



ALAMEDA COUNTY WATER DISTRICT

Water Rates Update and Financial Plan

November 28, 2022 – Final Report



ALAMEDA COUNTY WATER DISTRICT

43885 S Grimmer Boulevard

Fremont, CA 94538



WATER RATES UPDATE AND FINANCIAL PLAN

November 28, 2022

HF&H CONSULTANTS, LLC

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November 28, 2022

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Subject: Water Rates Update and Financial Plan – Final Report

Jonathan Wunderlich:

HF&H is pleased to submit this rate study report to the Alameda County Water District (ACWD or District). The District most recently adopted new rates effective March 1, 2022. This rate update, which is based on the 2021 cost-of-service analysis previously prepared for the District, makes the following major recommendations.

- **Revenue increases.** Rate increases are recommended due to increases in the cost of purchased water from the San Francisco Public Utilities Commission (SFPUC) and the need to fund capital improvements, including ongoing repairs and replacements of aging infrastructure. In addition, rate increases are needed to allow the District to continue compliance with debt service requirements and to avoid operational deficits and depletion of reserves.
- **Rate structure modifications.** The Board of Directors provided guidance to not alter the current rate structure. Once Advanced Metering Infrastructure (AMI) meters are installed and enough consumption pattern data has been collected, the District may choose to reconsider adopting a tier-based rate structure.
- **Drought Surcharges.** The drought surcharges adopted during the last study are updated to reflect the District's recent demand patterns so that the District can maintain revenue neutrality during any stage of water shortage. The District previously referred to these rates as water shortage emergency stage rates.

The rates proposed in this report reflect the current and projected cost of providing service for the next five years. We greatly appreciate your assistance in developing the revenue requirement analysis.

Sincerely,
HF&H CONSULTANTS, LLC

A handwritten signature in blue ink that reads 'Richard J. Simonson'.

Rick Simonson
Senior Vice President

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY	1
Background.....	1
Projected Revenue Requirements and Revenue Increases	1
Drought Surcharges.....	4
Water Rate Structure Modifications	4
II. INTRODUCTION	5
Study Purpose.....	5
Study Process.....	5
Report Organization	5
District Background.....	5
Rate Study Legislation & Principles.....	5
III. REVENUE REQUIREMENTS	8
Assumptions and Projections	8
Description of Assumptions	8
Revenue Requirement Projections.....	9
Revenue Requirement Components.....	9
Administrative and O&M	9
Source of Supply	10
Debt Service	10
Contribution to Capital	10
Revenue	11
Bimonthly Meter Service Charge	11
Commodity Rate	11
Other Revenue.....	12
Reserves.....	13
O&M Reserve.....	13
Capital Reserve ²	13
Rate Stabilization Reserve	13
Emergency Reserve ³	14
Management Retirement Bonus Reserve ³	14
Revenue Increases	14
Debt Coverage	15
Reserve Fund Balance.....	15
Projected Rates	16
IV. DROUGHT SURCHARGES	17
Derivation of Drought Surcharges	18
V. CUSTOMER BILL COMPARISONS	20
Bills Under Proposed and Approved Rates.....	20

APPENDIX

WATER RATE MODEL

- Tab 1a. Summary
- Tab 1b. Assumptions and Policies
- Tab 2a. Revenue Requirements
- Tab 3a. Service Charge Revenue
- Tab 3b. Consumption Charge Revenue
- Tab 3c. Rate Revenue Current
- Tab 3d. Non Rate Revenue
- Tab 4. Reserves Summary and Fund Balance
- Tab 5. Capital Improvement Projects
- Tab 6. Debt Service

TABLE OF FIGURES

Figure I-1. General Fund Reserves without Rate Increases	2
Figure I-2. Proposed Rate Increases	2
Figure I-3. General Fund Reserves with Rate Increases	3
Figure I-4. Current and Proposed Rates	3
Figure I-5. Proposed Drought Surcharges per HCF	4
Figure III-1. Projection Assumptions	8
Figure III-2. Revenue Requirement Projections	9
Figure III-3. Source of Supply Costs	10
Figure III-4. General Fund PAYGo Capital Expenses	10
Figure III-5. Bimonthly Meter Service Charge Revenue at Current Rates (effective 3/1/2022) ..	11
Figure III-6. Commodity Rate Revenue at Current Rates (effective 3/1/2022)	12
Figure III-7. Other Revenue	12
Figure III-8. Total Revenue	12
Figure III-9. Projected Rate Adjustments	14
Figure III-10. Projected Revenue with Rate Increases	14
Figure III-11. Debt Service Coverage	15
Figure III-12. Projected Year-End Fund Balance	15
Figure III-13. Current and Projected Bi-Monthly Rates	16
Figure IV-1. Current Drought Surcharges per HCF	17
Figure IV-2. Base Level of Revenue	18
Figure IV-3. Derivation of Lost Revenue	18
Figure IV-4. Derivation of Drought Surcharges per HCF	19
Figure IV-5. Proposed Drought Surcharges per HCF	19
Figure V-1. Sample Residential Customer Bill Impacts (5/8" or 3/4" Meter)	20
Figure V-2. Sample Commercial Customer Bill Impact (1.5" Meter)	20
Figure V-3. Sample Residential Customer Bill with and without Cutback (5/8" or 3/4" Meter) ...	21

GLOSSARY

- AMI** - Advanced Metering Infrastructure
- CalPERS** – California Public Employees’ Retirement System
- CIP** - Capital Improvement Program

Commodity Charges – The product of rates per unit of metered water consumption multiplied by a customer’s metered water use during the bi-monthly billing period

COS - Cost of Service

CY - Calendar Year

Drought Surcharges – Temporary rates adopted to recover lost revenue during periods of significant reduction in water consumption. Previously known as “Water Shortage Emergency Stage Rates”

ENR – Engineering News Record

FY - Fiscal Year

FYE – Fiscal Year End

HCF - Hundred cubic feet of metered water; 748 gallons. One HCF per month is about 25 gallons per day.

Meter Service Charges – Fixed charges paid per account regardless of the amount of water used. The charge is proportionate to the capacity of the customer’s service

O&M - Operating and Maintenance, in reference to the costs of running facilities

OPEB – Other Post-Employment Benefits

PAYGo - Pay-As-You-Go, in reference to funding capital improvements from cash rather than from borrowed sources such as bonds or loans

SFPUC - San Francisco Public Utilities Commission

SWP – State Water Project

Uniform rates - Constant charges per unit of consumption that do not change depending on the amount used.

ACKNOWLEDGEMENTS

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LIMITATIONS

This document was prepared solely for the Alameda County Water District in accordance with the contract between the District and HF&H and is not intended for use by any other party for any other purpose.

In preparing this study, we relied on information from the District, which we consider accurate and reliable. Our analysis is based on the best available information at the time of the study.

Rounding differences caused by stored values in electronic models may exist.

This document represents our understanding of relevant laws, regulations, and court decisions but should not be relied upon as legal advice. Questions concerning the interpretation of legal authorities referenced in this document should be referred to a qualified attorney.



WATER RATES UPDATE AND FINANCIAL PLAN

I. EXECUTIVE SUMMARY

BACKGROUND

HF&H Consultants, LLC (HF&H) was retained by the Alameda County Water District (ACWD or District) to provide rate design and financial advisory consulting services. The last rate study, completed in 2021, set rates for a one-year period beginning in March 2022. The District engaged HF&H to update the District's water rates for the next two-year period beginning in March 2023. This section summarizes the findings and recommendations in this report.

In preparing this water rate study, expenses, revenues, and reserves were projected using a long-term financial planning model beginning in FY 2022-23. The first five years of the planning period are presented in this report. The rates derived in this report are based on a cost-of-service analysis completed as part of the 2021 rate study (available at www.acwd.org/rates) and will be used for setting rates under Article XIID, Section 6 of the State Constitution.¹

The following findings and recommendations were made, which result in proposed water rates, to be effective March 1, 2023 and March 1, 2024.

PROJECTED REVENUE REQUIREMENTS AND REVENUE INCREASES

The District's revenue requirements were updated by preparing a long-term projection of operating and capital expenses. The projected increases needed in rate revenue were determined by comparing the revenue requirement projections with the revenue projected from current rates. In preparing the revenue requirements, the following findings were made.

Operating Costs. Operating and Maintenance (O&M) expenses (e.g. contractual services, utilities, maintenance) will generally increase at the rate of inflation, which the District anticipates will return to historic averages for FY 2023-24. The fiscal impact of the current inflationary environment is generally considered to be captured in the District's FY 2022-23 budget, which serves as the baseline for future operating cost projections.

Water Supply Costs. The District has several sources of water supply. The overall cost for the water supply will increase by an average of 4.5% through FY 2027-28, which is partially driven by planned increases to the SFPUC wholesale rate.

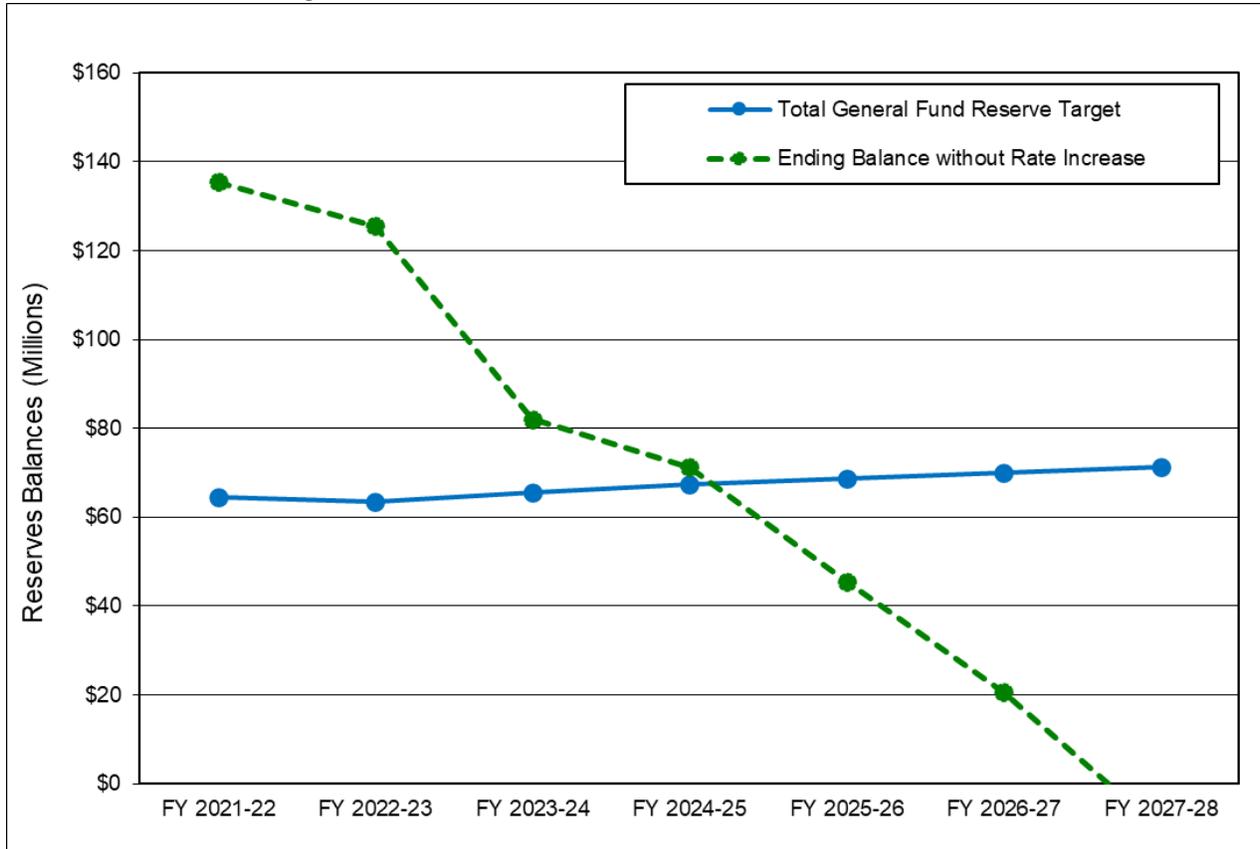
Capital Costs. The District will spend an average of \$48 million in pay-as-you-go (PAYGo) capital projects through FY 2027-28, \$38 million will be paid for via rates through the General Fund with the rest funded through the Facilities Connection Charges.

General Fund Reserves. Figure I-1 shows the projected General Fund cash balances through FY 2027-28 at current rates without rate adjustments. Without rate adjustments, reserves are projected to be below the District's target by FYE 2024-25 and completely depleted by FYE 2026-27. Therefore, rate increases

¹ This law was enacted by Proposition 218 in 1996. The law contains procedural and substantive requirements that apply to property-related fees and charges such as water rates. The law exempts connection charges, which instead are governed by Section 66000 of the Government Code.

are necessary to maintain a reserve fund balance above the District’s reserve fund target throughout the planning period.

Figure I-1. General Fund Reserves without Rate Increases

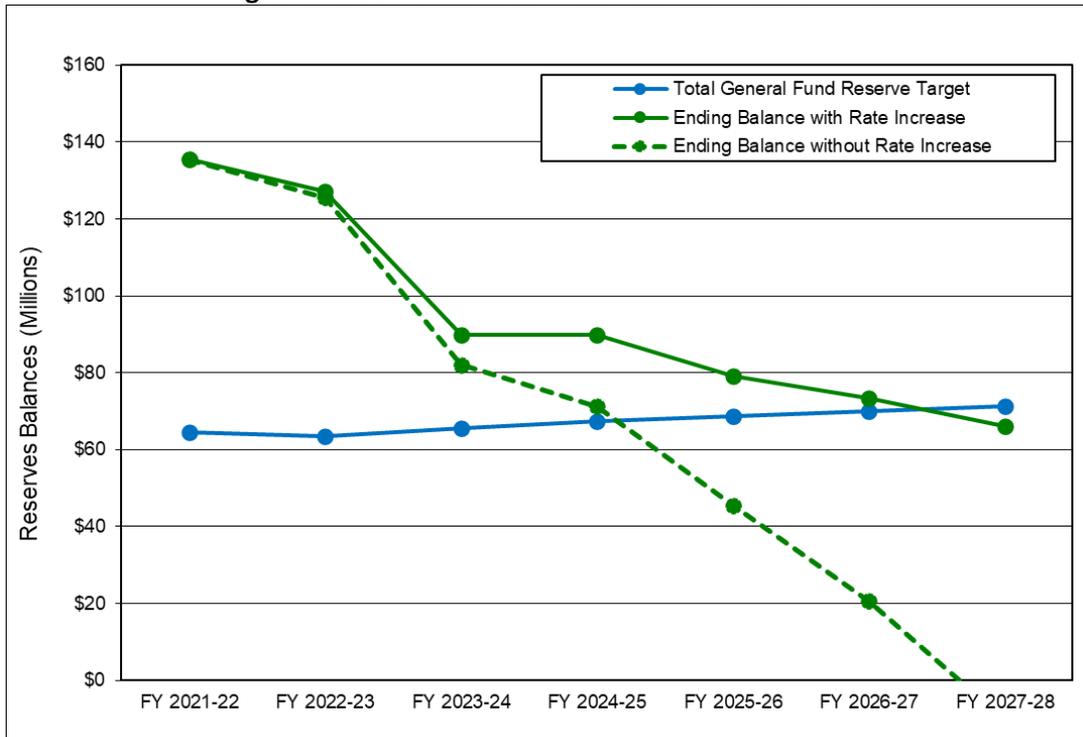


Projected Revenue Increases. Figure I-2 shows the proposed rate increase schedule to maintain reserves above the District’s reserve fund target throughout the planning period, as shown in Figure I-3.

Figure I-2. Proposed Rate Increases

Fiscal Year	Effective Date	Rate Adjustment
FY 2022-23	3/1/2023	4.0%
FY 2023-24	3/1/2024	4.0%
FY 2024-25	3/1/2025	3.0%
FY 2025-26	3/1/2026	3.0%
FY 2026-27	3/1/2027	3.0%
FY 2027-28	3/1/2028	3.0%

Figure I-3. General Fund Reserves with Rate Increases



Current and Proposed Rates. Figure I-4 shows the current and projected rates. It is recommended that the District’s commodity rates are rounded to the nearest cent.

Figure I-4. Current and Proposed Rates

Meter Service Charges	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
<i>proposed effective date:</i>	3/1/2022	3/1/2023	3/1/2024	3/1/2025	3/1/2026	3/1/2027	3/1/2028
5/8" & 3/4" Meters	\$58.94	\$61.30	\$63.75	\$65.66	\$67.63	\$69.66	\$71.75
1" Meters	\$94.18	\$97.95	\$101.87	\$104.92	\$108.07	\$111.31	\$114.65
1 1/2" Fire Meters	\$94.18	\$97.95	\$101.87	\$104.92	\$108.07	\$111.31	\$114.65
1 1/2" Meters	\$182.25	\$189.54	\$197.12	\$203.04	\$209.13	\$215.40	\$221.86
2" Meters	\$287.95	\$299.47	\$311.45	\$320.79	\$330.41	\$340.33	\$350.54
3" Meters	\$622.64	\$647.55	\$673.45	\$693.65	\$714.46	\$735.89	\$757.97
4" Meters	\$1,115.87	\$1,160.50	\$1,206.92	\$1,243.13	\$1,280.43	\$1,318.84	\$1,358.40
6" Meters	\$2,824.56	\$2,937.54	\$3,055.04	\$3,146.70	\$3,241.10	\$3,338.33	\$3,438.48
8" Meters	\$4,938.41	\$5,135.95	\$5,341.38	\$5,501.63	\$5,666.67	\$5,836.67	\$6,011.78
10" Meters	\$7,404.57	\$7,700.75	\$8,008.78	\$8,249.05	\$8,496.52	\$8,751.41	\$9,013.96
Commodity Rates per HCF	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
<i>proposed effective date:</i>	3/1/2022	3/1/2023	3/1/2024	3/1/2025	3/1/2026	3/1/2027	3/1/2028
Inside District	\$4.596	\$4.78	\$4.97	\$5.12	\$5.27	\$5.43	\$5.59
Outside District	\$5.253	\$5.46	\$5.68	\$5.85	\$6.03	\$6.21	\$6.39
Private Fire Service Rate	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
<i>proposed effective date:</i>	3/1/2022	3/1/2023	3/1/2024	3/1/2025	3/1/2026	3/1/2027	3/1/2028
3/4" Meters	\$7.93	\$8.25	\$8.58	\$8.83	\$9.10	\$9.37	\$9.65
1" Meters	\$8.12	\$8.44	\$8.78	\$9.05	\$9.32	\$9.60	\$9.88
2" Meters	\$9.97	\$10.37	\$10.78	\$11.11	\$11.44	\$11.78	\$12.14
4" Meters	\$21.46	\$22.32	\$23.21	\$23.91	\$24.62	\$25.36	\$26.12
6" Meters	\$47.57	\$49.47	\$51.45	\$53.00	\$54.59	\$56.22	\$57.91
8" Meters	\$92.59	\$96.29	\$100.15	\$103.15	\$106.24	\$109.43	\$112.71
10" Meters	\$160.32	\$166.73	\$173.40	\$178.60	\$183.96	\$189.48	\$195.17
12" Meters	\$254.19	\$264.36	\$274.93	\$283.18	\$291.68	\$300.43	\$309.44

Debt Service. The District currently pays approximately \$5.9 million in annual debt service. It is anticipated that the District will issue a \$30 million bond in FY 2024-25 which will increase the annual debt service to approximately \$8.1 million. The District will maintain a debt coverage ratio above 2.00 through the planning period.

DROUGHT SURCHARGES

The District should adopt the drought surcharges found in **Figure I-5**, effective March 1, 2023. The same methodology used to calculate the current rates were used to calculate the proposed rates per hundred cubic feet (HCF). The District previously referred to these surcharges as water shortage emergency stage rates.

Figure I-5. Proposed Drought Surcharges per HCF

Stage	Demand Reduction	Drought Surcharge FY 2022-23	Drought Surcharge FY 2023-24
	<i>proposed effective date</i>	<i>3/1/2023</i>	<i>3/1/2024</i>
0	0%	\$0.00	\$0.00
1	10%	\$0.52	\$0.54
2a	15%	\$0.82	\$0.85
2b	20%	\$1.16	\$1.21
3a	25%	\$1.55	\$1.61
3b	30%	\$2.00	\$2.08
4	40%	\$3.12	\$3.25
5	50%	\$4.62	\$4.81
6	60%	\$6.90	\$7.18

WATER RATE STRUCTURE MODIFICATIONS

The District’s Board of Directors chose not to modify the rate structure that will be effective March 1, 2023 and March 1, 2024 and decided to rely on the cost of service analysis completed for the District in 2021. The District is in the process of installing AMI meters for its customers and may choose to reexamine its rate structure when customer demand patterns of the District are better known and when customers have been equipped with the ability to more easily monitor their water usage.

II. INTRODUCTION

STUDY PURPOSE

The purpose of this study is to conduct a revenue requirements analysis to determine overall rate revenue increases that will provide adequate revenue to cover the District's costs.

STUDY PROCESS

Revenue requirements were projected for a multi-year planning period based on operations, maintenance, capital expenses, and contributions to reserves.

During the course of the study, interim work products were presented at several public meetings and workshops:

- July 20, 2022 – Board Workshop: HF&H presented key rate-setting policy issues for the Board to consider. The policy issues included funding strategies for the capital improvements, the split between fixed and variable revenues, customer classes, tiered rates, and stage rate structures.
- August 25, 2022 – Board Workshop: HF&H presented alternative structures for drought surcharges and summarized how a comparable Water District handled fixed and variable revenues.
- September 22, 2022 – Board Workshop: HF&H provided more detailed options for drought surcharges for the Board to consider.

The input received from the Board is reflected in the recommended rates documented in this report.

REPORT ORGANIZATION

This report describes steps taken in calculating rate revenue increases through FY 2027-28. A glossary of technical terms and acronyms is provided following the Table of Contents.

DISTRICT BACKGROUND

The Alameda County Water District (ACWD) supplies water to the cities of Fremont, Newark, and Union City in southern Alameda County. The first water district formed in California under the County Water District Act of 1913, the District today has a staff of approximately 244 employees and supplies drinking water to about 345,000 people. The District covers approximately 105 square miles and provides water service through over 86,000 connections. The District has a diverse portfolio of water sources which includes the State Water Project, water imported from the San Francisco Public Utilities Commission (SFPUC), and local groundwater.

RATE STUDY LEGISLATION & PRINCIPLES

The California Constitution includes two key articles that directly govern or impact the District's water rates: Article 10 and Article 13D. The rates from this study are designed to comply with both of these

constitutional mandates as well as various provisions of the California Water Code and Government Code that support and add further guidance for implementing these constitutional requirements.

Article 10, Section 2

Article 10, Section 2 of the California Constitution was established by voter-approval in 1976 and requires public agencies to maximize the beneficial use of water, prevent waste, and encourage conservation. Section 2 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.

Article 13D, Section 6 (Proposition 218)

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 subsequently ruled includes ongoing utility service charges such as water, sewer, and garbage rates. Article 13D, Section 6 establishes a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D also requires voter approval for new or increased property-related charges but exempts from this voting requirement rates for water, sewer, and garbage service.

The District must follow the procedural requirements of Proposition 218 for all water rate increases. These requirements include:

1. **Noticing Requirement** - The District must mail a notice of the proposed rate increases to all affected property owners. The notice must specify the amount of the fee, the basis upon which it was calculated, the reason for the fee, and the date/time/location of a public rate hearing at which the proposed rates will be considered/adopted.
2. **Public Hearing** - The District must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
3. **Rate Increases Subject to Majority Protest** - At the public hearing, the proposed rate increases are subject to majority protest. If more than 50% of affected property owners submit written protests against the proposed rate increases, the increases cannot be adopted.

Proposition 218 also established a number of substantive requirements that apply to water rates and charges, including:

1. **Cost of Service** - Revenues derived from the fee or charge cannot exceed the funds required to provide the service.
2. **Intended Purpose** - Revenues derived from the fee or charge can only be used for the purpose for which the fee was imposed.
3. **Proportional Cost Recovery** - The amount of the fee or charge levied on any customer shall not exceed the proportional cost of service attributable to that customer.

4. **Availability of Service** - No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property.
5. **General Government Services** - No fee or charge may be imposed for general governmental services where the service is available to the public at large.

Through the District's 2021 cost-of-service study and this rate update study, the proposed rates meet the procedural and substantive requirements discussed above.

III. REVENUE REQUIREMENTS

The revenue requirement analysis starts with the FY 2022-23 budgeted O&M and capital expenditures. Revenue requirements for each fiscal year were then projected over a long-term planning period. Revenue increases needed to cover the projected revenue requirements were then determined. Over a five-year period, it is possible to derive a relatively smooth series of annual revenue increases that minimize annual fluctuations.

It should be noted that the District maintains a sophisticated financial planning model that projects revenues and costs over a long-term planning period. HF&H utilized certain information in the District’s model to help inform cost projection assumptions but relied on its own independent judgement in escalating costs and revenues. As a result, minor differences in the results of the two models exist.

ASSUMPTIONS AND PROJECTIONS

Expense projections combined with contributions to reserves constitute the revenue requirements. The assumptions shown in **Figure III-1** were used to project expenses through FY 2027-28.

Figure III-1. Projection Assumptions

Inflation Factor Assumptions	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
General	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%
Salary	Budgeted	3.25%	3.14%	3.00%	3.00%	3.00%
Benefits	Budgeted	4.00%	4.00%	4.00%	4.00%	4.00%
CalPERS	Budgeted	11.50%	11.30%	11.10%	10.80%	10.60%
Medical	Budgeted	5.50%	5.40%	5.40%	5.30%	5.30%
OPEB	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%
Utilities	Budgeted	5.00%	5.00%	5.00%	5.00%	5.00%
SFPUC Water Cost (%)	Budgeted	10.53%	0.00%	0.00%	0.00%	14.67%
SFPUC Water Cost (\$)	\$4.75	\$5.25	\$5.25	\$5.25	\$5.25	\$6.02
SWP Water Cost	Budgeted	2.94%	6.89%	-4.40%	-2.23%	-0.57%
Overhead Allocation	Budgeted	165.60%	165.60%	165.60%	165.60%	165.60%

Description of Assumptions

General: the general inflation factor is used to escalate costs that haven’t been specifically identified using the other inflation factors.

Salary: the salary inflation factor is used to escalate the costs associated with salaries and wages of District staff.

Benefits: the benefits inflation factor is used to escalate the costs associated with employment benefits of District staff such as dental, vision, etc.

CalPERS: the CalPERS factor is the percent of District salaries and wages that the District will contribute to the California Public Employees’ Retirement System on behalf of its employees.

Medical: the medical inflation factor is used to escalate the costs associated with medical benefits of District staff.

OPEB: the OPEB inflation factor is used to escalate the costs associated with other post employment benefits of District staff.

Utilities: the OPEB inflation factor is used to escalate the costs associated with the utility costs of operating the District’s water system.

SFPUC Water Cost: the cost of purchased water per HCF from the San Francisco Public Utilities Commission.

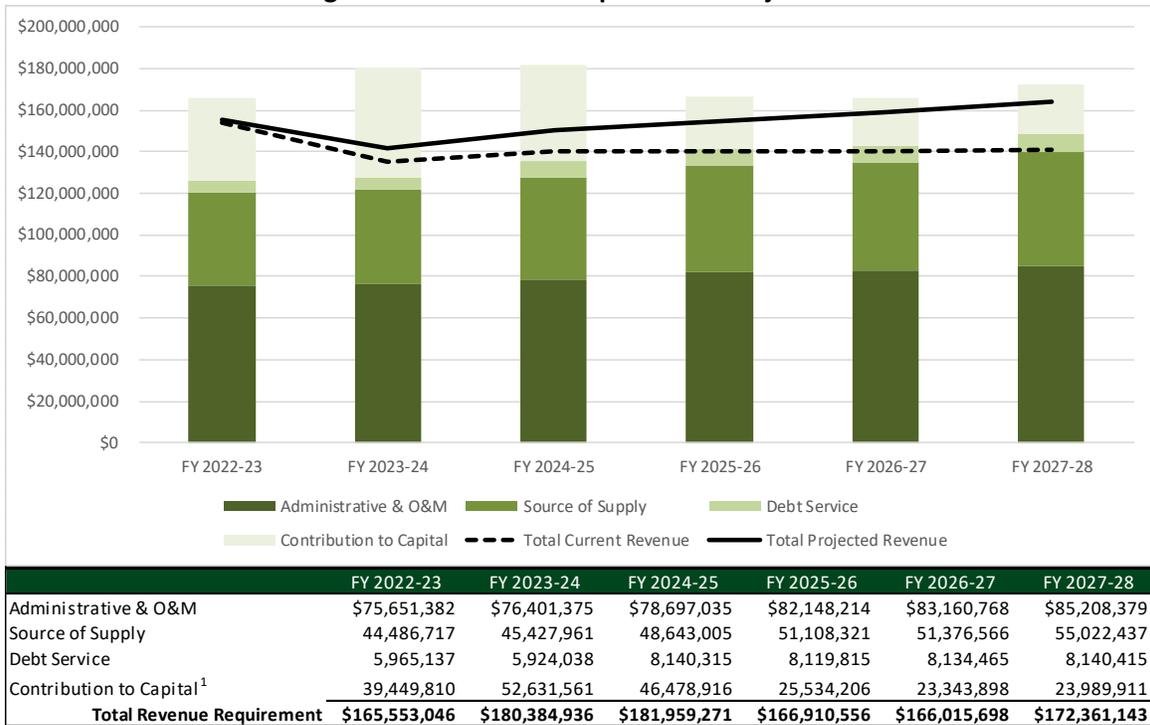
SWP Water Cost: the cost of purchased water per HCF from the State Water Project.

Overhead Allocation: the overhead factor applied to District salaries.

Revenue Requirement Projections

The resulting revenue requirement projections are shown in **Figure III-2** as stacked bars. In addition, the total revenue from current rates plus non rate revenue is shown as a dashed black line and the total revenue from rates with rate increases plus non rate revenue is shown as a solid black line.

Figure III-2. Revenue Requirement Projections



1. Each year’s contribution to capital is equal to the rolling five-year average of PAYGo capital expenses
2. Revenue from rates is anticipated to initially decline when drought surcharges sunset at the end of the current drought (currently planned to occur June 30, 2023). Water consumption will then gradually increase after the drought and reach a new normal in FY 2025-26, which is lower than the pre-drought normal level of demand due to a measure of expected permanent conservation. See **Figure III-6**.

REVENUE REQUIREMENT COMPONENTS

Administrative and O&M

The projected administrative and O&M expenses include the costs associated with the administration of the District (finance, human resources, information technology, etc.) and the operations of the water

system such as pumping, treatment, and transmission and distribution. All these costs are projected to gradually increase based on the escalation factors in **Table III-1**.

Source of Supply

The District has several sources of water supply including the SFPUC, groundwater, desalination, Lake Del Valle, and the State Water Project. **Figure III-3** shows costs associated with the water supply for the District.

Figure III-3. Source of Supply Costs

Description	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
SFPUC Water	\$18,150,933	\$22,606,235	\$22,606,235	\$22,606,235	\$22,606,235	\$25,491,315
Ground Water Resources	4,139,211	4,172,100	5,222,702	5,379,383	5,540,765	5,706,988
State Water Project Water	11,197,595	9,454,106	9,556,343	9,580,355	8,892,363	8,881,287
Semitropic Water	4,232,375	1,170,287	1,205,396	1,241,558	1,278,804	1,317,169
Purchased Water-Other	0	1,117,944	2,900,000	4,900,000	5,400,000	5,700,163
Maintenance of Wells	2,279,172	2,364,089	2,467,625	2,575,037	2,687,341	2,804,767
Oper & Planning of Supply System	3,620,044	3,664,503	3,778,260	3,891,608	4,008,356	4,128,607
Other O&M	867,387	878,696	906,444	934,145	962,702	992,142
Total Water Supply Costs	\$44,486,717	\$45,427,961	\$48,643,005	\$51,108,321	\$51,376,566	\$55,022,437

Debt Service

The District has an extensive capital improvement program of which a portion is funded from debt. The District has two outstanding revenue bonds (Series 2015 and Series 2022) which total approximately \$5.9 million in annual debt service for each of the next five years. Debt service is projected to increase in FY 2024-25 when the District anticipates issuing a \$30 million bond. For the remainder of the ten-year period, no further debt is currently planned.

Contribution to Capital

The revenue requirements also include contributions to capital reserves. The capital reserve provides working capital for pay-as-you-go (PAYGo) capital projects.

Because PAYGo projects fluctuate from year to year, they are funded from capital reserves, which buffers the annual fluctuations so that revenue requirements are relatively stable. To modulate these fluctuations, a portion of the revenue requirement is designated as a contribution to capital and is based on the five-year rolling average of annual PAYGo capital expenses. **Figure III-4** shows the annual PAYGo capital expenses for the General Fund.

Figure III-4. General Fund PAYGo Capital Expenses

Function	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Distribution	\$30,426,745	\$40,393,898	\$34,212,060	\$19,082,769	\$18,160,094	\$21,728,915
Operations	5,184,714	6,126,374	3,086,025	145,000	0	200,000
Customer Jobs	0	0	0	0	0	0
Extraordinary Expense	0	0	0	0	0	0
Vehicle	1,377,300	795,000	950,000	1,395,000	1,705,000	230,000
Engineering	1,127,868	119,280	77,300	1,278,125	295,000	295,000
HQ Facilities	495,000	161,000	315,500	1,691,000	661,000	1,161,000
Ground Water	1,428,182	5,449,010	8,251,031	2,355,312	2,935,804	787,996
Total	\$40,039,810	\$53,044,561	\$46,891,916	\$25,947,206	\$23,756,898	\$24,402,911
FRF Funded Projects	(\$590,000)	(\$413,000)	(\$413,000)	(\$413,000)	(\$413,000)	(\$413,000)
Net PAYGo Project Costs	\$39,449,810	\$52,631,561	\$46,478,916	\$25,534,206	\$23,343,898	\$23,989,911

REVENUE

The District’s rate structure contains two components: 1) a bimonthly meter service charge that is graduated based on the size of the meter and 2) a commodity rate that is charged based on total water consumption. Additionally, the District receives other revenues from such sources as an apportionment of general purpose property tax, grants and reimbursements, interest income, miscellaneous customer jobs, and the State Water Contract Property Tax Levy.

Bimonthly Meter Service Charge

Figure III-5 calculates the revenue generated from the fixed meter charge at current rates through FY 2027-28. Meter counts are projected to increase about 0.7% each year.

Figure III-5. Bimonthly Meter Service Charge Revenue at Current Rates (effective 3/1/2022)

Meter Counts	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
5/8" & 3/4" Meters	72,568	73,028	73,488	73,948	74,408	74,868
1" Meters	5,262	5,417	5,572	5,727	5,882	6,037
1 1/2" Fire Meters	2,110	2,110	2,110	2,110	2,110	2,110
1 1/2" Meters	1,801	1,801	1,801	1,801	1,801	1,801
2" Meters	2,980	3,004	3,028	3,052	3,076	3,100
3" Meters	232	232	232	232	232	232
4" Meters	116	116	116	116	116	116
6" Meters	59	59	59	59	59	59
8" Meters	26	26	26	26	26	26
10" Meters	3	3	3	3	3	3
	85,157	85,796	86,435	87,074	87,713	88,352
Meter Service Charges	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
5/8" & 3/4" Meters	\$58.94	\$58.94	\$58.94	\$58.94	\$58.94	\$58.94
1" Meters	\$94.18	\$94.18	\$94.18	\$94.18	\$94.18	\$94.18
1 1/2" Fire Meters	\$94.18	\$94.18	\$94.18	\$94.18	\$94.18	\$94.18
1 1/2" Meters	\$182.25	\$182.25	\$182.25	\$182.25	\$182.25	\$182.25
2" Meters	\$287.95	\$287.95	\$287.95	\$287.95	\$287.95	\$287.95
3" Meters	\$622.64	\$622.64	\$622.64	\$622.64	\$622.64	\$622.64
4" Meters	\$1,115.87	\$1,115.87	\$1,115.87	\$1,115.87	\$1,115.87	\$1,115.87
6" Meters	\$2,824.56	\$2,824.56	\$2,824.56	\$2,824.56	\$2,824.56	\$2,824.56
8" Meters	\$4,938.41	\$4,938.41	\$4,938.41	\$4,938.41	\$4,938.41	\$4,938.41
10" Meters	\$7,404.57	\$7,404.57	\$7,404.57	\$7,404.57	\$7,404.57	\$7,404.57
Meter Service Charge Revenue	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
5/8" & 3/4" Meters	\$25,662,948	\$25,825,622	\$25,988,296	\$26,150,971	\$26,313,645	\$26,476,320
1" Meters	\$2,973,451	\$3,061,038	\$3,148,626	\$3,236,213	\$3,323,801	\$3,411,388
1 1/2" Fire Meters	\$1,192,319	\$1,192,319	\$1,192,319	\$1,192,319	\$1,192,319	\$1,192,319
1 1/2" Meters	\$1,969,394	\$1,969,394	\$1,969,394	\$1,969,394	\$1,969,394	\$1,969,394
2" Meters	\$5,148,546	\$5,190,011	\$5,231,476	\$5,272,940	\$5,314,405	\$5,355,870
3" Meters	\$866,715	\$866,715	\$866,715	\$866,715	\$866,715	\$866,715
4" Meters	\$776,646	\$776,646	\$776,646	\$776,646	\$776,646	\$776,646
6" Meters	\$999,894	\$999,894	\$999,894	\$999,894	\$999,894	\$999,894
8" Meters	\$770,392	\$770,392	\$770,392	\$770,392	\$770,392	\$770,392
10" Meters	\$133,282	\$133,282	\$133,282	\$133,282	\$133,282	\$133,282
Total Meter Service Charge Revenue	\$40,493,586	\$40,785,312	\$41,077,039	\$41,368,765	\$41,660,492	\$41,952,219

Commodity Rate

Figure III-6 calculates the revenue generated from the consumption charge each year. The District estimates that consumption will rebound after the drought to 16,685,222 HCF per year (34.2 MGD) by FY 2025-26. It is assumed that drought surcharges will be in effect for the remainder of FY 2022-23. Some drought surcharge revenue will be received in FY 2023-24 as consumption toward the end of FY 2022-23 is billed and collected in the following fiscal year.

Figure III-6. Commodity Rate Revenue at Current Rates (effective 3/1/2022)

	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Total Demand (HCF)						
Inside District	15,262,584	15,736,797	16,211,010	16,685,222	16,685,222	16,685,222
Outside District	0	0	0	0	0	0
Total Potable	15,262,584	15,736,797	16,211,010	16,685,222	16,685,222	16,685,222
Total Potable (AF)	35,038	36,127	37,215	38,304	38,304	38,304
Total Potable (MGD)	31.3	32.3	33.2	34.2	34.2	34.2
Commodity Rates (per HCF)						
Inside District	\$4.596	\$4.596	\$4.596	\$4.596	\$4.596	\$4.596
Outside District	\$5.253	\$5.253	\$5.253	\$5.253	\$5.253	\$5.253
Drought Surcharge	\$0.790	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Commodity Rate	\$5.386	\$4.60	\$4.60	\$4.60	\$4.60	\$4.60
Commodity Revenue						
Inside District	\$82,204,276	\$72,326,317	\$74,505,800	\$76,685,282	\$76,685,282	\$76,685,282
Outside District	\$0	\$0	\$0	\$0	\$0	\$0
Total Variable Revenue	\$82,204,276	\$72,326,317	\$74,505,800	\$76,685,282	\$76,685,282	\$76,685,282

Other Revenue

The District receives revenues from sources other than the bi-monthly service charge and commodity rates. **Figure III-7** shows the sources and totals of these revenues. These revenues are projected to decline in FY 2023-24 because revenues received for Grants and Reimbursements are a one time occurrence.

The revenue from private fire service rates are considered a rate revenue and are designed to recover the additional costs that the detector meter imposes on the District. Periodically, the District performs maintenance on the fireline detector check. There is no charge for water used in private fire service lines for extinguishing accidental fires.

Figure III-7. Other Revenue

	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Private Fire Service Rate	\$948,130	\$976,574	\$1,005,871	\$1,036,047	\$1,067,129	\$1,099,143
Backflow Testing Charge	569,585	569,585	569,585	569,585	569,585	569,585
Account Estab. Charge	391,128	391,128	391,128	391,128	391,128	391,128
Ground Water Revenue	577,299	594,618	612,457	630,830	649,755	669,248
1% Apportionment Property Tax	7,558,439	7,785,192	8,018,748	8,259,310	8,507,089	8,762,302
State Water Contract Levy	5,921,559	6,033,122	6,029,333	6,019,586	5,564,269	5,559,394
Customer Jobs	5,090,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Licenses and Permits	126,410	126,410	126,410	126,410	126,410	130,203
Fire Flow Testing	22,724	23,406	24,108	24,831	25,576	26,343
Lease of Other Physical Property	354,967	365,617	376,585	387,883	399,519	411,505
Residential Service Line Insurance	74,900	74,900	74,900	74,900	74,900	77,147
Scrap Sales	16,800	17,304	17,823	18,358	18,909	19,476
Sale of Fixed Assets	80,500	0	2,500,000	0	0	0
Grants & Reimbursements	8,743,609	811,800	0	0	0	0
Misc	610,168	610,168	610,168	610,168	610,168	628,473
Total General Fund Non-Rate Revenues	\$31,086,219	\$22,379,824	\$24,357,116	\$22,149,036	\$22,004,438	\$22,343,946

Note: Excludes interest on fund balances and Facilities Connection Charges

Figure III-8 shows the sum of the service charge revenue, commodity rate revenue, and other revenue.

Figure III-8. Total Revenue

Revenue Source	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Service Charge	\$40,493,586	\$40,785,312	\$41,077,039	\$41,368,765	\$41,660,492	\$41,952,219
Commodity Rate	82,204,276	72,326,317	74,505,800	76,685,282	76,685,282	76,685,282
Other Revenue	31,086,219	22,379,824	24,357,116	22,149,036	22,004,438	22,343,946
Total	\$153,784,081	\$135,491,453	\$139,939,955	\$140,203,084	\$140,350,212	\$140,981,447

RESERVES

Reserves are required to stabilize rates and to provide for contingencies. Reserves can be drawn down in years when the District experiences above average costs and augmented during years when costs are below average (or similarly for years when revenues are higher or lower than expected). The District's reserves are used for operating and capital purposes. Rates must be set in order for the fund balance to achieve the target balance.

The District uses the following General Fund reserves for rate setting purposes. A description of each General Fund reserve is included below. These descriptions are directly from the District's July 2022 Statement of Reserve Fund Policy with some added description about the Rate Stabilization Reserve. The District also maintains funds to track revenues and expenses related to its Facilities Connection Charges.

O&M Reserve²

The O&M Reserve is a designated reserve, which has been established by the Board of Directors to maintain a level of funding to meet the daily cash needs for ongoing operations and maintenance of the water system. This also provides funds to ensure District operations are not affected by the timing of planned expenses, an unexpected expense, or disruption in revenue. The O&M Reserve has an established minimum target of three months of water revenues.

Capital Reserve²

The Capital Reserve is a designated reserve, which has been established by the Board of Directors to maintain a minimum level of funding to meet the cash flow requirements of the Capital Improvement Program and fund up to one-year of capital improvements. The District's main current source of funding for capital improvements is from water revenues. Capital improvements are designed to meet regulatory requirements, improve system reliability, and address future water demand in the District and are included in the 25-Year Capital Improvement Program and Long Range Financial Planning Model, both of which are reviewed by the Board of Directors each fiscal year.

The Capital Reserve has an established minimum target of one year of water system depreciation. This total minimum level of capital cash reserves is to ensure there are sufficient reserves maintained to help minimize the risk from year to year of not having enough cash in reserve to fund unanticipated swings in "pay-go" capital expenditures or to fund capital investments to maintain the value of the water system during a decline in revenues. However, the funding in the Capital Reserve will be revised annually based on the prior year's depreciation and will be adjusted to account for unanticipated timing issues that may affect the reserve balance.

Rate Stabilization Reserve³

The Rate Stabilization Reserve is a designated reserve, which at the direction of the Board of Directors is maintained at an amount equal to six months of variable water sales – the difference in revenue that would result from using the lowest water usage year versus the most recent year or a typical year based on current commodity rates. Any General Fund balances that are either short or in excess of the Capital Projects Sinking Fund target will be accounted for in the Rate Stabilization Reserve.

² Alameda County Water District – Statement of Reserve Fund Policy

³ Alameda County Water District – Statement of Reserve Fund Policy

These reserve funds may be designated to address revenue shortfalls resulting from lower than anticipated water sales due to unusually wet weather, conservation in response to a water shortage emergency, or any other reason that may cause lower water sales. Rate Stabilization Reserve funds will be replenished as needed during years of higher than anticipated water sales. The purpose of this reserve is to moderate the need for rate increases resulting from lower water demand. This reserve is not designed to stabilize District finances for long periods of revenue shortfall, which may result from an extended drought or other longer-duration factor.

Emergency Reserve³

The Emergency Reserve is a designated reserve, which at the direction of the Board of Directors, is to be maintained at a target level of \$10 million. This is the calculated additional amount of funds needed to purchase water in a year of adverse water conditions.

The Emergency Reserve is to be used only with the authorization of the Board of Directors in the event of an unforeseen event such as a natural disaster, water shortage emergency, or other unanticipated adverse situation.

Management Retirement Bonus Reserve³

The Management Retirement Bonus Reserve is a restricted reserve established by the Board of Directors to fund the total estimated remaining amount of future bonuses for any current employees that meet the eligibility requirements of the Management Retirement Bonus program. This program was established for employees hired on or before December 31, 2000. Employees hired on or after January 1, 2001 are not eligible.

REVENUE INCREASES

Rates are set to generate sufficient revenue to cover annual expenses. In addition, rates are set to maintain adequate reserves. The revenue from rates does not need to match each year’s revenue requirement. Annual fluctuations in revenue requirements are typically uneven because they are harder to control, whereas it is desirable to have smooth annual increases in rates. The annual differences cause the fund balance to fluctuate from year to year. **Figure III-9** shows the projected rate adjustments for each year through FY 2027-28. The District plans to adopt the rate adjustments for FY 2022-23 (effective March 1, 2023) and FY 2023-24 (effective March 1, 2024).

Figure III-9. Projected Rate Adjustments

Fiscal Year	Effective Date	Rate Adjustment
FY 2022-23	3/1/2023	4.0%
FY 2023-24	3/1/2024	4.0%
FY 2024-25	3/1/2025	3.0%
FY 2025-26	3/1/2026	3.0%
FY 2026-27	3/1/2027	3.0%
FY 2027-28	3/1/2028	3.0%

Figure III-10 shows projected revenue to be received with the revenue adjustments from **Figure III-9**.

Figure III-10. Projected Revenue with Rate Increases

Revenue Source	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Service Charge	\$41,033,500	\$42,982,281	\$44,873,214	\$46,547,658	\$48,282,183	\$50,078,886
Commodity Rate	83,300,333	76,222,295	81,391,328	86,285,396	88,873,958	91,540,177
Other Revenue	31,086,219	22,379,824	24,357,116	22,149,036	22,004,438	22,343,946
Total	\$155,420,052	\$141,584,400	\$150,621,658	\$154,982,090	\$159,160,578	\$163,963,009

Note: Excludes interest on fund balances and Facilities Connection Charges

DEBT COVERAGE

Figure III-11 shows the debt service coverage provided by the revenue increases in Figure III-9. The District aims to maintain a coverage ratio of 2.00. A higher ratio provides a greater margin of safety to bondholders and enhances the credit rating on bonds. This is particularly true with water utilities whose revenues are vulnerable to periods of conservation. It is projected that the District will be above its debt coverage target through FY 2027-28.

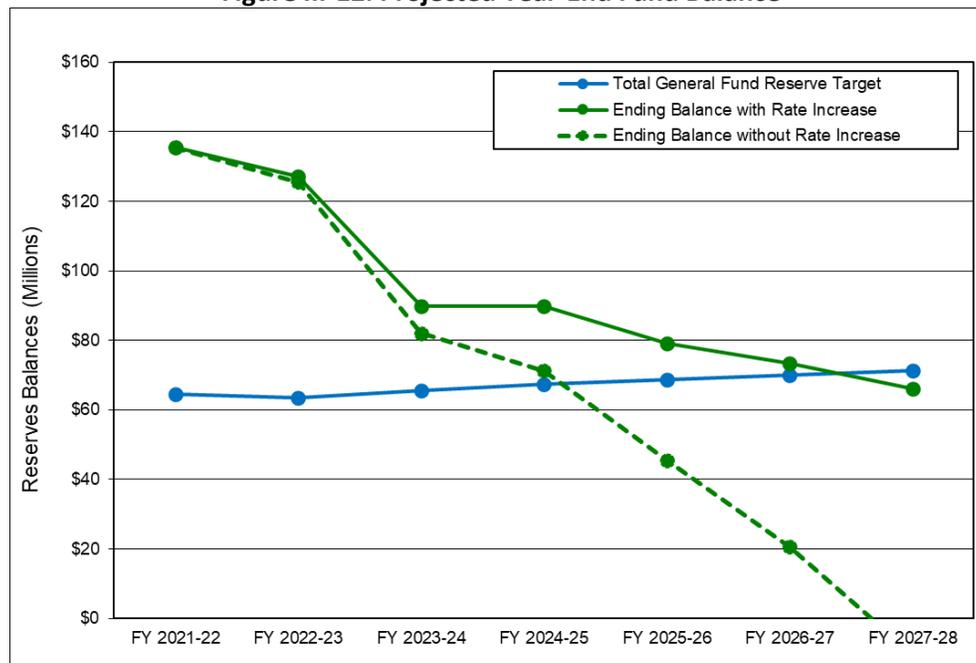
Figure III-11. Debt Service Coverage

	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Funds Available for Debt Service						
Rate Revenue - Service Charge	\$41,033,500	\$42,982,281	\$44,873,214	\$46,547,658	\$48,282,183	\$50,078,886
Rate Revenue - Commodity Charge	\$83,300,333	\$76,222,295	\$81,391,328	\$86,285,396	\$88,873,958	\$91,540,177
Non-Operating Income	\$31,086,219	\$22,379,824	\$24,357,116	\$22,149,036	\$22,004,438	\$22,343,946
Interest income	\$1,306,578	\$1,079,991	\$894,230	\$840,972	\$759,594	\$695,054
Total Funds Available	\$156,726,630	\$142,664,391	\$151,515,889	\$155,823,062	\$159,920,172	\$164,658,063
Expenses						
O&M	\$120,138,099	\$121,829,336	\$127,340,040	\$133,256,535	\$134,537,334	\$140,230,816
Total Expenses	\$120,138,099	\$121,829,336	\$127,340,040	\$133,256,535	\$134,537,334	\$140,230,816
Net Revenue	\$36,588,531	\$20,835,055	\$24,175,848	\$22,566,528	\$25,382,838	\$24,427,246
Debt Service	\$5,965,137	\$5,924,038	\$8,140,315	\$8,119,815	\$8,134,465	\$8,140,415
Debt Coverage Ratio (2.00 Target)	6.13	3.52	2.97	2.78	3.12	3.00

RESERVE FUND BALANCE

Figure III-12 shows the annual fluctuations (solid green line) in the fund balance that are caused by the differences between the revenue requirement and revenue from rates with the rate increases; the dashed green line is the projected fund balance without rate increases. The revenue and rate increases (shown in Figures III-10 and III-9, respectively) were derived to achieve the target reserves balance (blue line) by FY 2027-28.

Figure III-12. Projected Year-End Fund Balance



PROJECTED RATES

Figure III-13 shows the current and projected rates with the rate adjustments found in Figure III-9.

Figure III-13. Current and Projected Bi-Monthly Rates

Meter Service Charges	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
<i>proposed effective date:</i>	<i>3/1/2022</i>	<i>3/1/2023</i>	<i>3/1/2024</i>	<i>3/1/2025</i>	<i>3/1/2026</i>	<i>3/1/2027</i>	<i>3/1/2028</i>
5/8" & 3/4" Meters	\$58.94	\$61.30	\$63.75	\$65.66	\$67.63	\$69.66	\$71.75
1" Meters	\$94.18	\$97.95	\$101.87	\$104.92	\$108.07	\$111.31	\$114.65
1 1/2" Fire Meters	\$94.18	\$97.95	\$101.87	\$104.92	\$108.07	\$111.31	\$114.65
1 1/2" Meters	\$182.25	\$189.54	\$197.12	\$203.04	\$209.13	\$215.40	\$221.86
2" Meters	\$287.95	\$299.47	\$311.45	\$320.79	\$330.41	\$340.33	\$350.54
3" Meters	\$622.64	\$647.55	\$673.45	\$693.65	\$714.46	\$735.89	\$757.97
4" Meters	\$1,115.87	\$1,160.50	\$1,206.92	\$1,243.13	\$1,280.43	\$1,318.84	\$1,358.40
6" Meters	\$2,824.56	\$2,937.54	\$3,055.04	\$3,146.70	\$3,241.10	\$3,338.33	\$3,438.48
8" Meters	\$4,938.41	\$5,135.95	\$5,341.38	\$5,501.63	\$5,666.67	\$5,836.67	\$6,011.78
10" Meters	\$7,404.57	\$7,700.75	\$8,008.78	\$8,249.05	\$8,496.52	\$8,751.41	\$9,013.96
Commodity Rates per HCF	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
<i>proposed effective date:</i>	<i>3/1/2022</i>	<i>3/1/2023</i>	<i>3/1/2024</i>	<i>3/1/2025</i>	<i>3/1/2026</i>	<i>3/1/2027</i>	<i>3/1/2028</i>
Inside District	\$4.596	\$4.78	\$4.97	\$5.12	\$5.27	\$5.43	\$5.59
Outside District	\$5.253	\$5.46	\$5.68	\$5.85	\$6.03	\$6.21	\$6.39
Private Fire Service Rate	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
<i>proposed effective date:</i>	<i>3/1/2022</i>	<i>3/1/2023</i>	<i>3/1/2024</i>	<i>3/1/2025</i>	<i>3/1/2026</i>	<i>3/1/2027</i>	<i>3/1/2028</i>
3/4" Meters	\$7.93	\$8.25	\$8.58	\$8.83	\$9.10	\$9.37	\$9.65
1" Meters	\$8.12	\$8.44	\$8.78	\$9.05	\$9.32	\$9.60	\$9.88
2" Meters	\$9.97	\$10.37	\$10.78	\$11.11	\$11.44	\$11.78	\$12.14
4" Meters	\$21.46	\$22.32	\$23.21	\$23.91	\$24.62	\$25.36	\$26.12
6" Meters	\$47.57	\$49.47	\$51.45	\$53.00	\$54.59	\$56.22	\$57.91
8" Meters	\$92.59	\$96.29	\$100.15	\$103.15	\$106.24	\$109.43	\$112.71
10" Meters	\$160.32	\$166.73	\$173.40	\$178.60	\$183.96	\$189.48	\$195.17
12" Meters	\$254.19	\$264.36	\$274.93	\$283.18	\$291.68	\$300.43	\$309.44

IV. DROUGHT SURCHARGES

During water shortage emergencies, such as the current drought, rate payers reduce their water consumption. As a result, water agencies receive less revenue via commodity charges. It is common for water agencies to adopt temporary rates to offset this shortfall in revenue. In December 2021, the District declared a water shortage emergency and subsequently adopted water shortage emergency stage rates (referred to in this report as Drought Surcharges) that went into effect March 1, 2022 to ensure sufficient collection of revenues.

Figure IV-1 shows the drought surcharges that are effective as of March 1, 2022. The demand reduction is the overall reduction in water consumption by the District rate payers. As of the writing of this report, the District is in Stage 2a which requires a 15% reduction in overall water consumption.

Figure IV-1. Current Drought Surcharges per HCF

Stage	Demand Reduction	Rate per HCF
0	0%	\$0.000
1	10%	\$0.496
2a	15%	\$0.787
2b	20%	\$1.115
3a	25%	\$1.486
3b	30%	\$1.920
4	40%	\$3.000
5	50%	\$4.443
6	60%	\$5.852

There are several alternatives for structuring drought surcharge which are summarized as follows:

1. Equal monthly charge per account. Each account pays an equal fixed charge that totals the lost revenue due to a cutback in consumption. This approach could also be slightly altered to charge a fixed amount based on the size of the meter serving the account.
2. Uniform per unit increase to the commodity rate. This is the District's current practice. An increase to the commodity rate that would apply to all customers and levels of consumption to offset the lost revenue due to a cutback in consumption.
3. Tiered per unit increase to the commodity rate. This is similar to the alternative above. However, the increased commodity rate would only apply to consumption above a certain amount.
4. Revenue neutral multipliers. Certain customer classes may have more discretionary water use than others and could be required to cutback more during a water shortage. The level that each customer class needs to reduce its consumption would affect how much the commodity rate would increase for each customer class. The District currently bills all customers the same commodity rate and implementing this approach would change that practice during the drought.

The District has expressed a preference to maintain the current methodology. The following analysis updates the drought surcharges to be effective March 1, 2023.

DERIVATION OF DROUGHT SURCHARGES

The first step in calculating drought surcharges is determining the base level of revenue with no consumption cutback. **Figure IV-2** shows the level of consumption for calendar years 2019, 2020, and 2021 which are pre drought levels of consumption. Multiplying the average consumption for the three years by the current commodity rate provides the base level of revenue.

Figure IV-2. Base Level of Revenue

Year	Consumption (HCF)
2019	16,411,216
2020	17,588,151
2021	17,261,317
Total	51,260,684
Average	17,086,895
Rate per HCF	\$4.596
Total Revenue	\$78,531,368

The next step is to determine how much revenue will be lost at each stage. **Figure IV-3** shows the calculation of lost revenue at each stage. The level of consumption is reduced by the demand reduction for each stage. Multiplying the commodity rate of \$4.596 by the consumption provides the commodity charge revenue per stage. Accounting for the cost savings from less purchased water, treatment, etc. determines the lost revenue.

For example, in Stage 2a, a 15% demand reduction means 14,523,860 HCF in total consumption. $14,523,860 \text{ HCF} \times \$4.596 = \$66,751,663$. $\$78,531,368 - \$66,751,663 + \$349,650 = \$11,430,055$ in lost revenue.

Figure IV-3. Derivation of Lost Revenue

Stage	Demand Reduction	Consumption	Commodity Rate	Commodity Charge Revenue	Cost Savings	Lost Revenue
0	0%	17,086,895	\$4.596	\$78,531,368	\$0	\$0
1	10%	15,378,205	\$4.596	\$70,678,231	(\$233,100)	\$7,620,037
2a	15%	14,523,860	\$4.596	\$66,751,663	(\$349,650)	\$11,430,055
2b	20%	13,669,516	\$4.596	\$62,825,094	(\$466,200)	\$15,240,074
3a	25%	12,815,171	\$4.596	\$58,898,526	(\$582,750)	\$19,050,092
3b	30%	11,960,826	\$4.596	\$54,971,958	(\$590,173)	\$22,969,237
4	40%	10,252,137	\$4.596	\$47,118,821	(\$649,656)	\$30,762,891
5	50%	8,543,447	\$4.596	\$39,265,684	(\$1,296,933)	\$37,968,751
6	60%	6,834,758	\$4.596	\$31,412,547	(\$1,750,027)	\$45,368,794

After determining the lost revenue from each stage, the next step is to calculate the stage rate. Dividing the lost revenue by the consumption provides the stage rate for each stage. Using Stage 2a as an example again, $\$11,430,055 \div 14,523,860 = \0.79 . **Figure IV-4** shows the derivation of the stage rates.

Figure IV-4. Derivation of Drought Surcharges per HCF

Stage	Demand Reduction	Lost Revenue	Consumption	Stage Rate
0	0%	\$0	17,086,895	\$0.00
1	10%	\$7,620,037	15,378,205	\$0.50
2a	15%	\$11,430,055	14,523,860	\$0.79
2b	20%	\$15,240,074	13,669,516	\$1.11
3a	25%	\$19,050,092	12,815,171	\$1.49
3b	30%	\$22,969,237	11,960,826	\$1.92
4	40%	\$30,762,891	10,252,137	\$3.00
5	50%	\$37,968,751	8,543,447	\$4.44
6	60%	\$45,368,794	6,834,758	\$6.64

Figure IV-5 shows the proposed drought surcharges with a 4% overall rate revenue increase that will be effective March 1, 2023.

Figure IV-5. Proposed Drought Surcharges per HCF

Stage	Demand Reduction	Drought Surcharge FY 2022-23	Drought Surcharge FY 2023-24
<i>proposed effective date</i>		<i>3/1/2023</i>	<i>3/1/2024</i>
0	0%	\$0.00	\$0.00
1	10%	\$0.52	\$0.54
2a	15%	\$0.82	\$0.85
2b	20%	\$1.16	\$1.21
3a	25%	\$1.55	\$1.61
3b	30%	\$2.00	\$2.08
4	40%	\$3.12	\$3.25
5	50%	\$4.62	\$4.81
6	60%	\$6.90	\$7.18

V. CUSTOMER BILL COMPARISONS

Although there are no proposed changes to the District’s rate structure, customers may still be interested in understanding how the rate increases will affect them and how the District’s rates compare to other water agencies.

BILLS UNDER PROPOSED AND APPROVED RATES

Customers pay the sum of the service charge corresponding to the capacity of their service plus a commodity charge for water use during the billing period. For purposes of calculating bills, it was assumed that a service charge rate for a 5/8” or 3/4” meter applied, which represents 85% of customers. **Figure V-1** provides sample bill impacts for low, average, and high Residential water users. **Figure V-2** provides a sample bill impact for a commercial water user with a 1.5” meter.

Figure V-1. Sample Residential Customer Bill Impacts (5/8” or 3/4” Meter)

	Low	Medium	High
Demand Assumptions			
HCF per bi-monthly period	8	16	32
Bills at Current Rates effective 3/1/2022			
Service Charge	\$58.94	\$58.94	\$58.94
Commodity Charge	\$36.77	\$73.54	\$147.07
Total Bill	\$95.71	\$132.48	\$206.01
Bills at Proposed Rates effective 3/1/2023			
Service Charge	\$61.30	\$61.30	\$61.30
Commodity Charge	\$38.24	\$76.48	\$152.96
Total Bill	\$99.54	\$137.78	\$214.26
Difference - \$	\$3.83	\$5.30	\$8.25
Difference - %	4.0%	4.0%	4.0%

Figure V-2. Sample Commercial Customer Bill Impact (1.5” Meter)

Demand Assumptions	
HCF per bi-monthly period	125
Bills at Current Rates effective 3/1/2022	
Service Charge	\$182.25
Commodity Charge	\$574.50
Total Bill	\$756.75
Bills at Proposed Rates effective 3/1/2023	
Service Charge	\$189.54
Commodity Charge	\$597.48
Total Bill	\$787.02
Difference - \$	\$30.27
Difference - %	4.0%

Figure V-3 provides sample bills for a residential customer with a 5/8" or 3/4" meter at Stage 0 (no drought) and Stage 2a (current stage).

Figure V-3. Sample Residential Customer Bill with and without Cutback (5/8" or 3/4" Meter)

	Cutback	No Cutback	No Drought
Demand Assumptions			
HCF per bi-monthly period	13	16	16
Bills at Current Rates effective 3/1/2022			
Service Charge	\$58.94	\$58.94	\$58.94
Commodity Charge	\$59.75	\$73.54	\$73.54
Drought Surcharge	\$10.23	\$12.59	\$0.00
Total Bill	\$128.92	\$145.07	\$132.48
Bills at Proposed Rates effective 3/1/2023			
Service Charge	\$61.30	\$61.30	\$61.30
Commodity Charge	\$62.14	\$76.48	\$76.48
Drought Surcharge	\$10.64	\$13.10	\$0.00
Total Bill	\$134.08	\$150.88	\$137.78
Difference - \$	\$5.16	\$5.81	\$5.30
Difference - %	4.0%	4.0%	4.0%

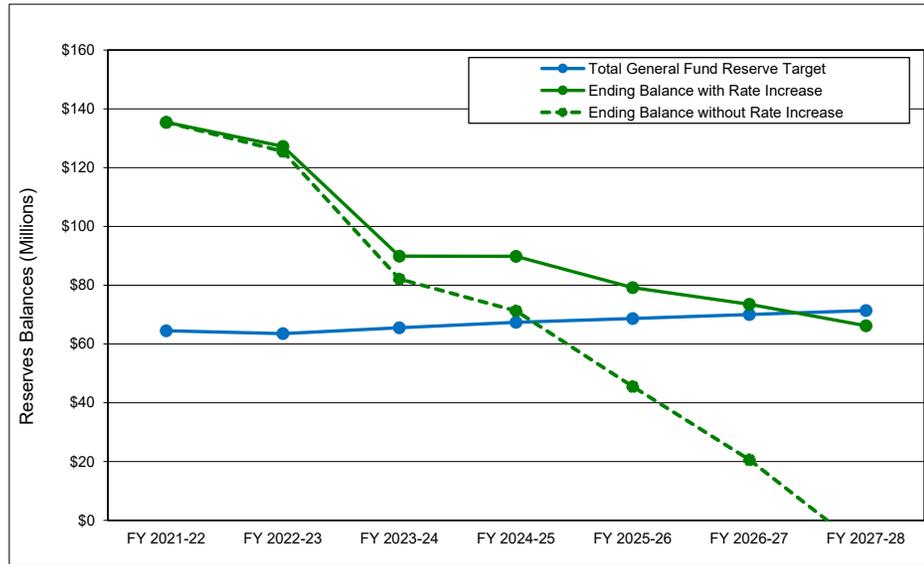
Assumes Stage 2a – 15% cutback for a customer normally using 16 HCF cutback 15% is 13.6 HCF; however, 13 HCF is used because the District bills in whole units



WATER RATES UPDATE AND FINANCIAL PLAN

Appendix. Water Rate Model

	A	B	C	D	E	F	G	H
1	Alameda County Water District							
2	Financial Planning Model							
3	1A. Summary							
4			Projected					
5			FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
6		<i>Eff. Date</i>	3/1/2023	3/1/2024	3/1/2025	3/1/2026	3/1/2027	3/1/2028
7	Annual Rate Revenue Increases							
8	Service Charge Revenue Increase		4.0%	4.0%	3.0%	3.0%	3.0%	3.0%
9	Cumulative Increase		4.00%	8.16%	11.40%	14.75%	18.19%	21.74%
10								
11	Consumption Charge Revenue Increase		4.0%	4.0%	3.0%	3.0%	3.0%	3.0%
12	Cumulative Increase		4.00%	8.16%	11.40%	14.75%	18.19%	21.74%
13								
14	Debt Coverage Ratio (2.00 Target)		613%	352%	297%	278%	312%	300%
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45	Water Rates - Including Annual Increases							
46	Meter Service Charges	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
47	<i>proposed effective date:</i>	3/1/2022	3/1/2023	3/1/2024	3/1/2025	3/1/2026	3/1/2027	3/1/2028
48	5/8" & 3/4" Meters	\$58.94	\$61.30	\$63.75	\$65.66	\$67.63	\$69.66	\$71.75
49	1" Meters	\$94.18	\$97.95	\$101.87	\$104.92	\$108.07	\$111.31	\$114.65
50	1 1/2" Fire Meters	\$94.18	\$97.95	\$101.87	\$104.92	\$108.07	\$111.31	\$114.65
51	1 1/2" Meters	\$182.25	\$189.54	\$197.12	\$203.04	\$209.13	\$215.40	\$221.86
52	2" Meters	\$287.95	\$299.47	\$311.45	\$320.79	\$330.41	\$340.33	\$350.54
53	3" Meters	\$622.64	\$647.55	\$673.45	\$693.65	\$714.46	\$735.89	\$757.97
54	4" Meters	\$1,115.87	\$1,160.50	\$1,206.92	\$1,243.13	\$1,280.43	\$1,318.84	\$1,358.40
55	6" Meters	\$2,824.56	\$2,937.54	\$3,055.04	\$3,146.70	\$3,241.10	\$3,338.33	\$3,438.48
56	8" Meters	\$4,938.41	\$5,135.95	\$5,341.38	\$5,501.63	\$5,666.67	\$5,836.67	\$6,011.78
57	10" Meters	\$7,404.57	\$7,700.75	\$8,008.78	\$8,249.05	\$8,496.52	\$8,751.41	\$9,013.96
58								
59								
60	Commodity Rates per HCF	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
61	<i>proposed effective date:</i>	3/1/2022	3/1/2023	3/1/2024	3/1/2025	3/1/2026	3/1/2027	3/1/2028
62	Inside District	\$4.596	\$4.78	\$4.97	\$5.12	\$5.27	\$5.43	\$5.59
63	Outside District	\$5.253	\$5.46	\$5.68	\$5.85	\$6.03	\$6.21	\$6.39
64								
65	Private Fire Service Rate	Current	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
66	<i>proposed effective date:</i>	3/1/2022	3/1/2023	3/1/2024	3/1/2025	3/1/2026	3/1/2027	3/1/2028
67	3/4" Meters	\$7.93	\$8.25	\$8.58	\$8.83	\$9.10	\$9.37	\$9.65
68	1" Meters	\$8.12	\$8.44	\$8.78	\$9.05	\$9.32	\$9.60	\$9.88
69	2" Meters	\$9.97	\$10.37	\$10.78	\$11.11	\$11.44	\$11.78	\$12.14
70	4" Meters	\$21.46	\$22.32	\$23.21	\$23.91	\$24.62	\$25.36	\$26.12
71	6" Meters	\$47.57	\$49.47	\$51.45	\$53.00	\$54.59	\$56.22	\$57.91
72	8" Meters	\$92.59	\$96.29	\$100.15	\$103.15	\$106.24	\$109.43	\$112.71
73	10" Meters	\$160.32	\$166.73	\$173.40	\$178.60	\$183.96	\$189.48	\$195.17
74	12" Meters	\$254.19	\$264.36	\$274.93	\$283.18	\$291.68	\$300.43	\$309.44



	A	B	C	D	E	F	G	H
1	Alameda County Water District		2023	2024	2025	2026	2027	2028
2	Financial Planning Model							
3	1B. Assumptions							
4								
5								
6	Inflation Factor Assumptions	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	
7	General	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
8	Salary	Budgeted	3.25%	3.14%	3.00%	3.00%	3.00%	3.00%
9	Benefits	Budgeted	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
10	CalPERS	Budgeted	11.50%	11.30%	11.10%	10.80%	10.60%	
11	Medical	Budgeted	5.50%	5.40%	5.40%	5.30%	5.30%	
12	OPEB	Budgeted	3.00%	3.00%	3.00%	3.00%	3.00%	
13	Utilities	Budgeted	5.00%	5.00%	5.00%	5.00%	5.00%	
15	SFPUC Water Cost (%)	Budgeted	10.53%	0.00%	0.00%	0.00%	14.67%	
16	SFPUC Water Cost (\$)	\$4.75	\$5.25	\$5.25	\$5.25	\$5.25	\$6.02	
17	SWP Water Cost	Budgeted	2.94%	6.89%	-4.40%	-2.23%	-0.57%	
18	Overhead Allocation	Budgeted	165.60%	165.60%	165.60%	165.60%	165.60%	
19			1.656					
20			1.724					
21	Other Assumptions	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	
22	CalPERS UAL	\$5,594,575	\$4,524,273	\$4,238,618	\$3,225,013	\$3,225,013	\$3,225,013	
23	Labor	\$29,386,645	\$30,194,777	\$31,025,134	\$31,878,325	\$32,754,980	\$33,655,741	
24	CalPERS (Normal Cost \$)		\$3,472,399	\$3,505,840	\$3,538,494	\$3,537,538	\$3,567,509	
25	PERS Employer Percent		\$7,996,672	\$7,744,458	\$6,763,507	\$6,762,551	\$6,792,522	
26	Overall Demand Changes	5.41%	-6.80%	-7.91%	3.11%	3.01%	2.93%	
27	Water Losses	8.10%	8.10%	8.10%	8.10%	8.10%	8.10%	
28	Fixed SFPUC Costs	\$2,935,236	\$2,935,236	\$2,935,236	\$2,935,236	\$2,935,236	\$2,935,236	
29	Fixed SWP Costs	\$8,746,764	\$8,908,554	\$8,902,958	\$8,888,559	\$8,216,009	\$8,208,808	
30	Fixed Semi-tropic Costs	\$1,136,201	\$1,170,287	\$1,205,396	\$1,241,558	\$1,278,804	\$1,317,169	
31	State Water Contract Tax (% of SW)	67.7%	67.7%	67.7%	67.7%	67.7%	67.7%	

	A	B	C	D	E	F	G
1	Alameda County Water District						
2	Financial Planning Model						
3	2A. Revenue Requirements						
4		Budgeted					
5		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
6	Operating Expenses						
7	Administrative & General	\$18,458,211	\$15,891,424	\$16,478,724	\$15,312,461	\$16,445,066	\$16,311,280
8	Pension Prefunding	\$5,566,086	\$6,636,388	\$6,922,043	\$7,935,648	\$7,935,648	\$7,935,648
9	Source of Supply	\$44,486,717	\$45,427,961	\$48,643,005	\$51,108,321	\$51,376,566	\$55,022,437
10	Pumping	\$2,625,664	\$2,628,881	\$2,655,928	\$2,778,927	\$2,908,320	\$3,044,460
11	Water Treatment	\$19,294,254	\$19,176,149	\$19,648,901	\$20,369,387	\$21,111,527	\$21,884,337
12	Transmission & Distribution	\$17,881,119	\$17,867,481	\$18,426,438	\$18,981,625	\$19,553,589	\$20,142,836
13	Customer Accounts	\$5,947,585	\$6,041,681	\$6,136,793	\$6,232,284	\$6,330,640	\$6,431,947
14	Extraordinary Expense Projects	\$5,878,463	\$6,871,741	\$6,836,301	\$7,309,215	\$4,809,860	\$4,490,360
15	Ad hoc Incremental O&M	\$0	\$1,117,944	\$2,900,000	\$4,900,000	\$5,400,000	\$5,700,163
16	Expense Projects Incremental O&M	\$0	\$119,146	(\$322,628)	(\$646,759)	(\$269,023)	\$373,700
17	Net Revised Budget Cuts	\$0	\$50,540	(\$985,465)	(\$1,024,575)	(\$1,064,859)	(\$1,106,352)
18	Total Operating Costs	\$120,138,099	\$121,829,336	\$127,340,040	\$133,256,535	\$134,537,334	\$140,230,816
19							
20	Debt Service						
21	Revenue Bonds Series 2015	\$1,624,400	\$1,627,400	\$1,623,650	\$1,623,400	\$1,623,800	\$1,623,000
22	Revenue Bonds Series 2022	\$4,340,737	\$4,296,638	\$4,287,138	\$4,266,888	\$4,281,138	\$4,287,888
23	Future Bonds & WIFIA	\$0	\$0	\$2,229,527	\$2,229,527	\$2,229,527	\$2,229,527
24	Future SRF Loans	\$0	\$0	\$0	\$0	\$0	\$0
25	Total Debt Service	\$5,965,137	\$5,924,038	\$8,140,315	\$8,119,815	\$8,134,465	\$8,140,415
26							
27	Non Rate Revenue	(\$31,086,219)	(\$22,379,824)	(\$24,357,116)	(\$22,149,036)	(\$22,004,438)	(\$22,343,946)
28							
29	Contribution to Capital	\$39,449,810	\$52,631,561	\$46,478,916	\$25,534,206	\$23,343,898	\$23,989,911
30							
31	Total Revenue Requirement	\$134,466,827	\$158,005,112	\$157,602,155	\$144,761,520	\$144,011,260	\$150,017,197

	A	B	C	D	E	F	G	H
1	Alameda County Water District							
2	Financial Planning Model							
3	3A. Service Charge Revenue							
4								
5		Months						
6		Increase					Projected	
7		In Effect	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
8	Rate Revenue at Current Rates							
9	Total Rate Revenue		\$40,493,586	\$40,785,312	\$41,077,039	\$41,368,765	\$41,660,492	\$41,952,219
10								
11	Increase in Rate Revenue		4.0%	4.0%	3.0%	3.0%	3.0%	3.0%
12								
13	Revenue from Current Rates		\$40,493,586	\$40,785,312	\$41,077,039	\$41,368,765	\$41,660,492	\$41,952,219
14								
15	Revenue from Rate Increases							
16	FY 2022-23 (eff. Mar 1, 2023)	4	\$539,914	\$1,631,412	\$1,643,082	\$1,654,751	\$1,666,420	\$1,678,089
17	FY 2023-24 (eff. Mar 1, 2024)	4		\$565,556	\$1,708,805	\$1,720,941	\$1,733,076	\$1,745,212
18	FY 2024-25 (eff. Mar 1, 2025)	4			\$444,289	\$1,342,334	\$1,351,800	\$1,361,266
19	FY 2025-26 (eff. Mar 1, 2026)	4				\$460,868	\$1,392,354	\$1,402,104
20	FY 2026-27 (eff. Mar 1, 2027)	4					\$478,041	\$1,444,167
21	FY 2027-28 (eff. Mar 1, 2028)	4						\$495,831
55	Total Revenue from Rate Increases		\$539,914	\$2,196,969	\$3,796,176	\$5,178,893	\$6,621,691	\$8,126,667
56	Total Current Revenue		\$40,493,586	\$40,785,312	\$41,077,039	\$41,368,765	\$41,660,492	\$41,952,219
57	Total Revenue with Rate Increases		\$41,033,500	\$42,982,281	\$44,873,214	\$46,547,658	\$48,282,183	\$50,078,886

	A	B	C	D	E	F	G	H
1	Alameda County Water District							
2	Financial Planning Model							
3	3B. Consumption Charge Revenue							
4								
5		Months						
6		Increase					Projected	
7		In Effect	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
8	Rate Revenue at Current Rates							
9		Total Rate Revenue	\$82,204,276	\$72,326,317	\$74,505,800	\$76,685,282	\$76,685,282	\$76,685,282
10								
11		Increase in Rate Revenue	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%
12								
13		Revenue from Current Rates	\$82,204,276	\$72,326,317	\$74,505,800	\$76,685,282	\$76,685,282	\$76,685,282
14								
15		Revenue from Rate Increases						
16		FY 2022-23 (eff. Mar 1, 2023)	4	\$1,096,057	\$2,893,053	\$2,980,232	\$3,067,411	\$3,067,411
17		FY 2023-24 (eff. Mar 1, 2024)	4		\$1,002,925	\$3,099,441	\$3,190,108	\$3,190,108
18		FY 2024-25 (eff. Mar 1, 2025)	4			\$805,855	\$2,488,284	\$2,488,284
19		FY 2025-26 (eff. Mar 1, 2026)	4				\$854,311	\$2,562,933
20		FY 2026-27 (eff. Mar 1, 2027)	4					\$879,940
21		FY 2027-28 (eff. Mar 1, 2028)	4					\$906,338
55		Total Revenue from Rate Increases		\$1,096,057	\$3,895,978	\$6,885,528	\$9,600,114	\$12,188,676
56		Total Current Revenue		\$82,204,276	\$72,326,317	\$74,505,800	\$76,685,282	\$76,685,282
57		Total Revenue with Rate Increases		\$83,300,333	\$76,222,295	\$81,391,328	\$86,285,396	\$88,873,958

Alameda County Water District
Financial Planning Model
3C. Rate Revenue Current

	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Total Demand (HCF)						
Inside District	15,262,584	15,736,797	16,211,010	16,685,222	16,685,222	16,685,222
Outside District	0	0	0	0	0	0
Total Potable	15,262,584	15,736,797	16,211,010	16,685,222	16,685,222	16,685,222
Total Potable (AF)	35,038	36,127	37,215	38,304	38,304	38,304
Total Potable (MGD)	31.3	32.3	33.2	34.2	34.2	34.2
Commodity Rates (per HCF)						
Inside District	\$4.596	\$4.596	\$4.596	\$4.596	\$4.596	\$4.596
Outside District	\$5.253	\$5.253	\$5.253	\$5.253	\$5.253	\$5.253
Drought Surcharge	\$0.790	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Commodity Rate	\$5.386	\$4.60	\$4.60	\$4.60	\$4.60	\$4.60
Commodity Revenue						
Inside District	\$82,204,276	\$72,326,317	\$74,505,800	\$76,685,282	\$76,685,282	\$76,685,282
Outside District	\$0	\$0	\$0	\$0	\$0	\$0
Total Variable Revenue	\$82,204,276	\$72,326,317	\$74,505,800	\$76,685,282	\$76,685,282	\$76,685,282

Meter Counts	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
5/8" & 3/4" Meters	72,568	73,028	73,488	73,948	74,408	74,868
1" Meters	5,262	5,417	5,572	5,727	5,882	6,037
1 1/2" Fire Meters	2,110	2,110	2,110	2,110	2,110	2,110
1 1/2" Meters	1,801	1,801	1,801	1,801	1,801	1,801
2" Meters	2,980	3,004	3,028	3,052	3,076	3,100
3" Meters	232	232	232	232	232	232
4" Meters	116	116	116	116	116	116
6" Meters	59	59	59	59	59	59
8" Meters	26	26	26	26	26	26
10" Meters	3	3	3	3	3	3
	85,157	85,796	86,435	87,074	87,713	88,352

Meter Service Charges	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
5/8" & 3/4" Meters	\$58.94	\$58.94	\$58.94	\$58.94	\$58.94	\$58.94
1" Meters	\$94.18	\$94.18	\$94.18	\$94.18	\$94.18	\$94.18
1 1/2" Fire Meters	\$94.18	\$94.18	\$94.18	\$94.18	\$94.18	\$94.18
1 1/2" Meters	\$182.25	\$182.25	\$182.25	\$182.25	\$182.25	\$182.25
2" Meters	\$287.95	\$287.95	\$287.95	\$287.95	\$287.95	\$287.95
3" Meters	\$622.64	\$622.64	\$622.64	\$622.64	\$622.64	\$622.64
4" Meters	\$1,115.87	\$1,115.87	\$1,115.87	\$1,115.87	\$1,115.87	\$1,115.87
6" Meters	\$2,824.56	\$2,824.56	\$2,824.56	\$2,824.56	\$2,824.56	\$2,824.56
8" Meters	\$4,938.41	\$4,938.41	\$4,938.41	\$4,938.41	\$4,938.41	\$4,938.41
10" Meters	\$7,404.57	\$7,404.57	\$7,404.57	\$7,404.57	\$7,404.57	\$7,404.57

Meter Service Charge Revenue	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
5/8" & 3/4" Meters	\$25,662,948	\$25,825,622	\$25,988,296	\$26,150,971	\$26,313,645	\$26,476,320
1" Meters	\$2,973,451	\$3,061,038	\$3,148,626	\$3,236,213	\$3,323,801	\$3,411,388
1 1/2" Fire Meters	\$1,192,319	\$1,192,319	\$1,192,319	\$1,192,319	\$1,192,319	\$1,192,319
1 1/2" Meters	\$1,969,394	\$1,969,394	\$1,969,394	\$1,969,394	\$1,969,394	\$1,969,394
2" Meters	\$5,148,546	\$5,190,011	\$5,231,476	\$5,272,940	\$5,314,405	\$5,355,870
3" Meters	\$866,715	\$866,715	\$866,715	\$866,715	\$866,715	\$866,715
4" Meters	\$776,646	\$776,646	\$776,646	\$776,646	\$776,646	\$776,646
6" Meters	\$999,894	\$999,894	\$999,894	\$999,894	\$999,894	\$999,894
8" Meters	\$770,392	\$770,392	\$770,392	\$770,392	\$770,392	\$770,392
10" Meters	\$133,282	\$133,282	\$133,282	\$133,282	\$133,282	\$133,282
Total Meter Service Charge Revenue	\$40,493,586	\$40,785,312	\$41,077,039	\$41,368,765	\$41,660,492	\$41,952,219

	A	C	D	E	F	G	H
1	Alameda County Water District						
2	Financial Planning Model						
3	3D. Other Revenue						
4		Budgeted	Projected				
5		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
7	Private Fire Service Rate	\$948,130	\$976,574	\$1,005,871	\$1,036,047	\$1,067,129	\$1,099,143
8	Backflow Testing Charge	569,585	569,585	569,585	569,585	569,585	569,585
9	Account Estab. Charge	391,128	391,128	391,128	391,128	391,128	391,128
10	Ground Water Revenue	577,299	594,618	612,457	630,830	649,755	669,248
11	1% Apportionment Property Tax	7,558,439	7,785,192	8,018,748	8,259,310	8,507,089	8,762,302
12	State Water Contract Levy	5,921,559	6,033,122	6,029,333	6,019,586	5,564,269	5,559,394
14	Customer Jobs	5,090,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
15	Licenses and Permits	126,410	126,410	126,410	126,410	126,410	130,203
17	Fire Flow Testing	22,724	23,406	24,108	24,831	25,576	26,343
18	Lease of Other Physical Property	354,967	365,617	376,585	387,883	399,519	411,505
19	Residential Service Line Insurance	74,900	74,900	74,900	74,900	74,900	77,147
22	Scrap Sales	16,800	17,304	17,823	18,358	18,909	19,476
23	Sale of Fixed Assets	80,500	0	2,500,000	0	0	0
26	Grants & Reimbursements	8,743,609	811,800	0	0	0	0
27	Misc	610,168	610,168	610,168	610,168	610,168	628,473
33	Total General Fund Non-Rate Revenues	\$31,086,219	\$22,379,824	\$24,357,116	\$22,149,036	\$22,004,438	\$22,343,946
34							
35	Facilities Connection Charges (FIF)	\$1,050,000	\$1,081,500	\$1,113,945	\$1,147,363	\$1,181,784	\$1,217,238
36	Facilities Connection Charges Equity Buy-In (FRF)	\$590,000	\$413,000	\$413,000	\$413,000	\$413,000	\$413,000
37	Total FCC	\$1,640,000	\$1,494,500	\$1,526,945	\$1,560,363	\$1,594,784	\$1,630,238

	A	B	C	D	E	F	G	H
1	Alameda County Water District							
2	Financial Planning Model							
3	4A. Cash Flows							
4								
5								
6		Consumption Charge	4.00%	4.00%	3.00%	3.00%	3.00%	3.00%
7		Service Charge Ad.	4.00%	4.00%	3.00%	3.00%	3.00%	3.00%
8		FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
9	General Fund (GF) Cash Flows							
10	Beginning Balance		\$135,429,291	\$127,192,875	\$89,885,330	\$89,854,948	\$79,180,455	\$73,497,929
11	Cash Inflows				\$30,000,000			
12	Operating Revenues		\$124,333,833	\$119,204,576	\$126,264,542	\$132,833,054	\$137,156,141	\$141,619,063
13	Non Operating Revenues		\$31,086,219	\$22,379,824	\$24,357,116	\$22,149,036	\$22,004,438	\$22,343,946
14	Bond Proceeds				\$30,000,000			
15	Cash Outflows							
16	Operating Expenses		(\$120,138,099)	(\$121,829,336)	(\$127,340,040)	(\$133,256,535)	(\$134,537,334)	(\$140,230,816)
17	Debt Service		(\$5,965,137)	(\$5,924,038)	(\$8,140,315)	(\$8,119,815)	(\$8,134,465)	(\$8,140,415)
18	PAYGo CIP		(\$39,449,810)	(\$52,631,561)	(\$46,478,916)	(\$25,534,206)	(\$23,343,898)	(\$23,989,911)
19	Transfers							
20	Transfer (to)/from FIF							
21	Transfer (to)/from FRF		\$590,000	\$413,000	\$413,000	\$413,000	\$413,000	\$413,000
22	Fund Subtotal		\$125,886,297	\$88,805,339	\$88,960,718	\$78,339,483	\$72,738,335	\$65,512,796
23	Estimated Interest Earnings		\$1,306,578	\$1,079,991	\$894,230	\$840,972	\$759,594	\$695,054
24	Ending Balance with Rate Increase	\$135,429,291	\$127,192,875	\$89,885,330	\$89,854,948	\$79,180,455	\$73,497,929	\$66,207,849
25	Target Balance	\$64,541,919	\$64,541,919	\$63,526,830	\$65,500,257	\$67,357,074	\$68,658,975	\$70,002,468
26	General Fund Reserve Targets							
27	O&M Reserve		\$31,083,458	\$29,801,144	\$31,566,136	\$33,208,264	\$34,289,035	\$35,404,766
28	Capital Reserve		\$14,499,000	\$14,499,000	\$14,499,000	\$14,499,000	\$14,499,000	\$14,499,000
29	Rate Stabilization Reserve		\$6,680,628	\$6,947,853	\$7,156,288	\$7,370,977	\$7,592,106	\$7,819,870
30	Emergency Reserve		\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000
31	Installer's Reimbursement Fund Reserve		\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000
32	Management Retirement Bonus Reserve		\$1,078,833	\$1,078,833	\$1,078,833	\$1,078,833	\$1,078,833	\$1,078,833
33	Total General Fund Reserve Target		\$64,541,919	\$63,526,830	\$65,500,257	\$67,357,074	\$68,658,975	\$70,002,468
34	Operations Contingency Fund (not included)		\$17,192,426	\$39,988,564	\$0	\$0	\$0	\$0
35	Capital Projects Sinking Fund (not included)		\$53,694,946	\$23,677,481	\$28,341,780	\$30,173,942	\$52,066,040	\$63,453,664
36	Facilities Improvement Fund (FIF)							
37	Beginning Balance		\$73,440,845	\$68,915,093	\$59,437,391	\$51,406,583	\$44,779,520	\$35,654,911
38	Cash Inflows							
39	Facilities Connection Charges		\$1,050,000	\$1,081,500	\$1,113,945	\$1,147,363	\$1,181,784	\$1,217,238
40	Transfers from General Fund		\$0	\$0	\$0	\$0	\$0	\$0
41	Cash Outflows							
42	CIP PAYGo - FIF		(\$6,283,990)	(\$11,197,771)	(\$9,696,216)	(\$8,252,964)	(\$10,706,565)	(\$7,303,658)
43	Fund Subtotal		\$68,206,855	\$58,798,822	\$50,855,120	\$44,300,982	\$35,254,739	\$29,568,491
44	Estimated Interest Earnings		\$708,238	\$638,570	\$551,463	\$478,538	\$400,171	\$326,117
45	Ending Balance	\$73,440,845	\$68,915,093	\$59,437,391	\$51,406,583	\$44,779,520	\$35,654,911	\$29,894,608
46	Target Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0
47	Facilities Renewal Fund (FRF)							
48	Beginning Balance		\$0	\$0	\$0	\$0	\$0	\$0
49	Cash Inflows							
50	Facilities Connection Charges Equity Buy-In		\$590,000	\$413,000	\$413,000	\$413,000	\$413,000	\$413,000
51	Cash Outflows							
52	CIP PAYGo - FRF		(\$590,000)	(\$413,000)	(\$413,000)	(\$413,000)	(\$413,000)	(\$413,000)
53	Fund Subtotal		\$0	\$0	\$0	\$0	\$0	\$0
54	Estimated Interest Earnings		\$0	\$0	\$0	\$0	\$0	\$0
55	Ending Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0
56	Target Balance	\$0	\$0	\$0	\$0	\$0	\$0	\$0
57	General Fund (GF) Cash Flows w/o Rate Increases							
58	Beginning Balance		\$135,429,291	\$125,548,724	\$82,101,326	\$71,257,992	\$45,544,627	\$20,621,325
59	Operating Revenues		\$122,697,862	\$113,111,630	\$115,582,839	\$118,054,048	\$118,345,774	\$118,637,501
60	Non Operating Revenues		\$31,086,219	\$22,379,824	\$24,357,116	\$22,149,036	\$22,004,438	\$22,343,946
61	Bond Proceeds				\$30,000,000			
62	Operating Expenses		(\$120,138,099)	(\$121,829,336)	(\$127,340,040)	(\$133,256,535)	(\$134,537,334)	(\$140,230,816)
63	Debt Service		(\$5,965,137)	(\$5,924,038)	(\$8,140,315)	(\$8,119,815)	(\$8,134,465)	(\$8,140,415)
64	PAYGo CIP		(\$39,449,810)	(\$52,631,561)	(\$46,478,916)	(\$25,534,206)	(\$23,343,898)	(\$23,989,911)
65	Transfers							
66	Transfer to FIF		\$0	\$0	\$0	\$0	\$0	\$0
67	Transfer to FRF		\$590,000	\$413,000	\$413,000	\$413,000	\$413,000	\$413,000
68	Fund Subtotal		\$124,250,325	\$81,068,241	\$70,495,010	\$44,963,520	\$20,292,141	(\$10,345,371)
69	Estimated Interest Earnings		\$1,298,398	\$1,033,085	\$762,982	\$581,108	\$329,184	\$51,380
70	Ending Balance with Rate Increase	\$135,429,291	\$125,548,724	\$82,101,326	\$71,257,992	\$45,544,627	\$20,621,325	(\$10,293,991)
71	Target Balance	\$64,541,919	\$64,541,919	\$63,526,830	\$65,500,257	\$67,357,074	\$68,658,975	\$70,002,468

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
1	Alameda County Water District															1	2	3	4	5	6
2	Financial Planning Model																				
3	SA. CIP																				
4																					
5																					
6	Include	Function	CIP No	Job or ID No	Funding Source	SRF/Bond #	% GF	% FIF	FRF	Start Year	Duration	Total	Project Description	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28		
6	yes	Distribution	MD6005	10062	PAYGo		90%	10%	no	2023	5	\$69,834,003	Advanced Metering Infrastructure	\$13,778,956	\$11,350,000	\$8,705,047					
7	yes	Operations	PH0108A	OPS0317	PAYGo		81%	19%	no	2023	3	\$15,174,177	PFAS treatment (CIP)	\$4,788,530	\$7,385,647	\$3,000,000					
8	yes	Distribution	SR0101	21292	PAYGo		80%	20%	no	2023	3	\$15,596,886	Alameda Reservoir Roof Replacement	\$4,514,422	\$6,082,464	\$5,000,000					
9	no	Customer Jobs	MD0109	OPS0003	PAYGo		100%	0%	no	2023	24	\$86,958,709	CUSTOMER GENERATED DISTRIBUTION SYSTEMS IMPROVEMENTS	\$4,458,709	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$3,500,000		
10	yes	Distribution	MM8007	21212	PAYGo		80%	20%	yes	2023	2	\$13,878,439	Main Renewal - MR1 Driscoll	\$3,878,439	\$10,000,000						
11	yes	Distribution	ST0752	21126	PAYGo		83%	17%	no	2023	1	\$2,261,333	Avalon Tank Slope Stabilization Improvements	\$2,261,333							
12	yes	Distribution	BB0203B	21247	PAYGo		80%	20%	no	2023	2	\$7,553,860	Curtner Road Booster Station Upgrade	\$4,276,285	\$3,277,575						
13	no	Extraordinary Expense	EE0163	10056	PAYGo		80%	20%	no	2023	24	\$93,543,000	Los Vaqueros Reservoir Expansion Project	\$1,543,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000		
14	yes	Distribution	MD0101	21047	PAYGo		100%	0%	no	2023	9	\$18,672,000	Service Line Emergency Replacement Program	\$1,400,000	\$1,400,000	\$1,400,000	\$2,412,000	\$2,412,000	\$2,412,000		
15	no	Extraordinary Expense	PH0108B	OPS0319	PAYGo		100%	0%	no	2023	1	\$1,201,823	PFAS treatment study (EE)	\$1,201,823							
16	no	Extraordinary Expense	YI0101	21266	PAYGo		90%	10%	no	2023	4	\$3,690,350	SCADA Systems Replacements	\$920,402	\$923,316	\$923,316	\$923,316				
17	yes	Vehicle	AV0103	OPS0028	PAYGo		100%	0%	no	2023	7	\$1,810,000	Vehicle Capital - Construction Equipment and Machinery	\$900,000	\$80,000	\$150,000			\$150,000		
18	yes	Operations	PJ0262	OPS0008	PAYGo		95%	5%	no	2023	1	\$716,970	WTP2 Filter Media Replacement	\$716,970							
19	yes	Distribution	YI0102B	21206	PAYGo		90%	10%	no	2023	22	\$13,946,702	Distribution PLC Upgrade	\$579,362			\$636,540	\$636,540	\$636,540		
20	yes	Distribution	MN0101B	21031A	PAYGo		80%	20%	no	2023	2	\$806,572	Cathodic Protection Improvements and Additions	\$464,572							
21	yes	Distribution	PH0154B	21299	PAYGo		90%	10%	no	2023	1	\$432,538	Blending Facility Low Flow Control Modifications/Neat Feed	\$432,538							
22	yes	Distribution	MM8012	21348	PAYGo		80%	20%	yes	2023	4	\$5,510,201	Main Renewal - Lindsay Tract	\$430,201	\$2,000,000	\$1,580,000	\$1,500,000				
23	yes	Distribution	PJ0154	OPS0327	PAYGo		100%	0%	no	2023	1	\$425,000	MSI/WTP Property Improvements	\$425,000							
24	no	Extraordinary Expense	AK0362	OPS0010	PAYGo		100%	0%	no	2023	2	\$507,360	Water Quality Extraordinary Expenses	\$407,360	\$100,000						
25	yes	Engineering	MD0104	E0090	PAYGo		100%	0%	no	2023	1	\$401,948	Distribution System Seismic Study Update	\$401,948							
26	yes	Vehicle	AV0104	OPS0029	PAYGo		100%	0%	no	2023	10	\$5,115,000	Vehicle Capital - Heavy - Duty Vehicles	\$385,000	\$325,000	\$640,000	\$915,000	\$1,625,000			
27	yes	HQ Facilities	AQ0151C	OPS0013A	PAYGo		100%	0%	no	2023	24	\$4,073,000	Headquarters Facility Improvement/ Equipment Replacement	\$370,000	\$161,000	\$161,000	\$161,000	\$161,000	\$161,000		
28	yes	Distribution	SR0201	21290	PAYGo		80%	20%	no	2023	3	\$12,131,244	Decoto Reservoir Roof Replacement	\$359,488	\$5,885,878	\$5,885,878					
29	yes	Ground Water	GG0601B	10099	PAYGo		80%	20%	no	2023	1	\$353,680	Monitoring Well Construction Project	\$353,680							
30	yes	Operations	AK0365	OPS0300	PAYGo		100%	0%	no	2023	1	\$330,000	Facilities Maintenance Shop	\$330,000							
31	yes	Engineering	AK0109	21360	PAYGo		100%	0%	no	2023	24	\$1,675,000	IT Infrastructure Upgrades - Capital	\$325,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000		
32	no	Extraordinary Expense	GG7001	10100	PAYGo		50%	50%	no	2023	1	\$314,720	Alternative Update and Model Upgrade Project	\$314,720							
33	no	Extraordinary Expense	PJ0208B	21117	PAYGo		80%	20%	no	2023	5	\$1,699,537	WTP2 Process Basin Concrete Grouting	\$290,537	\$394,500	\$337,800	\$282,200	\$394,500			
34	yes	Distribution	BB0851	21197	PAYGo		80%	20%	no	2023	1	\$280,702	Washington Booster Improvements (Phase 1 and 2)	\$280,702							
35	no	Extraordinary Expense	EE0161	10008	PAYGo		80%	20%	no	2023	3	\$926,840	Integrated Resources Planning - Extraordinary Expense	\$276,840	\$350,000	\$300,000					
36	yes	Ground Water	GG0302B	21168A	PAYGo		80%	20%	no	2023	3	\$2,384,995	Kaiser Pond Diversion Improvement Project	\$237,704	\$1,005,024	\$1,142,267					
37	no	Extraordinary Expense	AK0353	OPOS0308	PAYGo		100%	0%	no	2023	1	\$225,000	Facility Division Asset Management Master Plan	\$225,000							
38	yes	Distribution	ST0551B	21121A	PAYGo		80%	20%	no	2023	4	\$2,076,936	MSJ Tank Improvements	\$224,000	\$500,000	\$600,000	\$752,936				
39	yes	Distribution	YI0204	10093	PAYGo		80%	20%	no	2023	2	\$341,555	Clean Energy Plan Implementation	\$206,555	\$135,000						
40	yes	Distribution	MM8008	21235	PAYGo		80%	20%	yes	2023	7	\$12,817,659	Main Renewal - MR3 Central Newark	\$200,000	\$700,000	\$1,045,860	\$2,045,860	\$755,190	\$2,047,626		
41	yes	Operations	YI0101B	21277	PAYGo		100%	0%	no	2023	10	\$1,697,000	SCADA Systems Infrastructure Upgrades	\$197,000					\$200,000		
42	yes	Ground Water	GG4203	21106	PAYGo		100%	0%	no	2023	3	\$1,058,948	Rubber Dam 2 - Larinier Fishway	\$181,030	\$577,918	\$300,000					
43	yes	Distribution	PJ0251C	OPS0018A	PAYGo		100%	0%	no	2023	24	\$2,732,000	WTP No 2 Improvements and Equipment Replacements	\$179,000	\$111,000	\$111,000	\$111,000	\$111,000	\$111,000		
44	no	Extraordinary Expense	AV0155	OPS0335	PAYGo		100%	0%	no	2023	9	\$3,412,200	Vehicle Capital - Leased Vehicle	\$171,745	\$255,985	\$347,245	\$410,425	\$415,360	\$430,360		
45	yes	Distribution	MD0102	21048	PAYGo		100%	0%	no	2023	10	\$1,719,036	Service Line Incidental Replacement Program	\$168,412	\$168,412	\$168,412	\$173,400	\$173,400	\$173,400		
46	yes	Ground Water	GG5007	10117	PAYGo		100%	0%	no	2023	3	\$749,524	Groundwater PFAS Sampling and Source Investigation	\$149,524	\$300,000	\$300,000					
47	yes	Ground Water	GA5007	W0010	PAYGo		80%	20%	no	2023	5	\$13,020,544	Brackish Groundwater Reclamation Project-Desal Replacement	\$147,620	\$2,825,560	\$4,284,244	\$1,961,040				
48	yes	Distribution	MM8006	21192	PAYGo		80%	20%	yes	2023	5	\$15,595,553	Alvarado Niles Pipeline Seismic Improvement Project	\$137,903	\$3,401,800	\$3,000,000	\$6,055,850	\$3,000,000			
49	no	Extraordinary Expense	EE0201B	21240	PAYGo		80%	20%	no	2023	1	\$135,000	Engineering Report for CIP	\$135,000							
50	yes	Distribution	MD0112	OPS0314	PAYGo		90%	10%	no	2023	7	\$920,864	Distribution Leak Detection System	\$131,552	\$131,552	\$131,552	\$131,552	\$131,552	\$131,552		
51	yes	Ground Water	GW0160	W0107	PAYGo		80%	20%	no	2023	3	\$1,430,520	Mowry Deep Aquifer Secondary Well	\$130,520	\$100,000	\$1,200,000					
52	yes	HQ Facilities	AQ0110	21271	PAYGo		100%	0%	no	2023	1	\$125,000	Board Room Audio-Visual Upgrades	\$125,000							
53	yes	Engineering	AK0110	IT06	PAYGo		100%	0%	no	2023	1	\$125,000	IT Records Management Project	\$125,000							
54	yes	Distribution	SR0601	E0030	PAYGo		80%	20%	no	2023	3	\$9,525,552	Patterson Reservoir Roof Replacement	\$112,269	\$512,269	\$8,901,015					
55	yes	Distribution	PW0351B	OPS0016A	PAYGo		100%	0%	no	2023	24	\$1,446,000	Mowry and PT Wellfields - Replacement Pumping Equipment	\$112,000	\$58,000	\$58,000	\$58,000	\$58,000	\$58,000		
56	yes	Ground Water	GG5008	W0104	PAYGo		50%	50%	no	2023	2	\$203,680	Groundwater SGMA Enhancement	\$101,840	\$101,840						
57	yes	Distribution	MM8011	21191	PAYGo		80%	20%	yes	2023	8	\$17,086,550	Main Renewal - Small Diameter Pipeline Renewal	\$100,000	\$100,000	\$100,000	\$778,050	\$3,334,500	\$5,187,000		
58	no	Extraordinary Expense	AK0167	10102	PAYGo		100%	0%	no	2023	7	\$2,300,000	IT Enterprise Software Upgrades - JD Edwards	\$100,000	\$500,000	\$500,000					
59	yes	Ground Water	GA0901	21304	PAYGo		80%	20%	no	2023	3	\$3,414,384	New Aquifer Reclamation Program Well	\$100,000	\$1,475,952	\$1,838,432					
60	yes	Ground Water	GG4303B	W0105	PAYGo		80%	20%	no	2023	1	\$99,156	Fish Passage Facility Grating Assessment	\$99,156							
61	no	Extraordinary Expense	PH0108	OPS0320	PAYGo		100%	0%	no	2023	1	\$92,576	Blending Facility PFAS voluntary monitoring program	\$92,576							
62	no	Extraordinary Expense	SR0650	21161	PAYGo		80%	20%	no	2023	4	\$2,067,774	Patterson Reservoir Remediation Project	\$88,620	\$277,940	\$127,940	\$1,573,274				
63	yes	Ground Water	GA1001	10097	PAYGo		80%	20%	no	2023	1	\$78,165	Niles Cone Groundwater Basin Extraction Well Site Evaluation	\$78,165							
64	yes	Ground Water	GG4103B	E0092	PAYGo		80%	20%	no	2023	1	\$75,000	Rubber Dam 1 - Fish Ladder Miscellaneous Safety Modifications	\$75,000							
65	yes	Distribution	MD5001	OPS0004	PAYGo		100%	0%	no	2023	10	\$566,840	Distribution System Large Valve Replacement Program	\$71,840	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000		
66	yes	Distribution	PW5001B	OPS0104A	PAYGo		90%	10%	no	2023	24	\$1,013,000	Wellfield General Improvements and Equipment Replacements	\$70,000	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000		
67	yes	Distribution	PJ0																		

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
112	no	Extraordinary Expense	EE0165	10077	PAYGo		80%	20%	no	0	0	\$0	2019 Joint Purified Water Feasibility Evaluation						
113	yes	HQ Facilities	AQ0111	E0085	PAYGo		50%	50%	no	2025	2	\$2,369,000	Board Room Rehab and Reconfigure			\$309,000	\$2,060,000		
114	yes	Operations	PJ0155	E0086	PAYGo		50%	50%	no	2029	5	\$24,205,000	MSJWTP Recommission and Upgrade						
115	yes	Distribution	YI0204	21194	PAYGo		100%	0%	no	0	0	\$0	Clean Energy - Implementation of PPA						
116	yes	Distribution	AK0352	OPS0007	PAYGo		100%	0%	no	0	0	\$0	Water Quality Laboratory Equipment Program						
117	yes	Distribution	BB0951	OPS0302	PAYGo		80%	20%	no	2024	2	\$412,000	R03/B09 - Whitfield Reservoir and Zone 2 Booster Electrical Upgrades		\$51,500	\$360,500			
118	yes	Distribution	SR8001B	ops0303	PAYGo		80%	20%	no	2024	7	\$3,082,175	T03 - Hidden Valley Tank Seismic Upgrade Phase II		\$50,000	\$97,501	\$100,000	\$327,301	\$507,373
119	yes	Engineering	0	22222	PAYGo		100%	0%	no	0	0	\$0	Testing						
120	yes	Ground Water	GG5005	W0102	PAYGo		80%	20%	no	2026	1	\$75,000	Fisheries SCADA integration					\$75,000	
121	yes	Distribution	SR0151	OPS0315	PAYGo		100%	0%	no	2025	2	\$170,000	Alameda Reservoir Chlorotec WQ system replacement			\$20,000	\$150,000		
122	yes	Operations	PJ0212	OPS0316	PAYGo		100%	0%	no	2025	2	\$130,000	WTP-2 chlorine system upgrades			\$35,000	\$95,000		
123	yes	Distribution	PW0451	OPS0323	PAYGo		80%	20%	no	2029	3	\$444,172	Nursery Well Electrical Infrastructure Replacement						
124	yes	Distribution	PW0751	OPS0324	PAYGo		80%	20%	no	2029	3	\$443,163	Whipple Well Electrical Infrastructure Replacement						
125	yes	Distribution	SR0451	OPS0325	PAYGo		80%	20%	no	2029	3	\$418,326	Mayhew Reservoir Electrical Infrastructure Replacement						
126	yes	Distribution	YI0105B	21107A	PAYGo		90%	10%	no	2025	2	\$660,000	WTP2 PLC Replacement - CPUs			\$150,000	\$510,000		
127	yes	Operations	GG9903	E0091	PAYGo		100%	0%	no	0	0	\$0	Watershed Preservation and Protection						
128	yes	Distribution	SR0101a	OPS0333	PAYGo		100%	0%	no	2024	2	\$309,719	Vineyard Heights Tank site stability		\$109,719	\$200,000			
129	yes	Operations	PJ0208B2	OPS0334	PAYGo		100%	0%	no	2025	1	\$137,468	TP2 Process Block Construction Joint Assessment and Sealing				\$137,468		
130	yes	Ground Water	GS0101	W0106	PAYGo		80%	20%	no	2024	2	\$300,000	Site A ARP Well Outfall		\$50,000	\$250,000			
131	yes	Ground Water	GA5002	OPS0024	PAYGo		100%	0%	no	0	0	\$0	ARP Well Equipment Replacements						
132	yes	HQ Facilities	AQ0152	OPS0014	PAYGo		100%	0%	no	2046	1	\$2,500,000	Headquarter Facility- Reroof Building Office Complex and Garage						
133	yes	Distribution	PH0252B	OPS0009A	PAYGo		95%	5%	no	0	0	\$0	Membranes for Desal Facility						
134	no	Extraordinary Expense	EE0164	10052	PAYGo		80%	20%	no	0	0	\$0	IRP - Lake Del Valle						
135	no	Extraordinary Expense	W20401	W0002	PAYGo		50%	50%	no	2044	1	\$134,500,000	Water Reclamation, Phase 1						
136	yes	Ground Water	PW0206B	W0006A	PAYGo		90%	10%	no	2029	3	\$4,262,696	New Peralta-Tyson Production Wells Installation						
137	yes	Distribution	YI0107	OPS0331	PAYGo		80%	20%	no	2026	2	\$1,090,000	Blending Facility PLC Replacements				\$250,000	\$840,000	
138	yes	Engineering	AK0103	21273	PAYGo		0%	100%	no	0	0	\$0	IT Custom Applications-DCIETS Replacement and Upgrades						
139	no	Extraordinary Expense	AK0164	IT03	PAYGo		100%	0%	no	2025	5	\$1,500,000	IT Enterprise Software Upgrades - Cayenta			\$300,000			
140	no	Extraordinary Expense	AK0165	IT04	PAYGo		100%	0%	no	0	0	\$0	IT Enterprise Software Upgrades - Microsoft Office, SharePoint, and Exchange						
141	yes	Vehicle	AV0105	OPS0108	PAYGo		100%	0%	no	0	0	\$0	Portable Emergency Generator Plug Connections						
142	yes	Distribution	PF0201	OPS0109	PAYGo		80%	20%	no	0	0	\$0	Durham Take-off Improvements						
143	yes	Distribution	MM4006B	21007	PAYGo		80%	20%	no	0	0	\$0	Main Relocations for SFPUC Bay Division Pipeline 3 & 4 Seismic Project						
144	no	Extraordinary Expense	GG5004	21246	PAYGo		100%	0%	no	0	0	\$0	Old Jarvis Road Irrigation Well Destruction Grant Project						
145	yes	Distribution	BB9001	D501	PAYGo		0%	100%	no	2024	1	\$774,000	District Participation - Booster Pump Stations		\$774,000				
146	yes	Vehicle	AV0102	OPS0030	PAYGo		100%	0%	no	2024	7	\$1,000,000	Vehicle Capital - Light Duty Vehicles		\$225,000	\$150,000			
147	yes	Distribution	PJ0212	21220	PAYGo		100%	0%	no	0	0	\$0	TP2 Filter Press Polymer System Upgrade						
148	yes	Ground Water	YI0501B	21061	PAYGo		100%	0%	no	0	0	\$0	Communications Systems Projects - Alameda Creek						
149	yes	HQ Facilities	AQ0103	OPS0012	PAYGo		100%	0%	no	2030	1	\$7,000,000	Headquarter Facility -HVAC Upgrades						
150	yes	Distribution	AK0111	21269	PAYGo		80%	20%	no	0	0	\$0	Electronic Operating Logs						
151	no	Extraordinary Expense	AK0363	OPS0204	PAYGo		100%	0%	no	0	0	\$0	WRF Tailored Collaboration Study						
152	no	Extraordinary Expense	AK0364	OPS0205	PAYGo		100%	0%	no	0	0	\$0	School lead testing						
153	no	Extraordinary Expense	YI5003	10076	PAYGo		100%	0%	no	0	0	\$0	District Security Master Plan						
154	yes	Distribution	BB1251B	OPS0019A	PAYGo		90%	10%	no	0	0	\$0	Scott Creek Booster Station Improvements and Equipment Replacements						
155	no	Extraordinary Expense	EE0601	OPS0040	PAYGo		100%	0%	no	0	0	\$0	Hazard Mitigation and Emergency Response Strategic Planning						
156	yes	Engineering	AK0106B	21069	PAYGo		90%	10%	no	0	0	\$0	ITMP - SharePoint						
157	yes	Distribution	EE0501	21162	PAYGo		80%	20%	no	0	0	\$0	CIP Planning/Facility Assessments						
158	yes	Ground Water	GG0305	21167	PAYGo		100%	0%	no	2026	2	\$1,096,009	Pit T-2 Slope Rehabilitation			\$29,959			
159	yes	Distribution	BB1501	21264	PAYGo		80%	20%	no	0	0	\$0	PR-1 Booster Station						
160	yes	Distribution	MM4012	21190	PAYGo		80%	20%	no	0	0	\$0	ACFC Crossings						
161	yes	Distribution	MD0110B	21193A	PAYGo		80%	20%	no	2027	2	\$283,250	Zone Valve Relocation - Warm Springs				\$36,050	\$247,200	
162	yes	Ground Water	GG4302B	21208	PAYGo		80%	20%	no	0	0	\$0	Rubber Dam No. 3 Fabric Replacement						
163	yes	Distribution	SR8001B	21005	PAYGo		80%	20%	no	0	0	\$0	Tank and Reservoir Seismic Upgrades/ Applan Tank and Pipeline						
164	yes	Ground Water	GG4101B	21006	PAYGo		80%	20%	no	0	0	\$0	Rubber Dam No. 1 - Fabric Replacement, and Control Building & Equipment Modifications						
165	yes	Ground Water	GG4103B	21012	PAYGo		80%	20%	no	0	0	\$0	Rubber Dam 1 - Fish Ladder						
166	yes	Ground Water	GG1301B	21019	PAYGo		80%	20%	no	0	0	\$0	Shinn Pond Fish Screen						
167	yes	Ground Water	PW0902B	W0003A	PAYGo		90%	10%	no	2032	3	\$4,871,652	New Below Hayward Fault Production Well Installation						
168	yes	Ground Water	GG4303B	21083	PAYGo		80%	20%	no	0	0	\$0	Rubber Dam No. 3 Fish Ladder						
169	yes	Distribution	GA6002	21103	PAYGo		100%	0%	no	2024	1	\$374,314	Montecito Well Site Demolition		\$374,314				
170	yes	Distribution	YI0105B	OPS0332	PAYGo		90%	10%	no	2026	2	\$510,000	WTP2 PLC Replacement			\$50,000	\$460,000		
171	yes	HQ Facilities	AQ0102	21109	PAYGo		0%	100%	no	0	0	\$0	Headquarters Facility - Work Area Modifications						
172	yes	Distribution	ST0251B	21120A	PAYGo		80%	20%	no	0	0	\$0	Canyon Heights Tank Improvements						
173	yes	Distribution	EE0301B	E0002	PAYGo		80%	20%	no	2025	1	\$404,158	Program and 10 Year EIR Documentation			\$404,158			
174	yes	Engineering	PH0253B	E0007A	PAYGo		90%	10%	no	0	0	\$0	Desalination Facility - Replace Chemical Piping						
175	yes	Distribution	PP0102	E0008	PAYGo		100%	0%	no	2027	3	\$1,316,576	M.J. Bernardo Softening Plant Decommissioning & Building Upgrade				\$218,545	\$688,524	
176	yes	Operations	PP0201	E0009	PAYGo		100%	0%	no	2025	1	\$125,557	Nursery Softening Plant Decommissioning			\$125,557			
177	yes	Engineering	PJ0210	E0013	PAYGo		95%	5%	no	2026	1	\$1,287,500	WTP No. 2 - Second Filter Press			\$1,287,500			
178	yes	Distribution	BB0101B	21267	PAYGo		80%	20%	no	0	0	\$0	Canyon Heights Booster Station Upgrade/Replacement						
179	yes	Distribution	BB0602B	E0015A	PAYGo		90%	10%	no	2024	4	\$3,194,084	Seven Hills Booster Station Study and Upgrade		\$50,000	\$100,000	\$768,100	\$2,275,984	
180	yes	Distribution	BB1002	E0017	PAYGo		80%	20%	no	0	0	\$0	Whitfield Zone 1 Flowmeter						
181	yes	Distribution	BB1101	E0018	PAYGo		0%	100%	no	2026	3	\$3,364,186	Whitfield Zone 3 Booster Station			\$51,500	\$662,537	\$2,650,149	
182	yes	Distribution	BB1502	E0020	PAYGo		50%	50%	no	2027	3	\$1,301,437	PR-1/MSJWTP Power Facility (Future)				\$204,340	\$511,396	
183	yes	Distribution	SR0251	21291	PAYGo		80%	20%	no	0	0	\$0	Decoto - Lining/Structural/Mechanical/WQ Improvements (COMBINED WITH ROOF REPLACEMENT)						
184	yes	Distribution	SR0403	E0026	PAYGo		80%	20%	no	2024	3	\$1,078,768	Mayhew Reservoir Control Valve Vault		\$100,000	\$140,096	\$838,672		
185	yes	Distribution	SR0503	E0027	PAYGo		100%	0%	no	2024	1	\$381,075	Middlefield Reservoir Roof - Improvements		\$381,075				
186	yes	Distribution	SR0551	E0029	PAYGo		80%												

	A	B	C	D	E	F	G
1	Alameda County Water District						
2	Financial Planning Model						
3	6A. Debt						
4							
5							Projected
6		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
7							
8	Revenue Bonds Series 2015						
9	Principal	\$640,000	\$675,000	\$705,000	\$740,000	\$770,000	\$800,000
10	Interest	\$984,400	\$952,400	\$918,650	\$883,400	\$853,800	\$823,000
11	Total Payments	\$1,624,400	\$1,627,400	\$1,623,650	\$1,623,400	\$1,623,800	\$1,623,000
12							
13	Revenue Bonds Series 2022						
14	Principal	\$2,130,000	\$2,490,000	\$2,605,000	\$2,715,000	\$2,865,000	\$3,015,000
15	Interest	\$2,210,737	\$1,806,638	\$1,682,138	\$1,551,888	\$1,416,138	\$1,272,888
16	Total Payments	\$4,340,737	\$4,296,638	\$4,287,138	\$4,266,888	\$4,281,138	\$4,287,888
17							
18	Future Bonds & WIFIA						
19	P&I	\$0	\$0	\$2,229,527	\$2,229,527	\$2,229,527	\$2,229,527
20	Total Payments	\$0	\$0	\$2,229,527	\$2,229,527	\$2,229,527	\$2,229,527
21							
22	Future SRF Loans						
23	P&I	\$0	\$0	\$0	\$0	\$0	\$0
24	Total Payments	\$0	\$0	\$0	\$0	\$0	\$0
25							
26	Total Debt Service	\$5,965,137	\$5,924,038	\$8,140,315	\$8,119,815	\$8,134,465	\$8,140,415
27							
28							
29							
30							
31		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
32	Funds Available for Debt Service						
33	Rate Revenue - Service Charge	\$41,033,500	\$42,982,281	\$44,873,214	\$46,547,658	\$48,282,183	\$50,078,886
34	Rate Revenue - Commodity Charge	\$83,300,333	\$76,222,295	\$81,391,328	\$86,285,396	\$88,873,958	\$91,540,177
35	Non-Operating Income	\$31,086,219	\$22,379,824	\$24,357,116	\$22,149,036	\$22,004,438	\$22,343,946
36	Interest income	\$1,306,578	\$1,079,991	\$894,230	\$840,972	\$759,594	\$695,054
37	Total Funds Available	\$156,726,630	\$142,664,391	\$151,515,889	\$155,823,062	\$159,920,172	\$164,658,063
38							
39	Expenses						
40	O&M	\$120,138,099	\$121,829,336	\$127,340,040	\$133,256,535	\$134,537,334	\$140,230,816
41	Total Expenses	\$120,138,099	\$121,829,336	\$127,340,040	\$133,256,535	\$134,537,334	\$140,230,816
42							
43	Net Revenue	\$36,588,531	\$20,835,055	\$24,175,848	\$22,566,528	\$25,382,838	\$24,427,246
44							
45	Debt Service	\$5,965,137	\$5,924,038	\$8,140,315	\$8,119,815	\$8,134,465	\$8,140,415
46	Debt Coverage Ratio (2.00 Target)	6.13	3.52	2.97	2.78	3.12	3.00