Proposed Maximum Rates Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Residential / Domestic						
Includes Single Family (D), Single Family Large Lot (LD), Multi Family (M), Ag Domestic (AT), Commercial Ag (CB)						
Monthly Fixed Service Charges ($/EDU)	$11.08	$18.88	$26.68	$34.48	$42.28	$50.08
Volumetric Charges ($/Kgal)	11.28	10.22	9.16	8.10	7.04	5.98
Commercial / Government						
Monthly Fixed Service Charge ($/EDU)	$11.08	$12.14	$12.75	$13.39	$14.06	$14.76
Volumetric Charges						
Comm - Low Strength (C_L)	$11.20	$11.09	$11.64	$12.22	$12.83	$13.47
Comm - Medium Strength (C_M)	13.81	13.82	14.51	15.24	16.00	16.80
Comm- High Strength (C_H)	17.22	17.66	18.54	19.47	20.44	21.46
Government (G)	11.20	11.09	11.64	12.22	12.83	13.47
Schools						
Monthly charge based on number of students and staff						
Elementary Students ($ per student)	$1.37	$1.39	$1.46	$1.53	$1.61	$1.69
Junior High Students ($ per student)	2.00	2.08	2.18	2.29	2.40	2.52
School Staff ($ per staff)	2.00	2.08	2.18	2.29	2.40	2.52
Wastewater Capital Improvement Charges (CIC)						
Monthly charge per Equivalent Dwelling Unit (EDU) billed to all active wastewater accounts.						
Monthly Wastewater CIC Charges	$11.68	$12.66	Wastewater CIC Charges will be adjusted each January 1 based on the annual change in the Engineering News-Record Construction Cost Index for Los Angeles through February of the preceding year, subject to a maximum adjustment of 10% per year.			

1.4 Recycled Water Rate Recommendations

The District's recycled water utility is in stable financial health but faces a number of financial challenges in upcoming years that can be addressed via small, annual rate increases. These challenges include:

- **Capital Improvement Needs to Recycled Water Facilities** - The District's takes a proactive approach to maintaining its recycled system which requires a steady stream of repair and improvement projects. Accounting for construction cost inflation, the District anticipates funding approximately $0.5 million of capital improvement projects over the next 5 years. With the proposed rate increases, the District will be able to fund this level of capital spending on a pay-as-you-go basis without incurring additional debt.
- **Ongoing Cost Inflation** – Annual rate increases are also needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service.

Updated recycled water financial projections indicate the need to increase rate revenues by 2.5% per year over the next five years. All recycled water use is billed at a uniform volumetric rate. No modifications to the recycled water rate structure are recommended at this time. The following table shows a schedule of proposed recycled water rates for the next five years.

Table ES4: Proposed Recycled Water Rates

Proposed Maximum Recycled Water Rates						
	Current Recycled Water Rates	Proposed Rates Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Monthly Fixed Service Charges						
Billed based on meter size.						
3/4"	$25.22	$25.85	$26.50	$27.16	$27.84	$28.53
1"	34.15	35.14	36.02	36.92	37.84	38.79
1-1/2"	56.46	58.15	59.60	61.09	62.62	64.19
2"	83.23	85.88	88.03	90.23	92.48	94.80
3"	154.65	159.91	163.91	168.01	172.21	176.51
4"	235.00	243.09	249.17	255.40	261.78	268.33
6"	458.16	474.06	485.91	498.06	510.51	523.27
Volumetric Charges						
Billed based on metered water use as measured in units of 1,000 gallons ($/Kgal).						
Recycled Water Sales	$6.13	$6.29	$6.45	$6.61	$6.77	$6.94

1.5 Updated Fund Reserve Targets

BWA worked with the District's project team and Fiscal Policy & Insurance Committee to develop updated fund reserve targets for the District's water, wastewater, and recycled water utilities. Based

on the finances of each enterprise and an evaluation of alternatives, the following fund reserve targets are proposed:

- **Water Fund Reserve Target**
  Operating Reserves: 6 Months of Operating Expenses
  Capital Reserves: $5 Million
  SMCUP Debt Service Reserves: 2 Years of Annual Debt Service
- **Wastewater Fund Reserve Target**
  Operating Reserves: 6 Months of Operating Expenses
  Capital Reserves: $2 Million
- **Recycled Water Fund Reserve Target**
  Operating Reserves: 6 Months of Operating Expenses
  Capital Reserves: $200,000

1.6 Preliminary Savings Analysis of Detachment from SDCWA

BWA also analyzed the potential savings and impacts to water rates if the District detached from San Diego County Water Authority (SDCWA), which obtains most of its water supply from the Metropolitan Water District of Southern California (MWD), and instead purchased MWD water from Eastern Municipal Water District (EMWD) at substantially lower cost. Although all the costs related to the potential detachment from SDCWA are not currently known, initial analysis indicates the potential for annual savings of roughly $3 to $4 million per year (excluding any detachment fees). Savings would be passed on to FPUD water customers and enable the District to defer or avoid future rate increases that would otherwise be needed.

2 BACKGROUND, OBJECTIVES, & LEGAL REQUIREMENTS

2.1 Background

The Fallbrook Public Utility District serves a population of approximately 35,000 within a roughly 44-square-mile service area located in northern San Diego County, California. The District was incorporated in 1922 and is governed by a five-member Board of Directors. The District provides water, wastewater and recycled water service to residential, agricultural, commercial, and institutional customers.

The District's utilities operate as self-supporting enterprise funds. Revenues are derived primarily from service charges. As such, the District must establish rates and charges adequate to fund the costs of providing service, including costs for ongoing operations, wholesale water supply, debt service, and capital improvements needed to keep the District's aging utility infrastructure in safe and reliable operating condition.

2.2 Rate Study Objectives

In 2022, the District retained BWA to develop long-term financial plans and rate studies for the District's enterprises. The District has historically adopted gradual annual rate increases in order to keep revenues in line with escalating costs of providing service. Key goals and objectives of this study include developing water, wastewater, and recycled water rates that:

- Recover the costs of providing service, including operating, capital, and debt funding needs;
- Are fair and equitable to all customers;
- Are easy to understand and implement;
- Comply with the substantive requirements of the California Constitution, Article 13D, Section 6 (which was adopted by the voters as Proposition 218 in 1996) and the general mandate of Article 10, Section 2 that prohibits the wasteful use of water;
- Support the long-term operational and financial stability of each utility.

2.3 Rate-Study Process

The general process used for this cost-of-service rate study is summarized on the following diagram.

Figure W1: Cost-of-Service Rate Study Process

Key elements of the study include:

a) **Project Initiation and Data Collection –** Review financial policies; collect demand and financial, and other relevant data; and review rate structures,

b) **Demand Analysis** – Analyze past water, wastewater, and recycled water demands and customer characteristics and forecast future demands,

c) **Long Range Financial Plans** - Develop financial projections to evaluate annual revenue requirements from rates and the overall level of rate increases needed to fund the costs of providing service and support long-term financial stability,

d) **Cost Allocation** – Group the District's costs in terms of the function they serve as a basis to proportionally allocate the revenue requirement from rates,

e) **Cost of Service Rate Design** - Develop rate structures that proportionately recover costs between customer classes (i.e., residential and commercial), as well as from customers within their designated customer class.

f) **Prop 218 Process** – Follow the procedural requirements of Proposition 218.

2.4 Constitutional Requirements for Rates

The water, wastewater and recycled water rates proposed in this report are designed to comply with two key articles of the California Constitution: Article 13D and Article 10.

2.4.1 Article 13D, Section 6

Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court has ruled includes ongoing utility system charges such as water, wastewater, and garbage rates. Article 13D, Section 6 establishes both a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D requires voter approval for new or increased property-related charges but exempts rates for water, wastewater, and garbage service from this voting requirement if rates are adopted by the appropriate procedure and meet the substantive requirements. This report recommends rates designed to comply with the substantive requirements of Proposition 218.

Substantive Requirements

The substantive requirements of Article 13D, Section 6 require property-related charges, such as the District's water and wastewater rates, to meet the following conditions:

1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
4) No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question.
5) No fee or charge may be imposed for general governmental services, such as police or fire services, where the service is available to the public at large in substantially the same manner as it is to property owners.

2.4.2 Article 10, Section 2

Article 10, Section 2 of the California Constitution states that:

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

2.5 Rate Increase Pass Through Provisions

California Government Code Section 53756 (established via AB-3030) became effective on January 1, 2009. As subsequently amended, this section of the Code creates certain requirements for public agencies providing water, wastewater, and garbage services when adopting automatic pass through rate adjustments to account for a) cost inflation, and b) increases in wholesale water charges or wastewater treatment charges.

According to the Code, pass throughs must be adopted via the Proposition 218 process and can be effective for up to five years without additional Proposition 218 authorization. The Proposition 218 Notice informing ratepayers of the proposed pass through(s) must include a clearly defined formula describing how any inflationary or wholesale adjustments will be implemented. Once adopted, agencies must send ratepayers an informational notice informing them of the pass-through not less than 30 days before the effective date of the pass-through adjustment.

3 WATER ENTERPRISE FINANCES & RATES

3.1 Water System Overview

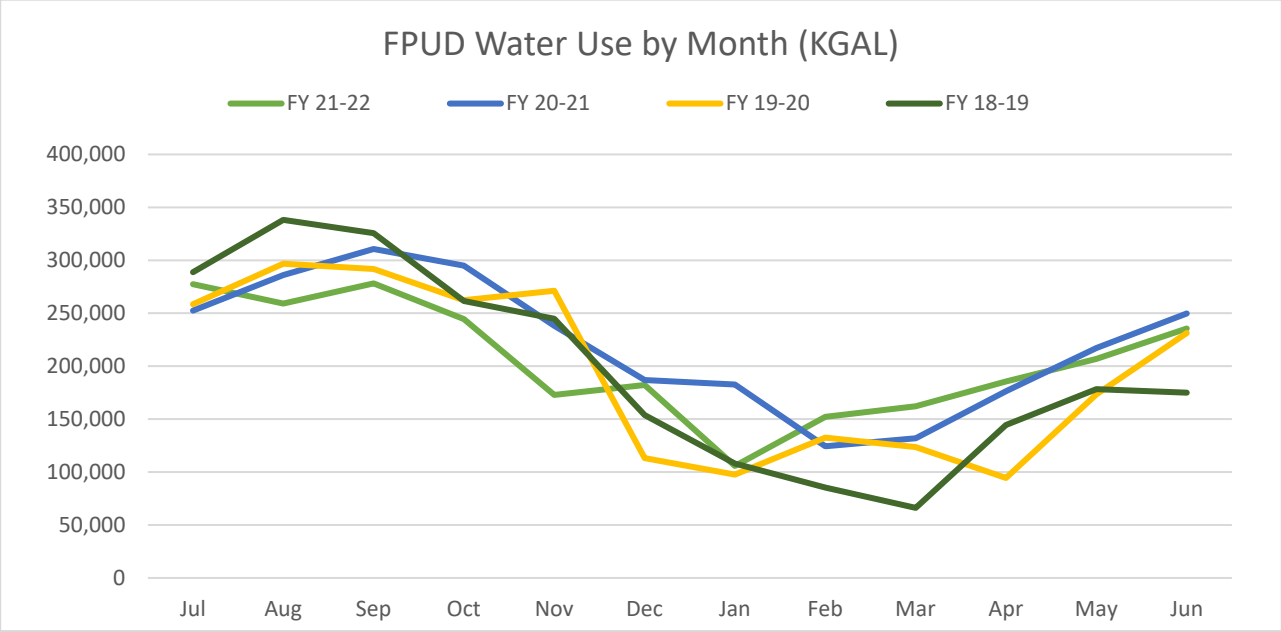
Fallbrook Public Utility District provides water service to over 9,000 accounts within a roughly 44-square-mile service area that includes a population of approximately 35,000 and a substantial agricultural sector. Roughly a third of District water is used by agricultural customers. The District's water distribution system is comprised of 270 miles of pipelines, 6,800 valves, an ultraviolet disinfection water treatment plant, nine steel reservoirs, a 300-million-gallon treated water reservoir, and five pump stations. The District has nearly completed an Advanced Metering Infrastructure (AMI) system upgrade that will enable real-time meter reading and provide customers with real-time water use data.

Historically, the District's water supply consisted mostly of imported water purchased from the San Diego County Water Authority (SDCWA) which in turn obtains most of its water supply from the Metropolitan Water District of Southern California (MWD). The District has four connections to the imported water system, three of the four are directly connected to MWD-owned pipelines and the fourth, which is not currently used, is connected to SDCWA's pipeline.

In 2022, the District completed construction of the Santa Margarita Conjunctive-Use Project (SMCUP), which enables the District to treat and convey water from the Santa Margarita River Watershed. This new local source of supply will enable the District to purchase less imported water and improve water reliability during periods of drought.

The following figure shows the District's water demands over the last four years. The District has a seasonal demand pattern, with substantially higher usage in the hotter, summer months largely due to landscape irrigation, which is two to three times the level of use during the lowest-use wet-weather, winter months. However, there is some annual variability in the timing and magnitude of minimum and maximum demands.

Figure W2: FPUD Water Use by Month (KGAL)



3.2 Water Financial Overview

Fallbrook Public Utility District's water enterprise is a financially self-supporting enterprise that relies primarily on revenues from water rate revenues to fund the costs of providing service. Water rate revenues are projected to account for over 93% of total annual revenues, with the remaining revenues coming from interest earnings, property tax allocations, capacity charges from new or upsized connections, and other miscellaneous revenues. As such, water rates must be set at levels adequate to fund the costs of operating and maintaining the water system, pay for wholesale water purchases, and fund necessary capital improvements to keep the water system in good operating condition.

The District has provided proactive financial stewardship of the water utility by gradually raising rates each year to help keep revenues in line with the cost of providing water service. The water utility fund is currently in strong financial health but faces financial pressures due to increases in wholesale water rates, the addition of new debt service, and cost inflation.

3.3 Current & Historical Water Rates

The following tables shows a 5-year history of the District's water rates. Water rates include the following components:

- Fixed monthly service charges based on meter size
- Volumetric water rates that vary by customer class
- Pass-through charges by meter size for MWD's Readiness-to-Serve (RTS) charges and SDCWA's Infrastructure Access Charges (IAC),
- Capital Improvement Charges (CIC) based on meter size that recover a portion of the District's capital improvement costs
- Private Fire Service charges levied on accounts with private fire service connections
- Monthly Standby Service Charges and Standby CIC Charges that only apply to a limited number of customers with temporarily suspended service
- Water usage in the Deluz and Toyon service areas which require additional pumping are also subject to a Pumping Charge and a separate Pumping CIC Charge applied based on metered water use.

Water CIC charges are currently escalated annually based on the percentage change in the Engineering News Records (ENR) Construction Cost Index (CCI) plus 3%. This escalation was intended to keep CIC revenues aligned with construction cost inflation and also gradually increase CIC revenues over time to help fund capital needs.

Table W1: Historical Fixed Monthly Water Rates

Monthly Fixed Charges	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Meter Size					
Monthly Fixed Service Charge					
3/4"	$44.10	$46.75	$50.49	$53.52	$56.20
1"	$67.33	$71.37	$77.08	$81.70	$85.79
1 1/2"	$125.36	$132.88	$143.51	$152.12	$159.73
2"	$195.01	$206.71	$223.25	$236.65	$248.48
3"	$380.73	$403.57	$435.86	$462.01	$485.11
4"	$589.67	$625.05	$675.05	$715.55	$751.33
6"	$1,170.06	$1,240.26	$1,339.48	$1,419.85	$1,490.84
Capital Impr. Charges					
3/4"	$8.58	$9.12	$9.47	$9.77	$10.10
1"	$14.30	$15.20	$15.78	$16.27	$16.82
1 1/2"	$28.60	$30.40	$31.56	$32.55	$33.66
2"	$45.76	$48.64	$50.49	$52.07	$53.84
3"	$91.52	$97.29	$100.98	$104.14	$107.68
4"	$143.00	$152.01	$157.79	$162.72	$168.25
6"	$286.00	$304.02	$315.57	$325.43	$336.50
Monthly Private Fire Services Charge					
2"	$9.61	$10.19	$11.01	$11.67	$12.25
3"	$10.25	$10.87	$11.74	$12.44	$13.06
4"	$11.36	$12.04	$13.00	$13.78	$14.47
6"	$15.30	$16.22	$17.52	$18.57	$19.50
8"	$22.11	$23.44	$25.32	$26.84	$28.18
Monthly Standby Service Charge					
3/4"	$19.79	$20.98	$22.66	$24.02	$25.22
1"	$26.80	$28.41	$30.68	$32.52	$34.15
1 1/2"	$44.31	$46.97	$50.73	$53.77	$56.46
2"	$65.32	$69.24	$74.78	$79.27	$83.23
3"	$121.38	$128.66	$138.95	$147.29	$154.65
4"	$184.43	$195.50	$211.14	$223.81	$235.00
6"	$359.58	$381.15	$411.64	$436.34	$458.16
Monthly Standby Capital Impr. Charge					
3/4"	$3.89	$4.14	$4.29	$4.42	$4.57
1"	$6.48	$6.89	$7.15	$7.37	$7.62
1 1/2"	$12.96	$13.78	$14.30	$14.75	$15.25
2"	$20.74	$22.05	$22.88	$23.60	$24.40
3"	$41.47	$44.08	$45.76	$47.19	$48.79
4"	$64.80	$68.88	$71.50	$73.73	$76.24
6"	$129.59	$137.75	$142.99	$147.46	$152.48

Table W2: Historical Volumetric Water Rates

Volumetric Rates $/ Kgal	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Tier					*Existing*
Agriculture SAWR (AS)	$4.17	$4.42	$4.77	$5.06	$5.31
Commercial Ag (CA)	$4.83	$5.12	$5.53	$5.86	$6.15
Agriculture Domestic (AT)					
Tier 1 (0-5 Kgal)	$5.62	$5.96	$6.44	$6.83	$7.17
Tier 2 (6-17 Kgal)	$4.83	$5.12	$5.53	$5.86	$6.15
Tier 3 (>17 Kgal)	$4.17	$4.42	$4.77	$5.06	$5.31
Commercial Domestic Ag (CB)					
Tier 1 (0-5 Kgal)	$5.62	$5.96	$6.44	$6.83	$7.17
Tier 2 (>5 Kgal)	$4.83	$5.12	$5.53	$5.86	$6.15
Domestic (D/ LD)					
Tier 1 (0-5 Kgal)	$5.62	$5.96	$6.44	$6.83	$7.17
Tier 2 (6-30 Kgal)	$5.71	$6.05	$6.53	$6.92	$7.27
Tier 3 (>30 Kgal)	$6.95	$7.37	$7.96	$8.44	$8.86
Multi-Unit (M)					
Tier 1 (0-5 Kgal)	$5.62	$5.96	$6.44	$6.83	$7.17
Tier 2 (6-30 Kgal)	$5.71	$6.05	$6.53	$6.92	$7.27
Tier 3 (>30 Kgal)	$6.95	$7.37	$7.96	$8.44	$8.86
Commercial (C)	$5.79	$6.14	$6.63	$7.03	$7.38
Government (G)	$5.70	$6.04	$6.52	$6.91	$7.26
Irrigation Only (I)	$5.80	$6.15	$6.64	$7.04	$7.39
Pumping Surcharges*	$0.69	$0.73	$0.79	$0.84	$0.88
CIC Pumping Charges*	$0.10	$0.10	$0.10	$0.10	$0.10

** DSA & Toyon Service Areas only*

4 WATER FINANCIAL PLAN

BWA developed long-term cash flow projections to determine the water utility's annual revenue requirements and project required water rate revenue increases. The financial projections incorporate the latest information available as well as a number of reasonable assumptions developed with input from the District.

4.1 Financial Plan Assumptions

The following table details the escalation factors used to develop the long-term cash flow projections. Escalation factors are based on input from District staff, historical escalations, and conservative projections for future escalations to reasonably ensure that the maximum rates adopted by the District will provide sufficient revenues to support District operations.

Table W3: Water Enterprise Escalation Factors

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%

REVENUE ASSUMPTIONS

- Rate adjustments are assumed to become effective on January 1 of each year.
- Water sales revenues are based on the projected volume of water sales and projected water rates.
- The District projects growth based on previous low growth years to ensure rate revenue is sufficient to support District operations.
- Interest earnings are projected based on the annual beginning fund balance multiplied by projected interest rate. The interest rate projections are based on recent and anticipated interest rates.
- Property tax revenues are projected to increase at the annual rate of 1% based on District evaluation of historical tax revenue increases during years of lower increases to assessed valuations in order to ensure rate revenue is sufficient to support District operations.

- Rent revenue increases are conservatively based on the District's rental agreements.

EXPENSE ASSUMPTIONS

- Water supply costs assumptions are shown in detail in the appendix of this report. Purchased water cost estimates are based on the latest rate information available from SDCWA and MWD and account for the District's increasing utilization of its local, SMCUP water supply.
- Operating and maintenance expenses (other than wholesale water costs) are based on the District's 2022/23 Budget and escalation factors listed above.
- The District projects the cost of Salaries to increase based on a recent compensation study and projected future cost of living adjustments.
- The District projects the cost of Benefits to increase based on projected salary costs and projected inflation of specific benefit expenses such as health insurance.
- CPI cost escalation is based on the recent and historical Consumer Price Index changes. This report projects that the current high level of inflation will gradually trend downwards to a level slightly higher than historical norms from recent years, in line with recent assessments by the Federal Reserve.
- ENR cost escalation is based on the recent and historical changes in the Engineering News-Record Construction Cost Index. This report projects that the current, extraordinarily high inflation level will gradually drop back towards a normal rate of inflation. This report projects that the current high level of inflation will gradually trend downwards to a level slightly higher than historical norms from recent years, in line with recent assessments by the Federal Reserve.
- Debt service projections are based on outstanding debt schedules. The District does not anticipate issuing any additional debt in future years.

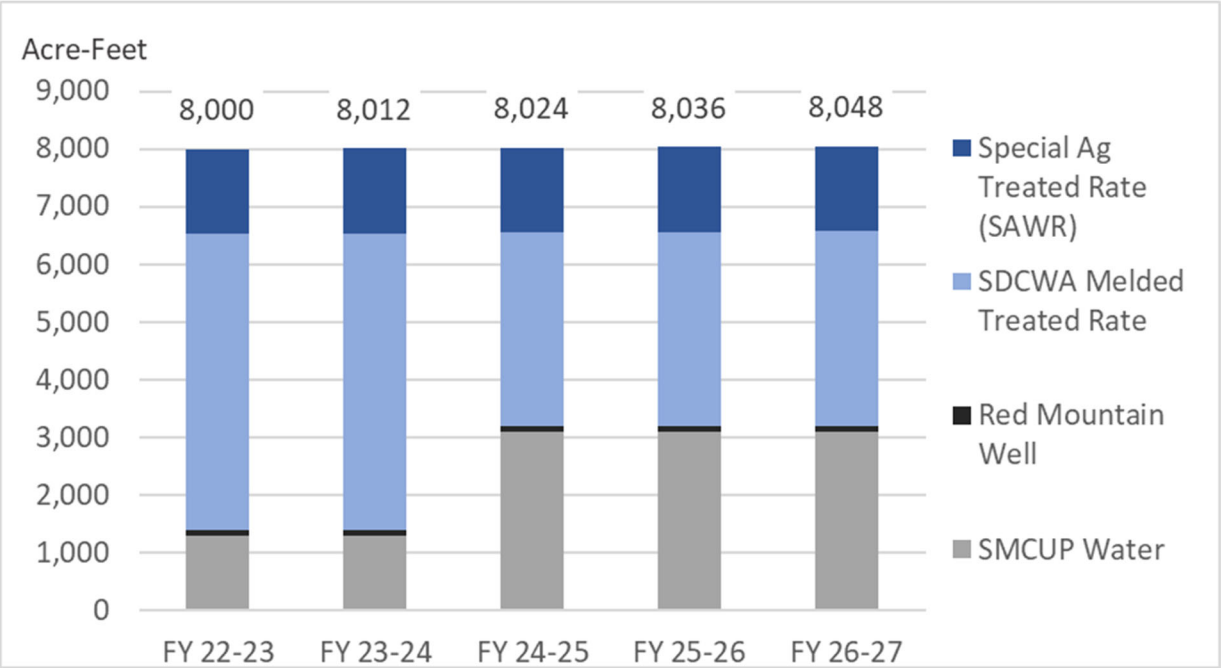
4.2 Financial Plan Drivers

The District's water enterprise is facing a number of manageable financial challenges that will drive the need for rate increases in upcoming years. Key drivers of future rate increases are summarized as below.

Wholesale Water Rate Increases

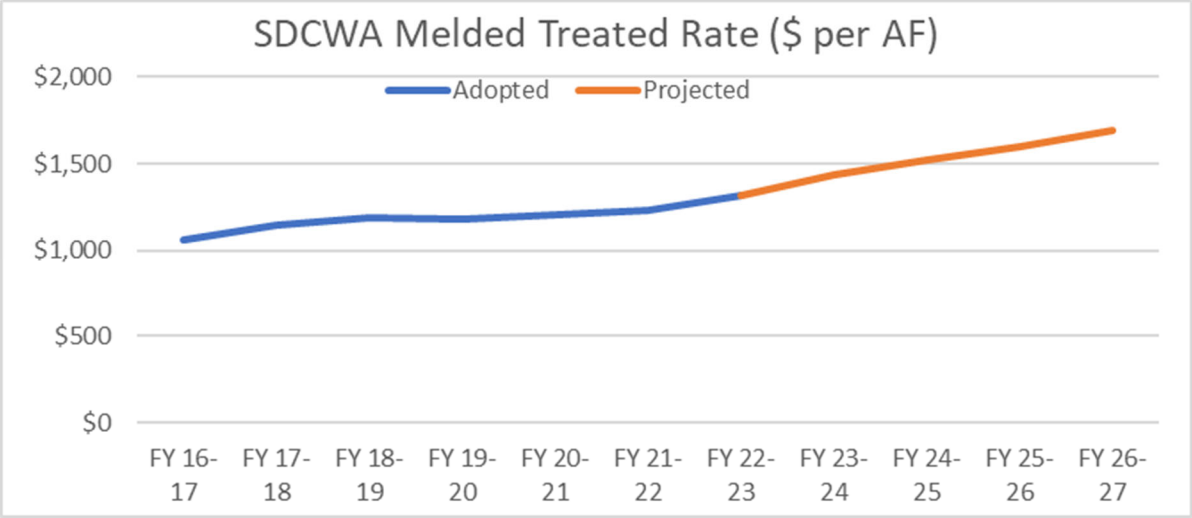
In the past, the District has relied almost entirely on imported water from the San Diego County Water Authority (SDCWA) for its water supply. SDCWA wholesale water rates have increased substantially over time. SDCWA's wholesale rates for water supply and treatment increased over 75% from 2010 to 2022 and are scheduled to increase by an additional 8.8% starting January 1, 2023. With the introduction of new local water supply from the Santa Margarita Conjunctive Use Project (SMCUP), the District is projected to reduce reliance on imported water to about 60% of total water supply by FY 2026/27 and replace higher-cost SDCWA water with lower-cost SMCUP water supply.

Figure W3: Projected Water Supply Needs



Over the next 5 years, total wholesale water rates are projected to increase by an average of an additional 8.6% per year accounting for both fixed and volumetric charges levied by SDCWA. Projected wholesale water rates are based on long-range financial plans published by SDCWA and MWD and input from the District. However, the amount of wholesale SDCWA water purchased is projected to decline due to an increase in SMCUP water supply. The following figure shows the historical SDCWA Melded Treated rate from FY 16/17 and the projected Melded Treated rate through FY 26/27.

Figure W4: SDCWA Melded Treated Rate



The following table shows the projected water purchase costs used in the financial plan. Water supply costs assumptions are shown in detail in the appendix of this report.

Table W4: Projected Water Purchase Cost Summary

Projected Water Purchase Cost Summary	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
SMCUP Camp Pendleton Charges	$501,592	$526,672	$1,312,425	$1,364,922	$1,419,519
MWD Charges					
MWD RTS Charge	$264,456	$303,831	$343,644	$343,644	$343,644
MWD Capacity Charge	$237,030	$200,804	$212,061	$238,483	$262,829
SDCWA Charges					
Melded Treated Rate	$6,950,291	$7,530,897	$5,187,830	$5,491,416	$5,784,941
SDCWA IAC	$603,768	$623,819	$667,487	$714,211	$764,206
Supply Reliability Charge	$684,192	$731,886	$783,118	$837,936	$896,592
Customer Service Charge	$555,840	$563,758	$591,946	$621,543	$652,621
Storage Charge	$1,048,488	$1,070,518	$1,124,044	$1,180,246	$1,239,259
Special Ag Treated Rate (SAWR)	$1,675,702	$1,804,625	$1,903,792	$2,007,981	$2,107,392
Water Purchase Costs	**$12,521,359**	**$13,356,811**	**$12,126,347**	**$12,800,383**	**$13,471,002**

Capital Improvement Funding Needs

The District takes a proactive approach to maintaining its water system which requires ongoing investment in repair and improvement projects to maintain safe and reliable service. Accounting for construction cost inflation, the District anticipates funding approximately $34 million of water system capital improvement projects over the next 5 years, an average of $6.9 million per year. The proposed

rate increases are designed to enable the District to fund its capital improvement needs on a pay-as-you-go basis without incurring additional debt.

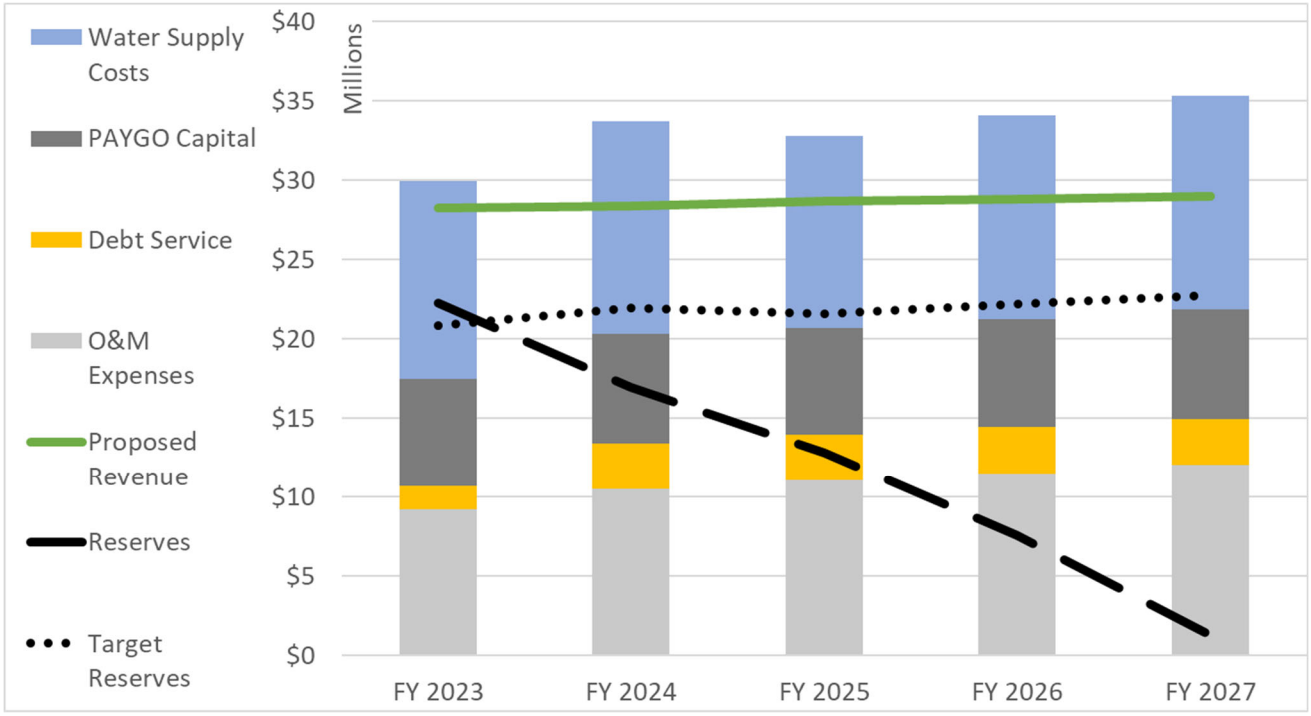
Ongoing Cost Inflation

The District's water enterprise faces ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Over the past 5 years, inflation has typically ranged between roughly 2% to 3%. In recent months, inflation has reached forty-year highs with the CPI and ENR Construction Cost Index reaching roughly 9% in early 2022. However, inflation is not expected to remain at such elevated levels in future years.

4.3 Cash Flow Projections with Existing Rates

Based on the financial projections, without any rate increases the District would operate at a deficit and gradually deplete the water enterprise's fund reserves within five years. The following figure shows a 5-year projection of expenses broken down by key categories, projected annual revenues with no rate increases, and ending reserves compared to the reserve target.

Figure W5: 5-Year Cash Flow Projection Without Rate Increases



4.4 Cash Flow Projections and Recommended Rate Increases

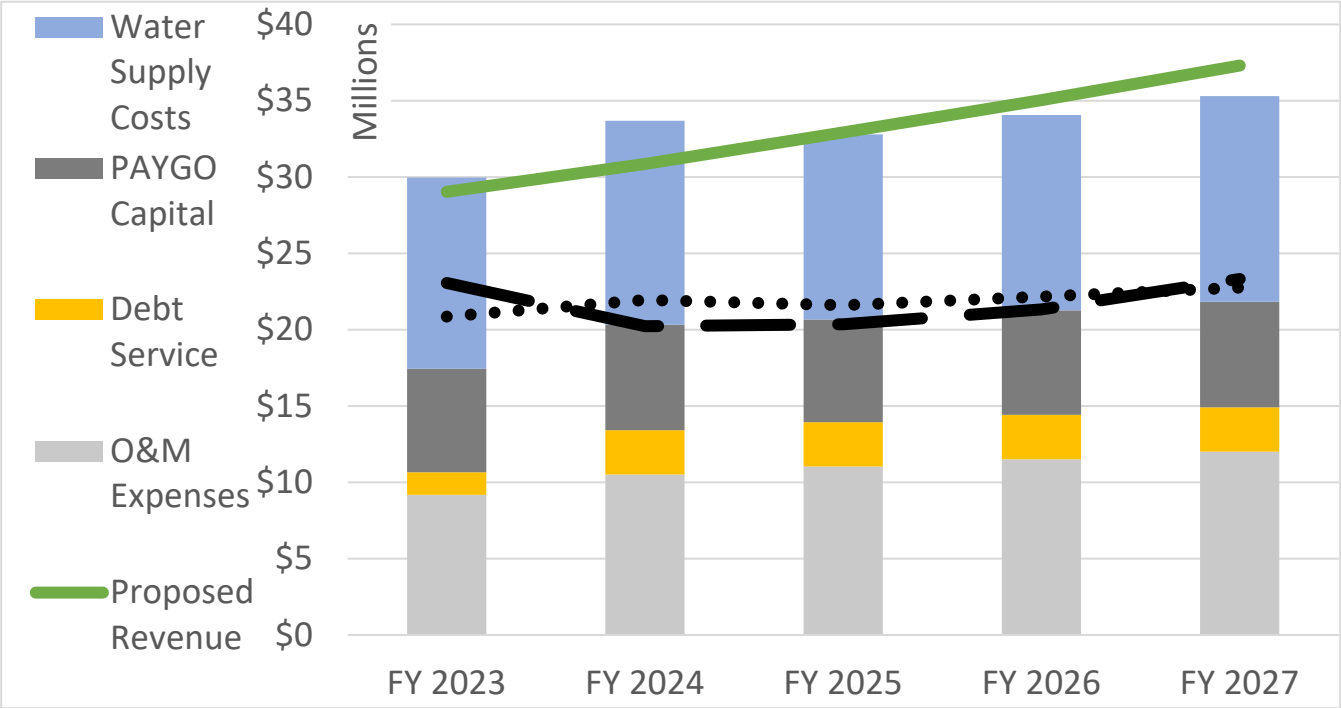
A summary of the cash flow projections is displayed in the following table. The overall rate revenue increases shown on the table are designed to fund the District's cost of providing service, maintain roughly balanced budgets, maintain healthy debt service coverage, and meet long-term fund reserve targets. The projections indicate the need for 6.5% increases to water rate revenues each of the next five years. Actual impacts to customers' water bills will vary the first year based on customer class and water use due to proposed modifications to the rate structure and the updated cost-of-service analysis. Future water rate increases starting January 1, 2024, are applied on an across-the-board basis with the same percentage increase to all water rates in future years.

Table W5: Proposed Water Rate Adjustments

W Financial Dashboard	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
Water Rev Adjustments	6.50%	6.50%	6.50%	6.50%	6.50%
	Projected Maximum Rate Revenue Increases				
Key Financial Information					
Revenue from Full Year Rate Increase	**$1,599,000**	**$1,705,489**	**$1,819,071**	**$1,940,216**	**$2,069,430**
Total Revenue	$29,041,478	$30,858,035	$32,920,485	$35,035,639	$37,304,291
Total Expenses	$29,965,318	$33,684,448	$32,799,776	$34,068,053	$35,298,291
Net Cash Change (Exl. Debt Proceeds)	**-$923,840**	**-$2,826,413**	**$120,709**	**$967,585**	**$2,006,000**
Total Reserves	**$23,062,452**	**$20,236,039**	**$20,356,748**	**$21,324,334**	**$23,330,334**
Reserves Over/Under Target	$2,197,291	-$1,713,938	-$1,240,524	-$847,941	$574,383
Water Debt Service Coverage (1.3x Target)	4.97x	2.41x	3.36x	3.69x	4.07x

Figure W6 shows a 5-year projection of expenses broken down by key categories and projected annual revenues with proposed rate increases. The table also compares fund reserves at the end of each fiscal year to annual fund reserve targets.

Figure W6: Projected Revenues & Expenses



Detailed water enterprise financial projections described in Sections 4.1 and 4.2 are shown in the following table.

Table W6: Detailed Water Financial Projections

REVENUES	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
	Budgeted	*Projected*	*Projected*	*Projected*	*Projected*
Revenues from Rates					
Revenues from Current Rates	$24,600,000	$24,636,900	$24,673,855	$24,710,866	$24,747,932
Proposed Rev Adjustments	$799,500	$2,454,143	$4,221,384	$6,108,723	$8,124,165
Subtotal Revenues from Rates	**$25,399,500**	**$27,091,043**	**$28,895,239**	**$30,819,590**	**$32,872,097**
Other Operating Revenues					
Pass-through Charges					
MWD RTS Charge	$130,551	$0	$0	$0	$0
SDCWD IAC Charge	$603,768	$623,819	$667,487	$714,211	$764,206
Sundry	$53,009	$53,009	$53,009	$53,009	$53,009
Subtotal Other Operating Revenues	**$787,328**	**$676,828**	**$720,496**	**$767,220**	**$817,215**
Non-Operating Revenues					
Water Availability Charge	$208,842	$208,842	$208,842	$208,842	$208,842
1% Property tax	$520,031	$525,231	$530,484	$535,788	$541,146
Interest	$143,918	$230,625	$303,541	$305,351	$319,865
Water Capital Impr. Charge	$1,593,121	$1,747,881	$1,878,972	$2,010,500	$2,151,235
Pumping Capital Impr. Charge	$16,378	$0	$0	$0	$0
Facility Rent	$261,189	$266,413	$271,741	$277,176	$282,720
Water Capacity Fees	$111,172	$111,172	$111,172	$111,172	$111,172
Subtotal Non-Operating Revenues	**$2,854,650**	**$3,090,163**	**$3,304,751**	**$3,448,829**	**$3,614,979**
TOTAL REVENUES	**$29,041,478**	**$30,858,035**	**$32,920,485**	**$35,035,639**	**$37,304,291**

EXPENSES	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
	Budgeted	*Projected*	*Projected*	*Projected*	*Projected*
Operating Expenses					
Water Supply Costs					
MET/CWA Purchased Water Costs	$10,344,065	$11,025,514	$8,910,130	$9,427,479	$9,944,090
SAWR	$1,675,702	$1,804,625	$1,903,792	$2,007,981	$2,107,392
SMCUP Supply*	$501,592	$526,672	$1,312,425	$1,364,922	$1,419,519
Treatment	$885,922	$1,734,082	$1,817,196	$1,892,589	$1,971,134
Production & Distribution	$1,166,941	$1,244,847	$1,314,947	$1,375,043	$1,437,918
Pipeline Maintenance & Construction	$529,956	$569,653	$604,790	$634,042	$664,717
System Services	$690,262	$739,153	$782,767	$819,590	$858,162
Allocated Admin Expenses	$5,904,708	$6,224,237	$6,517,324	$6,791,729	$7,077,795
Subtotal Operating Expenses	**$21,699,149**	**$23,868,782**	**$23,163,371**	**$24,313,376**	**$25,480,728**
Non-Operating Expenses					
Water Existing Debt	$1,477,819	$2,903,644	$2,903,644	$2,903,644	$2,903,644
PAYGO Capital	$6,788,350	$6,912,022	$6,732,761	$6,851,033	$6,913,919
Subtotal Non-Operating Expenses	**$8,266,169**	**$9,815,666**	**$9,636,405**	**$9,754,677**	**$9,817,563**
TOTAL EXPENSES	**$29,965,318**	**$33,684,448**	**$32,799,776**	**$34,068,053**	**$35,298,291**
NET REVENUES	**$7,342,329**	**$6,989,253**	**$9,757,114**	**$10,722,262**	**$11,823,563**
NET CASH CHANGE EXCL. NEW DEBT PROCEEDS	**($923,840)**	**($2,826,413)**	**$120,709**	**$967,585**	**$2,006,000**
BEGINNING BALANCES	$23,986,292	$23,062,452	$20,236,039	$20,356,748	$21,324,334
ENDING BALANCES W/O DEBT PROCEEDS	**$23,062,452**	**$20,236,039**	**$20,356,748**	**$21,324,334**	**$23,330,334**

5 PROJECTED WATER DEMAND AND CUSTOMER CHARACTERISTICS

5.1 FPUD Water Supply and Metered Water Demand Projection

BWA reviewed the last 6 years of metered water demand and total water supply. Projected FY 22/23 water demand is based on an average of the lowest three years in that period – FY 18/19, FY 19/20, and FY 21/22 – to provide a slightly-conservative and reasonable basis for demand projections. Conservative water demand projections are used to ensure rate revenue is sufficient and to reflect increased water conservation. All class and tier demand percentages are based on the average of actual FY 18/19, FY 19/20, and FY 21/22 metered water demand (water sales). The projected water loss was based on the six year average, as water loss is not related to water demand.

Table W7: Historic and Projected Water Supply and Metered Demand

Water Supply and Metered Water Demand	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	FY-22/23
	Actual	*Actual*	*Actual*	*Actual*	*Actual*	*Actual*	*Projected*
Water Supply (AF)	9,211	9,181	8,043	7,986	8,918	7,950	8,000
Water Loss %	*94.03%*	*94.34%*	*90.30%*	*90.03%*	*91.23%*	*95.05%*	*92.50%*
Metered Water Sales (AF)	8,661	8,661	7,263	7,189	8,136	7,556	7,400
Metered Water Sales (Kgal)	2,822,297	2,822,297	2,366,659	2,342,693	2,651,228	2,462,215	2,411,297

Source: Actual water supply, water loss, and metered water sales provided the District.

5.2 Water Services and Equivalent Capacity

The following table contains the counts of water services and calculations of equivalent meter units (EMU)s. Each connection to the District's water system is a considered one service. The EMUs for each meter size are based on the meter equivalent ratio. The meter equivalent ratios used in this report are in proportion to the maximum safe flow of a ¾" meter, 30 gallons per minute (GPM). This means a ¾" meter equals 1 EMU. A 1" meter with a maximum safe flow of 50 GPM will have a meter equivalent ratio of 1.67. EMUs are used for deriving fixed charges because they reflect system capacity. The total amount of EMUs in the District represent the total current capacity the District.

A small amount of District customers have locked meters. Meters are locked either by request of the customer or due to nonpayment. These customers are classified as Standby customers. They are segregated in the following table because they do not pay the full monthly fixed rates charged to active water customers.

Table W8: Water Services and Equivalent Meter Units

Count of Services	Water Services	Standby Services	Fire Services	Total Services	Total Annual Services
Connection Size	*#*	*#*	*#*	*#*	*#*
3/4"	6,642	7	-	6,649	79,788
1"	1,895	-	-	1,895	22,740
1 1/2"	397	1	-	398	4,776
2"	195	1	5	201	2,412
3"	18	1	8	27	324
4"	5	1	39	45	540
6"	5	2	37	44	528
8"	-	-	4	4	48
Total	9,157	13	93	9,263	111,156

Service Capacity	Water Services	AWWA Maximum Safe GPM	Meter Equivalent Ratios	Equivalent Meter Units (EMU)s	Total Annual EMUs
Meter Size	*#*	*#*	*#*	*EMU*	*EMU*
Active Water Services					
3/4"	6,642	30	1.00	6,642	79,704
1"	1,895	50	1.67	3,165	37,976
1 1/2"	397	100	3.33	1,322	15,864
2"	195	160	5.33	1,039	12,472
3"	18	320	10.67	192	2,305
4"	5	500	16.67	83	1,000
6"	5	1,000	33.33	167	2,000
Total	9,157			12,610	151,321
Standby Water Services					
3/4"	7	30	1.00	7	84
1"	-	50	1.67	-	-
1 1/2"	1	100	3.33	3	40
2"	1	160	5.33	5	64
3"	1	320	10.67	11	128
4"	1	500	16.67	17	200
6"	2	1,000	33.33	67	800
Total	13			110	1,316
Active and Standby Water Services					
3/4"	6,649	30	1.00	6,649	79,788
1"	1,895	50	1.67	3,165	37,976
1 1/2"	398	100	3.33	1,325	15,904
2"	196	160	5.33	1,045	12,536
3"	19	320	10.67	203	2,433
4"	6	500	16.67	100	1,200
6"	7	1,000	33.33	233	2,800
Total	9,170			12,720	152,637

Note: Customer counts by meter size provided by the District. AWWA maximum safe flow GPM based on the AWWA M1 Manual, Appendix B, Equivalent Meter Ratios.

5.3 Fire Service Capacity

The following table contains the counts of fire services and calculations of equivalent fire units (EFU)s used for deriving the fixed fire service charges. According to the M1 Manual, fire capacity is equal to the service size raised to the 2.63 power. The Fire Capacity Factors are the product of this calculation. The Equivalent Fire Unit Ratios are derived by calculating the Fire Capacity Factor equivalent to a 2" service. The District's fire service capacity includes the capacity of fire hydrants and private firelines connected to the District's water system.

Table W9: Water Services and Equivalent Units

Fire Service Size	Number of Services	Fire Capacity Factor	Equivalent Fire Unit Ratios (EFU)	Fire Capacity EFUs	Fire Capacity %	Annual Fire Services	Annual EFUs
Service Size"	*#*	*#*	*EFU*	*EFU*	*%*	*#*	*#*
Public Hydrants							
6	1,600	111	17.98	28,768	96.4%		345,216
Private Fireline Services							
2	5	6.19	1.00	5		60	60
3	8	17.98	2.90	23		96	278
4	39	38.32	6.19	241		468	2,897
6	37	111.31	17.98	665		444	7,983
8	4	237.21	38.32	153		48	1,839
Total Private Firelines	93			1,088	**3.64%**	1,116	13,058
Total Fire Protection	**1,693**			**29,856**		**1,116**	**358,274**

Note: Count of fire services provided by the District.

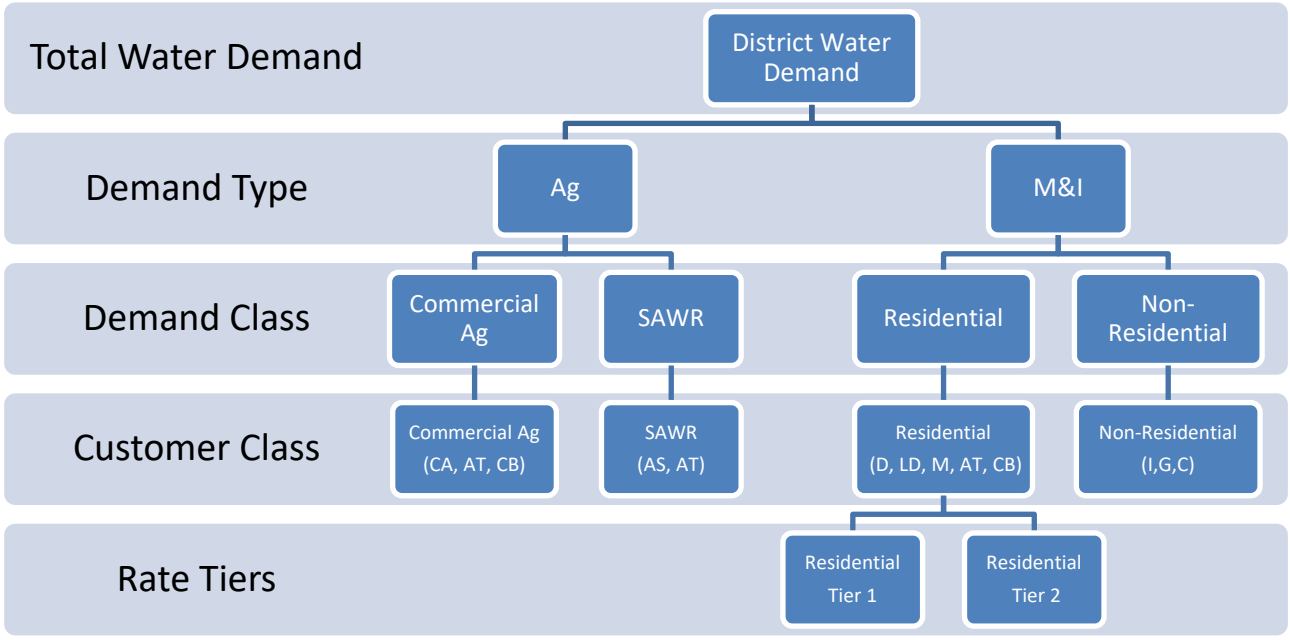
6 WATER DEMAND CATEGORIZATION AND SUPPLY UTILIZATION

6.1 Water Demand Categorization

In order to proportionally allocate costs to the District's customer classes, water demands were split into groups by demand category. The sum of the groupings of demand in each category equal the District's total projected demand. A demand category is related to how the District incurs costs e.g., some of the District's costs are related to all of the District's water demand, while some costs are only related to M&I demands. The demand categories are organized into a hierarchy where the District's demands are separated into progressively smaller groups. The categories and groups were based on BWA's review of District operations and input from District staff. The primary output of this categorization is to identify the water use and applicable costs associated different types of water demands.

The following figure shows the District's water demands in a larger framework that categorizes different types of water demands for purposes of allocating costs to different types of use. The categories correspond with the rate structure classes and components developed in this report.

Figure W7: FPUD Water Demand Categorization Levels



Demand Type and Water Demand Classes

The District's total demand can be separated into two distinct water demand types: Municipal and Industrial (M&I) demand and Agricultural (Ag) demand. Ag water is used by customers who have met the criteria to enroll in the FPUD commercial agricultural program or the SDCWA special agricultural

water rate (SAWR) program. Ag water is less reliable which leads to it being less expensive than M&I water. A description of each demand type is as follows:

- **Municipal and Industrial (M&I**) - M&I customers are provided a higher level of water supply reliability and are last in line for mandatory water use cutbacks if required by MWD or SDCWA due to water supply shortages. Additionally, M&I customers have first priority for use of local water supplies, which are the District's most reliable source of supply. To receive the higher level of supply reliability, M&I customers pay the wholesale water supply reliability charges and local water supply costs.
- **Agricultural (Ag)** - Water service to Ag customers is ultimately interruptible as Ag water use is first in line for mandatory cutbacks if ever needed due to water supply shortages. As such, Ag customers do not pay for wholesale water reliability charges or local water supplies costs. The District's Ag water demands are met via imported water purchased from SDCWA, which in turn obtains most of its water from MWD.

For the purposes of developing rates that reflect the cost of service, Ag demand and M&I demand are both bifurcated into two demand classes. Ag demand is bifurcated into 1) the SAWR demand class which consists of Ag customers who have enrolled in the Special Agricultural Water Rate (SAWR) program and receive the discounted SAWR rate for their eligible Ag use from SDCWA and 2) the Commercial Ag demand class which consists of customers who are not enrolled in the SAWR program but do meet the District's criteria to receive wholesale water at the Commercial Ag rate.

M&I demand is bifurcated into 1) a residential demand class which includes single-family, multi-family and other domestic/residential usage and 2) a non-residential demand class which includes commercial, governmental and irrigation accounts. The following table shows a breakdown of the projected water demand for each of the District's demand classes.

Table W10: Projected FY 22/23 Water Demand by Demand Class

FPUD Water Water Demand by Demand Class (Kgal)					Total
Total Water Demand	District Water Demand				
	2,411,297				2,411,297
Demand Type	AG		M&I		
	760,944		1,650,354		2,411,297
Demand Class	SAWR	Commercial Ag	Residential	Non-Residential	
	441,755	319,189	1,452,252	198,102	2,411,297

*Based on projected FY 22/23 water demands proportionally adjusted to reflect the average actual use by customer class in FY 18/19, FY 19/20, and FY 21/22.

Customer Classes and Tiers

Agricultural Water Demand Classes

The SAWR demand class includes the Agriculture SAWR (AS) customer class and the third tier of the Agriculture Domestic (AT) customer class which accounts for SAWR water used for agricultural purposes.

The Commercial Ag demand class includes the Commercial Ag (CA) customer class as well as the second tier of the Agriculture Domestic (AT) and Commercial Domestic Ag (CB) customer classes which receive the Commercial Ag rate water.

M&I Water Demand Classes

The residential demand class includes all tiers of the Domestic (D), Large Domestic (LD), and Multi-Unit (M) customer classes as well as the first tiers of the Agriculture Domestic (AT) and Commercial Domestic Ag (CB) classes which account for indoor water use in residences on an agricultural lot. The non-residential demand class includes the Commercial (C), Government (G), and Irrigation Only (I) customer classes.

The following table shows the demand class associated with each customer class and tier.

Table W11: Demand Class Supply by Customer Class & Tier

Customer Class	SAWR Demand Class	Commercial Ag Demand Class	M&I Demand Class
Agriculture SAWR (AS)	x		
Commercial Ag (CA)		x	
Agriculture Domestic (AT)			
Tier 1 (0-5 Kgal)			x
Tier 2 (6-17 Kgal)		x	
Tier 3 (>17 Kgal)	x		
Commercial Domestic Ag (CB)			
Tier 1 (0-5 Kgal)			x
Tier 2 (>5 Kgal)		x	
Domestic (D/ LD)			
Tier 1 (0-5 Kgal)			x
Tier 2 (6-30 Kgal)			x
Tier 3 (>30 Kgal)			x
Multi-Unit (M)			
Tier 1 (0-5 Kgal)			x
Tier 2 (6-30 Kgal)			x
Tier 3 (>30 Kgal)			x
Commercial (C)			x
Government (G)			x
Irrigation Only (I)			x

The following table shows a detailed breakdown of projected FY 22/23 water use by customer class and tier.

Table W12: Projected Water Use by Customer Class & Tier

Customer Class	Projected FY 22/23 Demand (Kgal)*	Services
Agriculture SAWR (AS)	194,152	61
Commercial Ag (CA)	140,720	118
Agriculture Domestic (AT)		
Tier 1 (0-5 Kgal)	7,504	
Tier 2 (6-17 Kgal)	15,926	
Tier 3 (>17 Kgal)	247,603	
Commercial Domestic Ag (CB)		
Tier 1 (0-5 Kgal)	12,270	
Tier 2 (>5 Kgal)	162,543	
Domestic (D/ LD)		7,773
Tier 1 (0-5 Kgal)	407,374	
Tier 2 (6-30 Kgal)	829,549	
Multi-Unit (M)		218
Tier 1 (0-5 Kgal)	166,320	
Tier 2 (6-30 Kgal)	29,236	
Commercial (C)	150,254	579
Government (G)	40,176	29
Irrigation Only (I)	7,671	12
Total	2,411,297	9,157

Note: Based on projected FY 22/23 water demands proportionally adjusted to reflect the average actual use by customer class in FY 18/19, FY 19/20, and FY 21/22.

The following table shows projected water use by customer class and demand class. Residential water use is shown for 2 tiers in line with the proposed water rate structure.

Table W13: Projected FY 22/23 Water Use by Demand Class & Tier

Projected Water Demand	Total	Residential	M&I	Total
	Kgal	*%*	*%*	*%*
Residential				
Tier 1 (D, LD, M, AT, CB)	593,467	40.87%		
Tier 2 (D, LD, M)	858,785	59.13%		
Total Residential	**1,452,252**	100.00%	88.00%	
Commercial (C)	150,254		9.10%	
Government (G)	40,176		2.43%	
Irrigation Only (I)	7,671		0.46%	
Total M&I	**1,650,354**		100.00%	68.44%
Ag SAWR (AS, AT, CB)	441,755			18.32%
Commercial Ag (CA, CB)	319,189			13.24%
Total	**2,411,297**			100.00%

6.2 FPUD Water Supplies

The District has two imported and two local water supplies. For the purposes of this study, imported water from SDCWA is treated as two distinct types of water supply since SAWR water is provided to the District at a lower rate and is only available for customers enrolled in the SAWR program. This report also considers all water entering the District's water system from the Red Mountain UV treatment facility to be Red Mountain water supply even though a portion of that water may include SMCUP water pumped to the Red Mountain Reservoir to supplement water storage.

The following table shows a breakdown of the District's projected water supply available to meet projected water demands. Water supply volumes for FY 26/27 were used to reflect the average volumes of water from different sources after water generated from the SMCUP is fully integrated into the District's water supply. These sources of water supply are subsequently allocated to different types of water use in line with how the District meets the water demands for each customer class.

Table W14: Projected Water Supply to Meet Metered Water Demand

Projected FBUD Water Supplies and Demand	Water Supply (FY 26/27)	Water Supply	Projected Metered Water Demand (FY 22/23)
	AF	*%*	*Kgal*
Red Mountain (Well)[2]	85	1.06%	25,467
Red Mountain (SMCUP)[1,2]	339	4.21%	101,568
SMCUP[1]	2,761	34.31%	827,224
SDCWA Water (SAWR Rate)[4]	1,474	18.32%	441,755
SDCWA Water (Blended Treated Rate)[3]	3,389	42.11%	1,015,283
Total	8,048	100.00%	2,411,297

1- Projected SMCUP supply reduced by amount used to fill Red Mountain Reservoir. Districts projects it will be filled once per year. For the purposes of this study all water treated at the Red Mountain UV treatment plant is considered Red Mountain supply as it is used to meet peak water demands.

2-Red Mountain Well, SMCUP and SAWR Rate SDCWA Water projections are based on FY 22/23 projections provided by the District increased by projected growth.

3- SDCWA Blended Treated Rate Water is projected to meet water demands not fulfilled by other sources.

4- SDCWA SAWR Rate Water is projected based on the usage of District customers with SAWR agreements with SDCWA.

6.3 Water Supply Utilization by Demand Classes

M&I Water Supply

Water supply for M&I water demand is provided by a combination of water supply sources including: a) SMCUP water to meet base water demands, b) SDCWA Melded Treated Rate water to meet demand up to peak summer demands, and finally c) water from the Red Mountain facilities to help meet peak water demands during the highest-use summer months. The District only uses the Red Mountain facilities during times of peak system demand because the facilities are expensive to start and operate. Red Mountain facilities are also critical to helping the District maintain adequate water pressure during periods of peak system demands due to their high elevation.

Agricultural Water Supply

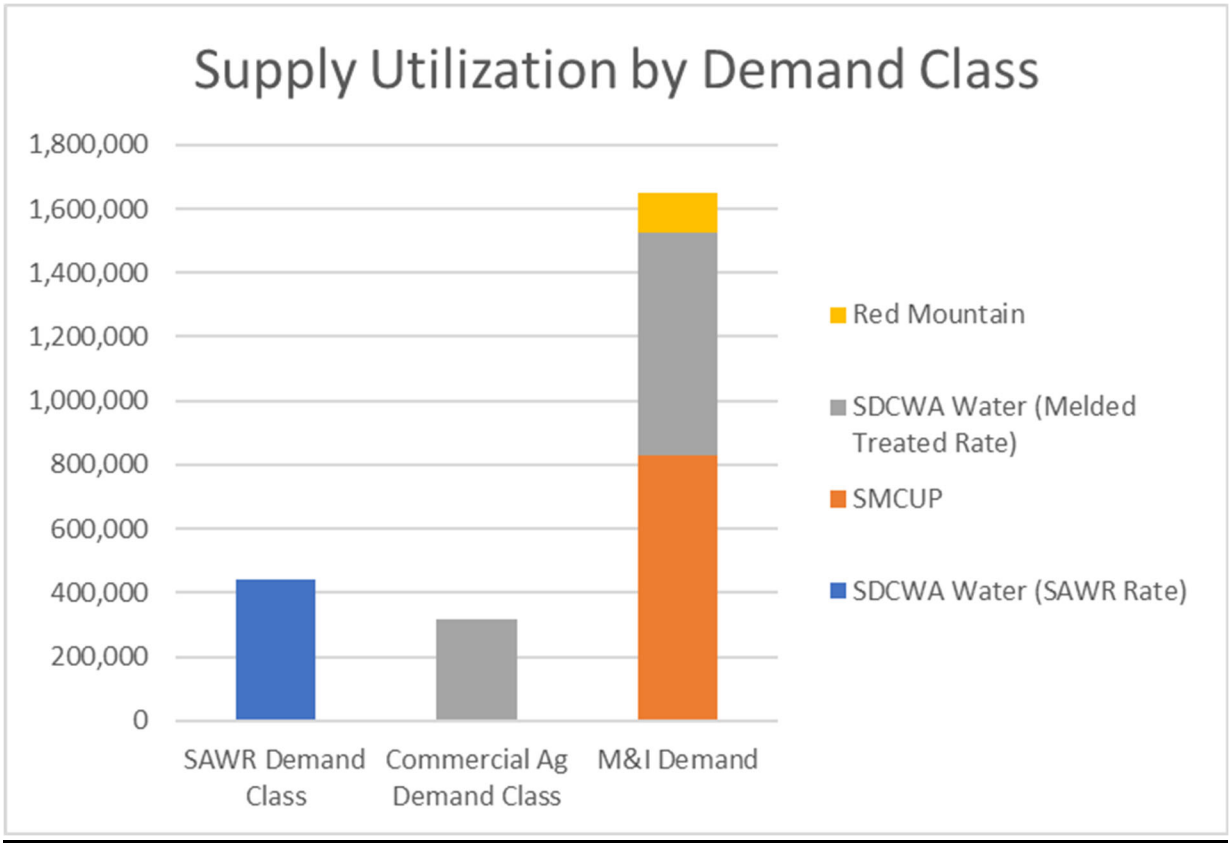
Water supply for SAWR customers is provided by lower-cost SAWR water to the extent such water is provided by SDCWA. All remaining SAWR demand and Commercial Ag demand is supplied by water purchased at the SDCWA Melded Treated Rate water.

The following table and figure show a breakdown of the District's sources of water supply used to meet the demands of each customer class.

Table W15: Water Supply Utilization by Demand Class

FPUD Demand Classes	Unit	SAWR Demand Class	Commercial Ag Demand Class	M&I Demand	Total FPUD Demand
Use Type		Ag	Ag	M&I	All
Projected Demand	*%*	18.32%	13.24%	68.44%	100.00%
Projected Demand	*Kgal*	441,755	319,189	1,650,354	2,411,297
SDCWA Water (SAWR Rate)	*Kgal*	441,755	0	0	441,755
SMCUP	*Kgal*	0	0	827,224	827,224
Red Mountain	*Kgal*	0	0	127,035	127,035
SDCWA Water (Melded Treated Rate)	*Kgal*	0	319,189	696,094	1,015,283

Figure W8: Supply Utilization by Demand Class (Kgal)



6.4 M&I Use Categories

To fairly allocate costs to each M&I demand class and eventually each residential tier, M&I demand is split into use categories. The purpose of splitting M&I demand into use categories is to identify how each M&I demand class utilizes available water supplies. The water demand identified in each use category is based on the proportion of actual average use in FY 18/19, FY 19/20 and FY 21/22 applied to the projected FY 22/23 M&I demands.

M&I Use Category Descriptions

Winter use in this study is defined as use that is at or below the average winter demand of December, January, and February. This is essentially the minimum level of demand the District consistently serves year round.

Average use in this study is defined as use greater than average winter demand of December, January, and February through annual average demand. Winter Average through Average use is the level of demand considered base demand in the Base-Extra Capacity Method, described in the AWWA M1 Manual.

Summer use in this study is defined as use greater than the annual average demand through the average summer demand in the months of June through October.

Peak use in this study is defined as use greater than the summer average demand in the months of June through October. Use in this category includes maximum day and maximum hour demands.

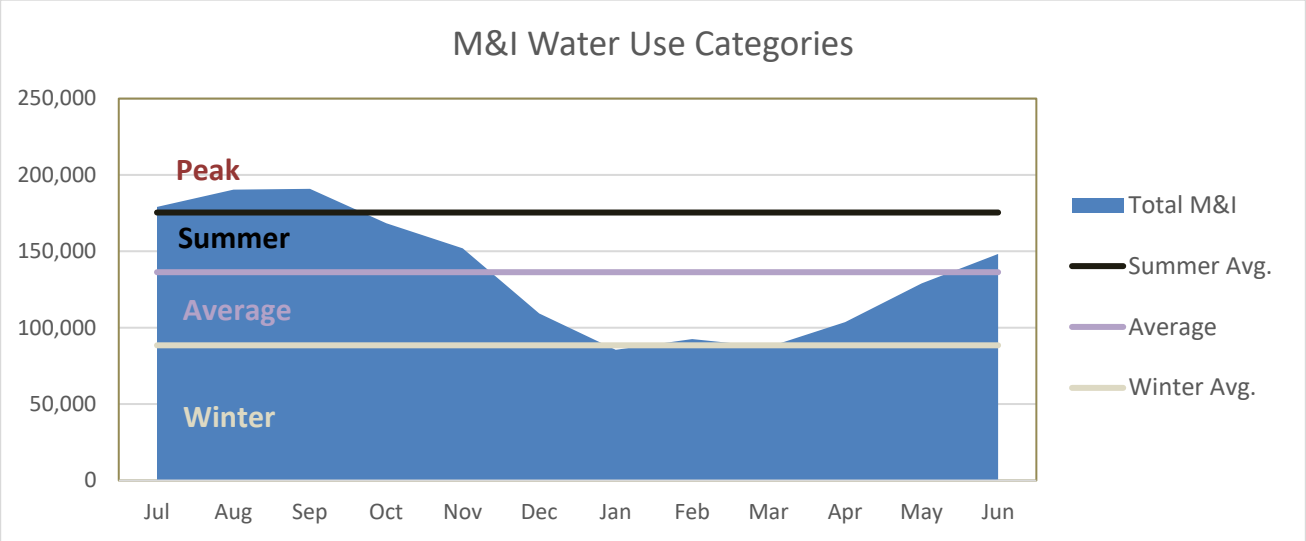
The following table shows the use category thresholds for each use category based on the descriptions above and the total projected M&I demand in FY 2022/23.

Table W16: M&I Use Categories

Demand Categories	Use Category Threshold	Projected FY 22/23 M&I Use	M&I Water Use
	Kgal	*Kgal*	*%*
Winter	89,602	1,066,342	64.61%
Average	137,529	461,345	27.95%
Summer	176,619	87,401	5.30%
Peak		35,267	2.14%
Total M&I		1,650,354	100%

The following figure illustrates how water use falls into the use categories over the course of a year.

Figure W9: Projected FY 22/23 M&I Use and Water Use Categories



M&I Supply Utilization by Use Category

As described above, M&I demand utilizes SMCUP water to supply base water demands, SDCWA Melded Treated Rate water to supply demand that exceeds SMCUP supply and is not supplied by the Red Mountain facilities. The District only uses the Red Mountain facilities during times of peak system demand because the facilities are expensive to startup. Red Mountain facilities are also critical in helping the District maintain pressure during peak system demands due to their high elevation.

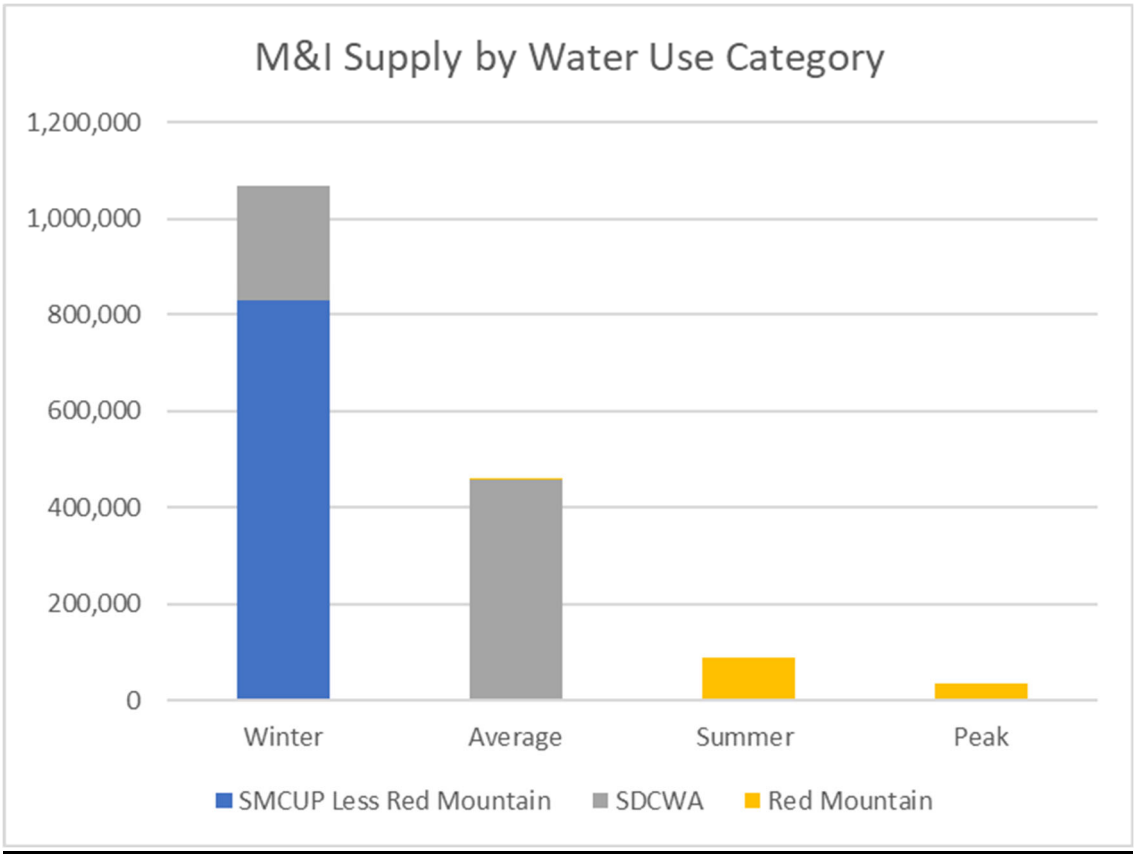
To allocate the cost to serve each use category, the supply utilization of each use category was determined. The water supply utilization of each use category was determined by exhausting the supply used to meet base demands (SMCUP) through the use categories from base to peak. Purchased SDCWA water fulfills the demand between SMCUP and the peak demands met by Red Mountain.

The supply utilization by use category is shown in the following table and figure.

Table W17: M&I Supply Utilization by Use Category

M&I Supply Utilization	Total Demand	Projected FY 22/23 Demand	SMCUP	SDCWA	Red Mountain
	%	*Kgal*	*Kgal*	*Kgal*	*Kgal*
M&I Demand		1,650,354	823,929	699,896	126,529
Winter	64.61%	1,066,342	827,224	239,117	0
Average	27.95%	461,345	0	456,977	4,367
Summer	5.30%	87,401	0	0	87,401
Peak	2.14%	35,267	0	0	35,267

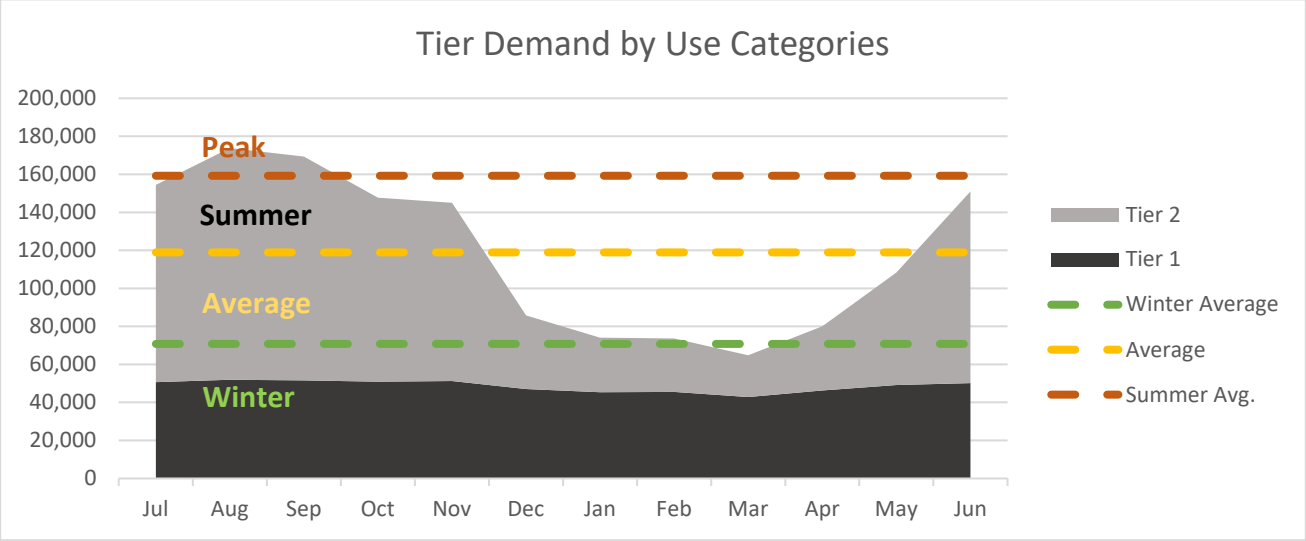
Figure W10: M&I Supply Utilization by Use Category (Kgal)



Use Category Utilization by Tier

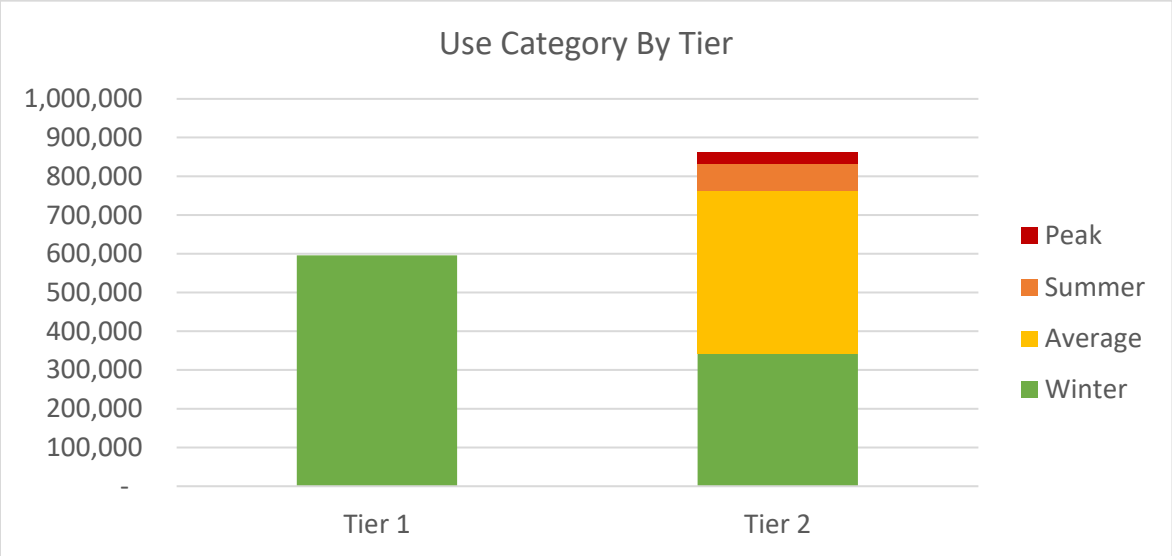
In order to develop rates that reflect the underlying costs of service for each residential tier, the volume of water in each use category (e.g., winter, average, summer and peak use) in each residential tier must be identified. Water use in each tier is based on average annual monthly tier usage percentages from FY 18/19, FY 19/20 and FY 21/22 applied to the projected FY 22/23 water demand to determine the demand in each use category for each tier. The following figure shows the water use categories that comprise each tier.

Figure W11: Tier Demand and Use Categories



The following figure shows the total demand in each use category by tier.

Figure W12: Use Categories by Tier



7 WATER COST OF SERVICE RATE ANALYSIS

The AWWA M1 Manual outlines the two most widely used methods for allocation of costs which are the a) base-extra capacity method and b) the commodity demand method. Both methods recognize that the cost of serving a customer depends not only on the total volume of water used, but also on the rate of use or peak-demand requirements.

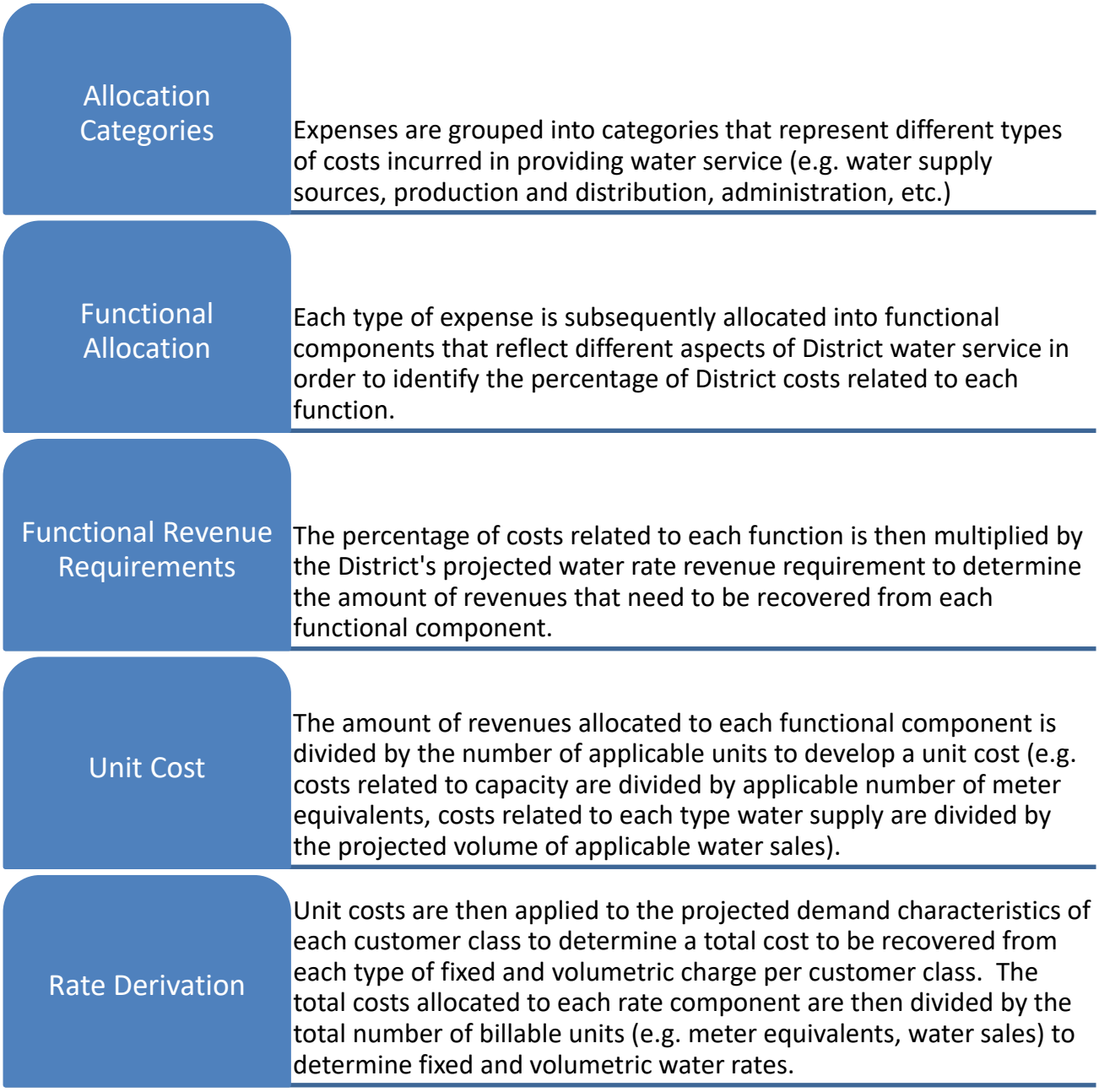
Similar to the previous rate study, the proposed rates presented in this study are developed using a base-extra capacity method. When using the base-extra capacity method, costs are typically separated into fixed and variable cost components. The variable cost components consist of costs associated with (1) Base (average water use) and (2) Extra Capacity (water use in excess of average use). As noted in the AWWA M1 Manual, in detailed rate studies (such as the one performed for this study) some of these elements might be broken down further into two or more subcomponents.

In this study, fixed capacity-related costs are recovered based on meter size and capacity. Meter capacity ratios provide a basis for charging customers based on the proportionate amount of water system capacity required for serving each meter size. Larger meters place a greater demand on the water system and are correspondingly charged higher fixed rates that reflect their proportionate level of water system capacity needs.

The proposed rates are developed based on a detailed cost allocation that reflects the District's costs of providing service based on analysis of operations and input from District staff. As part of the process, BWA met with District staff from finance, administration, engineering, and operations to gain input on water system design and operations.

The following chart shows the general process for deriving water rates that reflect the District's costs of service to each customer class.

Figure W13: Cost of Service Analysis Process



7.1 Revenue and Expense Allocation Categories

The first step in the cost of service evaluation process is to develop allocation categories where revenues and expenses related to the same purpose are grouped together. An example of this process is grouping expenses related to production and distribution into the Production and Distribution allocation category. BWA worked with District staff to analyze the District's budget on a line-by-line basis and to assign each expenditure and revenue to the appropriate allocation category. The

following contains descriptions of the allocation categories and an explanation of how they are allocated to functional components:

- **MET/CWA Blended Rate** is the amount paid to SDCWA for wholesale water at the Melded Treated rate. It was allocated to the Melded Rate Water functional component.
- **MWD RTS Charge** is a fixed charge imposed by MWD. All active water customers benefit from the availability of wholesale water, so these costs were allocated to the water capacity functional component.
- **MWD Capacity Charge** is a fixed charge imposed by MWD. All active water customers benefit from the availability of wholesale water so these costs were allocated to the water capacity functional component.
- **CWA Customer Service Charge** is a fixed charge imposed by SDCWA. All customers benefit from the customer service functions so these costs were allocated to the standby capacity functional component.
- **CWA Supply Reliability Charge** is a fixed charge imposed by SDCWA. The projects funded with this charge provide for increased water supply reliability to M&I customers. This charge is allocated to the Supply Reliability functional component.
- **SAWR** expense is amount paid to SDCWA for wholesale water at the Special Agricultural Water Rate (SAWR). It was allocated to the SAWR Rate Water functional component.
- **SMCUP** expenses are the District's cost to operate and maintain the Santa Margarita Conjunctive Use Project facilities and the variable costs paid to Camp Pendleton for use of its facilities. SMCUP were allocated to the SMCUP and the Red Mountain functional components based on the projected utilization of the SMCUP supply. SMCUP water is project to be used to fill the Red Mountain Reservoir once per year.
- **Supply Reliability** expenses are costs related to improving and maintaining water supply reliability. They include fixed wholesale costs related to water reliability as well as fixed costs related to local water supplies. Supply Reliability expenses were allocated to the Supply Reliability functional component.
- **SDCWD IAC Charge** is the fixed SDCWA charge the District recovers from customers as a pass through charge. The SDCWD IAC Charge is recovered as a passthrough charge and is not allocated to functional components.
- **Production & Distribution** expenses are capital and O&M costs related to production and distribution. Pumping charge revenues reduce the amount of production and distribution that need to be recovered from rates. The portion of Production & Dist. expenses directly related to Red Mountain operations were allocated to the Red Mountain functional component. The portion of Production & Dist. expenses related to private fire line costs were allocated to the Private Fire Capacity functional component. The remainder of Production & Dist. are related to delivering water to all water customers and are allocated to the All Volume functional component.

- **Pipeline Maintenance & Const.** expenses are capital and O&M costs related to pipeline maintenance and construction. The portion of Pipeline Maint. & Const. expenses related to private fireline costs were allocated to the Private Fire Capacity functional component. The remainder of Pipeline Maint. & Const. costs allocated between the Water Capacity and All Volume functional components to reflect standing capacity and demand capacity of pipelines.
- **System Services** are costs associated with providing and maintaining customer water meters including meter testing and replacements. Backflow device fees offset the backflow costs included in this category. System Services expenses were allocated to the Water Meter Service functional component.
- **Administration** expenses are related to the water enterprise's portion of the District's administrative costs. The portion of Administration expenses related to private fireline costs were allocated to the Private Fire Capacity functional component. The portion of Administration expenses related to customer service and billing were allocated to the Customer functional component. The portion of Administration expenses related to providing and maintaining customer water meters were allocated to the Water Meter Service functional component. The portion of Administration expenses related to conservation programs were allocated to the Conservation functional component. The remainder of the Administration costs were allocated to functional components related to system capacity, 60% of administrative costs were allocated to the Water Capacity functional component because administrative costs are fixed on an annual basis and the remainder were allocated to the All Volume functional component.
- **Benefits** expenses are employee costs which are not salaries. Benefit expenses were allocated to functional components based on the allocations of SMCUP, Production & Dist., Pipeline Maint. & Const., System Services, and Administration allocation categories weighted by the salary amount in each component.
- **Water System** expenses are the costs of capital projects related to the water system. The portion of Water System expenses related to private fire line costs were allocated to the Private Fire Capacity functional component. The remainder of Water System costs were allocated between the Water Capacity and All Volume functional components to reflect standing capacity and demand capacity. A greater portion of these costs were allocated to the Water Capacity functional component because these costs are mostly one-time or fixed costs.
- **As All Other** expenses and revenues are revenues not related to a specific function and are allocated proportionally based on the allocation of all the other categories causing thing this category to have no impact on the functional allocation.

The following table shows the expenses and offsetting revenues in each allocation category. The final allocation amount for each allocation category is the net of expenses less offsetting revenues. The allocation amounts for operating costs are based on the projected revenues and expenses in the final year of the Proposition 218 notice period (FY 2026/27) as show in Section 4.4. Capital costs are based

on the average annual funding levels over the five-year period adjusted for inflation to be consistent with FY 2026/27. Operating and maintenance expenses are based on FY 2026/27, the final year of the Proposition 218 notice period, because revenues and expenses are building to support operations which fully incorporate the SMCUP supply and associated costs, which will be incorporated by FY 2026/27. Expenses in FY 2026/27 reflect what will be the new normal for District operations. Capital costs were allocated based on a projected five year average, inflated to FY 2026/27 dollars to reflect the average annual level of capital funding to be supported by the proposed rates.

Table W18: Allocation Categories for Functional Allocation

	Projected FY 26-27 Amounts			
Allocation Category	**Allocation Expenses**	**Offsetting Revenues**	**Allocation Amount**	**Total**
MET/CWA Blended Rate	$5,784,941		$5,784,941	100%
MWD RTS Charge	$343,644		$343,644	100%
MWD Capacity Charge	$262,829		$262,829	100%
CWA Customer Service Charge	$652,621		$652,621	100%
CWA Supply Reliability Charge	$2,135,850		$2,135,850	100%
SAWR	$2,107,392		$2,107,392	100%
SMCUP	$3,390,653		$3,390,653	100%
Supply Reliability	$2,755,117	$508,842	$2,246,275	100%
SDCWD IAC Charge	$764,206	$764,206	$0	0%
Production & Dist.	$1,437,918	$212,744	$1,225,175	100%
Pipeline Maint. & Const.	$5,978,708	$1,517,982	$4,460,726	100%
System Services	$882,894	$7,065	$875,829	100%
Administration	$5,566,099	$70,650	$5,495,449	100%
Benefits	$1,511,696		$1,511,696	100%
Water System	$2,729,798	$666,710	$2,063,088	100%
Functional Allocation $	$36,304,366	$3,748,198	$32,556,168	$32,556,168
Functional Allocation %			100%	100%
Revenue Requirement			**$26,199,000**	**$26,199,000**

7.2 Allocations Between Fixed Capacity and Variable Water Usage Functions

Utilities have used a wide range of approaches or perspectives for allocating and recovering their costs for providing service and these costs are most commonly recovered from a combination of fixed and variable charges. The percentage of revenues derived from the fixed and variable charges should be proportional to each system's expenditures and must not exceed the cost of providing service.

Many of the District's costs are fixed costs that do not vary by the level of service provided, such as operational and staff costs, as well as costs for building and maintaining infrastructure. Some of these

costs are related to the number of customers but the majority of the fixed costs are related to the total capacity of the water system. Fixed costs related to system capacity can reasonably be apportioned by meter size or variable, usage-based rate recovery in recognition that both units of measure reasonably reflect a customer's portion of system capacity. For example, a share of the fixed cost of salaries related to water production can reasonably be recovered from usage-based charges as these costs are incurred to provide water supply to meet customer demand of from a fixed charge based on a customer's meter size which reflects the magnitude of water a customer can pull from the water system . Likewise, debt service payments may be fixed annual costs, but it is reasonable to recover some of these costs from usage-based rates as the costs are incurred to fund infrastructure that will improve the water delivery system.

While there is no single correct approach, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified.

7.3 Functional Cost Allocation

The next step in the cost of service analysis is to allocate the net expenses (expenses less offsetting revenues) in each allocation category to the water enterprise's functional components. While there is no single correct approach for cost allocation, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified. This process is intended to proportionately allocate costs to each functional component to determine the revenue requirement for each component. The allocations to each functional component were based on input from District staff and BWA analysis of customer, water supply, and metered water demand data. A description of the allocations is for each allocation category is included in Section 7.1. Supporting calculations for the allocations are included in Appendix A.

7.4 Allocation to Fixed Cost Functional Components

The following section describes the functional components where the revenue requirement is recovered from fixed units e.g., services, EMUs and EFUs.

Fixed Cost Functional Components

- **Private Fire Capacity** reflects the proportional costs to provide private fire protection capacity. The revenue requirement for this functional category is recovered per equivalent fire capacity unit (EFU).

- **Customer** reflects billing and customer service costs that are the same for each customer regardless of meter size. The revenue requirement for this functional category is recovered on a per service basis.
- **Water Meter Service** reflects costs associated with servicing meters. The revenue requirement for this functional category is recovered per equivalent meter unit (EMU) of active and standby customers.
- **Water Capacity** includes fixed operating and capital costs related to system capacity. The revenue requirement for this functional category is recovered per equivalent meter unit (EMU) of active customers.
- **Standby Capacity** includes fixed costs related to serving active and standby services. The revenue requirement for this functional category is recovered per equivalent meter unit (EMU) of active and standby customers.

The following table shows a breakdown of the water utility's allocation to fixed cost functional categories.

Table W19: Allocation to Fixed Cost Functional Components

Allocation Category	Allocation Amount	Private Fire Capacity	Customer	Water Meter Service	Water Capacity	Standby Capacity
MET/CWA Blended Rate	$5,784,941					
MWD RTS Charge	$343,644				100.0%	
MWD Capacity Charge	$262,829				100.0%	
CWA Customer Service Charge	$652,621					100.0%
CWA Supply Reliability Charge	$2,135,850					
SAWR	$2,107,392					
SMCUP	$3,390,653					
Supply Reliability	$2,246,275					
SDCWD IAC Charge	$0					
Production & Dist.	$1,225,175	0.1%				
Pipeline Maint. & Const.	$4,460,726	0.1%			50.0%	
System Services	$875,829			100.0%		
Administration	$5,495,449	0.1%	15.5%	3.9%	60.0%	
Benefits	$1,511,696	0.1%	7.6%	15.4%	35.6%	
Water System	$2,063,088	0.1%			69.9%	
Functional Allocation $	$32,556,168	$10,533	$968,434	$1,325,837	$8,114,835	$652,621
Functional Allocation %	100%	0.03%	2.97%	4.07%	24.93%	2.00%
Revenue Requirement	**$26,199,000**	**$8,477**	**$779,330**	**$1,066,944**	**$6,530,270**	**$525,185**

A description of the allocations is for each allocation category is included in Section 7.1. Supporting calculations for the allocations are included in Appendix A. The Functional Allocation $ are calculated by taking the sum of the products of the allocation percentages in each functional component multiplied by the allocation amounts. The Functional Allocation % is calculated by dividing the

Functional Allocation $ for each functional component by the total Functional Allocation $. The Functional Allocation % for each functional component is then multiplied by the total revenue requirement. The revenue requirement was identified in Section 4.4.

7.5 Fixed Cost Functional Component Unit Costs

The following table shows the allocation units and total revenue requirement by functional component. The allocation units used for each functional component are the units related to the service provided by the functional component. The revenue requirement divided by the allocation units for each functional component provide each functional component's unit rate.

Table W20: Fixed Monthly Unit Costs by Functional Component

Allocation Units	Customer	Meter Service	Water Capacity	Standby Capacity	Private Fire Capacity
Allocation Unit of Measure	*#*	*EMU*	*EMU*	*EMU*	*EFU*
Allocation Units	111,156	152,637	151,321	152,637	13,058
Revenue Requirement	$779,330	$1,066,944	$6,530,270	$525,185	$8,477
Unit Cost	**$7.01**	**$6.99**	**$43.16**	**$3.44**	**$0.65**

The following table describes the allocation units used to derive the unit cost by functional component.

Table W21: Fixed Allocation Units

Functional Component	Allocation Units	Allocation Units	Unit of Measure	Description
Customer	Number of Water Services	111,156	#	Total number of standby and active water services per month
Water Meter Service	All Equivalent Meter Units	152,637	EMU	Total amount of active and standby water customer equivalent meter units per month
Water Capacity	Active Equivalent Meter Units	151,321	EMU	Total amount of active water customer equivalent meter units per month
Standby Capacity	All Equivalent Meter Units	152,637	EMU	Total amount of active and standby water customer equivalent meter units per month
Private Fire Capacity	Private Fireline Equivalent Fire Units	13,058	EFU	Total amount of private fireline equivalent fire units per month

7.6 Function Allocation to Variable Cost Components

The following section describes the functional components where the revenue requirement is recovered from variable Kgal (1,000 gallon) units. The definition of the functional components and the units of demand associated with each category are as follows:

- **All Volume** costs are related to all water sold in the District and reasonably recovered volumetrically per unit of water sold by the district.
- **SMCUP** costs are driven by the acquisition and treatment of water related to the SMCUP and are reasonably recovered per unit of SMCUP water sold by the District.
- **Red Mountain** costs are those associated with the Red Mountain facilities including the well, reservoir, UV treatment facility and the SMCUP water that is projected to fill the reservoir once per year. Red Mountain costs are reasonably recovered per unit of water treated at the Red Mountain UV treatment facility sold by the District.
- **Supply Reliability** costs are associated with providing increased supply reliability to all M&I demand including SMCUP debt service, SDCWA Supply Reliability Charges and SDCWA Storage Charges. Supply Reliability costs are reasonably recovered per unit of M&I water sold by the District.
- **Blended Rate** costs reflect the cost of water purchased from SDCWA at the Melded Treated rate and are reasonably recovered per unit of Melded Treated Rate water sold by the District.
- **SAWR Water** costs reflect the cost of water purchased from SDCWA at the SAWR rate and are reasonably recovered per unit of SAWR water sold by the District.
- **Conservation** costs are related to the District's efforts to help M&I customers conserve water and reduce peak summer demands. conservation program. Conservation costs are reasonably recovered per unit of peak water sold by the District.

The following table shows a breakdown of the water utility's allocation to variable cost functional components.

Table W22: Cost Allocation to Variable Cost Recovery Functional Components

Allocation Category	Allocation Amount	All Volume	SMCUP	Red Mountain	Supply Reliability	Melded Rate Water	SAWR Rate Water	Conservation
MET/CWA Blended Rate	$5,784,941					100.0%		
MWD RTS Charge	$343,644							
MWD Capacity Charge	$262,829							
CWA Customer Service Charge	$652,621							
CWA Supply Reliability Charge	$2,135,850				100.0%			
SAWR	$2,107,392						100.0%	
SMCUP	$3,390,653		89.1%	10.9%				
Supply Reliability	$2,246,275				100.0%			
SDCWD IAC Charge	$0							
Production & Dist.	$1,225,175	81.3%		18.7%				
Pipeline Maint. & Const.	$4,460,726	49.9%						
System Services	$875,829							
Administration	$5,495,449	18.5%						2.0%
Benefits	$1,511,696	32.7%	6.0%	1.7%				1.0%
Water System	$2,063,088	30.0%						
Functional Allocation $	$32,556,168	$5,350,190	$3,110,044	$624,496	$4,382,125	$5,784,941	$2,107,392	$124,718
Functional Allocation %	100%	16.43%	9.55%	1.92%	13.46%	17.77%	6.47%	0.38%
Revenue Requirement	**$26,199,000**	**$4,305,471**	**$2,502,753**	**$502,552**	**$3,526,438**	**$4,655,329**	**$1,695,887**	**$100,364**

A description of the allocations is for each allocation category is included in Section 7.1. Supporting calculations for the allocations are included in Appendix A. The functional allocation $ are calculated by taking the sum of the products of the allocation percentages in each functional component multiplied by the allocation amounts. The functional allocation % is calculated by dividing the functional allocation $ for each functional component by the total functional $. The functional allocation % for each functional component is then multiplied by the total revenue requirement. The revenue requirement was identified in section 4.4.

7.7 Volumetric Unit Costs by Functional Components

The following table shows the allocation units and total revenue requirement by functional component. The allocation units used for each functional component are the units related to the service provided by the functional component. The revenue requirement divided by the allocation units for each functional component provide each functional component's unit cost.

Table W23: Volumetric Unit Costs by Function

Allocation Units	All Volume	SMCUP	Red Mountain	Supply Reliability	Melded Rate Water	SAWR Rate Water	Conservation
Allocation Unit of Measure	*Kgal*	*Kgal*	*Kgal*	*Kgal*	*Kgal*	*Kgal*	*Kgal*
Allocation Units	2,411,297	827,224	127,035	1,650,354	1,015,283	441,755	35,267
Revenue Requirement	$4,305,471	$2,502,753	$502,552	$3,526,438	$4,655,329	$1,695,887	$100,364
Unit Cost ($/Kgal)	**$1.79**	**$3.03**	**$3.96**	**$2.14**	**$4.59**	**$3.84**	**$2.85**

The following table describes the volumetric allocation demand units used to derive the unit cost by function.

Table W24: Volumetric Allocation Units

Functional Component	Allocation Units (Kgal)	Description
All Volume	2,411,297	All projected units sold by the District
SMCUP	827,224	Projected units from SMCUP sold by the District
Red Mountain	127,035	Projected units from Red Mountain sold by the District
Supply Reliability	1,650,354	Projected units sold to M&I customers
Melded Rate Water	1,015,283	Projected units of water purchased from SDCWA at the Melded Treated Rate sold
SAWR Rate Water	441,755	Projected units of water purchased from SDCWA at the SAWR Rate sold
Conservation	35,267	Projected Peak M&I units sold (Peak units identified in Section 7 of this report)

8 WATER RATE DERIVATION

8.1 Rate Structure Recommendations

The proposed rates incorporate a few modifications to the District's water rate structure designed to align rates with the current cost of providing service and reflect policy input provided by the District. Due to these modifications, impacts to water bills will vary based on customer class and water use when the first-year proposed rates are implemented on January 1, 2023. Future water rate increases starting January 1, 2024, are applied on an across-the-board basis with the same percentage increase to all water rates in future years.

The proposed water structure remains relatively consistent with FPUD's existing rate structure but incorporates some modifications designed to align rates with current projected costs of service. Rate structure recommendations are described as follows:

- Residential: Maintain a lower volumetric rate for the first 5,000 gallons (5 Kgal) of residential water use in Tier 1, reflecting the lower cost to provide water supply for base indoor demands. Combine residential Tiers 2 & 3 into a single tier for all water use above the first 5,000 gallons to reflect current costs of service.

- Non-Residential: Charge the same uniform volumetric rate to Commercial, Government, and Irrigation customer classes, which currently have extremely close but slightly different rates.

- Agricultural: Maintain volumetric rates for Agricultural water use based on lower-cost water supply including reduced SDCWA wholesale water supply rates for customers who qualify for SDCWA's Permanent Special Agricultural Water Rate Program.

- Recover MWD's Readiness-to-Serve Charge via the District's volumetric water rates, instead of as a small, separate pass-through charge based on meter size, to align costs with sources of water supply to each customer class,

- Maintain the supplemental Pumping Charges to recover the incremental costs of electricity needed to provide water supply to higher-elevation service areas but eliminate the small supplemental $0.10 per thousand gallons Pumping Capital Improvement Charge as the District's pumping facilities provide some benefit to all customers.

- Eliminate the reduced Standby Capital Improvement Charges levied on standby customers (accounts with suspended service) and instead have Standby customers pay the same Capital Improvement Charges as all other customers.

- Continue the historical practice of automatic annual adjustments to a) Capital Improvement Charges based on the annual change in the Engineering News-Record Construction Cost Index

plus 3%, and to b) SDCWA Infrastructure Access Charges based on actual charges established by SDCWA.

8.2 Agricultural Rate Derivation

The first step in deriving the District's agricultural rates is to identify the revenue requirement of each functional component for each demand class. The demand class revenue requirement for a functional component is calculated by multiplying the functional component unit cost (section 7.7) by a demand classes' share of the functional component's allocation units (section 6.3) i.e., Unit Cost x Allocation Units = Functional Component Revenue Requirement. The total revenue requirement for a demand class is the sum of the revenue requirements for each functional component.

Table W25: Agricultural Demand Class Revenue Requirements

Demand Class Volumetric Revenue Requirements	All Volume	SMCUP	Red Mountain	Supply Reliability	Melded Rate Water	SAWR Rate Water	Conservation	Total Revenue Requirement
Unit Cost ($/Kgal)	**$1.79**	**$3.03**	**$3.96**	**$2.14**	**$4.59**	**$3.84**	**$2.85**	
Demand Class Volumetric Allocation Units (Kgal)								
SAWR	441,755				-	441,755		
Commercial Ag	319,189				319,189			
Demand Class Revenue Requirements ($)								
SAWR	$790,742	$0	$0	$0	$0	$1,696,339	$0	**$2,487,081**
Commercial Ag Demand	$571,348	$0	$0	$0	$1,465,076	$0	$0	**$2,036,424**

The unit rate for each demand class is calculated by dividing the total revenue requirement by the projected demand for each demand class shown in the table above.

Table W26: Demand Class Unit Costs

Agricultural and M&I Rate Derivation	Total Revenue Requirement	Projected Demand (Kgal)	Unit Rate ($/Kgal)
SAWR	$2,487,081	441,755	**$5.63**
Commercial Ag Demand	$2,036,424	319,189	**$6.38**

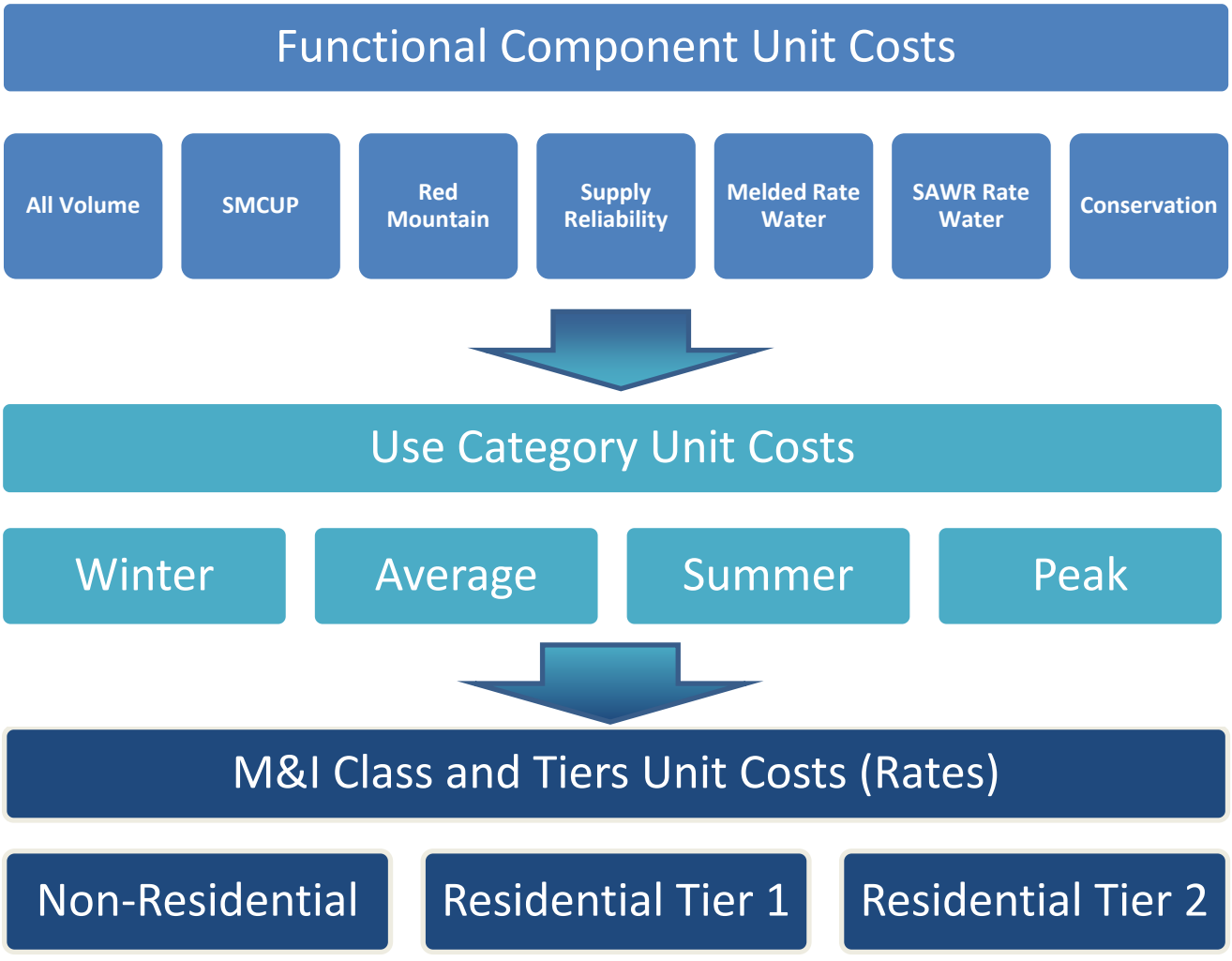
The SAWR demand class Unit Rate is the recommended FY 22/23 rate for the Agriculture SAWR (AS) customer class and the third tier of the Agriculture Domestic (AT) customer class.

The Commercial Ag demand class Unit Rate is the recommended FY 22/23 rate for Commercial Ag (CA) customer class as well as the second tier of the Agriculture Domestic (AT) and Commercial Domestic Ag (CB) customer classes.

8.3 M&I Demand Class Rate Derivation

M&I demand is split into use categories in order to fairly allocate costs to M&I non-residential customer classes and residential tiers as shown in the figure below. The purpose of splitting M&I demand into use categories is to identify how each M&I demand class utilizes available water supplies. The water demand identified in each use category is based on the proportion of actual average use in FY 18/19, FY 19/20 and FY 21/22 applied to the projected FY 22/23 M&I demands shown in Section 6.4. On a per unit basis, the cost to provide base water is less expensive because base facilities are almost fully utilized every month. Conversely, peak demands are more expensive on a per unit basis because peak facilities are only utilized for a few months per year while incurring expenses throughout the year.

Figure W14: M&I Rate Derivation



M&I Use Category Revenue Requirement

The first step in deriving the District's M&I rates is to identify the revenue requirement in each functional component for each use category (section 6.4). The use category revenue requirement for a functional component is calculated by multiplying the functional component unit cost (Section 7.7) by a use category's share of the functional component's allocation units i.e., Unit Cost x Allocation Units = Revenue Requirement. The total revenue requirement for a use category is the sum of the revenue requirements for each functional component.

Table W27: M&I Use Category Revenue Requirements

M&I Volumetric Revenue Requirements	All Volume	SMCUP	Red Mountain	Supply Reliability	Melded Rate Water	SAWR Rate Water	Conserv ation	Total Revenue Requirement
Functional Component Unit Cost ($/Kgal)	**$1.79**	**$3.03**	**$3.96**	**$2.14**	**$4.59**	**$3.84**	**$2.85**	
M&I Use Category Allocation Units (Kgal)								
M&I Demand	1,650,354	827,224	127,035	1,650,354	696,094		35,267	
Winter	1,066,342	827,224	-	1,066,342	239,117			
Average	461,345	-	4,367	461,345	456,977			
Summer	87,401	-	87,401	87,401	-			
Peak	35,267	-	35,267	35,267	-		35,267	
Use Category Revenue Requirements ($)								
M&I Demand	$2,954,133	$2,506,490	$503,058	$3,531,757	$3,195,073	$0	$100,510	**$12,791,021**
Winter	$1,908,751	$2,506,490	$0	$2,281,971	$1,097,547	$0	$0	**$7,794,760**
Average	$825,807	$0	$17,295	$987,278	$2,097,526	$0	$0	**$3,927,905**
Summer	$156,447	$0	$346,107	$187,038	$0	$0	$0	**$689,592**
Peak	$63,127	$0	$139,656	$75,471	$0	$0	$100,510	**$378,765**

M&I Demand Class Revenue Requirement

The next step in deriving the District's M&I rates identifies the revenue requirement in each use category for each demand class. The demand class revenue requirement for a use category is calculated by multiplying the use category unit cost from the table above by the projected demand class allocation units (projected use in each use category) in each use category (section 6.4) i.e., Use Category Unit Cost x Projected Demand Class Allocation Units = Revenue Requirement. The total revenue requirement for a demand class is the sum of the revenue requirements for each use category.

Table W28: M&I Demand Class Revenue Requirements

M&I Rate Derivation	Winter	Average	Summer	Peak	Total
M&I Use Caetgory Unit Rates ($/Kgal)	$7.31	$8.51	$7.89	$10.74	$7.75
M&I Demand Class Allocation Units by Use Category (Kgal)					
Residential	938,928	418,713	69,879	29,984	1,457,504
Non-residential	127,413	42,631	17,522	5,283	192,850
Total	1,066,342	461,345	87,401	35,267	1,650,354
M&I Demand Class Revenue Requirements ($)					
Residential	$6,863,391	$3,564,941	$551,343	$322,027	**$11,301,702**
Non-residential	$931,369	$362,965	$138,248	$56,738	**$1,489,320**

M&I Demand Class Unit Rates

The unit rate for each demand class is calculated by dividing the total revenue requirement by the projected demand for each demand class from the table above.

Table W29: M&I Demand Class Unit Costs

M&I Demand Class Rate Derivation	Total Revenue Requirement	Projected Demand (Kgal)	Unit Rate ($/Kgal)
Residential	$11,301,702	1,457,504	**$7.75**
Non-residential	$1,489,320	192,850	**$7.72**

The non-residential demand class Unit Rate is the recommended FY 22/23 rate for the Commercial (C), Government (G), and Irrigation Only (I) customer classes. The residential Unit Rate is further broken down into tier rates.

8.4 Residential Tier Rate Derivation

The recommended residential rate structure consists of two tiers.

- **Tier 1: 0 – 5 Kgal –** The Tier 1 breakpoint at 5 Kgal represents indoor use for a household of three people. The performance standard used by the California State Water Resources Control Board (SWRCB) for indoor water us is 55 GPCD[1] (gallons per capita per day). According to Census Data[2] the average household size in the District is 3.25 people.
    - 55 GPCD x 3.25 people x 30.5 days = 5,000 gallons
- **Tier 2: > 5 Kgal –** Usage in Tier 2 represents all outdoor use.

Residential Tier Revenue Requirement

Building off the M&I demand class revenue requirement, the revenue requirement for each use category for each residential tier must be determined. The residential tier revenue requirement for a use category is calculated by multiplying the use category unit cost (from the previous section) by the projected residential tier use in each use category (section 6.4) i.e., Use Category Unit Cost x Projected Residential Tier Demand = Revenue Requirement. The total revenue requirement for a residential tier is the sum of the revenue requirements for each use category.

Table W30: Residential Tier Revenue Requirements

Residential Rate Derivation	Winter	Average	Summer	Peak	Total
M&I Use Caetgory Unit Rates ($/Kgal)	$7.31	$8.51	$7.89	$10.74	$7.75
Projected Residential Demand by Tier (Kgal)					
Tier 1	595,626	-	-	-	595,626
Tier 2	343,302	418,713	69,879	29,984	861,878
Total	938,928	418,713	69,879	29,984	1,457,504
Residential Revenue Requirement by Tier					
Tier 1	$4,353,914	$0	$0	$0	**$4,353,914**
Tier 2	$2,509,477	$3,564,941	$551,343	$322,027	**$6,947,788**

[1] 55 GPCD is a performance standard for indoor water consumption used by the SWRCB and is also a standard level of usage used by the US Bureau of Reclamation for its health and safety allocation for municipal purposes.
[2] From 2016-2020 American Community Survey 5-Year Estimates, Average Household Size of Occupied Housing Units By Tenure for 2020 published by The United States Census Bureau for Fallbrook census designated place (CDP)

Residential Tier Unit Rates

The unit rate for each residential tier is calculated by dividing the total revenue requirement from the prior table by the projected demand for each residential tier from the previous table.

Table W31: Residential Tier Unit Rates

M&I Residential Tier Rate Derivation	Total Revenue Requirement	Projected Demand (Kgal)	Unit Rate ($/Kgal)
Tier 1	$4,353,914	595,626	**$7.31**
Tier 2	$6,947,788	861,878	**$8.06**

Residential Tier 1 is Tier 1 for the Domestic (D), Large Domestic (LD), Multi-Unit (M), Agriculture Domestic (AT) and Commercial Domestic Ag (CB) customer classes. Residential Tier 2 is Tier 2 for the Domestic (D), Large Domestic (LD), and Multi-Unit (M) customer classes.

8.5 Pumping Charge Derivation

Customers in the Deluz and Toyon areas of the District require additional pumping to receive water from the District. The District levies a Pumping Charge on customers in those areas to recover the cost of the electricity used to pump water up to the customers. The charge is derived by dividing the cost of electricity to pump water to those areas by the volume of water projected to be sold in those areas. The cost of electricity was provided by the District.

Table W32: Pumping Charge Derivation

Pumping Charge Derivation	Amount
Projected Pumping Cost	$155,278
Projected Zone Water Sales (Kgal)	216,528
Unit Rate ($/Kgal)	$0.72

8.6 Monthly Fixed Service Charge Derivation

Proposed fixed charges are designed to recover the standing capacity and per customer (or per service) costs to service each active, standby, and private fireline service connected to the District's water system. The following table shows the allocation unit cost for each functional component that comprises each service charge. Fixed functional component allocation unit costs were calculated in section 7.5.

Table W33: Service Charge Functional Component Composition

Functional Category	Unit of Measure	Unit Cost	Service Charge	Standby Service Charge	Private Fire Service Charge
Customer	#	$7.01	x	x	x
Water Meter Service	#	$6.99	x	x	
Water Capacity	EMU	$43.16	x		
Standby Capacity	EMU	$3.44	x	x	
Private Fire Capacity	EFU	$0.65			x

Monthly Fixed Service Charge

This charge applies to active water services. It recovers the Customer functional component revenue requirement on a per service basis, Water Meter Service functional component revenue requirement on a per EMU basis, Water Capacity functional component revenue requirement on a per EMU basis and Standby and Water Capacity functional component revenue requirement on a per EMU basis. The Customer unit cost is the same per meter size (one meter one charge) and the unit costs per EMU are based on the AWWA meter equivalent ratio for each meter size. Unit costs were calculated in section 7.5.

Table W34: Monthly Fixed Water Service Charge Derivation

Allocation Units	Customer	Meter Service	Water Capacity	Standby Capacity
Allocation Unit of Measure	*#*	*EMU*	*EMU*	*EMU*
Allocation Units	111,156	152,637	151,321	152,637
Revenue Requirement	$779,330	$1,066,944	$6,530,270	$525,185
Unit Cost	**$7.01**	**$6.99**	**$43.16**	**$3.44**

Monthly Fixed Service Charge Derivation	Equivalent Meter Ratio	Customer	Water Meter Service	Water Capacity	Standby Capacity	Fixed Service Charges
Meter Size"						
3/4	1.00	$7.01	$6.99	$43.16	$3.44	**$60.60**
1	1.67	$7.01	$11.67	$72.08	$5.74	**$96.51**
1 1/2	3.33	$7.01	$23.28	$143.72	$11.46	**$185.46**
2	5.33	$7.01	$37.26	$230.04	$18.34	**$292.64**
3	10.67	$7.01	$74.58	$460.52	$36.70	**$578.82**
4	16.67	$7.01	$116.52	$719.48	$57.34	**$900.36**
6	33.33	$7.01	$232.98	$1,438.52	$114.66	**$1,793.16**

Monthly Fixed Standby Service Charge

This charge applies to inactive water services. It recovers the Customer functional component revenue requirement on a per service basis, Water Meter Service functional component revenue requirement on a per EMU basis, and Standby Capacity functional component revenue requirement on a per EMU basis. This charge does not include the Water Capacity because customers on standby are not receiving water. The Customer unit cost is the same per meter size (one meter one charge) and the unit costs per EMU are based on the AWWA meter equivalent ratio for each meter size. Unit costs were calculated in section 7.5.

Table W35: Monthly Fixed Standby Service Charge Derivation

Allocation Units	Customer	Meter Service	Standby Capacity
Allocation Unit of Measure	*#*	*#*	*EMU*
Allocation Units	111,156	152,637	152,637
Revenue Requirement	$779,330	$700,453	$525,185
Unit Cost	**$9.07**	**$4.59**	**$3.44**

Monthly Fixed Standby Service Charge Derivation	Equivalent Meter Ratio	Customer	Water Meter Service	Standby Capacity	Monthly Fixed Standby Service Charges
Meter Size"					
3/4	1.00	$7.01	$6.99	$3.44	$17.44
1	1.67	$7.01	$11.67	$5.74	$24.43
1 1/2	3.33	$7.01	$23.28	$11.46	$41.75
2	5.33	$7.01	$37.26	$18.34	$62.61
3	10.67	$7.01	$74.58	$36.70	$118.30
4	16.67	$7.01	$116.52	$57.34	$180.88
6	33.33	$7.01	$232.98	$114.66	$354.65

Monthly Fixed Private Fire Service Charge

This charge applies to active private fire service. This charge applies to active water services. It recovers the Customer functional component revenue requirement on a per service basis and the Private Fire Capacity functional component revenue requirement on a per EFU basis. The Customer unit cost is the same per service size (one service one charge) and the unit costs per EFU are based on the AWWA Equivalent Fire Ratios for each service size. Fire services do not have meters. Unit costs were calculated in section 7.5.

Table W36: Monthly Fixed Private Fire Service Charge Derivation

Allocation Units	Customer	Private Fire Capacity
Allocation Unit of Measure	*#*	*EFU*
Allocation Units	111,156	13,058
Revenue Requirement	$779,330	$8,477
Unit Cost	**$7.01**	**$0.65**

Private Fire Service Charge Derivation	Equivalent Fire Ratio	Customer	Private Fire Capacity	Fixed Private Fire Charges
Service Size"				
2	1.00	$7.01	$0.65	**$7.66**
3	2.90	$7.01	$1.89	**$8.90**
4	6.19	$7.01	$4.02	**$11.03**
6	17.98	$7.01	$11.69	**$18.70**
8	38.32	$7.01	$24.91	**$31.92**

8.7 Capital Improvement Charge Derivation

The Water Capital Improvement Charge (CIC) was implemented to provide a partial funding source for capital projects. According to the District's administrative code, the Water CIC "will be adjusted annually based on the ENR (Engineering News Record) Construction Cost Index (CCI) of February, plus 3% not to exceed 10%." The District is increasing the CIC charge at a rate higher than inflation in order to fund a greater portion of its capital expenses with the CIC charge over time. The increasing CIC revenue is reflected in the cost of service analysis. The charge is applied by meter size EMUs. The charge for each meter size is based on a ¾" meter equivalent and increases as meter size increases based on the AWWA equivalent meter ratios. This results in charges that recover costs in proportion to the amount of system capacity associated with each meter size.

8.8 SDCWA IAC Fixed Passthrough Charge

SDCWA imposes a fixed monthly Infrastructure Access Charge (IAC) on a per EMU basis to its wholesale customers. This charge is directly passed through to the District's customers. The current charge per meter EMU is $4.24. The charge derivation is shown in the following table.

Table W37: Monthly Fixed SDCWA IAC Fixed Passthrough Charge Derivation

Monthly Fixed SDCWA IAC Passthrough Charge Derivation	Equivalent Meter Ratio	Monthly Fixed SDCWA IAC Passthrough Charge
Meter Size		
3/4	1.00	$4.24
1	1.67	$7.08
1 1/2	3.33	$14.12
2	5.33	$22.60
3	10.67	$45.24
4	16.67	$70.68
6	33.33	$141.32

8.9 Proposed Water Rates

The following table shows the proposed water rates. Under Proposition 218, the rates shown below are the maximum rates that the District can implement each year. The District can levy rates that are lower than those shown based upon an annual review of the water utility's finances if warranted.

Table W38: Proposed Water Rates

Proposed Maximum Water Rates						
	Current Water Rates*	Proposed Maximum Rates Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Monthly Fixed Service Charges						
Billed based on meter size.						
3/4"	$57.91	$60.60	$64.54	$68.74	$73.21	$77.97
1"	88.65	96.51	102.78	109.46	116.57	124.15
1-1/2"	165.42	185.46	197.51	210.35	224.02	238.58
2"	257.59	292.64	311.66	331.92	353.49	376.47
3"	503.36	578.82	616.44	656.51	699.18	744.63
4"	779.84	900.36	958.88	1,021.21	1,087.59	1,158.28
6"	1,547.83	1,793.16	1,909.72	2,033.85	2,166.05	2,306.84
Volumetric Charges						
Billed based on metered water use as measured in units of 1,000 gallons ($/Kgal).						
Residential: Domestic (D), Large Lot Domestic (LD) & Multi Unit (M)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: >5 Kgal	6-30 Kgal: 7.27 >30 Kgal: 8.86	8.06	8.58	9.14	9.73	10.36
Commercial (C)	$7.38	$7.72	$8.22	$8.75	$9.32	$9.93
Government (G)	7.26	7.72	8.22	8.75	9.32	9.93
Irrigation Only (I)	7.39	7.72	8.22	8.75	9.32	9.93
Agriculture SAWR (AS)	$5.31	$5.63	$6.00	$6.39	$6.81	$7.25
Commercial Ag (CA)	6.15	6.38	6.79	7.23	7.70	8.20
Agriculture Domestic (AT)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: 6-17 Kgal	6.15	6.38	6.79	7.23	7.70	8.20
Tier 3: >17 Kgal	5.31	5.63	6.00	6.39	6.81	7.25
Commercial Domestic Ag (CB)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: >5 Kgal	6.15	6.38	6.79	7.23	7.70	8.20
Pumping Charges (Deluz & Toyon Service Areas)	$0.88	$0.72	$0.77	$0.82	$0.87	$0.93

Table W39: Proposed Fixed Standby and Passthrough Water Rates

Proposed Maximum Other Water Service Charges						
		Proposed Maximum Charges Effective On or After				
	Current Charges	January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Water Capital Improvement Charges (CIC)						
Monthly charge billed based on meter size to all active water service accounts.						
3/4"	$10.10	$11.11	Water CIC Charges will be adjusted each January 1 based on the annual change in the Engineering News-Record Construction Cost Index for Los Angeles through February of the preceding year, plus 3%, subject to a maximum adjustment of 10% per year.			
1"	16.82	18.50				
1-1/2"	33.66	37.03				
2"	53.84	59.22				
3"	107.68	118.45				
4"	168.25	185.08				
6"	336.50	370.15				
SDCWA Infrastructure Access Charges (IAC)						
Monthly charge billed based on meter size to all active water service accounts.						
3/4"	$4.00	$4.24	SDCWA IAC Charges will be adjusted each January 1 based on the IAC charges adopted by SDCWA in future years, subject to a maximum adjustment of 10% per year.			
1"	6.69	7.08				
1-1/2"	13.33	14.12				
2"	21.34	22.60				
3"	42.75	45.24				
4"	66.79	70.68				
6"	133.53	141.32				
Monthly Fire Service Charges						
Billed based on service size to customers with private fire service connections.						
2"	$12.25	$7.66	$8.16	$8.69	$9.25	$9.85
3"	13.06	8.90	9.48	10.10	10.76	11.46
4"	14.47	11.03	11.75	12.51	13.32	14.19
6"	19.50	18.70	19.92	21.21	22.59	24.06
8"	28.18	31.92	33.99	36.20	38.55	41.06
Monthly Standby Fixed Service Charges						
Billed based on meter size to customers with inactive, standby service.						
3/4"	$25.22	$17.44	$18.57	$19.78	$21.07	$22.44
1"	34.15	24.43	26.02	27.71	29.51	31.43
1-1/2"	56.46	41.75	44.46	47.35	50.43	53.71
2"	83.23	62.61	66.68	71.01	75.63	80.55
3"	154.65	118.30	125.99	134.18	142.90	152.19
4"	235.00	180.88	192.64	205.16	218.50	232.70
6"	458.16	354.65	377.70	402.25	428.40	456.25

9 WATER SHORTAGE EMERGENCY SURCHARGES

The FPUD is proposing to authorize a series of Water Shortage Emergency Surcharges that could be implemented to support financial stability and help ensure adequate funding for water utility operations during periods of water shortages and reduced water sales. As proposed, these rates would be temporary surcharges, billed based on metered water use, that would be levied in addition to FPUD's regular water rates during water shortage emergencies. The proposed rates correspond with the Water Shortage Response Levels identified in FPUD's Urban Water Management Plan. No surcharges are proposed for Level 1 and Level 2 water shortages. FPUD is currently in a Drought Level 2, due to drought conditions throughout the western United States that are stressing regional water supplies.

BWA developed a series of Water Shortage Contingency Rate Surcharges corresponding with the Water Shortage Contingency Stages identified in the District's Urban Water Management Plan. The surcharges are designed to enable the District to recover its costs of service and remain financially stable during periods of water shortages and reduced water sales. These surcharges can be phased in corresponding with escalating water shortages in order to support financial stability under associated escalating water reduction requirements. The surcharges can also be phased out as water use gradually rebounds after a drought has ended.

Financial impacts during water shortages and periods of reduced water sales can include:

- A loss of volumetric water rate revenues due to a reduction in the volume of water sales.
- Reduced variable expenses due to reduced volumes of water production and supply, such as reduced costs for water treatment and pumping.
- Additional costs for achieving water demand cutback targets, such as costs for an enhanced conservation program and water demand mitigation efforts.
- Additional costs for supplemental sources of water supply when normal-year supply is curtailed during a drought.
- Potential costs of compliance for drought-related regulations and potential cost of fines or penalties for non-compliance with State water reduction mandates during periods of severe drought.

The surcharges account for a) lost revenues due to reduced water sales, less b) estimated reduced variable expenses due to reduced water supply, plus c) an estimate of the additional conservation program, compliance related costs, and/or other efforts to reduce water demand, divided by d) the volume of projected water sales with reduced demand.

Table W40: Water Shortage Emergency Surcharge Derivation

	Water Shortage Response Levels					
	Level 1 Water Shortage Notice	**Level 2 Water Shortage Watch**	**Level 3 Water Shortage Alert**	**Level 4 Water Shortage Warning**	**Level 5 Critical Condition**	**Level 6 Emergency Condition**
Water Demand Reduction Target	Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	> 50%
Water Demand Reduction % for Surcharge	10%	20%	30%	40%	50%	60%
Normal Year Water Use (Kgal)	2,411,300	2,411,300	2,411,300	2,411,300	2,411,300	2,411,300
Water Reduction Target (Kgal)	241,130	482,260	723,390	964,520	1,205,650	1,446,780
Net Use with Reduction (Kgal)	2,170,170	1,929,040	1,687,910	1,446,780	1,205,650	964,520
Average Volumetric Water Rates by Year						
2023	$7.18	$7.18	$7.18	$7.18	$7.18	$7.18
2024	7.61	7.61	7.61	7.61	7.61	7.61
2025	8.07	8.07	8.07	8.07	8.07	8.07
2026	8.55	8.55	8.55	8.55	8.55	8.55
2027	9.06	9.06	9.06	9.06	9.06	9.06
Projected Normal Year Volumetric Revenues						
2023	$17,313,000	$17,313,000	$17,313,000	$17,313,000	$17,313,000	$17,313,000
2024	18,438,000	18,438,000	18,438,000	18,438,000	18,438,000	18,438,000
2025	19,636,000	19,636,000	19,636,000	19,636,000	19,636,000	19,636,000
2026	20,912,000	20,912,000	20,912,000	20,912,000	20,912,000	20,912,000
2027	22,271,000	22,271,000	22,271,000	22,271,000	22,271,000	22,271,000
Revenue Loss by Year Due to Lower Use						
2023	$1,731,000	$3,463,000	$5,194,000	$6,925,000	$8,656,000	$10,388,000
2024	1,835,000	3,670,000	5,506,000	7,341,000	9,176,000	11,011,000
2025	1,945,000	3,891,000	5,836,000	7,781,000	9,726,000	11,672,000
2026	2,062,000	4,124,000	6,186,000	8,248,000	10,310,000	12,372,000
2027	2,186,000	4,371,000	6,557,000	8,743,000	10,929,000	13,114,000
Reduced Expenses due to Lower Use						
Variable Cost per Unit ($/Kgal)[1]						
2023	$3.67	$3.67	$3.67	$3.67	$3.67	$3.67
2024	3.91	3.91	3.91	3.91	3.91	3.91
2025	4.16	4.16	4.16	4.16	4.16	4.16
2026	4.43	4.43	4.43	4.43	4.43	4.43
2027	4.71	4.71	4.71	4.71	4.71	4.71
Reduced Variable Costs						
2023	$884,947	$1,769,894	$2,654,841	$3,539,788	$4,424,736	$5,309,683
2024	942,818	1,885,637	2,828,455	3,771,273	4,714,092	5,656,910
2025	1,003,101	2,006,202	3,009,302	4,012,403	5,015,504	6,018,605
2026	1,068,206	2,136,412	3,204,618	4,272,824	5,341,030	6,409,235
2027	1,135,722	2,271,445	3,407,167	4,542,889	5,678,612	6,814,334
Additional Conservation Program and Compliance Costs[2]	$0	$0	$50,000	$100,000	$200,000	$300,000
Net Financial Impact						
Revenue Loss - Reduced Exps + Add'l Costs						
2023	$846,053	$1,693,106	$2,589,159	$3,485,212	$4,431,265	$5,378,317
2024	892,182	1,784,363	2,727,545	3,669,727	4,661,909	5,654,090
2025	941,899	1,884,798	2,876,698	3,868,597	4,910,496	5,953,395
2026	993,794	1,987,588	3,031,382	4,075,176	5,168,971	6,262,765
2027	1,050,278	2,099,555	3,199,833	4,300,111	5,450,389	6,599,666
Water Shortage Emergency Rate %						
Net Financial Impact / Reduced Volumetric Revs						
2023	5.4%	12.2%	21.4%	33.6%	51.2%	77.7%
2024	5.4%	12.1%	21.1%	33.1%	50.3%	76.1%
2025	5.3%	12.0%	20.8%	32.6%	49.6%	74.8%
2026	5.3%	11.8%	20.6%	32.2%	48.8%	73.3%
2027	5.2%	11.7%	20.4%	31.8%	48.1%	72.1%
Rounded	5.0%	12.0%	20.0%	32.0%	49.0%	74.0%

The proposed water shortage emergency surcharges set forth in the table below represent the maximum rate surcharge that the District may charge in each year.

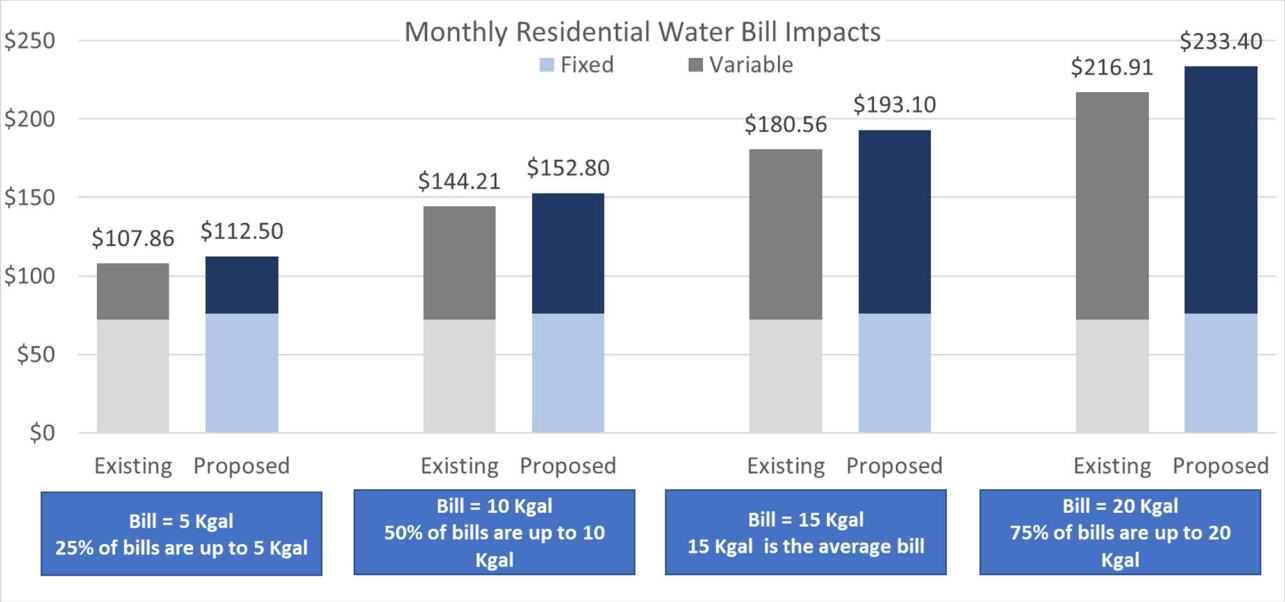
Table W41: Proposed Maximum Water Shortage Emergency Surcharges

Proposed Maximum Water Shortage Emergency Surcharges						
	Level 1 Water Shortage Notice	**Level 2 Water Shortage Watch**	**Level 3 Water Shortage Alert**	**Level 4 Water Shortage Warning**	**Level 5 Critical Condition**	**Level 6 Emergency Condition**
Water Reduction Target	Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	> 50%
Maximum Surcharge %	**5.0%**	**12.0%**	**20.0%**	**32.0%**	**49.0%**	**74.0%**
Proposed Maximum Surcharges ***(Surcharge % x Residential Tier 2)***	*Surcharges billed based on metered water use as measured in units of 1,000 gallons ($/Kgal).*					
Effective on or After						
January 1, 2023	$0.40	$0.97	$1.61	$2.58	$3.95	$5.96
January 1, 2024	0.43	1.03	1.72	2.75	4.20	6.35
January 1, 2025	0.46	1.10	1.83	2.92	4.48	6.76
January 1, 2026	0.49	1.17	1.95	3.11	4.77	7.20
January 1, 2027	0.52	1.24	2.07	3.32	5.08	7.67

10 WATER RATE BILL IMPACTS

The following table shows the impacts of the proposed water rates on a range of residential customers with different levels of consumption.

Table W42: Existing and Proposed Bills



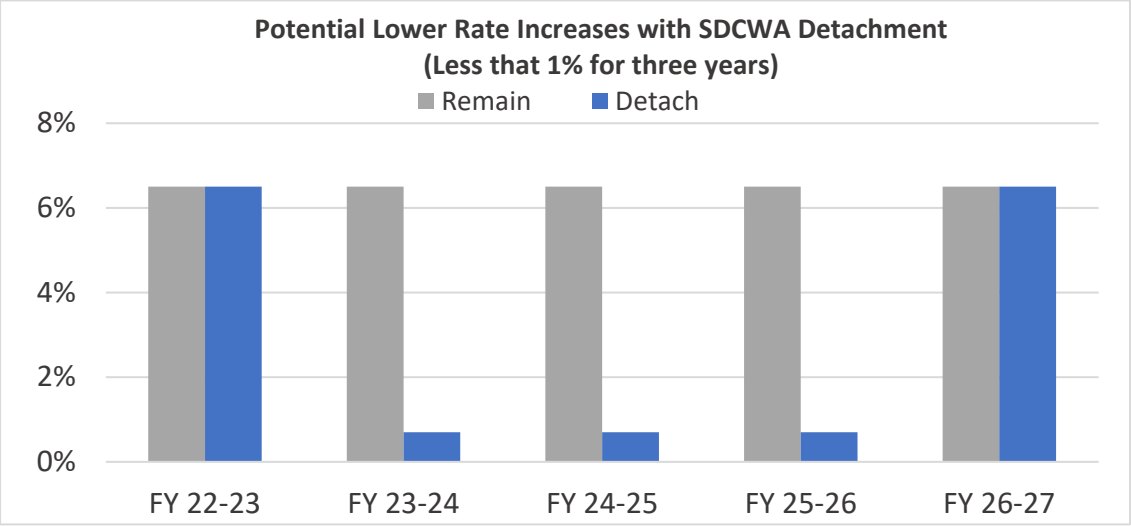
11 FINANCIAL IMPACT OF DETACHMENT FROM SDCWA

The District is working with Rainbow Municipal Water District to change water suppliers. Detaching from the San Diego County Water Authority and instead buying imported water from Eastern Municipal Water District. Three town hall meetings have been held presenting how the process works. The meetings drew large crowds of more than 100 people at each event. The detachment must first be approved by the Local Agency Formation Commission, or LAFCO. LAFCO is reviewing our applications to detach and will likely make a decision in the next few months. If the applications are approved, the final decision would still need to be ratified by the FPUD and Rainbow voters.

BWA also analyzed the potential savings and impact to water rates if the District detached from San Diego County Water Authority (SDCWA), which obtains most of its water supply from the Metropolitan Water District of Southern California (MWD), and instead purchased MWD water from Eastern Municipal Water District (EMWD) at substantially lower cost. Although all the costs related to the potential detachment from SDCWA are not currently known, initial analysis indicates the potential for annual savings of roughly $3 to $4 million per year (excluding any detachment fees). Savings would be passed on to FPUD water customers and enable the District to defer or avoid future rate increases that would otherwise be needed.

Based on current financial projections and with no detachment exit fee imposed by LAFCO, FPUD anticipates that it will be able to pass through detachment savings to customers via lower overall rate increases. The chart below shows the proposed maximum rate revenue increases without detachment and potential and estimated reduction after detachment from SDCWA, based on currently available information.

Figure W15: Impact of Detachment in FY 23/34 on Rate Revenue Increases



12 WASTEWATER ENTERPRISE FINANCES & RATES

12.1 Wastewater System Overview

FPUD's wastewater system serves a little over 5,000 accounts and includes over 78 miles of wastewater collection system pipelines, approximately 4 miles of wastewater force mains, 6 lift stations and a Water Reclamation Plant (WRP) with a 2.7 million gallon per day (mgd) capacity that currently processes approximately 1.5 mgd of influent flows. Treated effluent is disposed via 18 miles of pipeline to an outfall in the Pacific Ocean. In 2015, the District completed a $28 million rehabilitation of the WRP, and a $2 million recycled water pipeline extension that substantially increased the District's recycled water system capacity.

12.2 Wastewater Financial Overview

Fallbrook Public Utility District's wastewater enterprise is a financially self-supporting enterprise that relies primarily on revenues from wastewater rate revenues to fund the costs of providing service. Wastewater rate revenues are projected to account for over 86% of total annual revenues, with the remaining revenues coming from interest earnings, property tax, and capacity charges from new development, and other miscellaneous revenues. As such, wastewater rates must be set at levels adequate to fund the costs of operating and maintaining the wastewater system and fund necessary capital improvements to keep the wastewater system in good operating condition.

The District has provided good financial stewardship of the wastewater utility by gradually raising rates each year in an effort to keep revenues in line with the cost of providing wastewater service. However, over the past five years the wastewater utility fund generated less revenue than projected, resulting in a drawdown of fund reserve to levels that are currently significantly below fund reserve targets. Going forward the District is aiming to improve revenue stability and gradually build fund reserves toward achieving target levels.

12.3 Current & Historical Wastewater Rates

the following table shows a history of the District's wastewater rates. The District has gradually increased rates each year in an effort to keep revenues in line with the cost of providing service.

Current and historical wastewater rates are shown on Table S1 below.

Table S1: Historical Wastewater Rates

Adopted WW Rates	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Monthly Fixed Service Charges							*Current*
Prior Charges (discontinued and replaced with charge per EDU after 1/1/2018)							
3/4	$16.12	$16.12	-	-	-	-	-
1	24.01	24.01	-	-	-	-	-
1 1/2	43.75	43.75	-	-	-	-	-
2	67.42	67.42	-	-	-	-	-
3	122.67	122.67	-	-	-	-	-
4	201.60	201.60	-	-	-	-	-
6	398.91	398.91	-	-	-	-	-
SS	16.12	16.12	-	-	-	-	-
Adopted Charges $ / EDU	-	-	$9.28	$9.70	$10.14	$10.60	$11.08
Capital Improvement Charges	$10.84	$10.84	$11.16	$11.53	$11.62	$11.63	$11.68
Flow-Based Rates ($/Kgal)							
Ag Domestic (AT)	$8.77	$8.77	$9.44	$9.86	$10.32	$10.79	$11.28
Commercial Ag (CB)	8.77	8.77	9.44	9.86	10.32	10.79	11.28
Single Family (D)	8.77	8.77	9.44	9.86	10.32	10.79	11.28
Single Family (Large) (LD)	8.77	8.77	9.44	9.86	10.32	10.79	11.28
Multi Family (M)	8.77	8.77	9.44	9.86	10.32	10.79	11.28
Government (G)	8.77	8.77	9.37	9.79	10.25	10.72	11.20
School	8.77	8.77	9.37	9.79	10.25	10.72	11.20
Church	8.77	8.77	9.37	9.79	10.25	10.72	11.20
Commercial - Low Strength (C_L)	$8.77	$8.77	$9.37	$9.79	$10.25	$10.72	$11.20
Commercial - Medium Strength (C_M)	13.27	13.27	11.57	12.09	12.65	13.22	13.81
Commercial - High Strength (C_H)	22.28	22.28	14.44	15.09	15.77	16.48	17.22

13 WASTEWATER FINANCIAL PLAN

BWA developed long-term cash flow projections to identify the wastewater utility's annual revenue requirements and evaluate the overall level of rate increases needed to meet future funding needs. The financial projections incorporate the latest information available as well as a number of reasonable assumptions developed with input from the District.

13.1 Financial Plan Assumptions

The following table details the escalation factors used to develop the long-term cash flow projections. Escalation factors are based on input from District staff, historical escalations, and conservative projections for future escalations to reasonably ensure that the maximum rates adopted by the District will provide sufficient revenues to support District operations.

Table S2: Wastewater Enterprise Escalation Factors

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%

REVENUE ASSUMPTIONS

- Rate adjustments are assumed to become effective on January 1 of each year.
- Wastewater sales revenues are based on wastewater sales projections and projected wastewater rates.
- The District projects growth based previous low growth years to ensure rate revenue is sufficient to support District operations.
- Interest earnings are projected based on the annual beginning fund balance multiplied by projected interest rate. The interest rate projections are based on recent and anticipated interest rates increases.
- The District projects property tax revenue increases based on previous low increase years to ensure rate revenue is sufficient to support District operations.
- Rent revenue increases are conservatively based on the District's rental agreements.

EXPENSE ASSUMPTIONS

- Operating and maintenance expenses (other than wholesale water costs) are based on the District's 2022/23 Budget and escalation factors listed above.
- The District projects the cost of Salaries to increase based on a recent compensation study it completed and projected future cost of living adjustments.
- The District projects the cost of Benefits to increase based on projected salary costs and projected inflation of specific benefit expenses such as health insurance.
- CPI cost escalation is based on the recent and historical Consumer Price Index changes. This report projects that the current, extraordinarily high inflation level will gradually drop back towards a normal rate of inflation. Recent cost inflation has been unpredictable, but the CPI escalation projections are informed by recent projections from the Federal Reserve.
- ENR cost escalation is based on the recent and historical Engineering News Record Construction Cost Index changes. This report projects that the current, extraordinarily high inflation level will gradually drop back towards a normal rate of inflation. Recent cost inflation has been unpredictable, but the ENR escalation projections are informed by recent projections from the Federal Reserve.
- Debt service projections are based on outstanding debt schedules. The District does not anticipate issuing any additional debt in future years.

13.2 Financial Plan Drivers

The District's wastewater enterprise is facing a number of manageable financial challenges that will drive the need for rate increases in upcoming years. Key drivers of future rate increases are summarized as below.

Capital Improvement Needs & Rehabilitation of Aging Infrastructure

The District takes a proactive approach to maintaining its wastewater system which requires a steady stream of repair and improvement projects. Accounting for construction cost inflation, the District anticipates funding approximately $4.5 million of capital improvement projects over the next 5 years, averaging about $0.9 million per year, based on the District's current Capital Improvement Plan. With the proposed rate increases, the District will be able to fund this level of capital spending without incurring additional debt.

Variable Average Winter Water Consumption

Residential variable rate revenue has been volatile due to annual changes in winter water use largely based on weather and outdoor irrigation. Based on current wastewater rates, residential rate revenues over the past three years would have varied by up to $700,000 per year.

Low Fund reserves

The wastewater enterprise generated less revenue than projected over the past 5 fiscal years, resulting in deficits and a gradual drawdown of wastewater fund reserves. The beginning balance for FY 22/23 is estimated at $1.8 million, approximately $3 million below the target fund reserve for the enterprise.

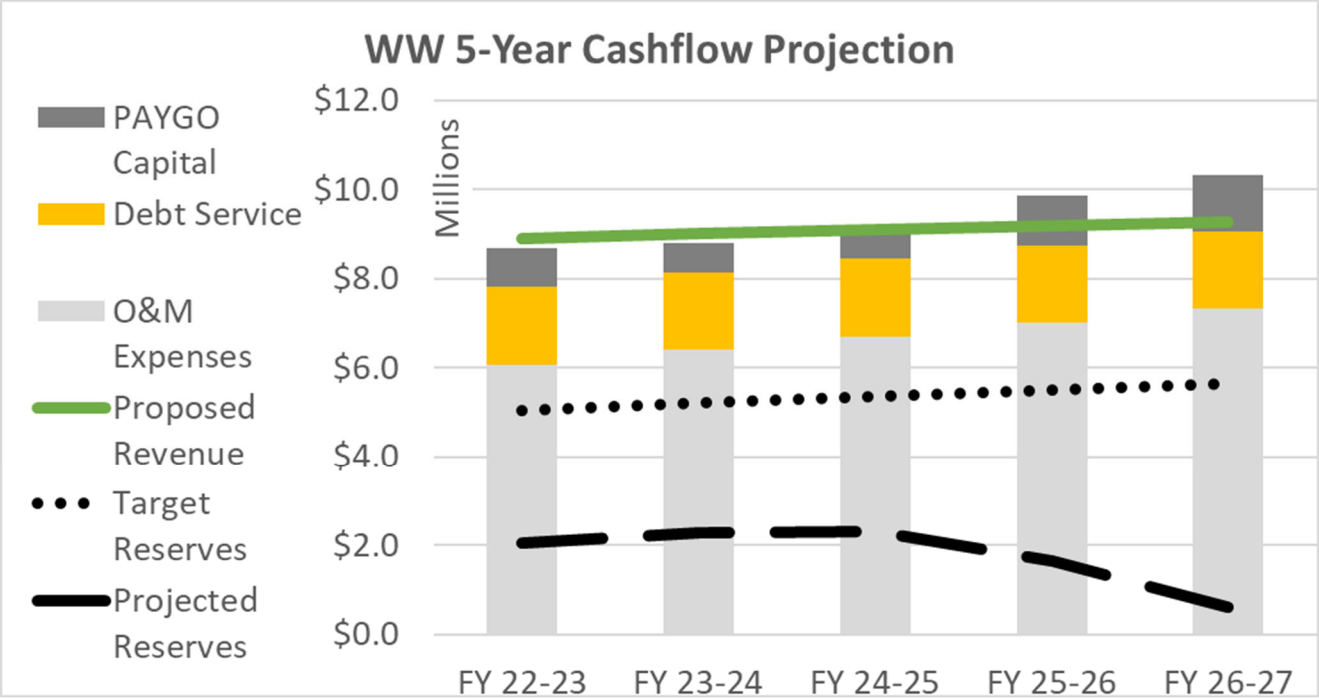
Ongoing Cost Inflation

The District's wastewater enterprise faces ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. In recent months, inflation has reached forty-year highs with CPI and the ENR Construction Cost Index reaching roughly 9% in early 2022. However, inflation is not expected to remain at such elevated levels in future years.

13.3 Cash Flow Projection with No Rate Increases

Based on financial projections without any rate increases, the District will operate at a deficit and deplete the wastewater enterprise fund reserves within six years. The following figure shows a 5-year projection of annual revenues with no rate increases; expenses based on the District's FY 22/23 budget, adjusted for cost escalation and broken down by key categories; and ending fund reserves compared to the reserve target.

Figure S1: WW 5-Year Cash Flow Projection Without Rate Increases



13.4 Cash Flow Projections and Recommended Rate Increases

A summary of the cash flow projections is shown in the following table. The overall rate revenue increases shown on the table are designed to fund the District's cost of providing service each year, maintain roughly balanced budgets, maintain healthy debt service coverage levels, and meet long-term fund reserve targets. With the proposed phase-in of rate increases, the wastewater enterprise is projected to gradually accrue fund reserves toward meeting its fund reserve target but is not projected to meet the target until FY 2027/28.

In addition to overall rate increases, some modifications to the wastewater rate structure are also proposed. Actual impacts to customers' wastewater bills will vary based on customer class and wastewater use due to these proposed rate structure modifications and the updated cost-of-service analysis.

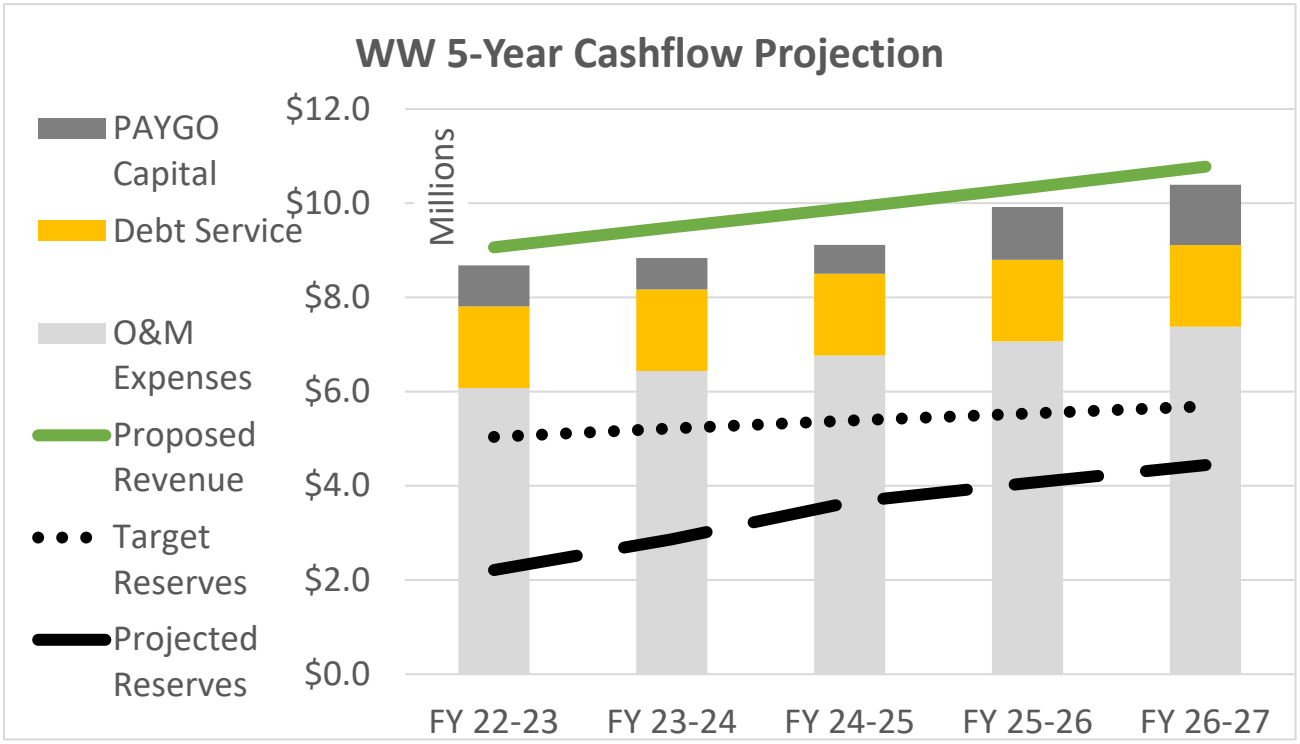
Table S3: Proposed Wastewater Rate Adjustments

WW Financial Dashboard	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
Month Rate Increase Effective	Jan	Jan	Jan	Jan	Jan
WW Rev Adjustments	5.00%	5.00%	5.00%	5.00%	5.00%
	Projected Maximum Rate Revenue Increases				
Key Financial Information					
Revenue from Full Year Rate Increase	**$321,645**	**$338,234**	**$355,678**	**$374,022**	**$393,312**
Total Revenue	$9,065,292	$9,485,983	$9,899,673	$10,326,791	$10,774,747
Total Expenses	$8,679,330	$8,834,686	$9,114,981	$9,919,798	$10,389,499
Net Cash Change (Exl. Debt Proceeds)	**$385,962**	**$651,297**	**$784,692**	**$406,993**	**$385,248**
Total Reserves	**$2,211,645**	**$2,862,942**	**$3,647,634**	**$4,054,627**	**$4,439,874**
Reserves Over/Under Target	($2,825,829)	($2,355,289)	($1,735,278)	($1,477,854)	($1,248,871)
WW Debt Service Coverage (1.3x Target)*	1.56x	1.58x	1.62x	1.68x	1.74x

*WW Enterprise Indentured for Full WWTP Loan

The following figure shows a 5-year projection of expenses based on the District's FY 22/23 budget, adjusted for cost escalation, and broken down by key categories; projected annual revenues with proposed rate increases; and ending reserves compared to the reserve target.

Figure S2: WW 5-Year Cashflow Projection With Recommended Rate Increases



Detailed wastewater enterprise financial projections are shown in the following table.

Table S4: Detailed Wastewater Financial Projections

REVENUES	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
	Budgeted	*Projected*	*Projected*	*Projected*	*Projected*
Revenues from Rates					
	$321,645	$338,234	$355,678	$374,022	$393,312
	$6,754,543	$7,102,909	$7,469,241	$7,854,467	$8,259,561
Revenues from Current Rates	$6,432,898	$6,442,548	$6,452,211	$6,461,890	$6,471,583
Proposed Rev Adjustments	$160,822	$491,244	$839,191	$1,205,566	$1,591,323
Subtotal Revenues from Rates	**$6,593,721**	**$6,933,792**	**$7,291,402**	**$7,667,456**	**$8,062,905**
Other Operating Revenues					
Sundry	$1,000	$1,000	$1,000	$1,000	$1,000
Subtotal Other Operating Revenu	**$1,000**	**$1,000**	**$1,000**	**$1,000**	**$1,000**
Non-Operating Revenues					
Wastewater CIC	$1,248,757	$1,332,602	$1,392,569	$1,448,272	$1,506,203
WW Capacity fees	$40,371	$40,431	$40,492	$40,553	$40,613
1% property tax - IDS	$1,085,974	$1,096,833	$1,107,802	$1,118,880	$1,130,068
Federal Interest Rate Subsidy	$84,516	$70,261	$55,178	$39,233	$22,388
Interest	$10,954	$11,064	$11,230	$11,398	$11,569
Subtotal Non-Operating Revenue	**$2,470,572**	**$2,551,191**	**$2,607,271**	**$2,658,335**	**$2,710,842**
TOTAL REVENUES	**$9,065,292**	**$9,485,983**	**$9,899,673**	**$10,326,791**	**$10,774,747**

EXPENSES	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
	Budgeted	*Projected*	*Projected*	*Projected*	*Projected*
Operating Expenses					
Collection	$853,042	$910,089	$962,050	$1,007,399	$1,054,906
Treatment	$1,753,579	$1,866,563	$1,969,605	$2,059,828	$2,154,232
Administration	$3,468,326	$3,659,812	$3,834,170	$3,997,735	$4,168,353
Subtotal Operating Expenses	**$6,074,947**	**$6,436,463**	**$6,765,824**	**$7,064,962**	**$7,377,491**
Non-Operating Expenses					
WW Existing Debt	$1,733,383	$1,733,212	$1,734,864	$1,731,618	$1,731,769
PAYGO Funded Capital	$871,000	$665,011	$614,293	$1,123,218	$1,280,239
Subtotal Non-Operating Expenses	**$2,604,383**	**$2,398,223**	**$2,349,157**	**$2,854,836**	**$3,012,008**
TOTAL EXPENSES	**$8,679,330**	**$8,834,686**	**$9,114,981**	**$9,919,798**	**$10,389,499**
NET REVENUES	**$2,990,345**	**$3,049,520**	**$3,133,849**	**$3,261,829**	**$3,397,256**
NET CASH CHANGE	**$385,962**	**$651,297**	**$784,692**	**$406,993**	**$385,248**
BEGINNING BALANCES	$1,825,683	$2,211,645	$2,862,942	$3,647,634	$4,054,627
ENDING BALANCES	**$2,211,645**	**$2,862,942**	**$3,647,634**	**$4,054,627**	**$4,439,874**

13.5 Wastewater Debt Service Coverage

The District's wastewater enterprise has two outstanding debt obligations:

- The 2010 QECB loan funded the District's 1 MW solar facility.

- The 2021 Wastewater Refunding Revenue Bonds (2021 Bonds), which refunded a SRF Loan that funded the rehabilitation and modernization of the District's Water Reclamation Plant

Pursuant to the legal covenants securing the 2021 Bonds, the debt is secured solely by the net revenues of the wastewater enterprise. However, 30% of the 2021 Bonds debt service is paid by the recycled water enterprise. For the purposes of calculating debt service coverage, debt service paid by the recycled enterprise can be counted as a supplemental revenue source. The following table calculated debt service coverage accounting for both the full

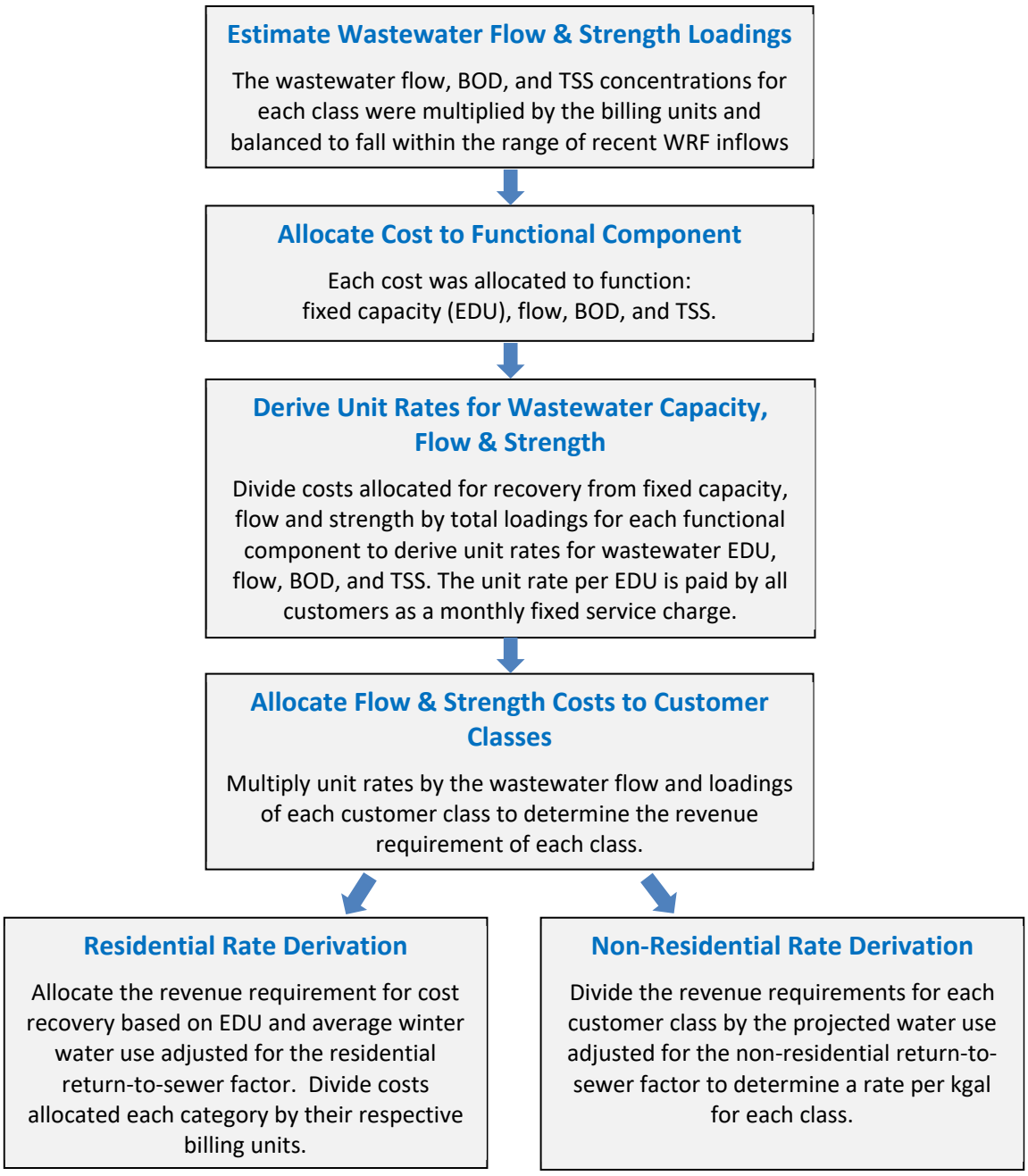
Table S5: WW Debt Service Coverage Calculation

WW Debt Service Coverage	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
	Budgeted	*Projected*	*Projected*	*Projected*	*Projected*
WW Debt Service Coverage Net Revenue					
WW Revenue	$9,065,292	$9,485,983	$9,899,673	$10,326,791	$10,774,747
RW Debt Contribution	$519,307	$519,224	$520,072	$518,980	$519,510
Total WW Debt Service Revenue	$9,584,599	$10,005,207	$10,419,745	$10,845,771	$11,294,257
WW Operating Expenses	$6,074,947	$6,436,463	$6,765,824	$7,064,962	$7,377,491
WW Debt Service Net Revenue	**$3,509,652**	**$3,568,744**	**$3,653,921**	**$3,780,809**	**$3,916,766**
WW Debt Service					
Solar QECB	$521,667	$521,690	$521,362	$520,665	$519,579
Total WWTP SRF	$1,731,022	$1,730,746	$1,733,575	$1,729,934	$1,731,700
Total WW Debt Service	**$2,252,689**	**$2,252,435**	**$2,254,937**	**$2,250,599**	**$2,251,279**
WW Debt Service Coverage	**1.56x**	**1.58x**	**1.62x**	**1.68x**	**1.74x**

14 WASTEWATER COST OF SERVICE ANALYSIS AND RATE DERIVATION

BWA derived updated wastewater rates that account for both a) the overall rate increases identified in the financial projections, and b) proposed rate structure modifications. The proposed rates are designed to equitably apportion and recover costs from the District's customer base. The basic methodology used to develop new rates includes the following steps:

Figure S3: WW Cost of Service Analysis and Rate Derivation Process



14.1 Wastewater Rate Structure Recommendations

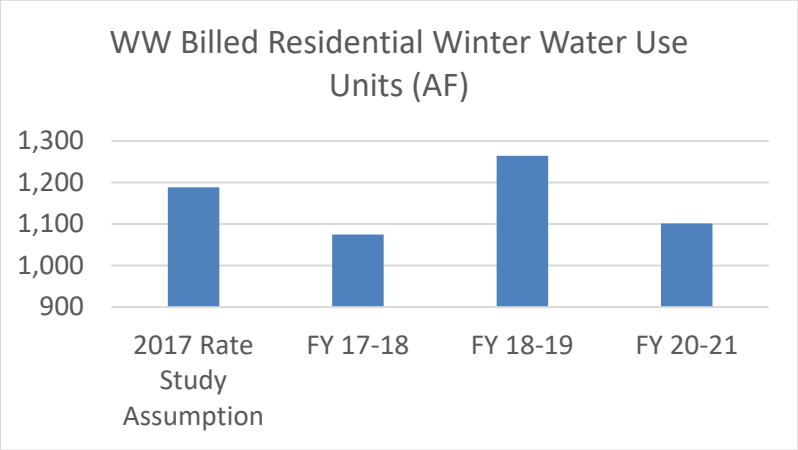
Bartle Wells Associates conducted an independent review the District's wastewater rate structure. Based on evaluation of rate alternatives and input from the District's project team, Finance Committee, Board of Directors, and independent legal counsel, BWA recommends a few modifications to improve revenue stability and realign rates with the current cost of providing service in conformance with the substantive requirements of Proposition 218. Rate structure modifications are summarized below.

Transition Residential Rates from 30% to 70% Fixed Cost Recovery

Volumetric residential wastewater rates are billed based on a two-year average of winter water use (AWC) from December through February adjusted to account for a 75% return-to-sewer factor. Although this period generally coincides with the lowest-use months, actual winter use has varied substantially from year-to-year largely based on weather and outdoor irrigation. BWA came to this conclusion because the District's wastewater treatment plant flows have remained relatively consistent despite significant changes in winter water use.

The following table shows a history of billed residential wastewater usage in comparison to assumptions used in the 2017 Rate Study. At current rates, the range in AWC result in $700,000 in annual revenue variability.

Figure S4: Residential Billed Winter Use Variability



At the same time, the District's current residential wastewater rates are skewed heavily toward volumetric rate recovery, with fixed charges currently accounting for only 32% of residential service charge revenues. This level of fixed residential rate recovery is substantially lower than industry norms and substantially lower than the wastewater enterprise's percentage of fixed expenses. Together, the District's low level of fixed residential rate recovery coupled with substantial variations

in winter water use have resulted in large variations in residential wastewater rate revenues from year to year.

Based on review of residential wastewater rate options and input received from the District, BWA recommends the District gradually transition its residential wastewater rates from 30% to 70% fixed rate recovery over the next five years to help improve revenue stability while still affording residential customers significant control over their bills.

Transition Residential Return-to Sewer (RTS) Factor from 75% to 80%

To account for water use that does not get discharged into the wastewater system, such as due to outdoor landscape irrigation, the District adjusts the volume of billed wastewater usage based on a discounted RTS factor. Over the past 5 years, the District has been adjusting billable residential usage by a 75% RTS factor. Based on analysis of residential winter water use and influent flows at the WRF over the past four years, BWA recommends transitioning the residential RTS factor from 75% to 80% of winter water use. This will bring the residential wastewater billing units into alignment with wastewater treatment plant inflows. No changes are recommended to the commercial RTS factor which is proposed to remain at 90% of all metered water consumption.

14.2 Wastewater Billing Units

This section shows the projected billing units used in the cost of service analysis and rate derivation. Projected billable volumetric wastewater use is based on the average of the two lowest-use years of the last four years in order to reflect slightly conservative estimates of future billable usage.

- Residential billable wastewater use is projected based on average monthly residential winter water consumption (AWC) from December through February in fiscal years 2019/20 and 2020/21, multiplied by an 80% RTS factor, and multiplied by twelve months.
- Commercial and Government volumetric billed wastewater use is projected based on average annual consumption from in fiscal years 2019/20 and 2020/21 multiplied by a 90% RTS factor.
- EDU assignments to each customer class are based on FPUD Administrative Code, Section 11.7, Schedule of equivalent dwelling units and class of service. The District assigns each customer a number of EDUs to reflect that customer's proportionate share of wastewater system capacity. One EDU represents the equivalent wastewater flow and strength of a typical single family home.

The following tables show historical and projected billable wastewater usage and the number of EDUs assigned to each customer class.

Table S6: Recent and Projected Annual Billing Units

Customer Billing Units	Billed Water Use Kgal[1,2] FY 18-19	FY 19-20	FY 20-21	FY 20-22	Projected FY 22-23[3]	7.8.22 EDU[5] Counts
Domestic						
Return to Sewer Factor[4]	*75%*	*75%*	*75%*	*75%*	*80%*	
Ag Domestic (AT)	81	198	99	0	158	1.00
Commercial Ag (CB)	342	162	189	459	187	6.60
Single Family (D)	265,986	258,120	222,795	254,448	256,488	4,386.86
Single Family (Large) (LD)	10,746	9,621	8,253	9,612	9,533	136.68
Multi Family (M)	134,719	131,689	127,438	134,949	138,201	2,629
Total Domestic	**411,874**	**399,790**	**358,774**	**399,468**	**404,568**	**7,160**
School						
Elementary						48.08
Junior High						18.13
Total School						**66**
Commercial and Government						
Return to Sewer Factor	*90%*	*90%*	*90%*	*90%*	*90%*	
Government (G)	7,232	5,614	6,178	5,614	5,896	151.01
Commercial - Low Strength (C_L)	41,993	42,153	48,153	42,153	45,153	1,114.13
Commercial - Medium Strength (C_M)	15,004	14,005	14,526	14,005	14,265	Included in (C_L)
Commercial - High Strength (C_H)	11,750	10,631	11,315	10,631	10,973	
Total Commercial and Government	**75,978**	**72,402**	**80,171**	**72,402**	**76,286**	**1,265**
Total	**487,852**	**472,192**	**438,945**	**471,870**	**480,854**	**8,491**

[1] Billed use is based on metered water use. 1 Kgal = 1,000 gallons. Domestic billed use is based on a two-year average of average winter water consumption (AWC) multiplied by the return-to-sewer factor. AWC is based on the average water use in Dec, Jan and Feb.

[2] Commercial and Government billed use is based on actual water consumption in each month multiplied by the return-to-sewer factor.

[3] Projected billed water use is based on FY 19-20 and FY 20-21, the lowest two of the past four years. The lowest two years were used to project future flows conservatively and are likely a better representation of actual sewer flow.

[4] The return-to-sewer factor (RTS) is used to adjust actual flows to better reflect actual sewer flow by removing water used for outdoor irrigation. Based on analysis of billed use and plant flows, BWA is recommending Domestic RTS be adjusted from 75% to 80%.

[5] "EDU" stands for equivalent dwelling unit. EDU definitions are found in the FPUD Administrative Code

The following tables shows the calculation of school EDU's and projected flow.

Table S7: Wastewater School Billing Units

School Units	Students	Staff	Total
Elementary			
People	2,885	404	
Flow per Person (GPD)	10	15	
School Days	180	180	
Annual Flow (Kgal)	5,193.0	1,090.8	6,284
Students per EDU	60		
EDUs	48.08		48.08
Junior High			
People	725	90	
Flow per Person (GPD)	15	15	
School Days	180	180	
Annual Flow (Kgal)	1,957.5	243.0	2,201
Students per EDU	40		
EDUs	18.13		18.13

14.3 Flows and Loadings

The following table estimates the flows and loadings of each customer class based on analysis of recent winter and annual water consumption data and wastewater strength assignments for each customer class.

- Residential flows per unit are based on analysis of historical winter water use data. Residential wastewater strength concentrations are based on estimates previously published by the State Water Resources Control Board (SWRCB), input from District WRF staff, and analysis of wastewater strength concentrations measured at the WRF. Residential wastewater strength concentrations have increased over the past decade as the volume of wastewater flow has decreased due to transition to low-flow toilets, water-efficient appliances, and other water conservation and efficiency measures.

- Commercial wastewater flows are estimated based on annual metered water use adjusted to account for a 90% RTS factor. Wastewater strength assignments for commercial customer classes are largely based on strength estimates previously published by the SWRCB, input from District WRF staff, and analysis of wastewater strength concentrations measured at the WRF.

- Wastewater flow from schools is estimated based on number of students and staff and estimated flow per person based on prior estimates published by SWRCB. This ensures that billable usage excludes water use for outdoor irrigation. School wastewater strength assignments are largely based on strength estimates previously published by SWRCB, input from District WRF staff, and analysis of wastewater strength concentrations measured at the WRF.

The resulting flow and strength projections for each class are shown on the following table and provide the basis for allocating costs and deriving equitable wastewater rates for each customer class.

Table S8: Wastewater Flows and Loading

	Projected Wastewater Flow[2]			Strength (mg/l)[9]		Loadings (lbs)	
Wastewater Flows and Loadings	Kgal[3]	MG[5]	GPD[6]	BOD[7]	TSS[8]	BOD	TSS
Domestic							
Ag Domestic (AT)	158	0.16	434	290	320	383	423
Commercial Ag (CB)	187	0.19	513	290	320	453	500
Single Family (D)	256,488	256.49	702,707	290	320	620,850	685,076
Single Family (Large) (LD)	9,533	9.53	26,117	290	320	23,075	25,462
Multi Family (M)	138,201	138.20	378,634	290	320	334,527	369,134
Total Domestic	**404,568**	**405**	**1,108,405**			**979,289**	**1,080,594**
Non-Domestic							
Government (G)	5,896	5.90	16,152	290	320	14,271	15,747
Elementary	6,284	6.28	17,216	170	130	8,916	6,818
Junior High	2,201	2.20	6,029	170	130	3,122	2,388
Commercial - Low Strength (C_L)	45,153	45.15	123,706	290	320	109,296	120,602
Commercial - Medium Strength (C_M)	14,265	14.27	39,082	500	560	59,534	66,678
Commercial - High Strength (C_H)	10,973	10.97	30,063	800	890	73,272	81,516
Total Non-Domestic	**84,771**	**85**	**232,248**			**268,412**	**293,749**
Total Customer Flows and Loadings	**489,338**	**489**		**305.5**	**336.5**	**1,247,700**	**1,374,343**
Inflow and Infiltration	29,200	29		100	100	24,373	24,373
Projected Plant Flows and Loadings	**518,538**	**519**		**293.9**	**323.2**	**1,272,073**	**1,398,716**
Historic Plant Flows and Loadings (Low)[1]	516,821	517		262.4	315.7	1,132,007	1,361,827
Historic Plant Flows and Loadings (High)[1]	556,000	556		314.0	343.6	1,457,146	1,594,649

[1] Historic Plant Flows and Loadings based data for FY 18-19, FY 19-20 and FY 20-21 provided by the district

[2] Flow estimate based on water demand, average winter use is the basis for domestic billing

[3] "Kgal" stands for 1,000 gallons

[4] Flow factor based on estimated flow returning to sewer

[5] "MG" stands for 1,000,000 gallons

[6] "GPD" stands for gallons per day

[7] "BOD" stands for biochemical oxygen demand

[8] "TSS" stands for total suspended solids

[9] Based on State Water Resource Control Board (SWRCB) Guidelines for Wastewater Agencies

14.4 Revenue and Expense Allocation Categories

Expenses and offsetting revenues were grouped into allocation categories for Admin, Treatment, Collection/Flow and As All Other by analyzing the District's budget on a line-by-line basis and assigning each expenditure and revenue to the appropriate category. The Expenses and revenues in the allocation categories are based on the average budgeted amounts over the next five years. The reason for this is there are no planned changes to district operations, but capital spending is projected to fluctuate based on project timing. Expenses and revenues were grouped into the following allocation categories:

- **Administration** includes the wastewater enterprise's portion of the District's administrative costs. Administration expenses were allocated to the EDU and Flow functional components to reflect standing and volumetric system capacity.
- **Treatment** includes costs related to wastewater treatment. These costs were allocated to evenly to the flow, BOD and TSS functional components based on input from District staff.
- **Collection/Flow** includes costs related to wastewater collection and conveyance and are allocated to the flow functional component.
- **As All Other** includes other expenses and offsetting revenues that are not related to one of the specific categories listed above. These revenues and expenses are allocated proportionally based on the combined allocation of all the other categories.

14.5 Functional Allocation

The next step in the cost of service analysis is to assign wastewater system costs in each allocation category for revenue recovery via the functional cost components of EDU, flow, BOD (biochemical oxygen demand), and TSS (total suspended solids). While there is no single correct approach for cost allocation, BWA believes that costs should be allocated within a reasonable range that reflects both a) underlying cost causation, to the extent such causation can reasonably be determined or estimated, and b) the policy preferences of the agency in cases where a range of reasonable approaches can be justified. This process is intended to proportionately allocate costs to each functional component to determine the revenue requirement for each component. The allocations to each functional component were based on input from District staff.

The functional cost components are described as follows:

- **EDU** reflects costs associated with fixed capacity in the wastewater system.
- **Flow** reflects costs associated with the volume of wastewater collected and treated.
- **BOD** reflects costs associated with treating BOD.
- **TSS** reflects costs associated with treating TSS.

The following table shows a breakdown of the sewer utility's expenses and how they are allocated.

Table S9: Functional Cost Allocation

Functional Allocation Categories	*Projected 5-Year Average* Expenses	Offsetting Revenues	Allocation Amount	EDU	Flow	BOD	TSS
Administration	$2,808,632	-$11,243	$2,797,389	45%	55.0%		
Treatment	$3,576,314	-$656,040	$2,920,274		33.3%	33.3%	33.3%
Collection/Flow	$1,985,665	-$824,448	$1,161,218		100.0%		
Total	$8,370,611		$6,878,881	$1,258,825	$3,673,206	$973,425	$973,425
Allocation %				18.30%	53.40%	14.15%	14.15%
As All Other	$2,125,959	-$1,108,911	$1,017,048	18.30%	53.40%	14.15%	14.15%
Total	$10,496,570		$7,895,928	$1,444,943	$4,216,292	$1,117,346	$1,117,346
Final Allocation			100.00%	18.30%	53.40%	14.15%	14.15%
Revenue Requirement	**$6,754,543**			**$1,236,071**	**$3,606,812**	**$955,830**	**$955,830**

14.6 Wastewater Unit Cost Derivation

The following tables calculates the unit rates per EDU, and rates per unit of flow, BOD and TSS. The wastewater rate revenue requirements from the prior table for each functional component are divided by the units related to each function as shown in sections 14.2 and 14.3.

Table S10: Unit Rate Calculations

Functional Allocation Units	EDU	Flow	BOD	TSS
	(#)	*(KGAL)*	*(LBS)*	*(LBS)*
Demand Units	101,897	489,338	1,247,700	1,374,343
Revenue Requirement	$1,236,071	$3,606,812	$955,830	$955,830
Unit Cost ($/Unit)	**$12.14**	$7.37	$0.77	$0.70

14.7 Flow and Strength Revenue Requirement by Class

Revenue requirements for each customer class are calculated by multiplying the unit rates for flow, BOD and TSS from Section 14.6 by the volume of wastewater flow and loadings associated with each class from Section 14.3.

Table S11: Flow and Strength Revenue Requirement by Class

Flow and Strength Revenue Requirements by Class	Flow	BOD	TSS	Revenue Requirement
	(KGAL)	*(LBS)*	*(LBS)*	*($)*
Domestic				
Ag Domestic (AT)	158	383	423	$1,756
Commercial Ag (CB)	187	453	500	$2,075
Single Family (D)	256,488	620,850	685,076	$2,842,594
Single Family (Large) (LD)	9,533	23,075	25,462	$105,650
Multi Family (M)	138,201	334,527	369,134	$1,531,651
Total Domestic	404,568	979,289	1,080,594	$4,483,724
School				
Elementary	6,284	8,916	6,818	$57,889
Junior High	2,201	3,122	2,388	$20,272
Total School	8,484	12,039	9,206	$78,161
Commercial and Government				
Government (G)	5,896	14,271	15,747	$65,339
Commercial - Low Strength (C_L)	45,153	109,296	120,602	$500,416
Commercial - Medium Strength (C_M)	14,265	59,534	66,678	$197,126
Commercial - High Strength (C_H)	10,973	73,272	81,516	$193,705
Total Commercial and Government	76,286	256,373	284,543	$956,586
Total	489,338	1,247,700	1,374,343	$5,518,472

14.8 Domestic Flow and Strength Rate Derivation

Residential rates are derived by dividing the total amount of costs designated for fixed and variable residential rate recovery by the total number of residential fixed and variable billing units. The fixed and variable amounts were set to produce 70% fixed recovery from residential customers accounting for separate fixed CIC charges.

Volumetric billing units consist of the two-year average of winter water consumption (AWC) from December through February with an 80% RTS factor applied to reflect that an estimated 20% of residential winter use does not enter the wastewater collection system.

The following table calculates the fixed monthly rate per EDU and the volumetric rate per unit of billed average winter water use for residential customers based on the billing units and revenue requirements in Section 14.7. The monthly fixed EDU rate was calculated in section 14.6

Table S12: Domestic Rate Derivation

FY 22/23 Domestic Rate Derivation	Units	Fixed	Volumetric
Volumetric Revenue Requirement Allocation		56%	44%
Revenue Requirement	$4,483,724	$2,495,222	$1,988,502
Volumetric Flow Rate ($/AWC Kgal/Month)	404,568		**$4.92**
Fixed Flow Rate ($/EDU/Month)	7,160	**$29.05**	
Domestic Monthly Fixed Charge ($/EDU/Month)			
Monthly Fixed Flow Rate		$29.05	
Monthly Fixed EDU Rate		$12.14	
Monthly Fixed Service Charge		**$41.19**	

In order to mitigate the impact of transitioning to 70% fixed revenue recovery BWA recommends phasing in the rate increases and rate structure adjustments over the next five years as shown on the following table.

Table S13: Domestic Rate 5-Year Phase-In Calculation

Domestic Rate 5-Year Phase-In Calculation

	FY 22-23 Derived Rate	Total 5-Year Rate Increase	FY 26-27 Projected Rate
Volumetric Rate	$4.92	21.6%	$5.99
Monthly Fixed Service Charge	$41.19	21.6%	$50.07

	FY 21-22 Existing Rate	FY 26-27 Projected Rate	Total 5-Year Change	Single Year Change
Volumetric Rate	$11.28	$5.99	-$5.29	-1.06
Monthly Fixed Service Charge	$11.08	$50.07	$38.99	7.80

	FY 21-22 Existing Rate	Single Year Change	Proposed FY 22-23 Rate	Proposed FY 23-24 Rate	Proposed FY 24-25 Rate	Proposed FY 25-26 Rate	Proposed FY 26-27 Rate
Volumetric Rate	$11.28	-1.06	$10.22	$9.16	$8.10	$7.04	$5.99
Monthly Fixed Service Charge	$11.08	7.80	$18.88	$26.68	$34.48	$42.28	$50.08

14.9 Non-Residential Volumetric Rate Derivation

The following table calculates volumetric rates for each commercial customer class by dividing the revenue requirements for each class by the volume of billable usage applicable to each class from Section 14.7. The volume of billable use for each class reflects a 90% RTS factor based on District estimates that 10% of non-residential water use is not discharged to the wastewater collection system.

Table S14: Non-Residential Rate Derivation

Commercial and Government Rate Derivation	Revenue Requirement	Billing Units	Volumetric Rate
	$	*Kgal*	*$/Kgal*
Government (G)	$65,339	5,896	$11.09
Commercial - Low Strength (C_L)	$500,416	45,153	$11.09
Commercial - Medium Strength (C_M)	$197,126	14,265	$13.82
Commercial - High Strength (C_H)	$193,705	10,973	$17.66

14.10 School Strength and Flow Rate Derivation

Fixed monthly charges per type of student and staff for schools are derived on the following table based on the approach summarized below:

1. The revenue requirement allocated to schools is divided by the projected flow for the school class to calculate an underlying unit rate ($/Kgal) from Ssection 14.7.
2. The unit rate is multiplied by the estimated wastewater flow for elementary students, junior high students, and staff to develop a revenue requirement for each category from Ssection 14.2.
3. The revenue requirement for each category is then divided by the estimated number of students and staff to derive the monthly rate per each type of student and staff Ssection 14.2.

Table S15: School Rate Derivation

School Rate Derivation

Unit Rate Calculation ($/Kgal)	Amount
Volumetric Revenue Requirement	$78,161
Flow (Kgal)	8,484.30
Flow Rate ($/Kgal)	$9.21

School Rate Calculation ($/person/month)	Flow (Kgal)	Rate Revenue Requirement	People	Monthly Rate Per Person
Elementary Students	5,193.00	$47,840	2,885	**$1.39**
Junior High Students	1,957.50	$18,033	725	**$2.08**
Staff	1,333.80	$12,288	494	**$2.08**

14.11 Wastewater CIC Charge

The Wastewater Capital Improvement Charge (CIC) was implemented to provide a partial funding source for capital projects that keeps pace with inflation. According to the District's administrative code, the Wastewater CIC "will be adjusted annually based on the ENR (Engineering News Record) Construction Cost Index (CCI) of February, not to exceed 10%." The charge is applied by EDU. This results in charges that recover costs in proportion to the amount of system capacity associated with each EDU.

14.12 Proposed Wastewater Rates

Table S16 shows a 5-year schedule of proposed wastewater rates. Proposed domestic rates are based on the wastewater rates derived for 2026/27 with rates in the intervening years phased in even increments. The rates are designed to recover the District's costs of providing wastewater service while achieving roughly balanced budgets in upcoming years.

Table S16: Proposed Wastewater Rates

Proposed Maximum Wastewater Rates						
	Current Wastewater Rates	Proposed Maximum Rates Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Residential / Domestic						
Includes Single Family (D), Single Family Large Lot (LD), Multi Family (M), Ag Domestic (AT), Commercial Ag (CB)						
Monthly Fixed Service Charges ($/EDU)	$11.08	$18.88	$26.68	$34.48	$42.28	$50.08
Volumetric Charges ($/Kgal)	11.28	10.22	9.16	8.10	7.04	5.98
Commercial / Government						
Monthly Fixed Service Charge ($/EDU)	$11.08	$12.14	$12.75	$13.39	$14.06	$14.76
Volumetric Charges						
Comm - Low Strength (C_L)	$11.20	$11.09	$11.64	$12.22	$12.83	$13.47
Comm - Medium Strength (C_M)	13.81	13.82	14.51	15.24	16.00	16.80
Comm- High Strength (C_H)	17.22	17.66	18.54	19.47	20.44	21.46
Government (G)	11.20	11.09	11.64	12.22	12.83	13.47
Schools						
Monthly charge based on number of students and staff						
Elementary Students ($ per student)	$1.37	$1.39	$1.46	$1.53	$1.61	$1.69
Junior High Students ($ per student)	2.00	2.08	2.18	2.29	2.40	2.52
School Staff ($ per staff)	2.00	2.08	2.18	2.29	2.40	2.52
Wastewater Capital Improvement Charges (CIC)						
Monthly charge per Equivalent Dwelling Unit (EDU) billed to all active wastewater accounts.						
Monthly Wastewater CIC Charges	$11.68	$12.66	Wastewater CIC Charges will be adjusted each January 1 based on the annual change in the Engineering News-Record Construction Cost Index for Los Angeles through February of the preceding year, subject to a maximum adjustment of 10% per year.			

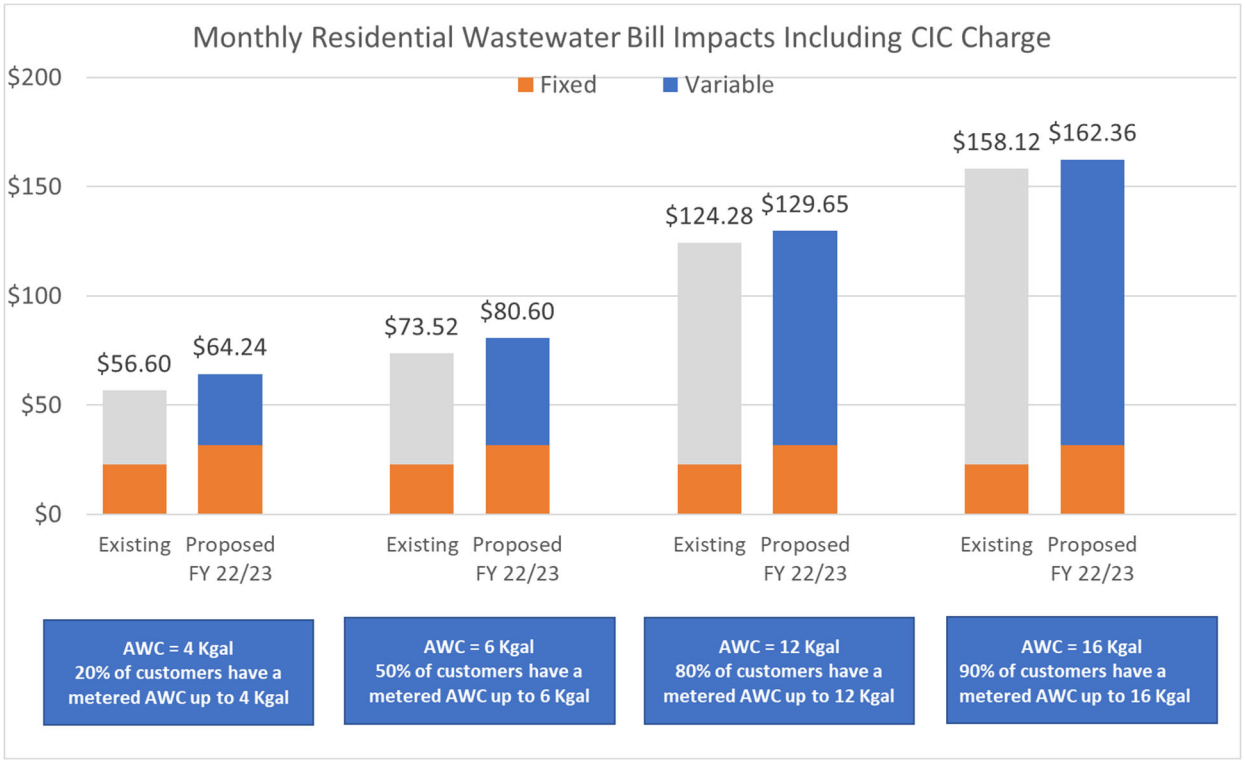
14.13 Wastewater Bill Impacts

Table S17 shows the impacts of the proposed wastewater rates on a range of residential customers with different levels of average winter consumption.

Table S17: Residential Wastewater Rate Impacts

Residential Rates	*Existing FY 21/22*	*Effective Jan. 1 2023*	*Effective Jan. 1 2024*	*Effective Jan. 1 2025*	*Effective Jan. 1 2026*	*Effective Jan. 1 2027*
Total Monthly Fixed Charge ($/EDU/Month)	$22.76	$31.54	$39.97	$48.37	$56.73	$65.10
Volumetric Flow Rate ($/AWC Kgal/Month)	$11.28	$10.22	$9.16	$8.10	$7.04	$5.98
Monthly Resiential Customer Bill Impacts						
Return to Sewer Factor	*75.00%*	*80%*	*80%*	*80%*	*80%*	*80%*
AWC (Kgal)	**Total Monthly Bill**					
4	$56.60	$64.24	$69.28	$74.29	$79.25	$84.24
6	$73.52	$80.60	$83.94	$87.25	$90.52	$93.81
12	$124.28	$129.65	$127.91	$126.13	$124.31	$122.51
16	$158.12	$162.36	$157.22	$152.05	$146.84	$141.65
	Change in Monthly Bill ($)					
4		$7.64	$5.04	$5.01	$4.96	$4.99
6		$7.08	$3.35	$3.31	$3.27	$3.29
12		$5.37	-$1.74	-$1.78	-$1.82	-$1.80
16		$4.24	-$5.13	-$5.17	-$5.21	-$5.19
	Change in Monthly Bill (%)					
4		13.51%	7.85%	7.23%	6.68%	6.29%
6		9.62%	4.15%	3.94%	3.75%	3.63%
12		4.32%	-1.34%	-1.39%	-1.44%	-1.45%
16		2.68%	-3.16%	-3.29%	-3.43%	-3.53%

Figure S5: Combined Single Family Water & Wastewater Bills



15 RECYCLED WATER ENTERPRISE FINANCES & RATES

15.1 Recycled Water System Overview

FPUD provides recycled water generated at the WRP for use as a drought-proof, locally generated irrigation water supply. FPUD has expanded its recycled water distribution system to increase service area and system capacity. Last year, the District delivered 810 AF (352,000 Kgals) of recycled water for landscape irrigation, sports fields, and nurseries.

15.2 Recycled Water Financial Overview

FPUD's recycled water enterprise is a financially self-supporting enterprise that relies primarily on revenues from recycled water rate revenues to fund the costs of providing service. Recycled rate revenues are projected to account for over 95% of total annual revenues, with the remaining revenues coming from interest earnings, property tax allocations and other miscellaneous revenues. As such, recycled rates must be set at levels adequate to fund the costs of operating and maintaining the recycled system and fund necessary capital improvements to keep the recycled water system in good operating condition.

The District has provided good financial stewardship of the recycled water utility by gradually raising rates each year to keep revenues in line with the cost of providing recycled service.

15.3 Current & Historical Recycled Rates

Current and historical recycled rates are shown on the table below.

Table R1: Historical Recycled Water Rates

Monthly Fixed Charges	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22
Meter Size					*Existing*
Monthly Fixed Service Charge					
3/4"	$19.79	$20.98	$22.66	$24.02	$25.22
1"	$26.80	$28.41	$30.68	$32.52	$34.15
1 1/2"	$44.31	$46.97	$50.73	$53.77	$56.46
2"	$65.32	$69.24	$74.78	$79.27	$83.23
3"	$121.38	$128.66	$138.95	$147.29	$154.65
4"	$184.43	$195.50	$211.14	$223.81	$235.00
6"	$359.58	$381.15	$411.64	$436.34	$458.16
Volumetric Rates $/ Kgal					
RW Sales	$4.81	$5.10	$5.51	$5.84	$6.13
Orange Grove					
Jan - June	$5.09	$5.66	$6.12	$6.59	$6.19
Jul - Dec	$5.66	$6.12	$6.59	$6.19	$6.50
SP&YB					
Apr - Sep	$2.43	$2.63	$2.83	$3.06	$3.30
Oct - Mar	$1.18	$1.28	$1.38	$1.50	$1.61

16 RECYCLED WATER FINANCIAL PLAN

BWA developed long-term cash flow projections to determine the recycled utility's annual revenue requirements and project required recycled rate revenue increases. The financial projections incorporate the latest information available as well as a number of reasonable assumptions developed with input from the District.

16.1 Financial Plan Assumptions

The following table details the escalation factors used to develop the long-term cash flow projections. Escalation factors are based on input from District staff, historical escalations, and conservative projections for future escalations to reasonably ensure that the maximum rates adopted by the District will provide sufficient revenues to support District operations.

Table R2: Historical Recycled Water Rates

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%

REVENUE ASSUMPTIONS

- Rate adjustments are assumed to become effective on January 1 of each year.
- Recycled water sales revenues are based on recycled sales projections and projected recycled water rates.
- The District projects growth based previous low growth years to ensure rate revenue is sufficient to support District operations.
- Interest earnings are projected based on the annual beginning fund balance multiplied by projected interest rate. The interest rate projections are based on recent and anticipated interest rates increases.
- The District projects property tax revenue increases based on previous low increase years to ensure rate revenue is sufficient to support District operations.
- Rent revenue increases are conservatively based on the District's rental agreements.

EXPENSE ASSUMPTIONS

- Operating and maintenance expenses (other than wholesale water costs) are based on the District's 2022/23 Budget and escalation factors listed above.
- The District projects the cost of Salaries to increase based on a recent compensation study it completed and projected future cost of living adjustments.
- The District projects the cost of Benefits to increase based on projected salary costs and projected inflation of specific benefit expenses such as health insurance.
- CPI cost escalation is based on the recent and historical Consumer Price Index changes. This report projects that the current, extraordinarily high inflation level will gradually drop back towards a normal rate of inflation. Recent cost inflation has been unpredictable, but the CPI escalation projections are informed by recent projections from the Federal Reserve.
- ENR cost escalation is based on the recent and historical Engineering News Record Construction Cost Index changes. This report projects that the current, extraordinarily high inflation level will gradually drop back towards a normal rate of inflation. Recent cost inflation has been unpredictable, but the ENR escalation projections are informed by recent projections from the Federal Reserve.
- Debt service projections are based on outstanding debt schedules. The District does not anticipate issuing any additional debt in future years.

16.2 Financial Plan Drivers

The District's recycled water enterprise is facing a number of manageable financial challenges that will require small gradual rate increases in upcoming years. Key drivers of future rate increases are summarized as below.

Capital Improvement Needs & Rehabilitation of Aging Infrastructure

The District's takes a proactive approach to maintaining its recycled system which requires a steady stream of repair and improvement projects. Accounting for construction cost inflation, the District anticipates funding approximately $0.5 million of capital improvement projects over the next 5 years. The District will be able to fund this level of capital spending without incurring additional debt.

Ongoing Cost Inflation

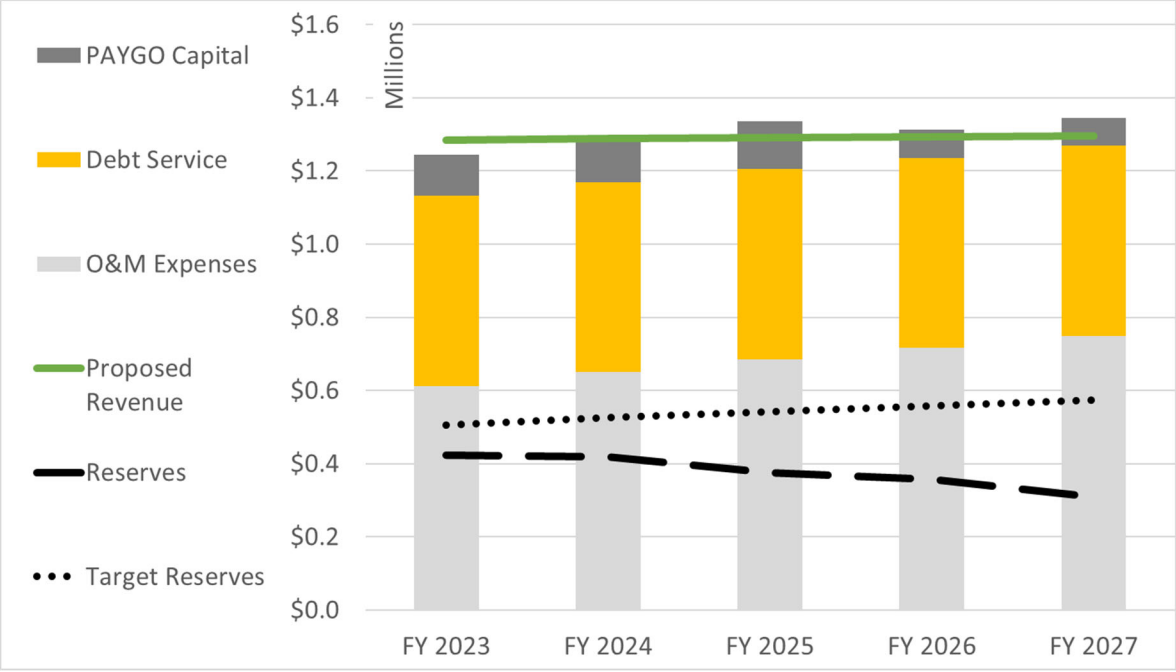
The District's recycled enterprise faces ongoing operating cost inflation due to annual increases in a range of expenses including staffing, utilities, insurance, supplies, etc. On top of rate increases needed for other purposes, annual rate increases are needed to keep revenues aligned with cost inflation and prevent rates from falling behind the cost of providing service. Historically, inflation consistently hovered between 2% and 3%. Currently, inflation has reach forty year highs with the ENR Construction Cost Index reaching almost 9% in early 2022. The Federal Reserve is projecting inflation will normalize

over the next five years. BWA designed the inflation projections to be slightly conservative, to leave the District in a strong financial position while not driving excessive rate increases.

16.3 Cashflow Projection at Existing Rates

Based on project expenses, without any rate increases the recycled water enterprise will operate at a deficit and deplete its reserves within nine years. The following figure shows a 5-year projection of expenses broken down by key categories, projected annual revenues with no rate increases, and ending reserves compared to the reserve target.

Figure R1: RW 5-Year Cash Flow Projection Without Rate Increases



16.4 Cashflow Projection and Recommended Rate Increases

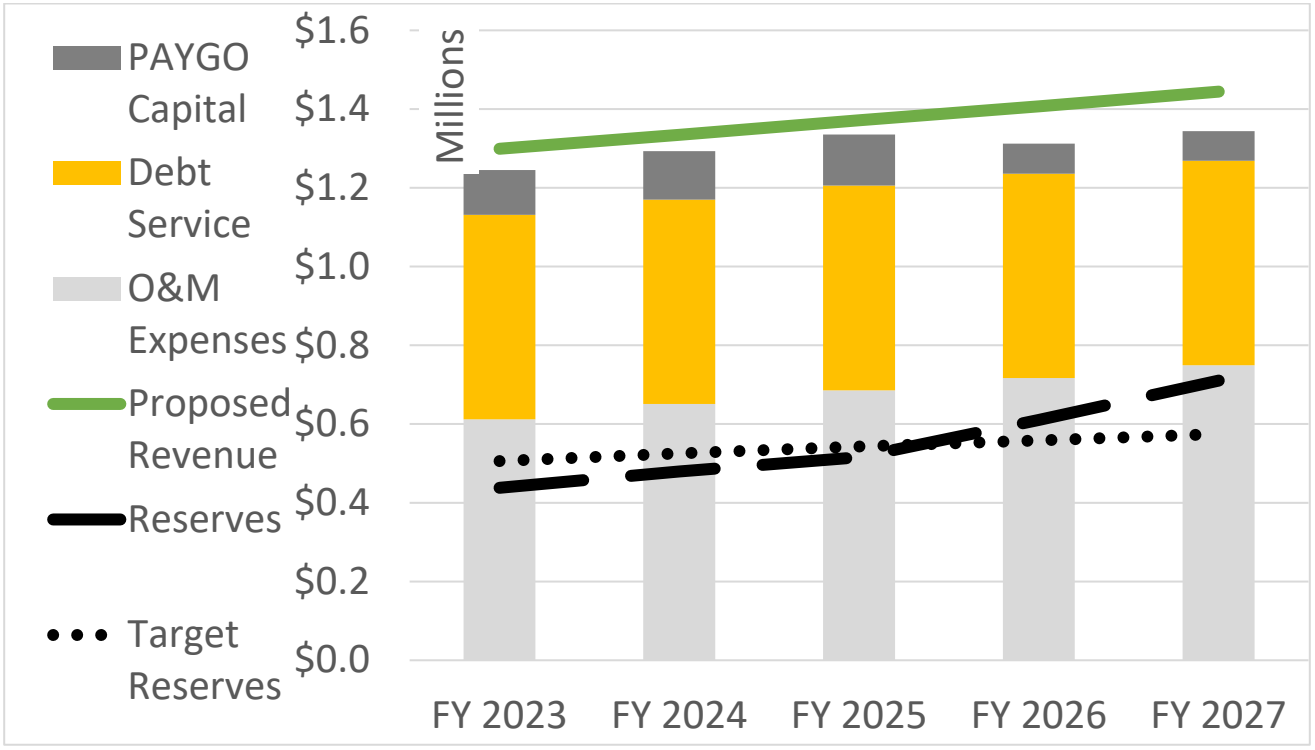
A summary of the cash flow projections is displayed in the following table. The overall rate revenue increases shown on the table are designed to fund the District's cost of providing service each year, maintain roughly balanced budgets, meet debt service and coverage requirements, and achieve long-term fund reserve targets. The recycled enterprise is projected to meet its fund reserve target in FY 2026/27. Actual impacts to customers' recycled bills will vary based on customer class and recycled use due to proposed modifications to the rate structure and the updated allocation of costs based on cost-of-service analysis. In future years, the District can update the long-term financial projections and re-evaluate future revenue requirements and rate projections.

Table R3: Proposed Recycled Rate Adjustments

RW Financial Dashboard	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
Effective Months	Jan	Jan	Jan	Jan	Jan
RW Rev Adjustments	2.50%	2.50%	2.50%	2.50%	2.50%
	Projected Maximum Rate Revenue Increases				
Key Financial Information					
Revenue from Full Year Rate Increase	**$30,567**	**$31,379**	**$32,211**	**$33,066**	**$33,944**
Total Revenue	$1,299,315	$1,334,514	$1,371,324	$1,406,756	$1,444,262
Total Expenses	$1,245,309	$1,292,944	$1,335,373	$1,312,106	$1,343,928
Net Cash Change (Exl. Debt Proceeds	**$54,006**	**$41,570**	**$35,951**	**$94,649**	**$100,335**
Total Reserves	**$437,988**	**$479,558**	**$515,509**	**$610,159**	**$710,493**
Reserves Over/Under Target	-$68,012	-$45,866	-$27,299	$51,832	$135,938

The following figure shows a 5-year projection of expenses broken down by key categories, projected annual revenues with proposed rate increases, and ending reserves compared to the reserve target.

Figure R2: RW 5-Year Cashflow Projection With Recommended Rate Increases



The detailed recycled enterprise financial plan is shown in the following table.

Table R4: Detailed Recycled Financial Plan

REVENUES	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
	Budgeted	*Projected*	*Projected*	*Projected*	*Projected*
Revenues from Rates					
Full year Adjustmei	$30,567	$31,379	$32,211	$33,066	$33,944
Revenues with Full	$1,253,265	$1,286,523	$1,320,665	$1,355,712	$1,391,689
Revenues from Current Rates	$1,222,697	$1,224,532	$1,226,368	$1,228,208	$1,230,050
Proposed Rev Adjustments	$15,284	$46,303	$78,191	$110,971	$144,667
Subtotal Revenues from Rates	**$1,237,981**	**$1,270,834**	**$1,304,559**	**$1,339,179**	**$1,374,717**
Other Operating Revenues					
MWD/CWA Incentive	$0	$0	$0	$0	$0
Sundry	$5,000	$5,000	$5,000	$5,000	$5,000
Subtotal Other Operating Revenue	**$5,000**	**$5,000**	**$5,000**	**$5,000**	**$5,000**
Non-Operating Rev					
1% Property tax	$54,030	$54,300	$54,572	$54,844	$55,393
Interest	$2,304	$4,380	$7,193	$7,733	$9,152
Subtotal Non-Operating Rev	**$56,334**	**$58,680**	**$61,765**	**$62,577**	**$64,545**
TOTAL REVENUES	**$1,299,315**	**$1,334,514**	**$1,371,324**	**$1,406,756**	**$1,444,262**

EXPENSES	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27
	Budgeted	*Projected*	*Projected*	*Projected*	*Projected*
Operating Expenses					
Production	$379,361	$403,785	$425,883	$445,010	$465,007
Distribution	$35,438	$37,523	$39,437	$41,135	$42,906
Allocated Admin Expenses	$197,203	$209,541	$220,297	$230,507	$241,197
Subtotal Operating Expenses	**$612,002**	**$650,849**	**$685,617**	**$716,652**	**$749,110**
Non-Operating Expenses					
Water Existing Debt	$519,307	$519,224	$520,072	$518,980	$519,510
Water New Debt					
PAYGO Capital	$114,000	$122,871	$129,684	$76,474	$75,308
TOTAL Non-Operating Expenses	**$633,307**	**$642,095**	**$649,756**	**$595,454**	**$594,818**
TOTAL EXPENSES	**$1,245,309**	**$1,292,944**	**$1,335,373**	**$1,312,106**	**$1,343,928**
NET REVENUES	**$687,313**	**$683,665**	**$685,707**	**$690,103**	**$695,153**
NET CASH CHANGE EXCL. NEW DEBT	**$54,006**	**$41,570**	**$35,951**	**$94,649**	**$100,335**
BEGINNING BALANCES	$383,982	$437,988	$479,558	$515,509	$610,159
ENDING BALANCES W/O DEBT PROC	**$437,988**	**$479,558**	**$515,509**	**$610,159**	**$710,493**

17 RECYCLED WATER COST OF SERVICE ANALYSIS & RATE DERIVATION

BWA derived recycled water rates that account for the overall rate increases identified in the financial projections. The proposed rates are designed to equitably apportion and recover costs from the District's customer base.

17.1 Fixed Service Charge Derivation

Fixed monthly recycled service charges recover costs related both to the number of services and meter capacity. The following table shows the number of recycled services by meter size. The table also shows the calculation of the number of recycled water EMUs by multiplying the number of services at each meter size by the meter equivalent ratio for each meter size. An EMU reflects the capacity of each meter size in comparison to the capacity of a ¾" meter.

Table R5: Recycled Services by Meter Size

Recycled Water Service Capacity	Recycled Water Services	Maximum Safe GPM	Meter Equivalent Ratios	Equivalent Meter Units
Meter Size	*#*	*#*	*#*	*EMUs*
3/4"	1	30	1	1
1"	2	50	2	3
1 1/2"	1	100	3	3
2"	7	160	5	37
3"	9	320	11	96
4"	7	500	17	117
6"	2	1,000	33	67
Total	29			324
Annual Total	**348**			**3,892**

The fixed monthly recycled water service charge is designed to recover the following costs related to the following functional components:

- **Customer** includes billing and customer service costs that are the same for each customer regardless of meter size. Customer costs are recovered on a per service basis.
- **Meter Service** includes maintenance and capital costs associated with servicing meters. These costs recovered per equivalent meter unit (EMU). Fixed costs are recovered per unit of capacity (EMU).
- **Capacity** includes fixed operating and capital costs related to system capacity. These costs are recovered per unit of capacity (EMU). Fixed costs or costs related to system capacity were allocated to this category.

Allocation to Fixed Cost Functional Components

In order to recover costs related to the functional components described above, BWA allocated Administrative Services expenses to be recovered from the fixed service charge based on the Administrative Services allocations to each functional category identified for the water enterprise. Since Administrative Services was also allocated to other functional cost components for the water enterprise BWA adjusted the allocations to equal 100% for the components used for the recycled water enterprise. The result of this process was the revenue requirement for each functional component. The following table shows this process.

Table R6: Allocation to Fixed Cost Functional Components

Revenue Requirement	Total	Customer	Meter Service	Capacity
Water Admin Allocation		15.5%	3.9%	60.0%
Water Admin Allocation 100% Adj.		19.54%	4.96%	75.50%
Administrative Services	$73,282	$14,321	$3,632	$55,329
Offsetting Tax Revenue		$10,150		$5,000
Total	$58,132	$4,171	$3,632	$50,329

Functional Component Unit Costs

The unit cost was then derived for each functional component by dividing the revenue requirement by the number of services or EMUs.

Table R7: Functional Components Unit Costs

Allocation Units	Customer	Meter Service	Capacity
Allocation Unit of Measure	*#*	*#*	*EMU*
Allocation Units	348	3,892	3,892
Revenue Requirement	$4,171	$3,632	$50,329
Unit Cost	**$11.99**	**$0.93**	**$12.93**

Monthly Fixed Recycled Water Service Charge Derivation

The monthly fixed recycled water service charge was then derived by applying the functional components unit costs to each meter size. The customer unit rate is the same for each meter size. The meter service and capacity unit rate are multiplied by the AWWA meter equivalent ratios for each meter size to each meter size.

Table R8: Fixed Monthly Recycled Water Rate Derivation

Allocation Units	Customer	Meter Service	Capacity
Allocation Unit of Measure	*#*	*#*	*EMU*
Allocation Units	348	3,892	3,892
Revenue Requirement	$4,171	$3,632	$50,329
Unit Cost	**$11.99**	**$0.93**	**$12.93**

Monthly Fixed RW Service Charge Derivation	Meter Equivalent Ratios	Customer	Meter Service	Capacity	Monthly Fixed RW Service Charges
3/4	1.00	$11.99	$0.93	$12.93	$25.85
1	1.67	$11.99	$1.56	$21.59	$35.14
1 1/2	3.33	$11.99	$3.11	$43.06	$58.15
2	5.33	$11.99	$4.97	$68.92	$85.88
3	10.67	$11.99	$9.96	$137.97	$159.91
4	16.67	$11.99	$15.56	$215.55	$243.09
6	33.33	$11.99	$31.10	$430.97	$474.06

17.2 Variable Service Charge Derivation

The variable recycled water revenue requirement is derived by adjusting the revenue requirement to account for the tax revenue applied to the youth sports parks, the fixed charge revenue, and contract revenues. The projected billed units were also adjusted to account for the recycled water contract customers.

The variable recycled water rate was derived by dividing the adjusted revenue requirement by the projected billed units.

Table R9: Variable Recycled Water Rate Derivation

RW Rate Derivation	Amount
Rate Revenue Requirement	
Revenue Requirement	$1,253,265
SP&YB Tax Revenue	$33,484
Fixed Charge Revenue	-$58,132
Orange Grove Contract Fee	-$5,000
Orange Grove Delay	$1,152
Rate Revenue Requirement	**$1,224,768**
Projected RW Billed Units (Kgal)	
Orange Grove Take or Pay	14,670
RW Demand Less Orange Grove	180,000
Total RW Billed Units	**194,670**
RW Volumetric Rate ($/Kgal)	
Rate Revenue Requirement	$1,224,768
Total RW Billed Units	194,670
RW Volumetric Rate	**$6.29**

17.3 Proposed Recycled Water Rates

The following table shows the proposed water rates. Under Proposition 218, the rates shown below are the maximum rates that the District can enact each year. The District can implement rates that are lower than those shown based upon an annual review of the water utility's finances to ensure that revenues are in line with expenses.

Table R10: Proposed Recycled Water Rates

Monthly Fixed Charges	**FY 21-22**	**Effective Jan. 1 2023**	**Effective Jan. 1 2024**	**Effective Jan. 1 2025**	**Effective Jan. 1 2026**	**Effective Jan. 1 2027**
Meter Size	*Existing*	*Proposed*	*Proposed*	*Proposed*	*Proposed*	*Proposed*
Monthly Fixed Service Charge						
3/4"	$25.22	$25.85	$26.50	$27.16	$27.84	$28.53
1"	$34.15	$35.14	$36.02	$36.92	$37.84	$38.79
1 1/2"	$56.46	$58.15	$59.60	$61.09	$62.62	$64.19
2"	$83.23	$85.88	$88.03	$90.23	$92.48	$94.80
3"	$154.65	$159.91	$163.91	$168.01	$172.21	$176.51
4"	$235.00	$243.09	$249.17	$255.40	$261.78	$268.33
6"	$458.16	$474.06	$485.91	$498.06	$510.51	$523.27
Volumetric Rates $/ Kgal						
RW Sales	$6.13	$6.29	$6.45	$6.61	$6.77	$6.94
Orange Grove						
Jan - June	$6.19	$6.50	$6.67	$6.83	$7.00	$7.18
Jul - Dec	$6.50	$6.67	$6.83	$7.00	$7.18	$7.36
SP&YB						
Apr - Sep	$3.30	$3.30	$3.30	$3.30	$3.39	$3.47
Oct - Mar	$1.61	$1.61	$1.61	$1.65	$1.69	$1.74

APPENDIX A

Supporting Rate Study Tables

Draft FPUD Rate Study
Water Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Revenue	Category	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
		Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Operating Rev											
Water Rate Revenue		$25,399,500	$27,091,043	$28,895,239	$30,819,590	$32,872,097	$34,806,614	$36,601,765	$38,489,501	$40,474,597	$42,354,455
MWD RTS Charge		$130,551	$0	$0	$0	$0	$0	$0	$0	$0	$0
SDCWD IAC Charge	SDCWD IAC Charge	$603,768	$623,819	$667,487	$714,211	$764,206	$817,700	$874,939	$936,185	$1,001,718	$1,071,838
Sundry	As All Other	$53,009	$53,009	$53,009	$53,009	$53,009	$53,009	$53,009	$53,009	$53,009	$53,009
Non-Operating Rev											
Water Availability Charge	Supply Reliability	$208,842	$208,842	$208,842	$208,842	$208,842	$208,842	$208,842	$208,842	$208,842	$208,842
1% Property tax	As All Other	$520,031	$525,231	$530,484	$535,788	$541,146	$546,558	$552,023	$557,543	$563,119	$568,750
Interest	As All Other	$143,918	$230,625	$303,541	$305,351	$319,865	$349,955	$392,088	$441,196	$489,132	$544,909
Water Capital Impr. Charge	Capital	$1,593,121	$1,747,881	$1,878,972	$2,010,500	$2,151,235	$2,301,821	$2,462,949	$2,635,355	$2,819,830	$3,017,218
Pumping Capital Impr. Charge	Capital	$16,378	$0	$0	$0	$0	$0	$0	$0	$0	$0
Facility Rent	As All Other	$261,189	$266,413	$271,741	$277,176	$282,720	$288,374	$294,142	$300,024	$306,025	$312,145
Gain/Loss on sale of assets/SDCWA Refund	As All Other	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Backflow Fee											
Pumping Charge											
Water Capacity Fees	Capital	$111,172	$111,172	$111,172	$111,172	$111,172	$111,172	$111,172	$111,172	$111,172	$111,172
Total Revenue		**$29,041,478**	**$30,858,035**	**$32,920,485**	**$35,035,639**	**$37,304,291**	**$39,484,045**	**$41,550,928**	**$43,732,827**	**$46,027,443**	**$48,242,338**
% Change from Previous Year		*0.1%*	*6.3%*	*6.7%*	*6.4%*	*6.5%*	*5.8%*	*5.2%*	*5.3%*	*5.2%*	*4.8%*

Draft FPUD Rate Study
Water Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Expenses	Category	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
		Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Purchased Water Costs	N/A	*$12,521,359*	*$13,356,811*	*$12,126,347*	*$12,800,383*	*$13,471,002*	*$14,079,894*	*$14,690,296*	*$15,337,194*	*$15,975,035*	*$16,672,486*
Treatment											
Salaries	SMCUP	$237,424	$254,044	$270,556	$284,084	$298,288	$313,203	$328,863	$345,306	$362,571	$380,700
Contractor Services	SMCUP	$80,000	$83,200	$86,944	$90,422	$94,039	$97,800	$101,712	$105,781	$110,012	$114,412
Equipment (Non Capital)	SMCUP	$5,000	$5,200	$5,434	$5,651	$5,877	$6,113	$6,357	$6,611	$6,876	$7,151
Materials/Services/Supplies	SMCUP	$278,498	$566,638	$592,137	$615,822	$640,455	$666,073	$692,716	$720,425	$749,242	$779,212
Memberships/Training/Permits	SMCUP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Utilities	SMCUP	$285,000	$825,000	$862,125	$896,610	$932,474	$969,773	$1,008,564	$1,048,907	$1,090,863	$1,134,498
Production & Dist.											
Salaries	Production & Dist.	$651,941	$704,097	$749,863	$787,356	$826,724	$868,060	$911,463	$957,036	$1,004,888	$1,055,132
Pumping Costs	Production & Dist.										
Water Treatment	Production & Dist.										
Other Services, Materials & Supplies	Production & Dist.										
Contractor Services	Production & Dist.	$101,000	$106,050	$110,822	$115,255	$119,865	$124,660	$129,646	$134,832	$140,226	$145,835
Equipment (Non Capital)	Production & Dist.	$20,000	$21,000	$21,945	$22,823	$23,736	$24,685	$25,673	$26,699	$27,767	$28,878
Materials/Services/Supplies	Production & Dist.	$224,000	$235,200	$245,784	$255,615	$265,840	$276,474	$287,533	$299,034	$310,995	$323,435
Professional Services	Production & Dist.	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Memberships/Training/Permits	Production & Dist.	$80,000	$84,000	$87,780	$91,291	$94,943	$98,741	$102,690	$106,798	$111,070	$115,512
Utilities	Production & Dist.	$90,000	$94,500	$98,753	$102,703	$106,811	$111,083	$115,526	$120,148	$124,953	$129,952
Pipeline Maint. & Const.											
Salaries	Pipeline Maint. & Const.	$439,956	$475,153	$506,038	$531,340	$557,907	$585,802	$615,092	$645,847	$678,139	$712,046
Contractor Services	Pipeline Maint. & Const.	$40,000	$42,000	$43,890	$45,646	$47,471	$49,370	$51,345	$53,399	$55,535	$57,756
Equipment (Non Capital)	Pipeline Maint. & Const.	$10,000	$10,500	$10,973	$11,411	$11,868	$12,343	$12,836	$13,350	$13,884	$14,439
Materials/Services/Supplies	Pipeline Maint. & Const.	$40,000	$42,000	$43,890	$45,646	$47,471	$49,370	$51,345	$53,399	$55,535	$57,756
System Services											
Salaries	System Services	$479,262	$517,603	$551,247	$578,810	$607,750	$638,138	$670,045	$703,547	$738,724	$775,660
Contractor Services	System Services	$106,000	$111,300	$116,309	$120,961	$125,799	$130,831	$136,064	$141,507	$147,167	$153,054
Equipment (Non Capital)	System Services	$0									
Materials/Services/Supplies	System Services	$105,000	$110,250	$115,211	$119,820	$124,612	$129,597	$134,781	$140,172	$145,779	$151,610
Allocated Admin Expenses											
Allocated Benefits Expenditures	Benefits	$1,214,646	$1,299,671	$1,371,153	$1,439,710	$1,511,696	$1,587,280	$1,666,645	$1,749,977	$1,837,476	$1,929,349
Allocation of Administrative Services	Administration	$4,690,063	$4,924,566	$5,146,171	$5,352,018	$5,566,099	$5,788,743	$6,020,293	$6,261,104	$6,511,549	$6,772,011
Total Operating Expenses		**$21,699,149**	**$23,868,782**	**$23,163,371**	**$24,313,376**	**$25,480,728**	**$26,608,033**	**$27,759,486**	**$28,971,073**	**$30,198,285**	**$31,510,885**
% Change from Previous Year		*5.6%*	*10.0%*	*-3.0%*	*5.0%*	*4.8%*	*4.4%*	*4.3%*	*4.4%*	*4.2%*	*4.3%*

Draft FPUD Rate Study
Water Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Existing Debt	Category	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
		Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Red Mountain SRF	Water System	$395,851	$395,851	$395,851	$395,851	$395,851	$395,851	$395,851	$395,851	$395,851	$0
SMCUP SRF	Supply Reliability	$1,081,968	$2,507,793	$2,507,793	$2,507,793	$2,507,793	$2,507,793	$2,507,793	$2,507,793	$2,507,793	$2,507,793
Total Existing Debt		**$1,477,819**	**$2,903,644**	**$2,903,644**	**$2,903,644**	**$2,903,644**	**$2,903,644**	**$2,903,644**	**$2,903,644**	**$2,903,644**	**$2,507,793**
% Change from Previous Year		*7.9%*	*96.5%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*-13.6%*

Capital	Category	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
		Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Inflated Capital											
Equipment	Water System	$0	$828,300	$532,956	$440,325	$569,204	$288,069	$306,183	$325,436	$345,899	$367,650
Reservoirs	Water System	$0	$549,685	$910,063	$776,693	$815,839	$593,278	$630,583	$670,234	$712,379	$757,173
10+YR Pipeline	Pipeline Maint. & Const.	$6,243,350	$3,847,257	$4,191,978	$4,863,295	$4,480,837	$5,365,869	$5,703,275	$6,061,897	$6,443,069	$6,848,209
District Yard-Facilities	Water System	$0	$53,891	$341,274	$0	$62,757	$0	$0	$72,146	$76,682	$81,504
Deluz District Pipeline Ext	Pipeline Maint. & Const.	$0	$107,781	$113,758	$119,491	$125,514	$131,840	$140,130	$148,941	$158,306	$168,261
Pressure Station Maint	Water System	$0	$118,560	$22,752	$0	$0	$0	$0	$0	$0	$0
Santa Margarita Conjunctive Use	SMCUP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Santa Margarita Water Rights	SMCUP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Pump Stations	Water System	$0	$183,228	$56,879	$59,746	$62,757	$65,920	$70,065	$571,979	$607,945	$646,173
Water Supply Facilities	Water System	$0	$53,891	$56,879	$59,746	$62,757	$131,840	$140,130	$148,941	$158,306	$168,261
Meter Service Replacement Pgm	System Services	$0	$21,556	$22,752	$23,898	$25,103	$26,368	$28,026	$29,788	$31,661	$33,652
Facility Upgrade-Security	Water System	$0	$91,614	$119,446	$125,466	$106,687	$138,432	$147,136	$156,388	$166,222	$176,674
SMCUP R&R	Supply Reliability	$0	$215,563	$227,516	$238,983	$251,027	$263,679	$280,259	$297,882	$316,613	$336,521
Administrative Upgrades	Water System	$105,000	$458,071	$28,439	$29,873	$31,378	$32,960	$35,032	$37,235	$39,577	$42,065
Engineering and Operations Information System	Water System	$30,000	$32,334	$34,127	$35,847	$37,654	$39,552	$42,039	$44,682	$47,492	$50,478
Facility Improvements/Upgrades/Security	Water System	$410,000	$350,290	$73,943	$77,669	$282,406	$85,696	$91,084	$96,812	$102,899	$109,369
Enhanced Pipeline Replacement	Pipeline Maint. & Const.	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Inflated Capital		**$6,788,350**	**$6,912,022**	**$6,732,761**	**$6,851,033**	**$6,913,919**	**$7,163,501**	**$7,613,942**	**$8,662,362**	**$9,207,051**	**$9,785,990**
% Change from Previous Year			*1.8%*	*-2.6%*	*1.8%*	*0.9%*	*3.6%*	*6.3%*	*13.8%*	*6.3%*	*6.3%*

Draft FPUD Rate Study
Wastewater Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.2%	0.2%	0.2%	0.2%	0.2%

Revenue	Allocation	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
			Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Operating Rev												
WW Service Charges		Growth	$6,593,721	$6,933,792	$7,291,402	$7,667,456	$8,062,905	$8,396,030	$8,575,554	$8,674,301	$8,774,186	$8,875,221
Class A Biosolids Sales		Non-inflated										
Sundry	As All Other	Non-inflated	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Non-Operating Rev												
Wastewater Capital Improvement Charge	Capital	ENR	$1,248,757	$1,332,602	$1,392,569	$1,448,272	$1,506,203	$1,566,451	$1,629,109	$1,694,274	$1,762,045	$1,832,526
WW Capacity fees	Capital	Growth	$40,371	$40,431	$40,492	$40,553	$40,613	$40,674	$40,735	$40,796	$40,858	$40,919
1% property tax - IDS	As All Other	Property Tax	$1,085,974	$1,096,833	$1,107,802	$1,118,880	$1,130,068	$1,141,369	$1,152,783	$1,164,311	$1,175,954	$1,187,713
CSI rebate		Non-inflated	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
WW SDGE offset		Non-inflated	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Federal Interest Rate Subsidy	Capital	Non-inflated	$84,516	$70,261	$55,178	$39,233	$22,388	$4,606	$0	$0	$0	$0
Other Non-Op Revenue		Non-inflated	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Interest	Administration	Interest	$10,954	$11,064	$11,230	$11,398	$11,569	$11,743	$11,919	$12,097	$12,279	$12,463
Total Revenue			**$9,065,292**	**$9,485,983**	**$9,899,673**	**$10,326,791**	**$10,774,747**	**$11,161,873**	**$11,411,100**	**$11,586,780**	**$11,766,321**	**$11,949,842**
% Change from Previous Year			*4.5%*	*4.6%*	*4.4%*	*4.3%*	*4.3%*	*3.6%*	*2.2%*	*1.5%*	*1.5%*	*1.6%*

Draft FPUD Rate Study
Wastewater Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.2%	0.2%	0.2%	0.2%	0.2%

Revenue	Allocation	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
			Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Expenses[1]	**Allocation**	**Escalation**	**FY 22-23**	**FY 23-24**	**FY 24-25**	**FY 25-26**	**FY 26-27**	**FY 27-28**	**FY 28-29**	**FY 29-30**	**FY 30-31**	**FY 31-32**
			Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Collection/Flows												
Salaries	Collection/Flow	Salaries	$479,842	$518,229	$551,914	$579,510	$608,485	$638,909	$670,855	$704,397	$739,617	$776,598
Contractor Services	Collection/Flow	CPI	$75,000	$78,750	$82,294	$85,586	$89,009	$92,569	$96,272	$100,123	$104,128	$108,293
Equipment (Non Capital)	Collection/Flow	CPI	$5,000	$5,250	$5,486	$5,706	$5,934	$6,171	$6,418	$6,675	$6,942	$7,220
Materials/Services/Supplies	Collection/Flow	CPI	$170,000	$178,500	$186,533	$193,994	$201,754	$209,824	$218,217	$226,945	$236,023	$245,464
Professional Services	Collection/Flow	CPI	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Memberships/Training/Permits	Collection/Flow	CPI	$900	$945	$988	$1,027	$1,068	$1,111	$1,155	$1,201	$1,250	$1,300
Utilities	Collection/Flow	Electricity	$122,300	$128,415	$134,836	$141,578	$148,656	$156,089	$163,894	$172,088	$180,693	$189,727
Treatment												
Salaries	Treatment	Salaries	$843,479	$910,958	$970,170	$1,018,678	$1,069,612	$1,123,093	$1,179,248	$1,238,210	$1,300,121	$1,365,127
Contractor Services	Treatment	CPI	$353,000	$370,650	$387,329	$402,822	$418,935	$435,693	$453,120	$471,245	$490,095	$509,699
Equipment (Non Capital)	Treatment	CPI	$7,000	$7,350	$7,681	$7,988	$8,307	$8,640	$8,985	$9,345	$9,719	$10,107
Materials/Services/Supplies	Treatment	CPI	$297,500	$312,375	$326,432	$339,489	$353,069	$367,191	$381,879	$397,154	$413,040	$429,562
Professional Services	Treatment	CPI	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Memberships/Training/Permits	Treatment	CPI	$95,000	$99,750	$104,239	$108,408	$112,745	$117,254	$121,945	$126,822	$131,895	$137,171
Utilities	Treatment	Electricity	$157,600	$165,480	$173,754	$182,442	$191,564	$201,142	$211,199	$221,759	$232,847	$244,489
Allocated Admin Expenses												
Allocated Benefits Expenditures	As All Other	Benefits	$903,448	$966,689	$1,019,857	$1,070,850	$1,124,393	$1,163,747	$1,204,478	$1,246,634	$1,290,267	$1,335,426
Allocated Admin Expenditures	Administration	CPI	$2,564,878	$2,693,122	$2,814,313	$2,926,885	$3,043,960	$3,165,719	$3,292,348	$3,424,041	$3,561,003	$3,703,443
Total Operating Expenses			**$6,074,947**	**$6,436,463**	**$6,765,824**	**$7,064,962**	**$7,377,491**	**$7,687,152**	**$8,010,012**	**$8,346,642**	**$8,697,639**	**$9,063,626**
% Change from Previous Year			*6.9%*	*6.0%*	*5.1%*	*4.4%*	*4.4%*	*4.2%*	*4.2%*	*4.2%*	*4.2%*	*4.2%*

Draft FPUD Rate Study
Wastewater Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.2%	0.2%	0.2%	0.2%	0.2%

Revenue	Allocation	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
			Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*

Existing Debt	Allocation	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
			Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Solar QECB	Collection/Flow	Non-inflated	$521,667	$521,690	$521,362	$520,665	$519,579	$261,515	$0	$0	$0	$0
WWTP SRF	Treatment	Non-inflated	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
WW Revenue Refunding Bonds	Treatment	Non-inflated	$1,211,715	$1,211,522	$1,213,502	$1,210,954	$1,212,190	$1,209,880	$1,209,740	$1,211,630	$1,211,980	$1,210,790
Total Existing Debt			**$1,733,383**	**$1,733,212**	**$1,734,864**	**$1,731,618**	**$1,731,769**	**$1,471,395**	**$1,209,740**	**$1,211,630**	**$1,211,980**	**$1,210,790**
% Change from Previous Year			*0.1%*	*0.0%*	*0.1%*	*-0.2%*	*0.0%*	*-15.0%*	*-17.8%*	*0.2%*	*0.0%*	*-0.1%*

Capital	Allocation	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
			Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Inflated Capital												
Collection/Flow System Improvements	Collection/Flow	ENR	$540,000	$395,558	$329,898	$346,525	$326,335	$342,783	$364,337	$387,246	$411,597	$437,478
WRP Improvements	Treatment	ENR	$281,000	$215,563	$227,516	$477,965	$815,839	$725,117	$266,657	$277,323	$288,416	$299,953
Outfall Improvements	Collection/Flow	ENR	$50,000	$53,891	$56,879	$298,728	$138,065	$145,023	$146,661	$152,528	$158,629	$164,974
Lift Station Improvements	Collection/Flow	ENR	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Inflated Capital			**$871,000**	**$665,011**	**$614,293**	**$1,123,218**	**$1,280,239**	**$1,212,924**	**$777,655**	**$817,098**	**$858,642**	**$902,405**
% Change from Previous Year			*-10.2%*	*-23.6%*	*-7.6%*	*82.8%*	*14.0%*	*-5.3%*	*-35.9%*	*5.1%*	*5.1%*	*5.1%*

Draft FPUD Rate Study
Recycled Water Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Revenue	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
		Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Operating Rev											
RW Rate Revenue		$1,237,981	$1,270,834	$1,304,559	$1,339,179	$1,374,717	$1,414,683	$1,459,309	$1,505,343	$1,552,829	$1,586,032
MWD/CWA Incentive	Calculated	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Sundry	Non-inflated	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000
Non-Operating Rev											
1% Property tax	Property Tax	$54,030	$54,300	$54,572	$54,844	$55,393	$55,947	$56,506	$57,071	$57,642	$58,218
Interest	Interest	$2,304	$4,380	$7,193	$7,733	$9,152	$10,657	$12,276	$14,029	$15,940	$17,979
Total Revenue		**$1,299,315**	**$1,334,514**	**$1,371,324**	**$1,406,756**	**$1,444,262**	**$1,486,287**	**$1,533,092**	**$1,581,443**	**$1,631,412**	**$1,667,230**
% Change from Previous Year		*9.1%*	*2.7%*	*2.8%*	*2.6%*	*2.7%*	*2.9%*	*3.1%*	*3.2%*	*3.2%*	*2.2%*

Draft FPUD Rate Study
Recycled Water Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Expenses	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
		Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Production											
Salaries	Salaries	$181,861	$196,410	$209,176	$219,635	$230,617	$242,148	$254,255	$266,968	$280,316	$294,332
Contractor Services	CPI	$36,000	$37,800	$39,501	$41,081	$42,724	$44,433	$46,211	$48,059	$49,981	$51,981
Equipment (Non Capital)	CPI	$4,000	$4,200	$4,389	$4,565	$4,747	$4,937	$5,135	$5,340	$5,553	$5,776
Materials/Services/Supplies	CPI	$89,500	$93,975	$98,204	$102,132	$106,217	$110,466	$114,885	$119,480	$124,259	$129,230
Utilities	CPI	$68,000	$71,400	$74,613	$77,598	$80,701	$83,929	$87,287	$90,778	$94,409	$98,186
Distribution											
Salaries	Salaries	$10,438	$11,273	$12,006	$12,606	$13,237	$13,898	$14,593	$15,323	$16,089	$16,894
Contractor Services	Calculated										
Equipment (Non Capital)	Calculated										
Materials/Services/Supplies	CPI	$25,000	$26,250	$27,431	$28,529	$29,670	$30,856	$32,091	$33,374	$34,709	$36,098
Allocated Admin Expenses											
Benefits Expenditures	Benefits	$123,921	$132,595	$139,888	$146,882	$154,226	$159,624	$165,211	$170,993	$176,978	$183,172
Administrative Services	CPI	$73,282	$76,946	$80,409	$83,625	$86,970	$90,449	$94,067	$97,830	$101,743	$105,813
Total Operating Expenses		**$612,002**	**$650,849**	**$685,617**	**$716,652**	**$749,110**	**$780,741**	**$813,733**	**$848,145**	**$884,039**	**$921,480**
% Change from Previous Year		*25.5%*	*6.3%*	*5.3%*	*4.5%*	*4.5%*	*4.2%*	*4.2%*	*4.2%*	*4.2%*	*4.2%*

Draft FPUD Rate Study
Recycled Water Enterprise
Revenues and Expenses

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Salaries	7.0%	8.0%	6.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Benefits	6.5%	7.0%	5.5%	5.0%	5.0%	3.5%	3.5%	3.5%	3.5%	3.5%
CPI	5.0%	5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR	5.5%	6.7%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
ENR + 3%	8.5%	9.7%	7.5%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Property Tax	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Rent - 2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Interest	0.6%	1.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Existing Debt	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
		Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
WW Revenue Refunding Bonds	Non-inflated	$519,307	$519,224	$520,072	$518,980	$519,510	$518,520	$518,460	$519,270	$519,420	$518,910
Total Existing Debt		**$519,307**	**$519,224**	**$520,072**	**$518,980**	**$519,510**	**$518,520**	**$518,460**	**$519,270**	**$519,420**	**$518,910**
% Change from Previous Year		*0.1%*	*0.0%*	*0.2%*	*-0.2%*	*0.1%*	*-0.2%*	*0.0%*	*0.2%*	*0.0%*	*-0.1%*

Capital	Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
		Budgeted	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Non-Inflated Capital Inputs											
Recycled Water Improvements		*$114,000*	*$115,140*	*$116,291*	*$65,939*	*$62,436*	*$63,061*	*$64,448*	*$63,810*	*$65,214*	*$66,648*
Total Non-Inflated Capital		**$114,000**	**$115,140**	**$116,291**	**$65,939**	**$62,436**	**$63,061**	**$64,448**	**$63,810**	**$65,214**	**$66,648**
% Change from Previous Year		*-65.2%*	*1.0%*	*1.0%*	*-43.3%*	*-5.3%*	*1.0%*	*2.2%*	*-1.0%*	*2.2%*	*2.2%*
Total Inflated Capital	ENR	**$114,000**	**$122,871**	**$129,684**	**$76,474**	**$75,308**	**$79,104**	**$84,078**	**$86,575**	**$92,019**	**$97,805**
% Change from Previous Year		*-65.2%*	*7.8%*	*5.5%*	*-41.0%*	*-1.5%*	*5.0%*	*6.3%*	*3.0%*	*6.3%*	*6.3%*

Draft FPUD Rate Study
Water Enterprise
Allocation Calculations

Customer Service and Billing Portion of Administrative Expenses	FY 22/23 Budget	Billing and CS Allocation	Billing and CS Amount
Finance & Customer Service (CS)			
Salaries	$ 856,036	50%	$ 428,018
Contractor Services	24,000	90%	21,600
Equipment (Non Capital)	4,500	90%	4,050
Materials/Services/Supplies	145,200	95%	137,940
Professional Services	181,500	20%	36,300
Memberships/Training/Permits	2,700		-
Utilities	-		-
Division Operating Total	$ 1,213,936		$ 627,908
Information Management	$ 457,018	50%	$ 228,509
Billing and CS Total	$ 1,670,954		$ 856,417
Administrative Services Operating Total			$ 5,513,151
Billing and CS Portion of Administrative Services			**15.53%**

System Services Portion of Administrative Services	FY 22/23 Budget	Portion of Operating Costs	Portion of Administrative Services Less Billing and CS
Administrative Services Less Billing and CS			84.47%
Operating Total	$18,402,933	100.00%	84.47%
System Services	**$858,162**	**4.66%**	**3.94%**

Draft FPUD Rate Study
Water Enterprise
Allocation Calculations

Benefits Allocation	Salaries	Salary %
Treatment	$237,424	6.70%
Production & Distribution	$651,941	18.39%
Pipeline Maintenance & Construction	$439,956	12.41%
System Services	$479,262	13.52%
Allocated Admin Expenses	$1,736,326	48.98%
Total	**$3,544,910**	100.00%

Allocation Amounts	Private Fire Capacity	Customer	Water Meter Service	Water Capacity	All Volume	SMCUP	Red Mountain	Conservation
SMCUP	0.0%	0.0%	0.0%	0.0%	0.0%	89.1%	10.9%	0.0%
Production & Distribution	0.07%	0.00%	0.00%	0.00%	94.93%	0.00%	5.00%	0.00%
Pipeline Maintenance & Construction	0.07%	0.00%	0.00%	50.00%	49.93%	0.00%	0.00%	0.00%
System Services	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Administration	0.07%	15.53%	3.94%	60.00%	18.46%	0.00%	0.00%	2.00%
Salary Allocation	$2,062	$269,651	$547,656	$1,261,774	$1,159,020	$211,460	$58,561	$34,727
Allocation Amounts	**0.1%**	**7.6%**	**15.4%**	**35.6%**	**32.7%**	**6.0%**	**1.7%**	**1.0%**

Conservation Portion of Administrative Services	FY 22/23 Budget	Conservation	Conservation
	$	*$*	*%*
1% Customer Service Salaries		$2,584	
40% Public Affairs Salary		$44,237	
Additional comm. Outreach		$25,000	
WaterSmart Software		$22,000	
Water Allocation of Administrative Services	$4,690,063	$93,822	2.0%

Draft FPUD Rate Study
Water Enterprise
Allocation Calculations

Production & Distribution Allocation to Red Mountain	FY 22/23 Budget	Red Mountain Reservoir, Well, and UV Portion	Red Mountain Reservoir, Well, and UV Portion
	$	*%*	*$*
Salaries	$651,941	5%	$32,597
Contractor Services	$101,000	45%	$45,450
Equipment (Non Capital)	$20,000	0%	$0
Materials/Services/Supplies	$224,000	18%	$40,320
Professional Services	$0	0%	$0
Memberships/Training/Permits	$80,000	63%	$50,000
Utilities	$90,000	55%	$49,500
Total	$1,166,941		$217,867
Production & Distribution Allocation to Red Mountain %			**18.670%**

Pumping Charge Revenue Allocation	Pumping Charge Revenue
FY 22/23 Pumping Charge Revenue	$155,278
Pumping Charge Rate Increases	1.37
FY 26/27 Pumping Charge Revenue	**$212,744**

Draft FPUD Rate Study
Water Enterprise
Water Supplies and Variable Cost

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
MWD RTS Charge		14.9%	13.1%	0.0%	0.0%	1.4%	6.4%	9.4%	7.9%	9.8%
SDCWA IAC		7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
MWD Capacity Charge		-1.5%	12.8%	12.2%	8.5%	11.3%	16.2%	12.3%	6.5%	5.7%
Supply Reliability Charge		7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Customer Service Charge		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Storage Charge		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Melded Treated Rate		5.5%	5.5%	5.4%	3.9%	3.0%	3.0%	2.6%	2.8%	3.5%
Special Ag Treated Rate (SAWR)		5.5%	5.5%	5.4%	3.9%	3.0%	3.0%	2.6%	2.8%	3.5%
SMCUP Water Variable		5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Water Volume Projections (Acre Feet)

		Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
Water Supply Inputs Have Gray Fill			*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
Total Water Supply Volume		Growth	**8,000**	**8,012**	**8,024**	**8,036**	**8,048**	**8,060**	**8,072**	**8,084**	**8,097**	**8,109**
FPUD Water Production												
Red Mountain Well			85	85	85	85	85	85	85	85	85	85
SMCUP Water			1,300	1,300	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100
Purchased Water Supply												
MWD/CWA Water			6,615	6,627	4,839	4,851	4,863	4,875	4,887	4,899	4,912	4,924
Special Ag Treated Rate (SAWR)			1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474
Jul - Dec	71%		1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052
Jan - Jun	29%		422	422	422	422	422	422	422	422	422	422
Melded Treated Rate			5,141	5,153	3,365	3,377	3,389	3,401	3,413	3,425	3,437	3,449
Jul - Dec	73%		3,737	3,745	2,446	2,454	2,463	2,472	2,481	2,490	2,498	2,507
Jan - Jun	27%		1,404	1,407	919	922	926	929	932	935	939	942

Draft FPUD Rate Study
Water Enterprise
Water Supplies and Variable Cost

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
MWD RTS Charge		14.9%	13.1%	0.0%	0.0%	1.4%	6.4%	9.4%	7.9%	9.8%
SDCWA IAC		7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
MWD Capacity Charge		-1.5%	12.8%	12.2%	8.5%	11.3%	16.2%	12.3%	6.5%	5.7%
Supply Reliability Charge		7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Customer Service Charge		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Storage Charge		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Melded Treated Rate		5.5%	5.5%	5.4%	3.9%	3.0%	3.0%	2.6%	2.8%	3.5%
Special Ag Treated Rate (SAWR)		5.5%	5.5%	5.4%	3.9%	3.0%	3.0%	2.6%	2.8%	3.5%
SMCUP Water Variable		5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Water Supply Cost Projections		Escalation	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
			Projected	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*	*Projected*
SMCUP Camp Pendleton Charges												
FPUD Variable O&M and CPEN OP&	$/AF	SMCUP Water Variable	$248	$260	$272	$282	$294	$306	$318	$330	$344	$357
R&R paid by FPUD	$/AF	SMCUP Water Variable	$138	$145	$152	$158	$164	$171	$178	$185	$192	$200
Total SMCUP Camp Pendleton Charges			**$501,592**	**$526,672**	**$1,312,425**	**$1,364,922**	**$1,419,519**	**$1,476,300**	**$1,535,352**	**$1,596,766**	**$1,660,636**	**$1,727,062**
MWD Fixed Costs												
MWD RTS Charge												
Jul - Dec	$ / month	MWD RTS Charge	$22,038	$25,319	$28,637	$28,637	$28,637	$29,028	$30,892	$33,796	$36,467	$40,033
Jan - Jun	$ / month	MWD RTS Charge	$22,038	$25,319	$28,637	$28,637	$28,637	$29,028	$30,892	$33,796	$36,467	$40,033
Total MWD RTS Charge	$ / year		$264,456	$303,831	$343,644	$343,644	$343,644	$348,338	$370,699	$405,549	$437,601	$480,396
MWD Capacity Charge												
Jul - Dec	$ / month	MWD Capacity Charge	$22,647	$16,858	$16,609	$18,734	$21,013	$22,792	$25,367	$29,480	$33,121	$35,275
Jan - Jun	$ / month	MWD Capacity Charge	$16,858	$16,609	$18,734	$21,013	$22,792	$25,367	$29,480	$33,121	$35,275	$37,299
Total MWD Capacity Charge	$ / year		$237,030	$200,804	$212,061	$238,483	$262,829	$288,951	$329,080	$375,605	$410,372	$435,439
SDCWA Fixed Costs												
SDCWA IAC												
Jul - Dec	$ / month	SDCWA IAC	$50,401	$50,227	$53,743	$57,505	$61,530	$65,837	$70,446	$75,377	$80,654	$86,299
Jan - Jun	$ / month	SDCWA IAC	$50,227	$53,743	$57,505	$61,530	$65,837	$70,446	$75,377	$80,654	$86,299	$92,340
Total SDCWA IAC	$ / year		$603,768	$623,819	$667,487	$714,211	$764,206	$817,700	$874,939	$936,185	$1,001,718	$1,071,838
Supply Reliability Charge												
Jul - Dec	$ / month	Supply Reliability Charge	$55,104	$58,928	$63,053	$67,467	$72,189	$77,243	$82,650	$88,435	$94,625	$101,249
Jan - Jun	$ / month	Supply Reliability Charge	$58,928	$63,053	$67,467	$72,189	$77,243	$82,650	$88,435	$94,625	$101,249	$108,337
Total Supply Reliability Charge	$ / year		$684,192	$731,886	$783,118	$837,936	$896,592	$959,353	$1,026,508	$1,098,363	$1,175,249	$1,257,516
Customer Service Charge												
Jul - Dec	$ / month	Customer Service Charge	$46,806	$45,834	$48,126	$50,532	$53,059	$55,712	$58,497	$61,422	$64,493	$67,718
Jan - Jun	$ / month	Customer Service Charge	$45,834	$48,126	$50,532	$53,059	$55,712	$58,497	$61,422	$64,493	$67,718	$71,104
Total Customer Service Charge	$ / year		$555,840	$563,758	$591,946	$621,543	$652,621	$685,252	$719,514	$755,490	$793,264	$832,928
Storage Charge												
Jul - Dec	$ / month	Storage Charge	$87,714	$87,034	$91,386	$95,955	$100,753	$105,790	$111,080	$116,634	$122,466	$128,589
Jan - Jun	$ / month	Storage Charge	$87,034	$91,386	$95,955	$100,753	$105,790	$111,080	$116,634	$122,466	$128,589	$135,018
Total Storage Charge	$ / year		$1,048,488	$1,070,518	$1,124,044	$1,180,246	$1,239,259	$1,301,222	$1,366,283	$1,434,597	$1,506,327	$1,581,643

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
MWD RTS Charge		14.9%	13.1%	0.0%	0.0%	1.4%	6.4%	9.4%	7.9%	9.8%
SDCWA IAC		7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
MWD Capacity Charge		-1.5%	12.8%	12.2%	8.5%	11.3%	16.2%	12.3%	6.5%	5.7%
Supply Reliability Charge		7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Customer Service Charge		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Storage Charge		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Melded Treated Rate		5.5%	5.5%	5.4%	3.9%	3.0%	3.0%	2.6%	2.8%	3.5%
Special Ag Treated Rate (SAWR)		5.5%	5.5%	5.4%	3.9%	3.0%	3.0%	2.6%	2.8%	3.5%
SMCUP Water Variable		5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

SDCWA Variable Costs

Special Ag Treated Rate (SAWR)											
Jul - Dec	$/AF	Special Ag Treated Rate (SAWR)	$1,109	$1,205	$1,271	$1,341	$1,413	$1,469	$1,512	$1,558	$1,598	$1,643
Jan - Jun	$/AF	Special Ag Treated Rate (SAWR)	$1,205	$1,271	$1,341	$1,413	$1,469	$1,512	$1,558	$1,598	$1,643	$1,701
Total Special Ag Treated Rate (SAWI	$ / year		$1,675,702	$1,804,625	$1,903,792	$2,007,981	$2,107,392	$2,184,372	$2,249,122	$2,313,843	$2,375,326	$2,447,289
Melded Treated Rate											
Jul - Dec	$/AF	Melded Treated Rate	$1,319	$1,440	$1,519	$1,603	$1,689	$1,756	$1,807	$1,862	$1,910	$1,964
Jan - Jun	$/AF	Melded Treated Rate	$1,440	$1,519	$1,603	$1,689	$1,756	$1,807	$1,862	$1,910	$1,964	$2,033
Total Melded Treated Rate	$ / year		$6,950,291	$7,530,897	$5,187,830	$5,491,416	$5,784,941	$6,018,407	$6,218,800	$6,420,798	$6,614,543	$6,838,376

Draft FPUD Rate Study
Water Enterprise
Water Supplies and Variable Cost

Escalation Factors	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
MWD RTS Charge		14.9%	13.1%	0.0%	0.0%	1.4%	6.4%	9.4%	7.9%	9.8%
SDCWA IAC		7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
MWD Capacity Charge		-1.5%	12.8%	12.2%	8.5%	11.3%	16.2%	12.3%	6.5%	5.7%
Supply Reliability Charge		7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Customer Service Charge		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Storage Charge		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Melded Treated Rate		5.5%	5.5%	5.4%	3.9%	3.0%	3.0%	2.6%	2.8%	3.5%
Special Ag Treated Rate (SAWR)		5.5%	5.5%	5.4%	3.9%	3.0%	3.0%	2.6%	2.8%	3.5%
SMCUP Water Variable		5.0%	4.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Growth		0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%	0.15%

Projected Water Purchase Cost Summary	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30	FY 30-31	FY 31-32
SMCUP Camp Pendleton Charges	$501,592	$526,672	$1,312,425	$1,364,922	$1,419,519	$1,476,300	$1,535,352	$1,596,766	$1,660,636	$1,727,062
MWD Charges										
MWD RTS Charge	$264,456	$303,831	$343,644	$343,644	$343,644	$348,338	$370,699	$405,549	$437,601	$480,396
MWD Capacity Charge	$237,030	$200,804	$212,061	$238,483	$262,829	$288,951	$329,080	$375,605	$410,372	$435,439
SDCWA Charges										
Melded Treated Rate	$6,950,291	$7,530,897	$5,187,830	$5,491,416	$5,784,941	$6,018,407	$6,218,800	$6,420,798	$6,614,543	$6,838,376
SDCWA IAC	$603,768	$623,819	$667,487	$714,211	$764,206	$817,700	$874,939	$936,185	$1,001,718	$1,071,838
Supply Reliability Charge	$684,192	$731,886	$783,118	$837,936	$896,592	$959,353	$1,026,508	$1,098,363	$1,175,249	$1,257,516
Customer Service Charge	$555,840	$563,758	$591,946	$621,543	$652,621	$685,252	$719,514	$755,490	$793,264	$832,928
Storage Charge	$1,048,488	$1,070,518	$1,124,044	$1,180,246	$1,239,259	$1,301,222	$1,366,283	$1,434,597	$1,506,327	$1,581,643
Special Ag Treated Rate (SAWR)	$1,675,702	$1,804,625	$1,903,792	$2,007,981	$2,107,392	$2,184,372	$2,249,122	$2,313,843	$2,375,326	$2,447,289
Water Purchase Costs	**$12,521,359**	**$13,356,811**	**$12,126,347**	**$12,800,383**	**$13,471,002**	**$14,079,894**	**$14,690,296**	**$15,337,194**	**$15,975,035**	**$16,672,486**

APPENDIX B

Notice of Public Hearing on Proposed Water, Wastewater and Recycled Water Rate Increases

Notice of Public Hearing on Proposed Water, Wastewater & Recycled Water Rate Increases

Date: November 16, 2022
Time: 9:00 am

JOIN US IN PERSON

Fallbrook Public Utility District
990 E. Mission Rd., Fallbrook, CA

JOIN US VIA ZOOM

https://bit.ly/3qEI80e

JOIN US VIA PHONE

Dial: (669) 444-9171
Meeting ID: 826 6289 5501
Passcode: 720961

Dear Property Owner or Customer of Record,

The Fallbrook Public Utility District (FPUD) is proposing to gradually phase in water, wastewater, and recycled water rate increases over the next five years to support operating and maintenance needs and provide adequate funding for capital improvements that will support safe and reliable service. The rates shown in this notice are the proposed maximum rates to be authorized. Each year, as it has in the past, FPUD will review the District's current financial position to determine the necessary rate increase.

FPUD's utilities are self-supporting and rely on service charge revenues to meet annual funding needs. As such, water, wastewater and recycled water rates need to be set at levels adequate to fund each utility's costs of providing service. The proposed rate increases are phased in over the next five years, with the first rate increases scheduled to become effective for service provided on and after January 1, 2023. The proposed rates are based on a recently updated Water, Wastewater and Recycled Water Rate Study, developed by an independent utility rate consultant, and reflect substantial input from District staff and the District's Fiscal Policy & Insurance Committee.

Members of the public are currently invited to attend the Public Hearing virtually or in person. If FPUD determines to hold the Public Hearing only virtually due to a state of emergency or public health concern pursuant to AB 361 or other applicable law, information will be posted on our website as soon as possible and included in the meeting agenda.

Moving Forward to Secure Low-Cost Water Supplies

Over the past decade, FPUD has had substantial increases in the cost of wholesale water supply imported from the San Diego County Water Authority (SDCWA). In an effort to keep water rates as low as possible, FPUD has engaged in major efforts to secure lower-cost water supplies for our customers. Recent accomplishments include:

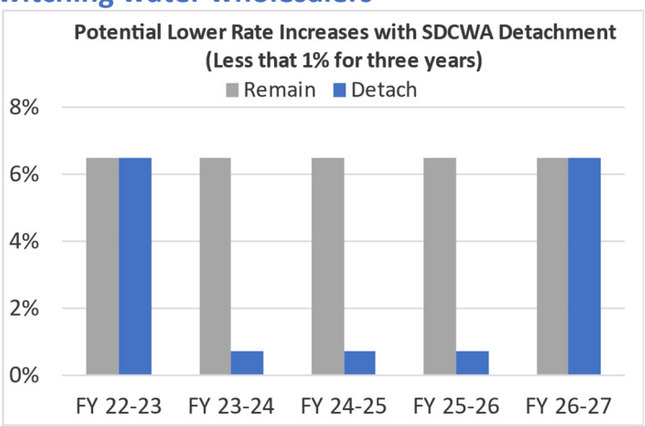
- Local water is now flowing from Fallbrook taps! After seven decades of legal and bureaucratic hurdles, the Santa Margarita River Conjunctive Use Project (SMRCUP) is now complete. It provides FPUD with its own local water supply, reducing reliance on imported water, and improving water reliability. We obtained a low-interest rate loan from California's State Revolving Fund to help finance the project. It provides a significant portion of our water and reduces our need to buy expensive imported water that increases in cost every year.
- Expanded our recycled water distribution system to increase our capacity to deliver highly treated recycled water produced at our Water Reclamation Plant for landscaping and irrigation.
- FPUD is also engaged in efforts to detach from the San Diego County Water Authority to buy lower-cost water and save customers money (see next page).

Our state-of-the-art treatment plant has been up and running since November 2021.

We're working to save millions of dollars by switching water wholesalers

We're working with Rainbow Municipal Water District to detach from the San Diego County Water Authority and instead buy imported water at a lower cost from Eastern Municipal Water District. The savings to FPUD are currently estimated at $3 million per year.

We've held three town hall meetings on how the process works, drawing large crowds of more than 130 people at each event. Our detachment must first be approved by the Local Agency Formation Commission, or LAFCO. LAFCO is reviewing our applications to detach and will likely make a decision later this year. If our application is approved, FPUD voters would have the final say in a future election held in the District's service area.



Based on current financial projections and with no detachment exit fee imposed by LAFCO, FPUD anticipates that it will be able to pass through detachment savings to customers via lower overall rate increases. The chart above shows the proposed maximum rate revenue increases without detachment (gray) and potential and estimated reduction after detachment from SDCWA (blue), based on currently available information.

FPUD is working to rehabilitate and replace old pipelines and other aging facilities.

Proactively replacing aging pipelines to prevent breaks and reduce costly emergency repairs

FPUD has over 350 miles of water and sewer pipelines. Some of our buried pipelines are over 80 years old. When the pipes become weak, damaged or are simply old, they are in danger of breaking and resulting in water leaks that can cause property damage and are expensive to fix. Our staff is strategically identifying pipelines most in need of repair or replacement and performing scheduled shutdowns on the pipes that need it most.

Community Input & Written Protest Procedures

Customers, property owners, and community members are invited to attend the Public Hearing to provide input. Customers and property owners may also submit written protests against the proposed rate increases. Pursuant to California law, protests must be submitted in writing and must a) identify the affected property or properties, such as by service address or Assessor's Parcel Number, b) include the name and original signature of the customer or property owner submitting the protest, and c) indicate opposition to the proposed water, wastewater and/or recycled water rate increases. Protests or comments submitted by e-mail, fax or other electronic means are not counted as written protests. The proposed rates cannot be adopted if written protests are received from a majority (more than 50%) of affected parcels with one protest counted per parcel. Written protests can be mailed or hand delivered to: Fallbrook Public Utility District, 990 E. Mission Rd., Fallbrook, CA 92028. Hand delivered protests may be delivered to the District's office or deposited in the drop box located in the District's parking lot, or may be hand-delivered to the Board Secretary at the Public Hearing. Written protests must be received by the Board Secretary before the close of the Public Hearing on November 16, 2022.

As a public utility, FPUD does not profit from charges for water, wastewater or recycled water services. Pursuant to California law, all funds collected are used to pay for the costs of operating, maintaining our utilities, and investing in our infrastructure. We understand that rate increases place additional burden on our customers, particularly people on fixed incomes, and we plan to re-evaluate our finances and rates each year to ensure rates continue to recover the costs of providing service without unnecessary increases.

FPUD turned 100 years old on June 5, 2022 and is now using local water from the Santa Margarita River.

Proposed Maximum Water Rates

FPUD is proposing to phase in a series of annual water rate increases over the next five years with the maximum allowable increases as shown on the table below. Water rate increases are needed to support water system operating expenses, pay for increasing costs of wholesale water supply, provide adequate funding for maintenance of facilities and equipment, meet annual debt service funding requirements, keep up with cost inflation, and help ensure continued compliance with regulatory requirements. The proposed water rates also help support high-priority capital improvements to FPUD's aging water system infrastructure to support safe and reliable service. FPUD's water rates include a number of components including:

- **Fixed Monthly Service Charges**: These charges are levied independently of water use and are based on the size of each customer's water meter.
- **Volumetric Charges**: As proposed, Residential volumetric charges are billed in 2 Tiers, with a lower rate for the first 5,000 gallons of water use in Tier 1, and all additional water use billed at the Tier 2 rate. Commercial, Government and Irrigation customers are billed a uniform rate for all water use. Agricultural customers are billed as shown below with lower rates for customers who qualify for SDCWA's Special Ag Water Program. Water volumetric charges are billed in units of 1,000 gallons (Kgal).
- In addition, FPUD will also continue to levy Capital Improvement Charges, Pass-Through Charges for SDCWA Infrastructure Access Charges, Standby Charges, and Private Fire Service Charges as described later in this notice.

Proposed Maximum Water Rates

	Current Water Rates*	Proposed Maximum Rates Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Monthly Fixed Service Charges						
Billed based on meter size.						
3/4"	$57.91	$60.60	$64.54	$68.74	$73.21	$77.97
1"	88.65	96.51	102.78	109.46	116.57	124.15
1-1/2"	165.42	185.46	197.51	210.35	224.02	238.58
2"	257.59	292.64	311.66	331.92	353.49	376.47
3"	503.36	578.82	616.44	656.51	699.18	744.63
4"	779.84	900.36	958.88	1,021.21	1,087.59	1,158.28
6"	1,547.83	1,793.16	1,909.72	2,033.85	2,166.05	2,306.84
Volumetric Charges						
Billed based on metered water use as measured in units of 1,000 gallons ($/Kgal).						
Residential: Domestic (D), Large Lot Domestic (LD) & Multi Unit (M)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: >5 Kgal	6-30 Kgal: 7.27 >30 Kgal: 8.86	8.06	8.58	9.14	9.73	10.36
Commercial (C)	$7.38	$7.72	$8.22	$8.75	$9.32	$9.93
Government (G)	7.26	7.72	8.22	8.75	9.32	9.93
Irrigation Only (I)	7.39	7.72	8.22	8.75	9.32	9.93
Agriculture SAWR (AS)	$5.31	$5.63	$6.00	$6.39	$6.81	$7.25
Commercial Ag (CA)	6.15	6.38	6.79	7.23	7.70	8.20
Agriculture Domestic (AT)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: 6-17 Kgal	6.15	6.38	6.79	7.23	7.70	8.20
Tier 3: >17 Kgal	5.31	5.63	6.00	6.39	6.81	7.25
Commercial Domestic Ag (CB)						
Tier 1 : 0-5 Kgal	$7.17	$7.31	$7.79	$8.30	$8.84	$9.41
Tier 2: >5 Kgal	6.15	6.38	6.79	7.23	7.70	8.20
Pumping Charges (Deluz & Toyon Service Areas)	$0.88	$0.72	$0.77	$0.82	$0.87	$0.93

* Current Monthly Fixed Service Charges shown also include current MWD Readiness-to-Serve (RTS) Charges. RTS Charges will be included in the proposed Monthly Fixed Service Charges starting January 1, 2023. Residential Volumetric Charges are currently billed in 3 Tiers, but will transition to 2 Tiers starting January 1, 2023. During water shortages, volumetric rates with the exception of SAWR, are subject to water shortage emergency surcharges shown later in this notice.

Proposed Maximum Water Rates (continued)

Proposed maximum allowable water service charges are shown on the following table. The proposed charges will be reviewed and adopted each year and reflect the cost of service associated with each type of charge.

- **Water Capital Improvement Charges (CIC)**: These charges are billed based on meter size and help recover costs for repairing, replacing and upgrading FPUD's aging water system to support safe and reliable operations. These charges may also help recover costs for debt service issued to fund water system improvements. Charges effective January 1, 2023 are shown below. FPUD is proposing to authorize automatic annual adjustments to these charges on January 1, 2024, and each January 1 thereafter through and including January 1, 2027, based on the annual change in the Engineering News-Record Construction Cost Index for Los Angeles through February of the preceding year, plus 3%, subject to a maximum annual adjustment of 10%.
- **SDCWA Infrastructure Access Charges (IAC)**: These charges are a direct pass-through of charges levied by SDCWA. Charges effective January 1, 2023 are shown below. FPUD is proposing to authorize automatic annual adjustments to these charges on any date through and including December 31, 2027, based on the actual charges levied by SDCWA, subject to a maximum annual adjustment of 10%.
- **Monthly Fire Service Charges:** These charges are only levied on customers with private fire service connections and are billed based on the size of each customer's fire service connection.
- **Monthly Standby Fixed Service Charges:** These charges are only levied on customers with inactive, standby service and are billed based on water meter size. Under the proposed rates, standby customers will also pay the same Water Capital Improvement Charges as all other water customers.

Proposed Maximum Other Water Service Charges

	Current Charges	Proposed Maximum Charges Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Water Capital Improvement Charges (CIC)						
Monthly charge billed based on meter size to all active water service accounts.						
3/4"	$10.10	$11.11	Water CIC Charges will be adjusted each January 1 based on the annual change in the Engineering News-Record Construction Cost Index for Los Angeles through February of the preceding year, plus 3%, subject to a maximum adjustment of 10% per year.			
1"	16.82	18.50				
1-1/2"	33.66	37.03				
2"	53.84	59.22				
3"	107.68	118.45				
4"	168.25	185.08				
6"	336.50	370.15				
SDCWA Infrastructure Access Charges (IAC)						
Monthly charge billed based on meter size to all active water service accounts.						
3/4"	$4.00	$4.24	SDCWA IAC Charges will be adjusted each January 1 based on the IAC charges adopted by SDCWA in future years, subject to a maximum adjustment of 10% per year.			
1"	6.69	7.08				
1-1/2"	13.33	14.12				
2"	21.34	22.60				
3"	42.75	45.24				
4"	66.79	70.68				
6"	133.53	141.32				
Monthly Fire Service Charges						
Billed based on service size to customers with private fire service connections.						
2"	$12.25	$7.66	$8.16	$8.69	$9.25	$9.85
3"	13.06	8.90	9.48	10.10	10.76	11.46
4"	14.47	11.03	11.75	12.51	13.32	14.19
6"	19.50	18.70	19.92	21.21	22.59	24.06
8"	28.18	31.92	33.99	36.20	38.55	41.06
Monthly Standby Fixed Service Charges						
Billed based on meter size to customers with inactive, standby service.						
3/4"	$25.22	$17.44	$18.57	$19.78	$21.07	$22.44
1"	34.15	24.43	26.02	27.71	29.51	31.43
1-1/2"	56.46	41.75	44.46	47.35	50.43	53.71
2"	83.23	62.61	66.68	71.01	75.63	80.55
3"	154.65	118.30	125.99	134.18	142.90	152.19
4"	235.00	180.88	192.64	205.16	218.50	232.70
6"	458.16	354.65	377.70	402.25	428.40	456.25

Proposed Maximum Recycled Water Rates

FPUD is proposing to phase in a series of recycled water rate increases over the next five years with the maximum allowable rates as shown in the table below. Recycled water rate increases are needed to support recycled water system operating expenses, provide adequate funding for maintenance of equipment, meet annual debt-service funding requirements, help ensure continued compliance with regulatory requirements, and fund capital improvements to FPUD's recycled water system. Recycled water rates include two components:

- **Fixed Monthly Service Charges**: These charges are levied independently of recycled water use and are based on the size of each customer's recycled water meter.
- **Volumetric Charges**: Wastewater volumetric charges are billed per 1,000 gallons (Kgal) of metered use as shown on the table below.

We've expanded our recycled water distribution system to provide highly treated recycled water to more customers within our service area. Our goal is to reduce the need for imported water to improve local supply reliability and save money.

Proposed Maximum Recycled Water Rates

	Current Recycled Water Rates	Proposed Maximum Rates Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Monthly Fixed Service Charges						
Billed based on meter size.						
3/4"	$25.22	$25.85	$26.50	$27.16	$27.84	$28.53
1"	34.15	35.14	36.02	36.92	37.84	38.79
1-1/2"	56.46	58.15	59.60	61.09	62.62	64.19
2"	83.23	85.88	88.03	90.23	92.48	94.80
3"	154.65	159.91	163.91	168.01	172.21	176.51
4"	235.00	243.09	249.17	255.40	261.78	268.33
6"	458.16	474.06	485.91	498.06	510.51	523.27
Volumetric Charges						
Billed based on metered water use as measured in units of 1,000 gallons ($/Kgal).						
Recycled Water Sales	$6.13	$6.29	$6.45	$6.61	$6.77	$6.94

Note: Charges to customers who receive recycled water service pursuant to contracts with FPUD will continue to be based on the specific terms detailed in each contract.

Proposed Maximum Wastewater Rates

FPUD is proposing to phase in a series of annual wastewater rate increases over the next five years with the maximum allowable rates as shown on the table below. Wastewater rate increases are needed to support wastewater system operating expenses, provide adequate funding for maintenance of facilities and equipment, meet annual debt service funding requirements, and help ensure continued compliance with regulatory requirements. The proposed wastewater rates also help support high-priority capital improvements to FPUD's aging sewer collection system pipelines, sewer lift stations, and the District's Water Reclamation Plant to support safe and reliable service. FPUD's wastewater rates include a number of components including:

- **Fixed Monthly Wastewater Charges:** These charges are billed based on the number of Equivalent Dwelling Units (EDUs) assigned to each account. An EDU is a single family household. Each EDU represents the wastewater demand and associated system capacity needed for serving a typical single family home or equivalent. EDUs are assigned to each account based on estimated wastewater flow and strength/density of flow as detailed in Article 11, Section 11.7 of the District's Administrative Code, available at our offices or website: www.fpud.com. No changes to the District's Schedule of EDUs are proposed other than a revision to the EDU assignment for Standby Customers. Schools are billed monthly charges based on the number of students and staff.

Proposed Maximum Wastewater Rates (continued)

- **Volumetric Charges:** Proposed volumetric charges for Residential / Domestic customers are billed based on average monthly winter water use from December through February, multiplied by a return-to-sewer factor of 80% (based on an updated analysis of wastewater treatment plant flows) to determine billable flow which will help ensure that wastewater rates only pay for estimated discharge into the sewer system and exclude water used for outdoor landscape irrigation (subject to a maximum billed flow of 16 Kgal). Commercial / Government customers pay rates that vary based on customer class and wastewater strength with bills based on metered water use in each billing period multiplied by a return-to-sewer factor of 90%. Wastewater volumetric charges are billed per 1,000 gallons (Kgal) of estimated wastewater discharge.

- **Wastewater Capital Improvement Charges (CIC):** These charges are billed based on the number of EDUs assigned to each account and help recover costs for repairing, replacing and upgrading FPUD's aging wastewater system to support safe and reliable operations. These charges may also help recover costs for debt service issued to fund wastewater system improvements. Wastewater CIC Charges effective January 1, 2023, are shown below. FPUD is proposing to authorize automatic annual adjustments to the Wastewater CIC Charges on January 1, 2024, and each January 1 thereafter through and including January 1, 2027, based on the annual change in the Engineering News-Record Construction Cost Index for Los Angeles through February of the preceding year, subject to a maximum annual adjustment of 10%.

Proposed wastewater charges for each customer class are based on an updated cost-of-service analysis designed to ensure that all customers continue to pay their proportionate share of the District's costs of providing wastewater service. Proposed Residential wastewater rates account for a gradual five-year transition to more revenue recovery from Fixed Wastewater Charges coupled with a reduction in volumetric charges. This transition is designed to reflect the District's current cost of providing wastewater service while still providing customers significant control over their wastewater bills.

Proposed Maximum Wastewater Rates						
	Current Wastewater Rates	Proposed Maximum Rates Effective On or After				
		January 1 2023	January 1 2024	January 1 2025	January 1 2026	January 1 2027
Residential / Domestic						
Includes Single Family (D), Single Family Large Lot (LD), Multi Family (M), Ag Domestic (AT), Commercial Ag (CB)						
Monthly Fixed Service Charges ($/EDU)	$11.08	$18.88	$26.68	$34.48	$42.28	$50.08
Volumetric Charges ($/Kgal)	11.28	10.22	9.16	8.10	7.04	5.98
Commercial / Government						
Monthly Fixed Service Charge ($/EDU)	$11.08	$12.14	$12.75	$13.39	$14.06	$14.76
Volumetric Charges						
Comm - Low Strength (C_L)	$11.20	$11.09	$11.64	$12.22	$12.83	$13.47
Comm - Medium Strength (C_M)	13.81	13.82	14.51	15.24	16.00	16.80
Comm- High Strength (C_H)	17.22	17.66	18.54	19.47	20.44	21.46
Government (G)	11.20	11.09	11.64	12.22	12.83	13.47
Schools						
Monthly charge based on number of students and staff						
Elementary Students ($ per student)	$1.37	$1.39	$1.46	$1.53	$1.61	$1.69
Junior High Students ($ per student)	2.00	2.08	2.18	2.29	2.40	2.52
School Staff ($ per staff)	2.00	2.08	2.18	2.29	2.40	2.52
Wastewater Capital Improvement Charges (CIC)						
Monthly charge per Equivalent Dwelling Unit (EDU) billed to all active wastewater accounts.						
Monthly Wastewater CIC Charges	$11.68	$12.66	Wastewater CIC Charges will be adjusted each January 1 based on the annual change in the Engineering News-Record Construction Cost Index for Los Angeles through February of the preceding year, subject to a maximum adjustment of 10% per year.			

The following table shows a Schedule of Equivalent Dwelling Unit (EDUs). EDUs are assigned to each account based on estimated wastewater flow and strength as detailed in Article 11, Section 11.7 of FPUD's Administrative Code. Other than a revision to the EDU assignment for Standby Customers, no changes to the schedule are proposed.

Schedule of Equivalent Dwelling Units (EDUs)		
Class	**Description**	**EDUs**
Class 1	Single Family Residence	
	Single family residence	1.00
	Mobile home on individual parcel	1.00
Class 2	Apartment/Condominium/Attached Cottage-Mobile Home	
	Per detached cottage with bathroom and kitchen on a parcel with a single family residence	0.80
	Per mobile home on a parcel with a single family residence	0.80
	Per apartment unit	0.80
	Per condominium/duplex unit	0.80
	Accessory Dwelling Unit (As defined by State Government Code.)	0.40
Class 3	Mobile Home Park	
	Per separate mobile home space	0.80
	Motel/Hotel with no restaurant	
Class 4	Per motel/hotel with kitchen unit	0.80
Class 41	Per motel/hotel without kitchen unit	0.50
	A Separate Business, Retail Shop With Office, Or Packing House Equipped With Restroom Facilities, Or Not So Equipped But Located In A Building Or Complex With Common Restroom	
Class 5	First 3500 square feet (exterior building area) facilities	1.33
Class 55	Per additional 1000 square feet (exterior building area)	0.38
	Automotive Service Station	
Class 6	4 pumps or less	2.00
Class 61	More than 4 pumps	3.00
Class 62	Per recreational vehicle holding tank disposal station	1.00
Class 7	Church, Fraternal Lodge Or Similar Auditorium	
	Per 200 seating capacity	1.00
Class 8	Bakery	
	Per 3500 square feet (exterior building area)	1.00
Class 9	Theater	
	Per 150 seating capacity	1.33
Class 10	Hospital	
	Per bed	0.65
Class 11	Convalescent or Boarding Home	
	Per bed	0.30
Class 13	Elementary School / Daycare Per 60 Students	1.00
	Junior High School Per 40 Students	1.00
Class 17	High School Per 30 Students	1.00
Class 14	Mortuary	1.00
Class 21	Car Wash with water recovery system and public restroom	2.00
Class 23	Self Service Laundry	2.00
	Restaurants	
Class 24	Restaurant Under 2500 Square feet	3.00
Class 25	Restaurant 2501-7000 Square feet	4.00
Class 26	Restaurant Over 7000 Square feet	5.00
	Grocery Stores	
Class 32	Grocery Stores Under 2500 feet	3.00
Class 33	Grocery Stores 2501-7000 Square feet	4.00
Class 34	Grocery Stores Over 7000 Square feet	5.00
Class 88	Standby	0.70

Users whose use is not classified in the above table are considered "unclassified users." District staff shall determine the number of equivalent dwelling units for which a permit shall be issued to an unclassified user, including but not limited to commercial and industrial users, based upon the estimated volume of wastewater to be discharged therefrom into the District's sewer system. An unclassified user that is also an Industrial User may be required to obtain a Special Use Permit pursuant to Section 2.9 of FPUD's Administrative Code.

For information on rebates and water conservation, visit us at www.fpud.com/conservation. Our staff is available to help.

You can monitor your usage online, in real time. Our "smart meters" let you track your water use and set up leak alerts to help you catch leaks long before your bill arrives. You can get a text or an email letting you know if your water use spiked higher than usual. Or, you can log in and check how you're doing throughout the month. It's FREE. All you have to do is create an account: https://fpud.watersmart.com/index.php/welcome

FPUD is in a Drought Level 2 Water Shortage Watch

Current drought conditions throughout the western United States are stressing regional water supplies. While regional investments in storage and supply sources have secured water supplies in the short term, continued drought conditions may lead to regional water shortages in the coming year. In March, Governor Newsom signed Executive Order N-10-22 declaring a regional drought emergency and called on Californians to voluntarily reduce water use by 20%. In response, FPUD's board of directors declared a Drought Level 2 which encourages voluntary conservation, including:

- Avoid washing sidewalks, roadways and other hardscape with a hose.
- Use a positive shutoff nozzle when hand-watering landscapes or washing a car.
- Eliminate runoff from irrigation and reduce irrigation during cooler weather. Avoid watering after measurable rain.
- Check water systems for leaks and make repairs promptly.
- Limit spray irrigation to run between 6pm and 10am.

Proposed Maximum Water Shortage Emergency Surcharges

FPUD is proposing to authorize a series of Water Shortage Emergency Surcharges that could be implemented to support financial stability and help ensure adequate funding for water utility operations during periods of water shortages and reduced water sales. As proposed, these rates would be temporary surcharges, billed based on metered water use, that would be levied in addition to FPUD's regular water rates during water shortage emergencies. The proposed rates correspond with the Water Shortage Response Levels identified in FPUD's Urban Water Management Plan. No surcharges are proposed for Level 1 and Level 2 water shortages. FPUD is currently in a Drought Level 2, due to drought conditions throughout the western United States that are stressing regional water supplies.

The proposed water shortage emergency surcharges set forth in the table below represent the maximum rate that the District may charge in each year. However, the actual rate may be lower, and will be calculated based on the maximum surcharge percentage applied to each adopted rate. For example, a commercial water customer, in 2023, at a Level 3 Water Shortage Watch, will pay a water shortage emergency surcharge of $1.54 per Kgal ($7.72 x 20% = $1.54).

Proposed Maximum Water Shortage Emergency Surcharges

	Level 1 Water Shortage Notice	Level 2 Water Shortage Watch	Level 3 Water Shortage Alert	Level 4 Water Shortage Warning	Level 5 Critical Condition	Level 6 Emergency Condition
Water Reduction Target	Up to 10%	Up to 20%	Up to 30%	Up to 40%	Up to 50%	> 50%
Maximum Surcharge %	**5.0%**	**12.0%**	**20.0%**	**32.0%**	**49.0%**	**74.0%**
Proposed Maximum Surcharges ***(Surcharge % x Residential Tier 2)***	*Surcharges billed based on metered water use as measured in units of 1,000 gallons ($/Kgal).*					
Effective on or After						
January 1, 2023	$0.40	$0.97	$1.61	$2.58	$3.95	$5.96
January 1, 2024	0.43	1.03	1.72	2.75	4.20	6.35
January 1, 2025	0.46	1.10	1.83	2.92	4.48	6.76
January 1, 2026	0.49	1.17	1.95	3.11	4.77	7.20
January 1, 2027	0.52	1.24	2.07	3.32	5.08	7.67

Additional Information

Pursuant to California Government Code 53759, there is a 120-day statute of limitations for challenging any new, increased, or extended fees. This statute of limitations applies to the water and wastewater service charges proposed in the notice and future changes to water and wastewater rates and charges.

FPUD is committed to operating as cost-effectively as possible while providing safe and reliable service! For questions or more information about FPUD or the proposed rates, please contact us at noelle@fpud.com or visit us at www.fpud.com.